

[Report of the Medical Officer of Health for Greenwich Borough].

Contributors

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London Borough of

GREENWICH

REPORT

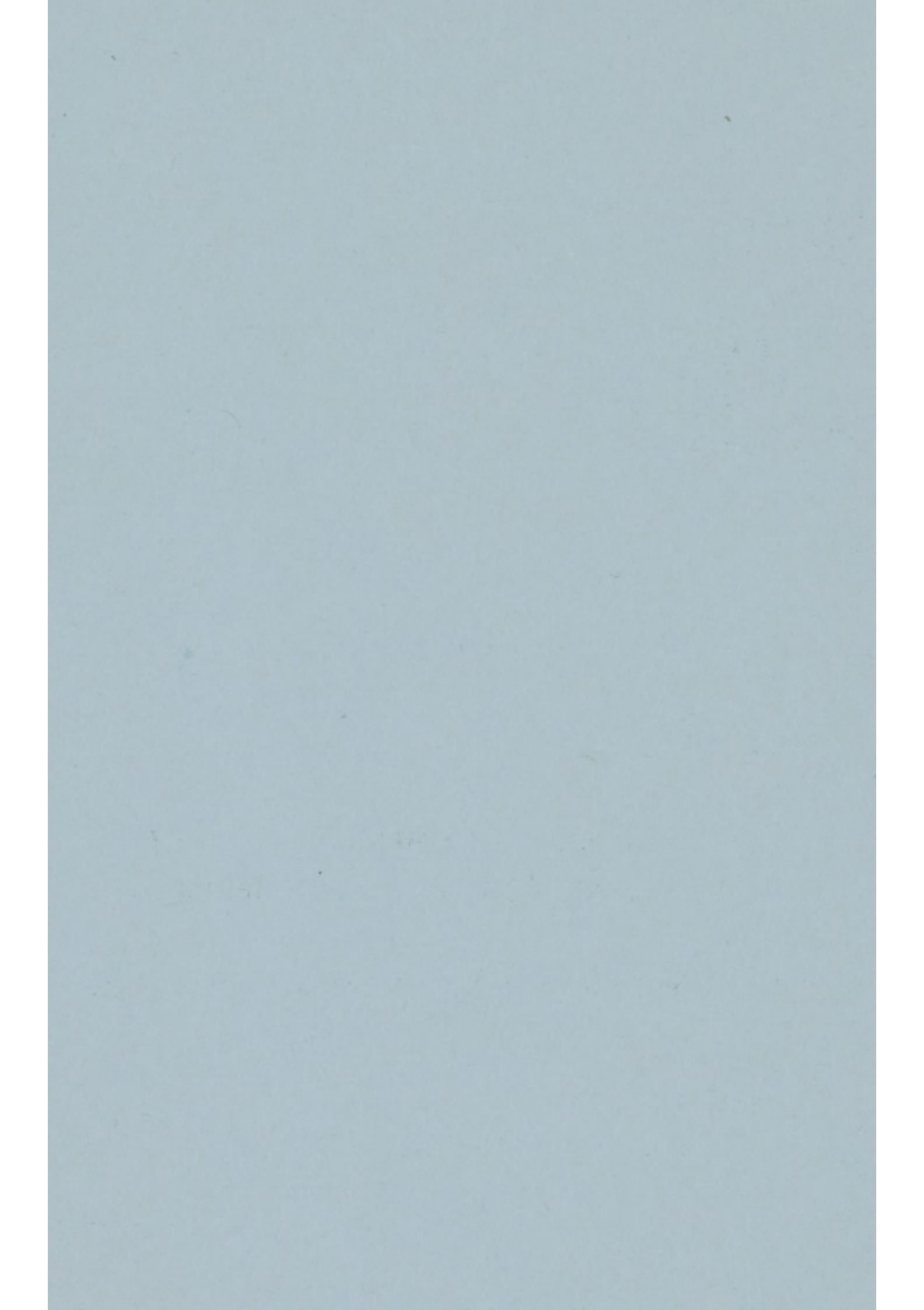
of the

MEDICAL OFFICER OF HEALTH
DIRECTOR OF HEALTH SERVICES

and

PRINCIPAL SCHOOL MEDICAL OFFICER

1971



London Borough of
GREENWICH

REPORT

of the
MEDICAL OFFICER OF HEALTH
DIRECTOR OF HEALTH SERVICES
and
PRINCIPAL SCHOOL MEDICAL OFFICER

1971



from GREENWICH PARK

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(as at 31st December, 1951)

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HEALTH COMMITTEE

(as at 31st December, 1971)

The Mayor :
(*ex-officio*)

Councillor Mrs. M. I. KINGWELL

Chairman :

Councillor W. F. STRONG

Vice-Chairman :

Councillor R. D. VAUGHAN

Alderman :

C. E. BROOKER

Councillors :

Mrs. K. BROOKS

Mrs. E. COSTELLO

Miss V. GOOD

R. ILLE-SMITH

R. L. MARTIN

F. B. NEWLAND

G. E. OFFORD, J.P.

M. O'TOOLE

H. A. READ

A. M. SELVES

L. SQUIRRELL

Mrs. H. STROUD

F. W. STYLES, B.E.M.

P. L. SUDDS

Mrs. G. M. WHEATLEY

Terms of Reference :

- (1) The Committee shall consist of 18 members of the Council (exclusive of the Mayor and the Leaders of the Council and Opposition).
- (2) The Council's powers and duties pertaining to the general health services (personal and environmental) and sanitation of the borough, including the school health service and nurseries.
- (3) The powers and duties of the Council under the Clean Air Act, 1956, the Shops Acts, the Offices, Shops and Railway Premises Act, 1963, Food and Drugs Acts, Acts relating to consumer protection and public control, Gaming Acts and related legislation, and matters relating to markets and street trading and the control and welfare of animals.

- (4) The powers and duties of the Council under the Mental Health Acts and related legislation.
- (5) The powers and duties of the Council relating to houses in multiple occupation, individual unfit houses, the declaration of improvement areas, the reception of representations as to Clearance areas and the issue of certificates of disrepair under the Rent Acts.
- (6) Home Safety.

Chairman:

Councillor W. F. Strong

Vice-Chairman:

Councillor R. D. Vaughan

Alderman:

C. E. Brooker

Councillors:

H. A. Read
A. M. Selves
L. Squirrell
Mrs. H. Stroud
F. W. Styles, B.E.M.
F. L. Suds
Mrs. G. M. Wheatley

Mrs. K. Brooks
Mrs. E. Costello
Miss V. Good
R. Lee-Smith
R. L. Martin
F. B. Newland
G. E. Oxford, J.P.
M. O'Toole

Terms of Reference:

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STAFF
DIRECTORATE OF HEALTH SERVICES
(as at 31st December, 1971)

Senior Officers :

Medical Officer of Health, Director of Health Services and Principal School Medical Officer:	Dr. J. KERR BROWN
Deputy Medical Officer of Health:	Dr. M. E. WATTS
Principal Medical Officer:	Dr. H. GOUGH-THOMAS
Medical Officers:	Dr. B. W. HORDERN Dr. G. G. SHERRIFF Dr. R. E. SILLETT Dr. M. E. SPENCER D. F. I. WINFIELD
Chief Dental Officer and Principal School Dental Officer:	Mr. F. ELSTON
Visiting Medical Officers:	Dr. D. P. EVANS Dr. G. M. FERRARIS Dr. R. S. L. HOOD Dr. G. F. HORTON Dr. J. TROUGHTON Dr. W. H. D. TROUGHTON Dr. R. G. TAYLOR Dr. P. D. WARREN Dr. M. F. WRIGHT Dr. J. R. WOOD
Consultant Chest Physicians:	Dr. P. FORGACS Dr. A. MACMANUS Dr. D. G. WRAITH
Consultant Geriatrician:	Dr. R. V. BOYD
Public Analyst:	Mr. R. G. MINOR

Personal Health

Chief Nursing Officer:	Miss M. NAUNTON
Deputy Chief Nursing Officer:	Miss M. E. TURNER
Supervisor of Midwives and Home Nursing Services:	Miss J. A. WAUGH
Senior Public Health Officer: (Geriatric Visiting)	Miss B. HATFIELD
Chief Chiropodist:	K. D. REEVE

Environmental Health

Chief Public Health Inspector:	G. B. ALLEN
Deputy Chief Public Health Inspector:	W. F. N. TROUGHTON
Principal Food Inspectors:	F. J. HOINES C. W. SPORE
Principal Housing Inspector:	D. SIMPSON
Senior District Public Health Inspector and Hygiene Officer:	M. E. POULTNEY
Principal Public Health Inspector (<i>Clean Air</i>):	W. E. McLELLAND
Disinfection and Disinfestation Inspector:	J. G. LYONS
Rodent Control Inspector:	J. W. DENNARD

Administration*

Chief Administrative Officer:	L. M. LONGHURST
Deputy Chief Administrative Officers:	Vacant (Departmental)
	H. J. MORSE (Establishment)

Section Heads

Principal Administrative Assistant:	Vacant
Finance and Supplies:	R. E. SWEETT
Personal Health:	J. HANNEN
Environmental Health:	G. RYAN
Staff:	R. AUGUSTIN
Planning and Development:	K. G. ALLUM
Health Education, Publicity and Research:	A. H. WILCOX J. E. KAY
Transport:	W. F. GOODALL
Typing:	Mrs. M. HOGAN

**This establishment is an interim one to maintain existing services during the Directorate's re-organisation resulting from the operation of the Local Authority Social Services Act, 1970. Officers are performing a dual role, i.e. social and health duties until the division of the previously integrated department has been achieved.*

DIRECTORATE OF HEALTH SERVICES,
MUNICIPAL OFFICES,
ROYAL HILL, S.E.10.

TO THE MAYOR, ALDERMEN AND COUNCILLORS,
LONDON BOROUGH OF GREENWICH.

Ladies and Gentlemen,

I have pleasure in presenting this account of the Health and Social circumstances of Greenwich for 1971. This is the year during which the present Health and Social Services began to form separate organisations; the process of division continues and it will be some time before the two Directorates are operating as distinct entities.

The late 60's will be remembered as the halcyon days of management consultants and the early 70's will present local authorities with difficult problems of readjustment to new systems and ideas. The fact that the Health Services will be unified in 1974 outside local government means that special efforts must be directed to seeing that care within the community is closely related to the health services and that both are relevant to the ascertained needs of the population. This effort of co-operation is of paramount importance in respect of four main groups: the under-fives, the handicapped, the mentally disordered and the elderly. Neither service can develop in isolation. Some form of acceptable *de facto* integration must be devised, at least in major capital spending and in assessing professional and supportive manpower requirements.

In the new Area Health Authorities, the proposed joint consultative committees hold out hope of the two planning authorities deciding their priorities in unison and in accordance with mutually accepted planning standards. Any arrangements whereby each authority proceeds independently of the other will be disastrous. By way of illustration, let us examine very briefly and superficially the geriatric problem. A recent Office of Population survey reveals that some 70 per cent of all the handicapped in the country are elderly and, in this Borough, 67 per cent of the home nursing resources is devoted to citizens over the age of 65. Local surveys have indicated that about 16,000 elderly require health visiting of varying intensity. Early warning systems, rapid and accurate assessment of need and the provision of appropriate practical help are of paramount importance when dealing with such large numbers. We therefore have the situation that a majority of elderly requiring social services also require health services and their needs stem very largely from an underlying physical or psychological infirmity. Because of the ever-increasing numbers of elderly and

particularly the higher proportion of the population reaching the advanced years of 80 and over, a caseload of the order of 800/900 per geriatric health visitor is the rule. Clearly a formal casework approach, with caseloads of some 50, is neither relevant nor practicable and, for the foreseeable future, the bulk of the regular domiciliary supervision will fall on the health services. It is more or less the same with the under-fives where the preventive health services have the predominant interest and refer to other specialised agencies as required. The very weight of these problems demands a preventive approach and this is why the domiciliary and day care facilities are essential in a balanced health and social care system for the various vulnerable groups. These factors must be kept uppermost in mind when the new Management Structure for the health services is being determined.

An analysis of vital statistics appears as usual in the body of the report. The population continues to decline despite the new Kidbrooke development and this trend will not be reversed until Thamesmead is well established. Since the 1961 census, the Registrar-General has consistently over-estimated the population in this area and the recorded drop of 8,340 does not reflect accurately the changes since 1970. All our infant mortality rates show decreases and there are also decreases in deaths from heart disease, cancer of the lung and bronchus, pneumonia, bronchitis and emphysema; but deaths from malignancy of breast, uterus and cervix, congenital anomalies and road accidents have increased. These matters are discussed in more detail in the main report.

During the year, there was a fall in infectious disease notification, again, mainly attributable to a reduction in measles infections. An outbreak of dysentery at a local hospital accounts for the sharp rise in dysentery notifications. However, the total number of cases of food poisoning was halved although two deaths were notified to us posthumously, one due to *Salmonella mendoza* and the other *Cl. welchii*.

Turning to the personal health services, the decline in home confinements continued and hospital deliveries accounted for 88 per cent of all births. Arrangements were finalised with the Greenwich District Hospital for a midwives' liaison scheme whereby domiciliary midwives can come to the obstetric unit and deliver their mothers who book for a planned early discharge at 48 hours, a scheme which it is hoped will be extended to the British Hospital for Mothers and Babies. The aim is to encourage the majority of mothers to be delivered in hospital and, consistent with obstetric and paediatric considerations, for them to be allowed home as early as possible.

Despite efforts to encourage women to have the cervical cytology

test, the numbers attending for examination fell. Undoubtedly some are being seen by their own doctor but there is an indication that many women are deterred by fear of adverse reports. Extension of the family planning service is under consideration and particular attention is being directed to the provision of a domiciliary service and the possibility of a free service is being examined. Demands on the home nursing service continue to increase, as do attendances at child health centres. Greater attention is now being paid to development assessment clinics. With specially trained doctors and nursing staff available for consultation any deviation from the normal development of a child can be detected at the earliest possible stage.

In this, the final year of direct responsibility for registration of playgroups and childminders, it is pleasing to record yet a further increase in the number of registrations. The total places now available in the Borough is 1,820, equivalent to 15 per cent of all children between one and five years.

This Directorate co-operated in a number of research activities and surveys. These included enquiries into childhood cancers, cerebral palsied and normal children, a new polyvalent oral polio vaccine, congenital rubella survey, the British Birth Survey and an enquiry into chromosome anomalies and congenital malformations.

On the environmental health side, it is pleasing to note that the Borough is now completely covered by smoke control orders although during the early part of the year temporary suspension of the orders was authorised by the Government, due to shortage of smokeless fuels. Registration of houses in multiple occupation became operative from 1st April and increasing attention is being directed to noise nuisance and noise measurements.

The future needs of Thamesmead are being examined in detail and plans are now in hand to provide a temporary health centre in Stage III of the development. At the same time, preliminary work continues on the main health centre to be located in the Central area which will be a focal point of a new philosophy of total health care, incorporating in the one building comprehensive primary, preventive and specialist services. The Council are also embarked on an ambitious health centre programme and it is hoped that, in 1974, these proposals will be adopted and carried forward on completion by the new Area Health Authorities.

The year under review was one of uncertainty for the health services and, although we are now writing this preface with the wisdom of hindsight, at the time, the irrational arrangement of reorganising the social services, while leaving the health services in limbo, caused unnecessary confusion and bewilderment. London is fortunate in that the boroughs are exempt from the Government's

reorganisation proposals. It is however surprising that, in the provinces, local authorities who will now become extinct have been compelled to create large departments of social services at considerable expense, only to be told within a year of their formation to prepare to dismantle them and reorganise yet again by April 1974.

I am glad to acknowledge the help which I have received from the staff who have worked closely with me. I am confident that their continued optimism will be confirmed in the future. It has been another heavy year for my Deputy, Dr. Watts, and I acknowledge my debt to her. In conclusion, I am glad to have the opportunity to thank my Chairman, Councillor Strong, and Vice-Chairman, Councillor Vaughan, and all the members of the Health Committee for the support which they have given at all times.

Your obedient Servant,

J. KERR BROWN,

Medical Officer of Health and
Director of Health Services.

SECTION I

GENERAL STATISTICS AND SOCIAL CONDITIONS
OF THE AREA

General Statistics

ELEVATION—Varies from below high-water mark up to 416 feet above sea level.

*AREA OF THE BOROUGH AND DISTRICTS

Land and Inland Water—

Greenwich	.....	3,863	acres	
Woolwich	.....	7,861	acres	11,724 acres

Foreshore and Tidal Waters 839 acres

12,563 acres

POPULATION—

*At Census, 1961	.....	230,250
<i>At Census, 1966 (10% sample)</i>	.....	226,980
Estimated, 1971 (mid-year)	.....	217,790

DENSITY OF POPULATION (*persons per acre*) 18.58

NUMBER OF INHABITED DWELLINGS—end 1971 72,035
(*according to Rate Books*)

*Structurally separate dwellings at Census, 1961	70,175
<i>At Census, 1966 (10% sample)</i>	70,140

NUMBER OF UNINHABITED DWELLINGS—

*At Census, 1961	.....	.....	.....	.....	1,031
<i>At Census, 1966 (10% sample)</i>	.....	.....	.....	.....	1,710
At end 1971	.....	.....	.....	.....	1,770

NUMBER OF FAMILIES OR SEPARATE OCCUPIERS—

*At Census, 1961	.....	75,803
<i>At Census, 1966 (10% sample)</i>	.....	74,050

RATEABLE VALUE, 31st March, 1971 £12,646,090

SUM REPRESENTED BY A 1p. RATE, 1971 £122,256

**Adjusted to accord with Boundary Changes introduced under the London Government Act, 1963.*

PUBLIC OPEN SPACES

BOROUGH COUNCIL—

	<i>Approx. Acreage</i>
Altash Gardens	1.90
Batley Park	0.97
Bellott Memorial Gardens	0.19
Bostall Gardens, McLeod Road	2.75
Briset Road Recreation Ground	3.79
Charlton House and Gardens	9.25
Coldharbour Open Space	7.90
Dallin Road Open Space	0.50
East Greenwich Pleasaunce	5.93
Eltham Green	6.00
Horn Park Open Space	8.55
Hughes Fields Recreation Ground	0.74
Middle Park Children's Playing Field	8.00
Pippinhall Farm, Bexley Road	3.40
Plumstead Gardens, Church Manorway	6.31
Queen's Gardens, Coldharbour Estate	1.50
Queenscroft Recreation Ground	12.50
Rockcliff Gardens	5.21
St. Alfege Recreation and Church Grounds	2.30
St. Mary's Churchyard	3.36
St. Nicholas Gardens, S.E.18	2.80
Sidcup Road Open Space	9.13
Southwood Road Recreation Ground	1.26
Sunbury Street Recreation Ground	0.30
Sutcliffe Park and Harrow Meadow Playing Field	65.00
The Tarn, Court Road	10.45
Villas Road	0.16
Well Hall Pleasaunce	12.17
William Barefoot Gardens	0.79
Other Open Spaces	6.01
	<hr/> 199.12 acres

GREATER LONDON COUNCIL—

Avery Hill, Eltham (with Nurseries)	83.00
Blackheath (part of)	89.00
Blackheath — Rangers House and Gardens	2.50
Bostall Heath	71.50
Bostall Woods	62.00
Castlewood, Shooter's Hill	22.50
Charlotte Turner Gardens	1.75
Charlton Park	42.75
Eaglesfield, Shooter's Hill	9.00
Eltham Common, Shooter's Hill	32.00
Eltham Park, South	41.50
Eltham Park, North	14.00
Fairy Hill	11.50
Hornfair (formerly Charlton Playing Field)	26.00
Jackwood, Shooter's Hill	45.00
King George's Field	4.75
Maryon and Maryon Wilson Parks	51.50
Oxleas and Shepherdleas Woods ...	212.50
Plumstead Common	103.50
Sayes Court Recreation Grounds ...	3.25
Shrewsbury Park	27.50
	<hr/>
	957.00 acres

DEPARTMENT OF ENVIRONMENT

Greenwich Park	185.00 acres
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WAR OFFICE DEPARTMENT

Woolwich Common	159.00 acres
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TOTAL PUBLIC OPEN SPACES IN BOROUGH

<i>(representing 12.8% of the total area of the Borough)</i>	<hr/> 1,500.12 acres
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MILEAGE OF ROADS (1st April, 1971)

<i>(including Bridleways and footpaths—8.37 miles)</i> Approx. 253.15
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GENERAL INFORMATION AND SOCIAL CONDITIONS

Whether it should be the purpose of a civilized country to strive for the extension or elimination of social services is a matter of polemics but it must be conceded that, in any society, the establishment and implementation of a community health policy is bound to have due regard to the social circumstances of that particular section of the population to which it is directed. Present social circumstances are the result of the impact of past history, both political and economic, upon the lives and environment of inhabitants, modified, as appropriate, by the extent to which a community can afford or is prepared to allocate its various resources to such purposes. It is the aim of these introductory pages to supply, in abbreviated form, such background information as will enable a more objective view to be taken of the Borough and its problems.

Following a report to Parliament in October, 1960, by an *ad hoc* Commission, re-organisation of the Metropolis was effected by the London Government Act of 1963 and a Greater London Council was created, together with 32 London Boroughs, the City and Temples. Twelve of these are designated Inner London Boroughs, of which Greenwich is one, and, on 1st April, 1965, under the title of the London Borough of Greenwich, the previous Metropolitan Boroughs of Greenwich and Woolwich were united. Amalgamation of these two areas (with the exclusion of North Woolwich) has resulted in the formation of a Borough which is second to none in historical associations and with interests of more than usual diversity.

Few residential districts near the City of London are so full of historical associations as Greenwich, whose streets are among the most interesting of any in the capital and whose wealth of surviving buildings is unrivalled. History has played a large part in determining the types of industries located within its boundary with their consequent effects upon the social conditions of its community. Its particularly favourable siting on the banks of the Thames, its unique place in English history and its close connection with Royalty through the ages give Greenwich an air and a fascination difficult to resist.

As a riparian authority, the Council now has jurisdiction over a river frontage of almost nine miles extending eastwards from just short of the Surrey Commercial Docks and Limehouse Reach, through the Greenwich, Blackwall, Bugsby, Woolwich and Gallions' Reaches almost to Crossness on the Erith Marshes in Barking Reach. Averaging approximately $\frac{1}{4}$ mile in width, the River Thames forms the northern boundary of the new Borough which ranges southwards for about 5 miles from this base line in

a triangular shape closely resembling that of a map of India. The resultant area is 18.32 square miles, giving a population density of 18.58 persons per acre.

With the exception of the Kidbrooke/Shooters Hill region which is mainly clay, the sub-soil of the greater portion of the Borough consists of gravel and sand and, throughout the whole of the area, the altitude varies from a few feet below high-water mark on the Marshes up to 416 feet above sea level on Shooters Hill.

It is a steady climb at every point from the low lying land adjacent to the Thames to the raised plateau of Blackheath where extensive views of London and the river obtainable from this escarpment are incomparable. This strip of land between Blackheath and the Thames, invaluable for defensive purposes, was to become the future site of Greenwich and, undoubtedly, the particular significance of its topography was not lost upon the Romans. With the high and low tides and gravelly shores the Romans recognised not only the fishing potentials at Greenwich but that with the peculiar horse-shoe bend their early primitive shipping would be protected and its repair facilitated. When they cut and paved their dead-straight road from Dover to London via Canterbury, this area's strategic importance became even more obvious for trade or trouble could reach London only by way of the river or the road and these two all but met at Greenwich.

In the days of Caesar, Greenwich, which in Latin was described as *Grenovicum viridis sinus a viridariis* and in Saxon, *Grenawic*, i.e., the flourishing village in the pleasant green hollow, was in the Roman province of *Britannia Primo* and all evidence points to the fact that the present Royal Naval College stands on a site where once stood handsome Roman villas and courts.

Notwithstanding that documented history of Greenwich appears to begin only during King Alfred's reign when he was Lord of the manor (*circa* 900) there is evidence that Greenwich has been inhabited for over 2,000 years—certainly Crooms Hill is pre-Celtic whilst Maidenstone Hill and Shooters Hill along with many other place names, are clearly of Celtic origin. Charlton is a corruption of Ceorl-tun, the Romano-Celtic "freeman's village". Recovered coins and fragments of pottery show an almost continuous Roman settlement from 41 B.C. to 423 A.D. and Saxon burial mounds and barrows dating from the 6th century are still to be seen in Greenwich Park.

As far as can be ascertained, the first mention of the name Greenwich occurred in September, 918, when the Manor, which included Lewisham, Woolwich, Mottingham and Combe, was granted by Elstrudis, daughter of King Alfred, to the Abbey of St. Peter at Ghent "for the safety of her soul", a grant which was con-

firmed by King Edgar in 964 and again by Edward the Confessor in 1040.

At the time of the Domesday survey, Greenwich proper (as distinguished from the Hundred of Greenwich) was 2 sulings, a measurement of land peculiar to Kent, being about 400 acres in extent, one third of which was domain land, the remainder being held by 24 villeins. The area had a sufficiency of beech and oak trees to support 10 pigs and there were 4 water mills worked by the Thames or the Ravensbourne.

Under the title of HULVIZ (hill-reach), Domesday Book records, *inter alia*, "a wretched tract of country" occupied by eleven bordars or cottagers who, altogether, paid 41 pence annually. This area, subsequently to become known as Woolwich, was, in Edward the Confessor's time, held by one William Falconer "to be hawked" and it may well be that Harold, portrayed on the Bayeux tapestry with a hawk on his wrist, diverted himself in such a fashion on occasions in this neighbourhood since he held one of the two Manors of Greenwich. At the time of the Domesday survey these two Manors had been welded into one and were under the control of Odo, Bishop of Bayeux, half brother to William the conqueror.

Surviving the Romans' departure and the coming of the Jutes in the mid 5th century, village life was concerned predominantly with those men whose business was with the sea and ships with the profession of waterman as its most important occupation. Indeed, it is hard to visualize that, even up to one hundred years ago, the river rang with the shipbuilders' hammers and fishing fleets were sailing regularly from Greenwich, a busy little attractive Thames-side town, to the North Sea, Iceland and Greenland, thus emphasising the economic as well as the historic influences which its excellent roadstead has had on the life of the inhabitants in the area. Such was the importance of this portion of the river that during the reign of King Ethelred (1011 A.D.) the whole Danish Fleet lay off Greenwich for three or four years whilst the army was for the most part encamped on Blackheath. This army ravaged the country and sacked the city of Canterbury, from whence they brought Archbishop Alfege to his martyrdom on 19th April, 1012.

Although efforts to obtain a Royal Charter have proved unsuccessful, Greenwich is unquestionably royal by association. Early English kings normally had no settled domicile. They travelled the country with their retinues and resided at various castles and palaces within their kingdom, dispensing justice and entertaining lavishly until they had exhausted the vicinity of its food and victuals. It seems clear, however, that the early Norman kings preferred Winchester but, at the time of St. Alfege's

martyrdom, the English king was resident and had a Royal Treasury at Greenwich.

Subsequently, Eltham became prominent in royal affairs for a period of 200 years and, as early as 1270, it is recorded that Henry III, a somewhat reckless monarch, spent Christmas here. It is interesting to note that Geoffrey Chaucer, author of "Canterbury Tales" and a frequenter of Bella Court at Greenwich, was Clerk of Works at Eltham between 1389 and 1391 and contributed to the construction of the Palace. Prince John, son of Edward II, was born at Eltham in 1316, a palace where Edward III, father of the Black Prince and founder of the English textile industry, was wont to hold tournaments and where, in 1347, he is reputed to have instituted the "*Order of the Garter*". Eltham was the favourite residence of Richard II who held parliaments at the palace and whose appointment of a host of tax gatherers to collect his iniquitous poll-tax led to the revolution of 1381. Headed by Wat Tyler, a motley assembly of ill-armed ragged peasants camped on Blackheath after pillaging the countryside of Kent on their way to London to meet Richard II who undertook to redress their wrongs but failed to keep his promise.

Blackheath Common, from which the Park was taken by Humphrey, Duke of Gloucester, in 1433, was the scene of many other interesting and important events. It would seem that, at this particular time in English history, the Heath was the place where distinguished persons from the Continent were usually received in order to be conducted with proper state and ceremony to London. In 1400, the Emperor of Constantinople was met by Henry IV in great splendour and, in 1415, the Lord Mayor and Aldermen of London attired in "*orient grained scarlet with rich collars and great chains rode caparisoned horses*" and "*accompanied by 400 commoners clad in beautiful murrie, all well mounted*" greeted, in triumph, Henry V on his victorious return from Agincourt. The following year, Emperor Sigismund, King of the Romans, seeking a peace between France and England, was met by the Duke of Gloucester and conducted to the king at Lambeth. Thirty-four years later, Blackheath witnessed another insurrection—that of Jack Cade and, in 1497, 4,000 Cornishmen under Lord Audley were routed by Henry VII on this very Heath. In 1540, Anne of Cleves was met here by her "*unwieldy lover*", Henry VIII, and escorted to Greenwich Palace.

However, not until Henry IV, the first of the Lancastrians, was Greenwich regarded as one of the seats of government at which time he was building himself a house in the south-east corner of Blackheath, probably on the site of the present Morden College. His will dated "*Greenwich, 22nd January, 1408*" bears

testimony to his residence here. Meanwhile, royalty continued to utilise Eltham Palace to which was added a magnificent banqueting hall with hammer-beam roof by Edward IV who was also responsible for enlarging the Palace at Greenwich and stocking its park with deer.

On the death of Henry V, "Good Duke Humphrey" became Regent during the minority of his nephew Henry VI who granted to his uncle the right to enclose 200 acres of Blackheath to make a park and to build a castle (on the site of which now stands the Royal Observatory) and a palace, a fine red-bricked building which he named Bella Court. Humphrey, at heart a studious man, settled down in his palace to enjoy the life he loved surrounded by scholars and artists. At his death (some say his murder), he bequeathed to Oxford University his extensive collection of hand written books where they formed the nucleus of the now world famous Bodleian Library. Later, Bella Court was re-named the Palace of Placentia by Margaret of Anjou, the wife of Henry VI, who spent large sums of money on beautifying it, tiling the floors and filling the windows with glass.

At this splendid palace lived Henry Tudor (Henry VII) the victor of the Battle of Bosworth Field (1485) who began the Tudors' long association with Greenwich. He was the true founder of English maritime power and he it was who linked the history of Greenwich indissolubly with that of England's sea services. It was here that Henry VIII, his daughter Mary and her half sister Elizabeth were born and spent much of their time and where Edward VI, son of Henry VIII, died at the early age of 16 years. At this palace, the ill-fated Anne Boleyn, second wife of Henry VIII and mother of Queen Elizabeth I, was arrested and taken by barge to the Tower of London to be beheaded and, within the precincts of this noble residence, the marriage of Henry VIII to Anne of Cleves was celebrated. It was during this period that the connection of Eltham Palace with royalty began to wane and the Palace of Placentia became more important in royal and state affairs.

Henry VIII, who was the first king to put the Royal Navy on a national basis, founded the Navy Office. Confirming the Borough's long standing affinity with the sea and shipbuilding, he established the Deptford and Woolwich Dockyards and at the latter, in 1515, built the "*Henri Grace à Dieu*", the greatest warship of her day. He christened the ship and appointed her captain as the first Master of Trinity House, the corporation which still controls the lighthouses and pilotage of the coasts of England. At that time, Trinity House was located beside St. Nicholas, the "seafarers'" church, in an area famous for its association with

Peter the Great, Sir Francis Drake, Admiral Benbow, John Evelyn, Christopher Marlowe, Grinling Gibbons, Samuel Pepys and others. For his shipbuilding needs, premises and property were acquired by Henry VIII, especially in the vicinity of Woolwich Dockyard, and some of these could be regarded as ordnance depots which eventually were to lead to the establishment of the Royal Arsenal.

Unquestionably Henry VIII loved Greenwich. Here within easy water distance of London, he could hawk and hunt, watch his merchant shipping bring valuable merchandise from abroad, visit his ships of war anchored close by and, from this vantage point, he and his Lord Chancellor, Cardinal Wolsey, could welcome with grandest pageantry the many illustrious visitors to his sumptuous palace. Wolsey was the organiser of the historic ceremony at Greenwich when a legate of Pope Leo X conferred upon Henry VIII the title of "*Defender of the Faith*" which, at the dissolution of the monasteries, was soon to acquire an entirely different connotation.

In his dealings with Emperor Charles V, usually at Greenwich Palace, Henry VIII laid the foundations of England's foreign policy which remain to this day, viz. to oppose the military domination of the Continent by any one state.

Following the failure of Cardinals Wolsey and Campeggio to resolve Henry's marriage difficulties with the church, Wolsey was replaced by Sir Thomas More, author of "*Utopia*", as Chancellor. He was beheaded in 1533 for refusing to take the Oath of Supremacy. His beautiful and talented daughter, Margaret, subject of a portraiture by the painter Holbein, married William Roper who is reputed to have been responsible for the building of Well Hall Manor house.

Before he died, Henry VIII had made great additions to the Palace of Placentia. He completed the gardens and made them the finest in England. He built the Armoury and staffed it with the best of foreign craftsmen, mostly Germans, whose work in this field made the name of Greenwich world famous. He added the Tilt Yard which became renowned throughout Europe as did his Banqueting Hall, the work of the architect William Vertue who was responsible for the Bath Chapel at Westminster.

It is difficult to conceive the magnificence and splendour of the Palace of Placentia during this period for, set amidst gardens laid out with flower beds, sparkling fountains, ornamental summer houses and surrounded by a superb park, it contained everything that money could buy or thought could devise to add to its grandeur. Floors were heavily carpeted; rooms, furnished from the dis-established monasteries and churches, were richly decorated, and the genius of the world's greatest painters was expended

on its walls and ceilings which were hung with fine Arras cloth and tapestries, with silk and crimson velvet from Montpelier in Gascony and with ermine, sable and fox from Ireland. Lavish use was made of gold and blue cloths, silver broached upon satin ground together with white damask, each and every piece richly emblazoned with Royal emblems. Manifold servants with liveries of blue murrey and horses with "hobby harness" of green velvet and aglets of silver, all were here assembled to receive distinguished personages from the world of arts, crafts, trades and professions.

From the beginning of the 15th century when Westminster had again become the centre of government, the Palace of Placentia, the favourite royal resort up to the time of James II (1685), became the scene of countless tournaments, pageants and lavish spectacles. Greenwich in its hey-day and during one of the most colourful periods in English history, was the haunt of most eminent people of the time and the great Elizabethan admirals, statesmen, philosophers, writers, musicians and courtiers thronged the riverside and splendid palace nestling at the foot of Greenwich Hill in some 200 acres of beautiful sward and delightful woodlands. Among these could be numbered the painters Holbein, Rubens and Vandyke—men of letters such as Shakespeare, Bacon, More, Jonson, Milton, Sidney, Spencer, Evelyn and Pepys—seamen and explorers such as Drake, Hawkins, Raleigh, Blake, Cabot, Lord Howard, Davis, Frobisher, etc.—Tallis and Bull the composers—Newton the celebrated philosopher-mathematician and friend of Flamsteed, the Astronomer Royal—Harvey, the physiologist—Gresham, the astute merchant and financier and "money-finder" for the Royal Households—the list seems endless but, with such habitués, it was no wonder that the Court of Greenwich was the most popular in Europe. A sign of its popularity was the fact that in 1586, due to the concourse of visitors to the Palace, local bakers were constrained to apply for a warrant to obtain corn from various markets in Kent, a most exceptional request. It was towards the end of this "golden age" in 1675, on a Warrant of Charles II, that the Royal Observatory was founded and, to the design of Christopher Wren, Flamsteed House was built on the site of Duke Humphrey's tower.

Almost as if to create a surfeit of grand edifices, an exquisite building designed by Inigo Jones with ceilings by Gentileschi and originally intended by James I as a palace for his Queen, Anne of Denmark, was commenced in 1616 and marked the introduction for the first time in England of the Palladian style of domestic architecture. The Queen's House, as it is now called, was finally completed for Charles I and occupied by Queen Henrietta Maria

in 1635. This beautiful house set the fashion for the big country seats which subsequently sprang up all over England.

Following the execution of Charles I, the Palace of Placentia fell into disrepair and, during the Cromwellian period, valuable furnishings and pictures were sold. It was the same story with Eltham Palace to which, unfortunately, full reparations were not made until the middle 1930's. However, at Greenwich, on the restoration of Charles II in 1660, the older buildings were demolished for an intended new palace but only one of the four blocks forming the present Royal Naval College was begun. The remaining three blocks were completed by Queen Ann and William and Mary, respectively, with the laudable aim of providing a Royal Hospital for Naval Seamen. For this purpose, a commission had been set up with John Evelyn, the diarist, as its treasurer but it was some years before the Hospital was eventually completed by Vanbrugh, Hawksmoor and later architects in accordance with the overall plans of Christopher Wren. This group of imposing and stately buildings, now the Navy's University, were themselves to become equally famous as the original palace for they now house the nation's Maritime Museum.

Meanwhile, at Woolwich, the foundations of a Royal Arsenal were laid with the erection of a Rope Yard in 1573 to serve the nearby dockyards where Phineas Pett, the first Master of the Shipwright's Company, was designing and building most of the navy's famous ships. Some 50 years later, the Warren was being used for gun testing and by the end of the 17th century the Lieutenant General of Ordnance was resident at the Warren and the manufacture of other war materials was proceeding. Previous to 1716, the government's guns were cast at Moorfields but, following a serious accident there, the Royal Brass Foundry at Woolwich was completed a year later to the designs of Sir John Vanbrugh to undertake these duties. Many of the buildings erected at that time were completed by convict labour which was accommodated in hulks moored offshore in the Thames. Resulting from a visit by George III in 1805, the establishment became known as the Royal Arsenal. As a centre for research, design, manufacture and testing of military stores and equipment, the Royal Arsenal was unsurpassed. Modern requirements have demanded a curtailment and concentration of these particular skills and now plans are for much of the land to be utilised by the Greater London Council for housing purposes.

The year 1716 also saw the establishment of the Royal Regiment of Artillery with permanent headquarters at Woolwich. Originally housed at the Warren, the regiment became too large for its quarters and a move to new barracks on Woolwich Common was

completed by 1781. It is perhaps not unnatural that a soldier as famous as General Gordon of Khartoum should have been born at Woolwich Common in 1833. He was later christened at St. Alfege's Church, near the Royal Naval College.

The commanding position held by Greenwich in the 17th century, began to wane during the following century partly due to the conversion of the Palace into a hospital which induced many of the fashionable people to leave the area. Moreover, it was in an atmosphere of violence and unscrupulous intrigue that George I, who began the Hanoverian dynasty, landed at Greenwich in 1714 and held his first reception at the Queen's House. Nevertheless, although the Court was no longer in permanent residence and Blackheath was still plagued with highwaymen and footpads, its position continued to appeal to influential people of the times who still frequented Greenwich or lived in the fine buildings in its environs. Lord Chesterfield, friend of Voltaire and Pope, lived and wrote many of his celebrated "Letters" to his son at the Rangers House. Adjoining was McCartney House, the home of General Wolfe—Angerstein, father of "Lloyds" of London, whose paintings became the foundation of the National Portrait Gallery, resided at the "Woodlands". Sir John Morden, the founder of Morden College, a delightful Wren masterpiece, lived locally in a handsome mansion at Wricklemarsh. Dr. Johnson, the lexicographer and poet, who lodged locally, composed in and often strolled the park with his biographer, James Boswell. Notable occupants of other stately homes such as Charlton House (one of the country's finest examples of Jacobean architecture), of Vanbrugh Castle and Mince Pie House, (both erected by the designer of Blenheim Palace and the Mansion House), and of the Manor Houses at Crooms Hill and East and West Combe (the latter being the home of the Dowager Duchess of Bolton—the "Polly Peachum" of the "Beggar's Opera", and East-Combe, the residence of the Duchess of Athol), gave evidence of the continued popularity of Greenwich.

Within its boundaries Greenwich had two traditional fairs. Granted to Charlton by Henry III at the same time as sanction for its market received Royal Assent, Horn Fair was held on St. Luke's Day, October 18th, when horn trinkets of all kinds were sold and where a carnival of the most restrained kind was included. However, over the years the procession became more ribald and the crowds so disorderly that it was ended by an Order in Council dated March, 1872.

That Greenwich Fair held on 12th-14th May and 11th-13th October was one of London's brightest attractions is emphasised by the numerous clever skits and drawings which emanated from

the various journals and papers of the day. It came into prominence at the beginning of the 18th century originally as a cattle fair but gradually became a place noted not only for the sale of eatables and for its variety of amusement but also for its riotous and disreputable character. Despite its doubtful reputation Charles Dickens thoroughly enjoyed the fair and gives an amusing account of it in his "Sketches by Boz". In addition to theatrical and wax-work shows, there were menageries, prize fighters, thimble-riggers, equestrians, rope performers, quack doctors, dancing booths, and the inevitable quota of pickpockets. Through telescopes on the Observatory and One Tree Hills, gibbets with skeletons attached could be viewed on the river banks for a few pence. The fair drew enormous crowds and thousands of persons, many of whom came by water in every conceivable craft, congregated in the park for rough merrymaking. There were swings and roundabouts, and it is reliably reported that the latter was first introduced to the British public at Greenwich from France in 1835. Stalls were arranged by the roadside from St. Mary's Gate to Blackheath and refreshments included shell fish of all kinds, effervescing drinks, eels in all its stages of cooking (pickled, stewed and in pies), plum pudding, gingerbread, cold fried fish all liberally peppered with dust but being rapidly disposed of by their vendors.

In the evenings, the taverns were filled to overflowing and the merrymaking continued well into the night. As a direct result of the increase in the riotous nature of the entertainment, the fair was relegated to the road from Deptford Creek via St. Alfege's Church to the Park Gates and, finally, the local inhabitants succeeded in having it closed down in about 1860. One suspects that Nathaniel Hawthorne, the celebrated American writer who resided in Pond Road for a time, although somewhat critical of the fair, was one of many who regretted its passing. Nevertheless, the fair, a mere shadow of its former glory, is still held on Blackheath at time of Public Holidays.

In more recent time, before the quality of the river deteriorated as a result of the population explosion of London in the latter half of the nineteenth century, Greenwich was renowned for its whitebait dinners and suppers. Gladstone, Prime Minister and member of parliament for this constituency in 1868, with his ministers, regularly dined here on whitebait caught in the Thames, off Greenwich, and the "Ship", "Trafalgar" and "Crown and Sceptre" Hotels were famous not only for these occasions but for the literary luncheons which were frequented by such celebrities as Thomas Hood, Captain Marryat, George Cruickshank, Douglas Jerrold and Charles Dickens. Lately, with a resurgence of events of interest in Greenwich and its history, there has been some move to revive these admirable riverside gatherings.

At the opening of the present century the Greenwich and Woolwich areas, which were predominantly shipbuilding and engineering centres, were already feeling the effects of the change-over from sail to steam. Acceptance of the steamship had led to the building of bigger ships and, as a consequence, this trade passed to other and more suitable areas of the country with the result that many local industries were seriously affected. Sail-makers and repairers were no longer required; men engaged in the refitting, etc., of the sailing vessels lost their employment and concerns which catered for the revictualling of such vessels saw their trade wither away. Firms were compelled to close down owing to competition and the heavy rates and taxes imposed and such movements of industry only tended to aggravate the unemployment problem in the area and there was great hardship among the workers. In this respect, the people in the neighbourhood of Woolwich were a little more fortunate in that some compensation was provided by the increasing demand for labour at the government's armaments depot at Woolwich and the expansion of electrical engineering at a riverside factory.

During the 1914-18 war, a number of industries returned to the area although the post-war period saw the closing of the Foreign Animals' wharf (locally known as the Deptford Cattle Market), the site being acquired by the Government for a Supply Reserve Depot. Much of this region is now zoned for housing development. Still later, a further compensating movement began and some of the larger buildings and dwellings were utilised as new factories and commercial undertakings.

As a result of the 1939-45 war, housing problems were accentuated, but in certain instances some benefits were derived from the fact that many properties which were demolished by enemy action would, by now, have been unsightly and particularly difficult problems for the Health Department.

With the advance of time many old buildings and houses were demolished and improvements effected. The breaking up of large estates, especially in the Westcombe Park area, has led, in the case of the houses concerned, to many new units of accommodation in the shape of flats and, in the case of the extensive grounds, to spacious areas for the erection of houses of the villa type.

Very early in the 18th century Daniel Defoe described Greenwich as "*the most delightful spot of ground in Great Britain*" and in 1738, in a road book of the British Isles this description was given: "*Greenwich on the Thames, 4 miles east of London Bridge, a very delightful place*". It can still lay claim to that title.

Considering that the Borough is a constituent part of the

country's greatest conurbation, it is well served with parks and open spaces. These are evenly distributed throughout its area and form 12.8% of its total acreage, equivalent to $6\frac{1}{2}$ acres per 1,000 of its population. Shooters Hill, which encompasses Oxleas and Shepherdleas Woods, Castlewood, Jackwood and Eltham Common, in total amounting to some 312 acres, gives a continuous expanse of woodland as attractive and extensive as Hampstead Heath. Greenwich Park, designed by Le Notre of Versailles fame, with its historical associations and surroundings, covers an area of 185 acres of rich fauna and flora. On its southern boundary is Blackheath, one of London's most famous open spaces, 89 acres of which are within the Borough providing unsurpassed facilities for games, sports and amusements. Excellent recreation grounds serve the Charlton area for, as well as the Maryon and Charlton Parks, there is the Greater London Council's Play Centre and Lido with its well-equipped open-air swimming bath, tennis courts and bowling greens. In addition to 65 acres at Sutcliffe Park allocated for a variety of sports, and a beautiful natural lake at the Tarn, Eltham, the Council has control of attractive formal gardens and grounds at Well Hall Pleasaunce. Among other delightful attributes, Avery Hill grounds and nurseries serve as the headquarters of the Education Authority's Nature Study Scheme supplying "botany boxes" to the local schools. West of the Royal Military Academy is Woolwich Common which has been the site for military displays since the latter half of the 18th century, a practice which is continued today with the Royal Regiment of Artillery's annual Tattoo.

Likely to add still further to the already compelling attractions of the Borough is a scheme now in operation, to develop the Cutty Sark Gardens/Greenwich Pier area in a manner worthy of the Borough's historical associations.

Regions in close proximity to the River Thames are, generally speaking, industrial but, as the result of a pattern of living inherited from the Industrial Revolution era, these districts also tend to be more densely populated than other parts of the Borough. However, the scene has been changing and, in recent years, there has been a movement of people away from the riverside to Eltham and Kidbrooke, areas which earlier in the century had been considered "rural". These once open spaces are now almost entirely built over.

Prior to 1919, housing was considered hardly a local government responsibility and, in 1915, 1,000 houses and a large number of timber bungalows were erected in the Borough by the Government for its munitions and other workers. Subsequent to this, however, housing has always been given a high degree of priority, a policy which started with the conversion into flats of a number

of large houses in Blackheath acquired under the Housing and Town Planning Act in 1919. This was followed by the purchase for housing of Page's Estate (previously known as Eltham Estate) and an area in Charlton known as "Hanging Wood Lane". Gradually other sites such as Charlton Park, Middle Park, Horn Park, Cherry Orchard, Victoria Way, Timbercroft Lane and Woodlands Estate, etc., were acquired and development proceeded until halted by the second World War in 1939. By this time, 14,474 dwellings had been erected in the Borough since the year 1919, 9,648 in the Woolwich area and 4,826 in Greenwich and, of this total, the local authority had been responsible for 5,891. Of the remainder, the majority were built in accordance with private enterprise plans although from 1934 the London County Council had also been operating housing schemes within the Borough boundaries.

During the second World War, when new building had necessarily ceased, the Borough suffered heavily from bomb damage and destruction of its residential areas. Requisitioning of property became imperative in order to resolve the serious housing problems thereby arising and in this respect over 3,000 units of accommodation were so acquired.

Following the war, the respective local authorities immediately proceeded to plan and organise housing programmes to meet residents' needs, and, as first priority, arranged for the erection in their Boroughs of Emergency Factory Made Bungalows (later to become known as "pre-fabs"). Meanwhile, traditional building began and continued apace and work on the completion of 2 pre-war estates was commenced in December, 1945, in accordance with modernised plans. By the end of 1947, 112 flats and 48 houses had been erected and occupied at Cherry Orchard and the construction of a further 24 houses at Marlborough Lane and 24 old people's flats at East Mascalls was well under way. Other schemes, including the Coldharbour Estate which was begun in the same year, were advancing rapidly and Borough residents were reaping the rewards of the foresight shown by the authorities. Substantial support to these efforts was forthcoming from the London County Council which was developing estates in this area. In April, 1965, at the inauguration of the new Borough, nearly 15,500 dwellings of all types came into the control of the Council.

Supplies of building land which, until recently, had been fairly readily available especially in the Woolwich area, became exhausted and, with the exception of the Plumstead Marshes Scheme (a project actively pursued by the Greater London Council for the accommodation of 60,000 persons over a period of 15 years), new housing can come only from clearance of sub-standard houses and redevelopment in areas such as St. Mary's, Glyndon, Lewisham Road, Maryon Road, etc. An exception to this generalisation is

the housing scheme in the Kidbrooke area. Here the Greater London Council has acquired the old Kidbrooke R.A.F. Depot as a development site which, eventually, will provide homes for some 7,000 persons, a large shopping centre, 3 schools and 27 acres of open space. Commenced in 1966, the scheme is expected to be completed by 1977.

Housing in the Borough is not only provided by the Council, the G.L.C. and private enterprises but also by a number of other agencies which serve special classes of citizens, i.e. the aged, widows, elderly spinsters, and widowers, etc. Organisations such as the Greenwich and Quadrant Housing Societies provide assistance in the housing of elderly and other classes of people not likely to qualify for such help from the local authority. Furthermore, over 200 units of accommodation for aged persons are furnished by ten groups of almshouses one of which was founded as early as 1558, being the first public charity to be established after the reformation.

Although the future housing problem is monumental there is no doubt that it will be tackled by the Council in a manner as firm and resolute as has been demonstrated in previous years.

Providing for the needs of Borough residents there are, at the present time, more than 2,000 shops, generally of the smaller kind, many being of the old-fashioned "shop on the corner" type selling a wide range of goods. However, this situation is changing, possibly contrary to the interests of many sections of the public. Town planning is demanding concentration of traders into "*shopping centres*" which tend to be dominated by big companies and which often lead to burdensome and sometimes costly journeys for the elderly and women with large families. Of the existing shops, a large percentage are food establishments to which supplies of meat and poultry come mainly from Smithfield Market and sometimes directly from Kent and Surrey. Fruit and vegetables, for the most part, arrive from Kent or from the Covent Garden, Borough, Greenwich or Spitalfields Market. The rights of a flourishing daily open-air market in Beresford Square mainly for the sale of vegetables, fish and poultry, are vested in the Council and date from the reign of James I. A "new market", under cover, in Plumstead Road, is also a popular centre for the daily and weekend shoppers of south-east London. Commodity standards are maintained by the vigilance of the Council's Public Control Officers.

Full time supervision is afforded by the Borough's Food Inspectors to the private slaughterhouse at Woodlands Farm, Garland Road, one of the most up-to-date and busiest abattoirs in the Metropolitan area. Their duties also include the inspection

of large quantities of food for consumption, mainly by Londoners, arriving at Greenwich wharves from abroad.

Both the previous local councils, now united in the London Borough of Greenwich, had always been in the forefront of progressive health authorities and, within the new area, this forward looking attitude persists and all aspects of health, welfare and social work, both personal and environmental, are amply covered. These range from the normal maternity, child welfare and school health services, to the usual general practitioner and hospital services, and from the useful municipally-run chiropody clinics to the special maternity, paediatric, geriatric, thoracic and neuro-surgical units based at local hospitals of which there are twelve. With such a close connection as Woolwich has with the army it was almost inevitable that one of these establishments, the Royal Herbert, should be a military hospital. This latter hospital, opened in 1866, owes its existence to the efforts of Florence Nightingale and her friend Lord Herbert (Secretary of War) following the Crimean War. In close proximity to this hospital's present location the Army is in the process of building a new complex to replace the existing one and to which the Millbank headquarters will, in due course, be transferred.

Comprehensive Borough Community Care services include 7 modern, purpose-built "Old People's Homes" and future plans provide for further "small home" accommodation. To overcome urgent and unexpected crises, a Reception Centre gives shelter to homeless families and a Main Unit caters for the more intractable cases.

At 3 Combined Centres and several voluntarily supported clubs, social rehabilitation of persons with differing physical and mental handicaps is promoted by tuition, training and the introduction of pastime activities. Blind people are offered a service of Braille and "talking" books obtained from the National Library for the Blind and allied organisations, and sheltered employment is provided at the Greenwich Workshops for the Blind where mattresses, baskets and "fend-offs" are manufactured. Substantial assistance is given to the severely mentally handicapped child by the Borough's modern, specially designed "Junior Centre", shortly to be transferred to the Local Education Authority, and older persons in this category are encouraged to become self-supporting at the Council's 3 Industrial Training Centres. A recently opened Hostel caters for the long and short term care of 25 subnormal girls and boys between the ages of 3 and 16 years. Adults are shortly to be provided with a similar establishment.

Sixty-five "Old People's Clubs", each of which receives a little financial assistance from the Council, cater for the elderly residents

of the Borough and, in seven instances, Council premises are made available free of charge. In addition to the eighteen luncheon clubs, which are responsible for dispensing almost 280,000 meals a year, and the supplying of meals to three other establishments, viz. two for handicapped and one for elderly homebound, there is an effective "Meals-on-Wheels" service. Daily deliveries are made to over 1,150 homebound persons and the number of meals provided is at the rate of 200,000 annually. A "week-end" meals service catering for approximately 120 persons has been introduced, a scheme which will bring to about 550,000 the total number of meals being supplied by this department's services during the year. A Day Club for the homebound and 4 Day Rooms have been founded to ameliorate still further the lot of the retired person.

More recently, realizing the substantial benefits accruing to the aged from a satisfying holiday, the Council purchased two first-class hotels at Westgate-on-Sea for the exclusive use of its elderly residents and holidays have now been made available to them throughout the year at nominal cost. Further assistance to retired persons has been provided by the introduction of "concessionary fares" as well as rent and rate rebate schemes.

In suitable cases, arrangements are made for the elderly to be bathed either in their own homes or at the Council's Bathing Centres and a special "incontinent laundry" service has been introduced for the cleansing of soiled bed linen and clothing of the bedridden.

By appointing a Geriatric Advisor, the Council has demonstrated its fervent support of "preventive medicine" and, furthermore, has introduced Geriatric Clinics for the early detection of disorders to which the elderly become prone.

Serving the Borough are 13 libraries, 9 main and 4 part-time, supplemented by a mobile library intended to cater for the more "remote" parts of the area. The main branches are admirably adapted to enable private study to be undertaken in close proximity to comprehensive reference sections and they afford access to daily newspapers as well as weekly and monthly periodicals. Special facilities are provided for children, hospital patients, homebound invalids and elderly persons and, furthermore, opportunities for the borrowing of gramophone records and original prints by contemporary British artists have been made available to residents over the age of 18 years. "Large print" books are stocked for the particular use of the elderly and partially sighted. A museum at Plumstead, an Art Gallery at the Tudor Barn, Well Hall Pleasaunce, Eltham, and Exhibition Halls and a Local History Section at the

"Woodlands", Mycenae Road, Blackheath, are all the responsibility of the Borough Librarian and Curator.

Virtually first-class educational facilities are at the disposal of residents, encompassing as they do the nursery and handicapped children's establishments as well as the normal primary, secondary, grammar, technical and comprehensive schools. Abundant opportunities are also provided for further education whether vocational or cultural or merely for enabling persons to indulge in a particular hobby.

A women's residential training college located at Avery Hill and opened in 1906 was the first to be established by the London County Council. Today, it is a "mixed" training college catering for upwards of 1,165 students and is a constituent college of the University of London Institute of Education with an annexe for 300 mature students at Mile End. Woolwich Polytechnic, now catering for nearly 700 full-time students and over 2,000 part-timers released by industrial concerns, is unique in that it is the only polytechnic in the London area which may be aided by the local Council. Eltham College, originally founded in 1842 as a "*Home and School for the Sons of Missionaries*", lies just beyond the Borough boundary in Bromley and is recognised as a Public School.

The name Rachel McMillan is internationally famous, for the McMillan sisters were the pioneers of nursery schools in the British Isles and their *avant garde* methods met with world wide acclaim. To cater for an increasing demand for this type of education, expansion and extensive adaptation has taken place at the College of Education based upon the original Rachel McMillan Training College at the Deptford end of the Borough.

In the Roan Schools, founded in 1643 by John Roan, the son of a member of the Royal household when it was at the Palace of Placentia, Greenwich has one of the oldest teaching foundations in London.

Most educational services are now under the control of the I.L.E.A. or church organisations but there are still some private schools in the area which are conducted independently of the Education Authority and which cater for fee-paying pupils.

Within the Borough, the "Arts" are well patronised and the Rangers House on Blackheath is becoming noted for its art displays, poetry reading sessions, etc. Recently, the re-establishment of a theatre on the site of the old Parthenon Music Hall has been given the Council's blessing and financial support. Municipal entertainment, especially for the very young and the elderly, is a prominent feature in the Council's policies.

Social centres providing for all shades of cultural and educational

tastes have been established at Charlton House, Kidbrooke House, Shrewsbury House, and West Greenwich House under the auspices of the Greenwich Community Council in conjunction with the I.L.E.A. and, in this connection, it can be stated that there are upwards of 178 clubs and societies affiliated to this Community Council.

Besides Associations for rowing and barge sailing, the local sports clubs include the famous Blackheath Football Club (the oldest of all rugby football clubs) and the newer professional Charlton Athletic Football Club. It is hard to believe that the area supports 2 golf clubs, one of which is the Royal Blackheath, the oldest golf club in the world. With royal sanction it was formed nearly 360 years ago as the "*Society of Blackheath Goffers*" at a time when James I was wont to play with his friends while holding court at Greenwich. It is reputed that the army title of "Field Marshal" which dates from 1736 was copied from the appellation used by the Blackheath Club a century earlier.

Greenwich can boast of modern public baths. There are four such establishments within the borough, each of which has two swimming pools. Moreover, at Eltham, the Council has provided a hydrotherapy pool and, on the Abbey Estate, has introduced a laundrette. Warm baths for men and women are to be had at Greenwich, Plumstead and Woolwich and, at the former two premises, in addition to Turkish and Vapour Baths, public laundries still operate. In winter, the large pools at Eltham, Greenwich and Woolwich are covered and utilised for a wide range of recreational pursuits such as roller skating, badminton, table tennis, etc., and facilities are made available for indoor bowling, golf and the use of indoor cricket practice nets.

In recent years, the Council's recreational services have aided the development of the pre-school child with "play-centres" and the pattern has been repeated with similar centres for children of school age. It also sponsors sports events such as cycle racing and provides facilities for "five-a-side" football, "keep-fit" and netball and "rhythm and movement" classes.

The Council has control of the five cemeteries located within the Borough and, on behalf of the Woolwich, Greenwich and North West Kent Crematorium Board, is responsible for the modern crematorium at Eltham.

The unique position held by Greenwich in Britain's history has its counterpart in the nation's industrial story. From earliest years its residents have been closely linked with the sea and ships and Britain's ascendancy in respect of them for over 1,000 years. This association, manifest since before the advent of the ancient "wooden walls" until after the birth of the "ironclad" has, to a

very large extent, determined the pattern of industry in the Borough.

Early in its history, local industry was influenced by the area's close association with royalty and the demands which it and its retinues made on the neighbourhood. For instance, the siting close to Greenwich Palace of the Royal Armoury in the reign of Henry VIII gave rise to the production of russet steel suits of armour which became renowned and modern metal products from Greenwich continue this distinction. Connections with shipbuilding and armaments, forged in the days of Britain's peril, are perpetuated in existing industries. Indeed, throughout its annals, the country has never demanded armaments and accoutrements from Greenwich industry in vain. Even records covering the last war will clearly reveal the great contributions made by these industries with special reference to PLUTO, FIDO and the famous Mulberry harbour.

In the main, industries and sources of employment of the Borough are to be found in the vicinity of the River Thames which forms the northern boundary. Chief among the concerns employing large numbers of workers are:—

Cablemakers, telecommunications and shipbuilding and repair works, automobile, construction, electrical and mechanical engineers; manufacturers of fire engines; manufacturers of tools, gauges, scientific instruments, tin boxes and containers, paints and lacquers, glass bottles, ropes, ships' propellers, cement and road surface materials; works for the recovery of metal and for the production of castings and for extruded non-ferrous metals and alloys and for the manufacture of oxygen and rare gases; printers, both letterpress and newspapers; furniture makers, joiners and shopfitters; electric welders and galvanisers and sheet metal workers; producers of water softening and conditioning chemicals and horticultural products; works for the manufacture of wireless, aero, vehicle and typewriter accessories. Beside the usual electricity generating stations and gas works, there are cement and stone works, cold meat stores, coal wharves and the inevitable lighterage companies.

The numbers actually employed vary from a few hundred to several thousands at the larger factories.

Recent efforts by the Government to encourage rationalisation of industry and manufacturing processes throughout the country have met with varying degrees of success. Locally, however, considerable anxiety has grown and great concern expressed in the Borough at the probable economic and social consequences of severe staff reductions in, or the closure of, a number of large industrial premises in the area. Elimination or contraction of firms such as A.E.I., U.G.B., S.E.G.B. (gas processing), Johnson and Phillips, Stone-Wallwork, General Steam Navigation, etc., make long-term planning of industry and the establishment of

viable residential areas in the Borough (as in the case of "Thames-mead") hazardous undertakings. Much of this previous industrial capacity has been utilised for warehousing, the nett result of which is a demand for a smaller and less skilled labour force. Persistence of these conditions will be damaging to the Borough's future social well-being.

SUPERFICIAL GEOLOGY

Geological formations occurring in the London Borough of Greenwich are of two groups, namely, the "superficial deposits" and the "solid formations". These are given below, *seriatim*, in descending order and while this holds good for the area as a whole, the complete sequence is not always met with for superficial deposits may be non-existent, local arching of strata and subsequent denudation of the higher parts may have brought to the surface lower members of the succession and, in other cases, a stratum of the sequence may be entirely absent. Where maximum and minimum depths are stated, this implies a true variation of the thickness of the beds in question, and, with the exception of the superficial deposits, is not to be ascribed to thinning due to erosion.

Superficial deposits in the Borough are distributed over the surface of the "solid formations" and may be considered as being of (a) "made" ground, (b) alluvium, and (c) gravel, the latter deposit being of the Pleistocene or "drift" series. At some places these deposits fill deep hollows in the surface of the "solid" attaining a maximum thickness of about 70 feet and at others are arranged as banks. More usually they form spreads of comparatively uniform thickness, or remain caps to the higher ground. Situated below these are the "solid" Eocene formations of Claygate, London, Blackheath and Woolwich and Reading beds followed by that of Thanet Sand. Underlying the whole Eocene strata is the Chalk or Cretaceous formation.

SUPERFICIAL DEPOSITS

Made—Made ground, consisting of artificial accumulations of debris and dumped materials from excavations have been spread over a number of areas of the district especially where the material has been used to raise the surface level of alluvial areas to reduce flooding in times of exceptionally high tides and heavy rainfall.

Alluvium—Such a term is applied to the deposits up to 30 feet in depth forming the low-lying areas bordering the Thames and its tributaries. Originally marshland, these areas are still liable to flood should the river overflow its banks except where artificial means of protection have been adopted.

Consisting of alternations of mud or silt, clay, shell marl, peat, sand and gravel, any or all of which may be present, the deposits

may lie directly on "solid formations" or on banks of "river terrace gravel". Alluvium components are subject to rapid changes in thicknesses and often arranged in "lens-shaped" masses.

Gravels—Although four types of gravel deposits have been distinguished, the most important are the River Gravels which form part of the ancient alluvial deposits of the Thames and its tributaries. These deposits, up to 40 feet in thickness, extend up the sides of the valley from the bed of the Thames and lie on the gentle slopes or series of platform or terraces of "solid formations".

The gravel is largely composed of subangular and well-rounded flints, together with quartz and quartzite pebbles. Sand is frequently interbedded with the gravel and, in places, constitutes the bulk of the deposit while occasional seams of peat are to be found.

SOLID FORMATIONS

Claygate Beds—A group of evenly-bedded alternations of fine sands and clays with thicknesses in the range of 50 to 100 feet. At the top of the sequence, seams of clay lie between the thicker beds of sand while at the base, fine laminae of white sand alternate with beds of clay.

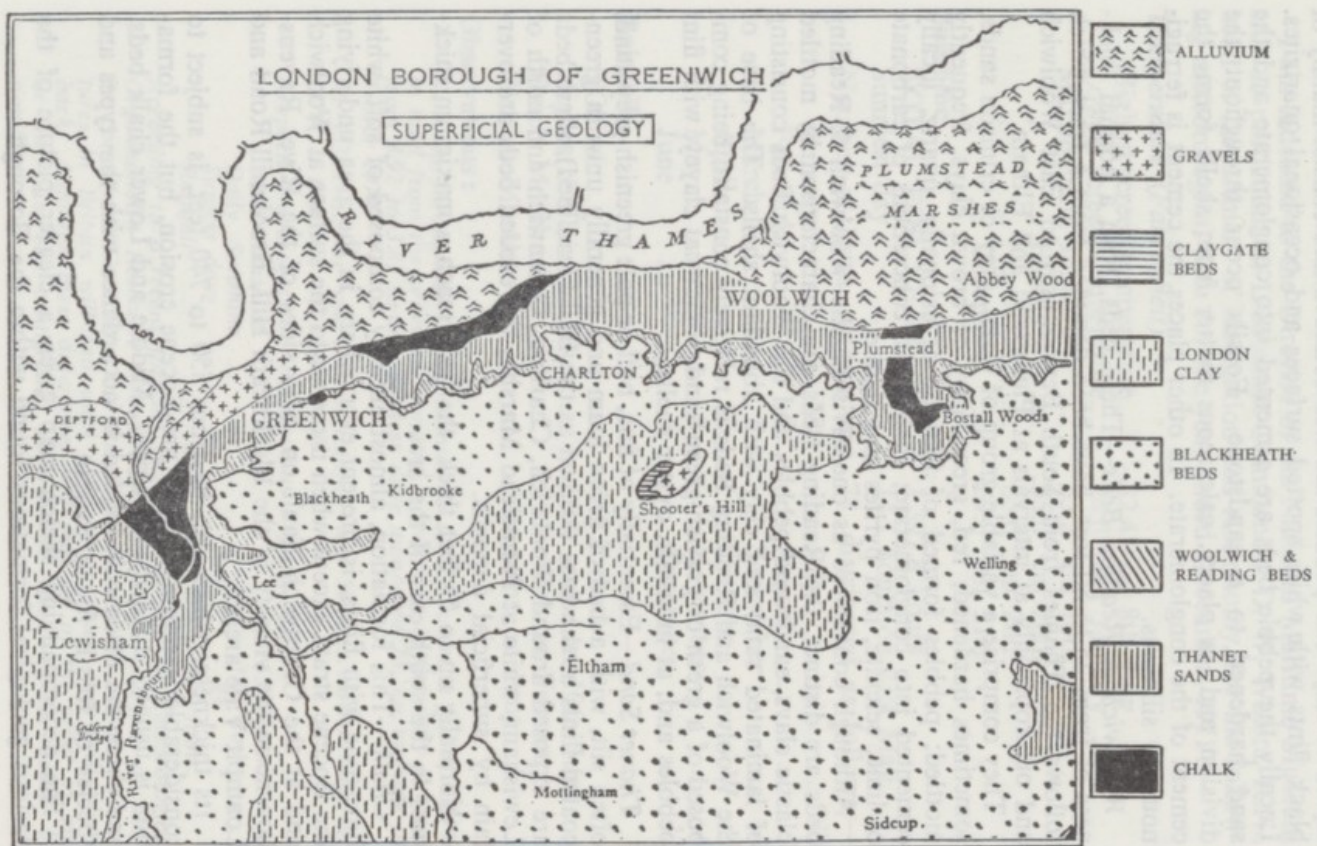
Within the Borough, a syncline fold running from Mitcham through Crystal Palace to Shooters Hill brings a vestige of the Claygate Beds to the surface at the latter locality.

London Clay—This is a formation of stiff dark grey or bluish-grey clay which when exposed at the surface or underlying "drift" becomes brown in colour due to weathering. The weathering may penetrate a few inches or reach a depth of 10 feet beyond which the brown-grey mottling indicates incomplete oxidization. When water has stood on the clay for a long period the zone of decomposition may extend to a depth of 40 feet.

At regular intervals, layers of septarian nodules (argillaceous limestone often with calcium sulphate veins) are met with throughout the clay and crystals of selenite and pyrites are common. The lower part of the formation is frequently composed of fossiliferous sand with black flint pebbles and occasional layers of sandstone and is known as the Basement Bed.

The full thickness of London Clay is from 300 to 430 feet but, in the Borough, this is only realised at Shooters Hill. In the Deptford, Greenwich and Woolwich areas the whole of the clay has been removed by denudation exposing older formations.

Blackheath Beds—Very irregular in thickness, ranging up to 45 feet, these beds lying to the East of a line joining Sydenham and Deptford often fill hollows eroded in the Woolwich & Reading beds. They are composed of pebble-beds with a sandy matrix and beds of fine, sharp, light-coloured quartzose sand in which are thin



layers of clay. The pebbles are well-rounded and consist mainly of black flints with white spotted surfaces and occasional quartzites. Locally the pebble beds are cemented into conglomerate and the sand hardened to a sandstone. Fossils occur throughout the division and, in places, calcareous matter from shells forms the cement of the conglomerate. In other places the cement is ferruginous or siliceous.

Woolwich & Reading Beds—These beds, with a normal thickness of from 25 to 80 feet, have been denuded from a tract which follows the Thames from South Bermondsey to East Woolwich and outcrops only at intervals at Plumstead and Eltham.

They comprise a variable group of white, grey or crimson sands, sometimes hardened; red, green, grey or brown clays, frequently mottled; pebbles formed of flint or occasionally quartz, locally cemented into conglomerate; shell beds, concretions of carbonate of lime, selenite, iron pyrites and lignite.

Although considered as one division, the Woolwich & Reading beds are distinct, the Reading Beds are characterised by mottled plastic clays, sands and pebbles and the Woolwich Beds consisting of laminated sand and clay with abundant shells. The base of the Woolwich and Reading Beds is relatively constant, being composed of a green or greyish-green sand, somewhat clayey, with flint pebbles and, at intervals, oyster shells.

Thanet Sand—Essentially of fine, buff or pale greenish-grey sand, often silt, with a bed of green loam and generally unworn green-coated flints at the base (known as the Bull Head Bed), these beds are exposed around Woolwich, Charlton, Greenwich and north of Lewisham, while at Plumstead Marshes the eroded beds are overlain by superficial deposits.

Normally up to 55 feet thick, the beds reach a maximum thickness in the south east of the area.

Chalk—This formation, almost entirely composed of soft, white limestone with flints, is present everywhere in the area underlying the Eocene strata except when it comes to the surface at Woolwich and at the Greenwich Fault on both sides of the River Ravensbourne in the vicinity of the Blackheath Hill, Brookmill Road and Loampit Vale areas.

Its thickness, which can be from 550 to 740 feet, is subject to considerable variation due to pre-Eocene erosion, but the formation is usually divided into Upper, Middle and Lower chalk beds, and these are often sub-divided in accordance with the types and species of fossils found therein.

The accompanying sketch map gives a clearer picture of the various geological formations found within the Borough.

METEOROLOGICAL OBSERVATIONS—1971

I am indebted to the Director of the National Maritime Museum and, in particular, to Lieutenant-Commander D. W. Waters, R.N., head of Department of Navigation and Astronomy, for the following meteorological data for the year ended December, 1971:—

Temperature (*Fahrenheit*)

Highest screen temperature.....	82.4° on 8th July
Lowest screen temperature.....	24.0° 6th January
Maximum in January	55.2° on 10th
" " February	55.0° on 20th
" " November	63.0° on 2nd
" " December	59.0° on 21st

Sunshine

TOTAL FOR YEAR	1,397.8 hours
Sunniest day	14.1 hours on 21st May
Number of Days, without sun, 73, distributed as follows:—	
January	13
February	9
March	5
April	12
May	3
June	4
July	Nil
August	3
September	1
October	4
November	6
December	13

Rainfall

TOTAL	563.0 mms.
Highest Fall in 24 hours	28.4 mms. on 10th June
Driest Month	12.0 mms. in February
Wettest Month	88.4 mms. in June

Observations :

Sunshine throughout 1971 amounted to 1,397.8 hours, a fall of 0.24% in total from the previous year and a reduction in the daily average from 3.92 to 3.81 hours. Sunless days numbered 73, an increase of 7 over 1970.

At 563 mms., the year's total rainfall was 59 mms. lower than for 1970, a decrease of some 9.5%.

Respective averages for the previous 6 years are:—

Total Sunshine	1,316.58 hours
Daily Sunshine	3.61 hours
Sunless days	83
Rainfall	650 mms.

According to a recent forecast made by the World Meteorological Organisation's Research Group and based upon analyses of deep ice cores from Greenland and the Antarctic, average annual temperatures in Britain will fall until 1985 after which they will climb back. Although these differences will only be of the order of one or two degrees centigrade, nevertheless, their effects could be significant.

SECTION II

VITAL STATISTICS

SUMMARY*

Population (mid-year 1971)

TOTAL HOME POPULATION	.....	.....	.....	217,790
Child Population (under 15 years)	49,100			
Elderly Population (over 65 years)	29,000			
DENSITY (persons per acre)	.....	.....	.....	18.58

Area Comparability Factors

Births—1.04; Deaths—1.07

Marriages

TOTAL	.....	.....	.....	2,027
MARRIAGE RATE (persons marrying) (per 1,000 pop.)				18.68

Births

LIVE	Total: 3,095
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	M	F	Total
Legitimate	1,394	1,392	2,786
Illegitimate	161	148	309
	<hr/> 1,555	<hr/> 1,540	<hr/> 3,095

Crude Rate (per 1,000 pop.) 14.26

Comparable Rate (per 1,000 pop.) 14.83

Ratio of Comparable Rate to National Rate 0.92

Illegitimate Live Births=10% of all live births

STILLBIRTHS	Total: 42
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	M	F	Total
Legitimate	16	20	36
Illegitimate	3	3	6
	<hr/> 19	<hr/> 23	<hr/> 42

Rate (per 1,000 total births): 13.39

TOTAL OF ALL LIVE AND STILLBIRTHS 3,137

*These figures, which are supplied by the Registrar-General, may differ slightly from those shown in other parts of the Report.

Deaths Total : 2,546

Males 1,296

Females 1,250

Crude Rate (per 1,000 pop.) 11.73

Comparable Rate (per 1,000 pop.) 12.55

Ratio of Comparable Rate to National Rate 1.08

Natural Increase (excess of births over deaths) 549

Infantile Mortality (deaths of infants under 1 year) Total : 53

INFANT DEATHS

<i>Age</i>	<i>Leg.</i>		<i>Illeg.</i>		<i>Total</i>
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	
<i>Under 1 year</i>	31	18	1	3	53
<i>Under 4 wks.</i>	21	9	1	1	32
<i>Under 1 wk.</i>	20	8	1	1	30

INFANT MORTALITY RATES

All Infant Deaths (per 1,000 total live births) 17.12

Legitimate Deaths (per 1,000 legitimate live births) 17.59

Illegitimate Deaths (per 1,000 illegitimate live births) 12.94

Neo-Natal Mortality Rate (per 1,000 total live births) 10.34

Early Neo-Natal Mortality Rate (per 1,000 total live births) 9.69

Peri-Natal Mortality Rate (per 1,000 total births) 22.95

Reproductive Wastage (per 1,000 total births) 30.28

Maternal Mortality (inc. 2 Therapeutic Abortions) Total : 3

MATERNAL MORTALITY RATE (per 1,000 total births) 0.96

Death Rates—Special Causes (per 1,000 population)

	No.	Rate
Heart Disease (<i>all forms</i>)	727	3.35
Ischaemic Heart Disease	578	2.66
Cerebrovascular Disease	299	1.38
Cancer (<i>all forms inclu. Leukaemia</i>)	591	2.72
Lung, Bronchus	160	0.74
Breast	56	0.26
Uterus	18	0.08
Cervix	9	0.04
Leukaemia, Aleukaemia	18	0.08
Tuberculosis (<i>all forms</i>)	7	0.03
Pneumonia	272	1.25
Bronchitis and Emphysema	155	0.71
Congenital Anomalies	21	0.10
Accidents—Motor Vehicle	35	0.16
Home	19	0.09
Suicide	25	0.12

General

In this context the term “statistics” covers all types of numerical descriptions of social, economic and biological phenomena and, as a method of comparing, differentiating and classifying material and data, brings intelligent coherence to an otherwise incomprehensible mass of minutiae.

It is conventional to consider *vital statistics* as the continuous numerical recording, in a large number of lives, of marriages, births, sickness and deaths as a means whereby the health and growth of a community may be measured. Inevitably, of course, this leads to the observation of other aspects of society which influence life, its reproductivity and its vitality. This whole field is, nowadays, referred to as the science of demography.

An essential preliminary to any statistical appraisal is the “counting of heads” and this is achieved by the decennial Census. However, it was not until 1801 that a national Census was initiated and, with the exception of 1941, has been repeated every 10 years since. At first, the Census merely covered the recording of sexes with a rough classification of occupation. Not until the Census of 1851, after the establishment of the General Register Office in 1839, was appropriate detailed data sought and correct analyses

made of Census figures. Since then, the Census form has become progressively more comprehensive and consequently more valuable as a statistical instrument.

More recently a move was made to initiate 5 year Census periods when, on the night of 24/25th April, 1966, a 10% sample of the population was taken during which, for the first time ever, information regarding cars and garaging facilities was requested.

Population

General—Determinations of future populations are of vital importance to governments for the framing of social policies, to hospitals for the provision of adequate and suitable facilities, to local authorities who have a duty to plan maternity and child welfare services, nurseries, schools, housing, etc., and to the Medical Officer of Health who needs to know and to gauge the effect of these variables upon the health of the public, generally.

Population levels are dependent on three factors, viz. births, deaths and migration and the extent to which reliance may be placed on projected populations rests upon the accuracy with which these separate factors can be forecast. It is usual, indeed it is the best method available, to base future trends on past experiences (*extrapolation*) and with death rates this has seldom failed. Birth rates, however, have proved to be rather less reliable and migration, especially since the introduction of the Commonwealth Immigrants Act, 1962, is the most difficult to assess. Indeed, effects following our probable entry into the Common Market in January 1973, defy accurate prognosis although, at present, the net outflow from this country of U.K. citizens constitutes the biggest element in the migration problem.

Preliminary figures for the recent Census indicate that population statistics, at mid-year 1971, are somewhat lower than the extrapolations produced by the Registrar-General based upon the previous full Census of 1961 would have led us to expect. It follows that rates calculated on the resultant re-adjustments will cause comparisons with those of the previous year to be a little spurious.

Reasons for the discrepancy are not difficult to find. Certainly in England and Wales since 1965 and contrary to expectations total births have declined by over 9%, fertility by almost the same amount and, during the last decade, emigration has proved to have been under-estimated to the extent of an average of 20,000 per annum, an outward flow which is not only likely to continue but possibly increase.

Population Projections—Even when the new "bench-mark" provided by the current Census replaces that of 1961 the recent

changes in legislation, together with undisclosed problems associated with our membership of the E.E.C., will render population projections and analyses over the next few years more hazardous than usual.

Previous population projections seem to have foundered on the failure accurately to predict the gap between intended and eventual family size—between attitudes and actual behaviour. However, recent surveys have shown that this discrepancy has narrowed and that people have almost complete control over their own family planning. Couples are now having the families they want rather than being constrained to make the best of an aggravated situation. Despite the fact that pre-maritally conceived births remain high and some women are inclined to increase their intended family size, downgrading is the present tendency among recently married women. In the early 1960's investigations showed that two thirds of all pregnancies in the first 5 years of marriage were unintended. There is reason to believe that this has now fallen to one third and even these have resulted largely from "risk-taking" contraceptive users. Support for this theory is provided by evidence accumulated over the last few years which indicates a marked fall in births conceived within the first 3 months of marriage and an extension of the interval between marriage and the birth of the first child and between the first and second births.

Notwithstanding comments made in the previous paragraph, Greenwich births over the next few years should show an upward trend, not, however, from increased fertility but primarily because of the greater number of females in the childbearing age groups arising from the boom in post-war births. By reason of the spread of contraceptive knowledge and the greater willingness of the younger women to adopt reliable forms of birth control to limit family size in accordance with current practice, this increase is not likely to be as marked as once thought.

Rationalisation of local industry over the last few years leading not only to unemployment but enforced emigration may well have spent its force and a more stable Borough population could evolve which would be affected mainly by its own *natural increase*.

Risks of a persistently increasing population to society, its life and institutions were amply portrayed in the last Report and reiteration is unnecessary. However, despite the expected greater emigration, lower fertility and reduction in family size, the Registrar-General estimates that the total population will continue to increase, albeit at a slower rate, namely at 0.4% per annum over the next 10 years compared with last year's projection of 0.6%,

due almost entirely to natural increase arising from the relatively high proportion of the present population under middle age.

Estimated mid-year population of England and Wales at 48,815,000 indicates a decrease of 172,700 (0.35%) from last year whilst that for Greater London, viz. 7,418,020 also shows a loss amounting to 194,260 (2.55%). This year the South Eastern Region which in recent times has partially compensated for London's falling population has itself registered a reduction of some 56,410 (0.33%) to 17,259,100 which represents 35.4% of the total for England and Wales.

Following the Registrar-General's publication of tentative figures for the 1971 Census, Greenwich is now estimated to have a population of 217,790, a fall of 8,340 (3.7%) from the figure returned for 1970. Since the Census of 1961 the Borough has sustained a reduction of 12,460 in its population, equivalent to a decrease of 5.41%.

Population Losses—Social Implications

(a) LONDON

Probable influences on life in the Greater London area arising from the adoption of policies based upon the Abercrombie recommendations were outlined in last year's Report. However, little mention was made of the slowing down of migration to the South East Region from the North nor of the difficulty of providing employment in towns taking the "decanted" population from the Metropolis, both of which have long-term social and economic consequences upon the South in general and London in particular.

London's declining population, amounting to over 500,000 since 1961, does not necessarily imply that the capital is no longer receiving immigrants but rather that, over this period, replacement of its "decanted" indigenous inhabitants by the inflow of people from other sources is, by arrangement, not being actively pursued.

It is known that manufacturing workers who have removed from London with their firms to expanded towns during the last 15 years number some 6,700 but this is only a small part of the picture since similar records for new towns and development areas are not available. There is greater certainty about the fact that between 1965/71 the number of registered dock-workers, including those at Tilbury, has contracted by 8,500 to a total of 16,994 and that since 1961 there has been a nett loss of 400,000 manufacturing jobs in the London area as a whole. Reasons for such reduction are numerous and include industrial rationalisation, mergers and "take-overs". However, it is mainly deliberate G.L.C. policies directed towards discouraging industry from establishing or expanding itself in the Metropolis and encouraging the younger married elements in the capital to take up residence and employ-

ment in the provinces which has precipitated the present situation and thereby focuses attention on a weakness of overall long-term detailed planning in connection with personal problems.

Several serious situations now appear to confront the G.L.C. and other London Boroughs:—

1. Possible loss to London of pride of place as the world's financial, business and commercial centre, a fact which is also of great concern to the nation.
2. Falling consumer demands which will progressively affect all forms of retail and wholesale businesses and manufacturing and industrial productions.
3. It follows that local authority income from industry will fall and, if public services are not to be cut, this will result in higher rates to a private sector, the size of which is already being effectively reduced by existing policies.
4. Denuding central areas of their younger elements by the process of "decanting" will result in a situation whereby industry in London will be left almost entirely in the hands of ageing artisans—clearly not a happy state of affairs.
5. Fortunately, difficulties associated with finding employment in the newer provincial areas is a deterrent and residents willing to be "decanted" are becoming fewer. However, with its 1960's accent on a policy of "all out" of London, the G.L.C. is committed to a heavy expenditure on extant projects in those very areas despite the fact that, in some instances, subvented houses stand empty.

Effects of population and environmental changes on the life of the capital have been somewhat underestimated or even miscalculated and although, patently, present schemes must be completed, allocation of progressively scarcer financial resources should now be concentrated on improving the environment within the capital and renewing its central areas.

(b) GREENWICH

As an integral part of the metropolis and in addition to its own peculiar problems as outlined in last year's Report, Greenwich exhibits trends similar to those discernible in London as a whole.

It so happens that, in this area, there would appear to be some compensating aspects such as the establishment of the G.L.C.'s Ferrier Estate at Kidbrooke and their "Thamesmead" project at Plumstead. It is expected that the former will largely be completed within the next two years and will cater for over 7,000 persons. The Thamesmead scheme, however, is already from two to three years behind schedule and some drastic re-appraisal has recently

been considered necessary. Accommodation for 60,000 inhabitants as originally planned has been reduced to under 45,000, the effects of which can only serve to increase unit costs (thereby presaging greater subvention) and cast serious doubts on the social and economic stability of the emerging conurbation.

However, the introduction of a yacht basin and marina facilities, together with confirmation of the need for a Flood Barrier at the Borough's eastern river boundary, may yet prove the scheme's salvation. Development of a community spirit depends such a great deal upon the viability of local industry and these innovations may provide just the stimuli necessary to resuscitate some of the lighter industries concerned with boat-building and associated trades which used to be prevalent in Greenwich earlier in this century.

Natural Increase—The natural increase for the year, i.e. excess of births over deaths, was 549 compared with the figure of 563 for the previous year.

Emigration/Immigration—Assessing all sources of migration and making necessary adjustments to the International Passenger Survey returns concerning intended and actual migration, there was a total net loss of 40,400 in the population of the United Kingdom.

Migration movements into and out of England and Wales during 1971, as derived from the I.P.S. totals, amounted to a net loss of 26,900 (excluding those regarding the Irish Republic). Only one Region, that of the South East, registered an increase, namely of 2,300.

Taking into account a recorded natural increase of 549, there was a presumptive emigration from Greenwich of 8,889 during the current year. However, as stated earlier, this is a statistical aberration produced by the substantial difference in the estimations produced over recent years by the Registrar-General and the provisional totals for the 1971 Census. Nevertheless, there is no doubt that there has been a substantial exodus of people from this Borough since 1965 amounting to some 13,980 (6.0%).

Estimates based upon the 1961 Census indicated that at 1st April, 1965, there were 7,947 residents (*Equivalent to 3.4% of the Borough's total population*) who were born outside the British Isles, of whom almost 2/3rds were from the Commonwealth countries, the Colonies or Protectorates. By the 1966 Census some 9,350 or 4.5% were registered as born overseas, an increase of 15% since the 1965 estimate, the proportion of these coming from the Commonwealth, Colonies or Protectorates remained roughly the same, i.e. 2/3rds.

In the absence of any 1971 Census figures on this subject any

serious attempt to assess the proportion of overseas immigrants in the Greenwich community must be fraught with difficulties. However, if the previous 10% sample Census of 1966 be considered reasonably accurate then the number of residents falling within this category is not likely to be less than 11,300, some 5.2% of the Borough's total population. Credence for such a contention is to be found in the returns concerning immigrant schoolchildren receiving full-time education in Greenwich schools.

Immigrant Schoolchildren—In the I.L.E.A. area, at the beginning of 1972, true immigrant children (i.e. those born to parents whose countries of origin were abroad but excluding those of mixed immigrant and non-immigrant parentage and those children from Ireland) receiving full-time education in primary and secondary schools, amounted to 69,655 equivalent to 17.6% of the total school population.

Of all the Inner London Boroughs, Greenwich had the lowest percentage of such schoolchildren. Numbering 2,284, immigrant children formed 5.93% of the total school roll at the end of 1971, a figure slightly in excess of that previously estimated. If, to this total, is added those attending "special" schools the percentage rises to 6.15. By the end of 1972 it is anticipated that immigrant schoolchildren will number approximately 2,800 forming almost 7% of the total school population.

Under the Local Government Act, 1966, a person of foreign origin with 10 years standing or less as an inhabitant, or a child of such parents, is termed an immigrant. As almost a decade has elapsed since the introduction of the Commonwealth Immigrants Act, 1962, it follows that, after the end of the current year, the number of schoolchildren classified as immigrants will even out and subsequently begin to decline.

Expectation of Life—From 1841, when the expectation of life at birth was 40 years for males and 42 for females, there was a gradual but persistent rise in both these figures until 1954, but since that year the expectation of life at birth has scarcely changed and now stands at 68.8 years for males and 75.1 for females.

Sex-wise there is a substantial disparity in those persons reaching the older age groups. Although some 82.3% of all females can be expected to reach the age of 65 years only 70.1% of males are likely to succeed.

COMPOSITION OF POPULATION

(a) *Sex Ratio*—Taking preliminary figures of the 1971 Census as a basis, it is estimated that the total population of Greenwich,

viz. 217,790, is made up of 105,519 males and 112,271 females, giving a sex ratio of 1,064 females per 1,000 males.

Ratios for Greater London and England and Wales are 1,082 and 1,058 respectively.

(b) *Age Composition*—It has been expedient from time to time to make analyses of the population figures with particular regard to age distribution in relation to whooping cough, diphtheria, poliomyelitis, measles and B.C.G. prophylaxis and, now of major importance, the problem of the aged.

In line with the general trend throughout the country, Greenwich has an ageing population and the number of persons outside the normal working range is still increasing. It is estimated that, of the Borough's male residents, 10.5% are over the age of 65 years and women in the same age group form 15.9% of the female population; together they account for 13.3% of the total population. If to these figures are added those women over 60 years of age, then the proportion of retirement persons rises to 16.5%

ESTIMATED AGE COMPOSITION OF THE POPULATION

	Age	No.	Approx. % of Total Population
As estimated by The Registrar- General :	Under 1 year	3,110	1.4
	1 to 4 years (inclusive)	12,090	5.6
	5 to 14 years (inclusive)	33,900	15.5
	Total Child Population under 15 years	49,100	22.5
Estimated locally :	15 to 64 years (inclusive)	139,690	64.2
	65 years and over	29,000	13.3
	Total Population	217,790	100.0

From details given in the accompanying table it will be seen that the "working" population of Greenwich, i.e. those between 15 and 65 years amounts to approximately 64% and that of "dependent" groups collectively, to 36%. In effect, this means that for every two persons of "working age" there is one dependent person outside this group. If account also be taken of women over 60 years and of those persons over 15 years still in receipt of full-time education including those attending special schools, then the

"dependent" population rises to over 41%, a ratio of more than 4 economically inactive persons to 6 actively employed.

Family Size—Social Effects of its Alteration

Despite an overall population increase, family size has been declining for almost a century. Countrywise, the average number of births per family has fallen from 4.57 in 1879 to 2.38 in 1971 after a surge in the early 1900's. This provides a partial explanation for the fact that persons per inhabited dwelling in Greenwich since 1901 have decreased from 6.73 to 2.92.

Evident from the beginning of the present century these changes, together with earlier marriage, shortening of time devoted to family building and nurture of small children and longer life expectancy, have had profound effects upon the social life of society. They have resulted, *inter alia*, in the lengthening of the later stages of married life when a couple are left alone but, conversely, the greatly extended educational facilities now made available has meant that the individual child remains financially dependent for a much longer period than hitherto. In combination, these factors have brought about an increase in the economic activity of married women throughout the country from 34.0% in 1961 to 41.1% in 1971. Locally, of all married women in Greenwich in 1901, 6.0% were economically active compared with the present figure of 47.7%.

Social changes initiated by the increase in family income include a general rise in living standards and, with both parents becoming wage-earners, a re-distribution of family and household responsibilities. Indeed, the traditional view of woman as the home-maker and keeper is rapidly being transformed. With society's condonation of the industrial and commercial employment of married women comes mounting pressure on local authorities to establish more childminding and nursery facilities for progressively younger children, perhaps to the ultimate detriment of family unity. Time devoted to the development of essential parent/child relationships seems to be inversely proportional to the increase in affluence with a growing tendency for parents to "buy" children's esteem and acquiescence to the newer family patterns with all its sinister implications.

Marriages

The Marriage Rate is calculated on a "total population" basis and, as such, is not strictly comparable with other areas by reason of discrepancies in age constitution. A more accurate ascertainment would be to return a rate based upon the marriage of unmarried persons over the age of 16 years (*legal marriage is prohibited where either party is under 16 years*). As approximately

90% of all births are legitimate it follows that the extent to which people marry exerts a powerful influence on the fertility rate.

Mr. G. H. Rodgers, Superintendent Registrar for Greenwich has kindly furnished me with particulars relating to the number of marriages solemnised or registered in the London Borough of Greenwich during 1971. The total of 2,027 gives a marriage rate (*i.e. persons marrying*) of 18.68 per 1,000 population, a decrease of 0.16 from that of the previous year and is 2.10 in advance of the figure of 16.58 for England and Wales. Greater London returned a rate of 18.9.

The following table shows particulars given by the various Registrars for the past 7 years.

YEAR	AREA	Church of England	Chapels and R.C. Churches	Non Conforming Churches and Chapels	Register Office	TOTAL	Reg. General's Estimate of Population	Marriage Rate (<i>persons marrying</i>)
1965	Greenwich Woolwich	285 604	84 115	60 104	256 484	1,992	231,770	17.24
1966	Greenwich Woolwich	280 570	78 114	23 91	284 487	1,927	231,590	16.69
1967	Greenwich Woolwich	291 597	71 127	69 79	288 544	2,066	231,150	17.94
1968	Greenwich Woolwich	329 612	78 144	80 84	286 586	2,199	229,700	19.21
1969	Greenwich	815	176	174	841	2,006	228,030	17.65
1970	Greenwich	795	203	203	947	2,123	226,130	18.84
1971	Greenwich	760	154	171	942	2,027	217,790	18.68

Marital Condition

Nationally, for every 1,000 males over the age of 15 years at the end of the current year 695 were married while for females the total, as one would expect, was somewhat lower at 638. In Greenwich, the comparable figures were 681 and 625 respectively.

By the end of 1970, 10% of all females and 2.5% of all males under the age of 20 years were married compared with 8.4% and

1.4% for 1961. In the age group 20/24 years, the 1961 percentages of 57.3 and 30.9 have since risen to 58.0 and 35.7. In the absence of statistics from the recent Census the latest available figures for Greenwich are those given in the 1966 Census which disclosed that, under 20 years of age, 7.5% of females and 1.6% of males in the Borough were married. In the age group 20/24 years the proportions were 57.4% and 30.7%.

During the last two decades, marriages have tended to be contracted earlier, especially among females under the age of 20 years. Indeed, the number of wives in this age category has risen from 41 in 1951 to 94 per 1,000 in 1970 and that of husbands has almost doubled to a total of 28. Of every 1,000 Greenwich female residents under 20 years of age in 1951, 45 were married compared with the 4 males who were so wedded. By the 1966 Census these figures had advanced to 75 and 16 respectively with the prospect of further increases presaged in the 1971 Census.

More recently, in line with fashionable philosophy, younger marriage, particularly among females in the age group 20/24 years, has been losing momentum, the numbers of which have fallen from 259 per 1,000 in 1961 to a total of 254 for 1971. In contrast, those for males in the same age group and over the same period have risen from 158 to 174, a situation which conceivably could have been influenced by the Family Law Reform Act of 1969. This piece of legislation which, *inter alia*, was concerned with the reduction of the age of majority from 21 to 18 years is likely, at least initially to have imparted an impetus to earlier marriage in males. For the year 1970 (*the latest available*) the mean age at marriage for bachelor bridegrooms was 24.43 and for spinster brides 22.38, both exemplifying this tendency for earlier marriage when compared with the 1956 figures of 26.15 and 23.73. Marriages in which both bride and bridegroom were under 20 numbered 36,472, an increase of almost 21% over 1969. In 1950, the total was 5,479.

Divorce, etc.—During 1950, divorces or annulments, etc., in the country aggregated 30,870. By 1970 this total had advanced to 58,239 of which 6,746 occurred in those whose marriages were contracted under the age of 20 years, a figure which rises to 39,190 in those who married under 25 years of age. Statistically, youth continues to be one of the greatest risks to stable marriage.

Births

By relating the number of births to the respective population of a particular group, a *birth rate* is produced which proves to be a convenient method of indicating the gross rate of increase of the population by births.

However, this rate gives no guide to future effects of contem-

porary variations in fertility on the maintenance or otherwise of the population or its age characteristics and, since the population figure used in its computations not only contains males but also females outside childbearing age, the birth rate should not be used as an accurate calculation of fertility.

Live births registered in the Borough during the year totalled 4,281 and of this number 3,919 occurred in hospitals and 362 in private dwellings. In 1,684 cases the parents resided outside the Borough and these births were subsequently transferred to their appropriate districts leaving a figure of 2,597. To this must be added 498 births belonging to this Borough which took place in institutions outside the Borough, thus making a final total for Greenwich of 3,095, a decrease of 74 (2.3%) from that calculated for the previous year. Of the total, 1,555 were males and 1,540 females, a proportion of 1,010 males to 1,000 females compared with 1,061 for England and Wales.

The following table gives by district the number of Greenwich Births occurring during the current year:—

Source of Information	DISTRICT		Total Borough Births
	Greenwich	Woolwich	
Registrar's Returns:—			
Inward	934	1,663	2,597
Transfers:—			
1st Qtr.	14	122	136
2nd Qtr.	18	113	131
3rd Qtr.	19	101	120
4th Qtr.	25	86	111
TOTALS	1,010	2,085	3,095

The Birth Rate for the year, calculated on the figure of 3,095 live births, is 14.26 per 1,000 of the population, 0.20 higher than that computed for 1970. With an *area comparability factor* of 1.04, an adjusted rate of 14.83 is returned compared with 16.0, the figure for England and Wales and 14.14 for the Greater London area. Inner London returned an unadjusted rate of 15.1.

Although, nationally, overall births were almost unchanged during 1971 compared with an average annual decrease of 12,500 over the last six years, nevertheless, sharp increases were noted at the end of 1970 and at the beginning of 1971 before the downward trend was resumed. These variations were thought to be partly due to the adverse publicity given to oral contraceptives at the end of 1969 and the early part of 1970. No such effects were

noticeable in Greenwich and births continued to fall in accordance with a pattern established in the middle 1960's.

Since 1965, Greenwich yearly births have declined by 627 (16.8%) to the present total of 3,095 which itself is a decrease of 74 (2.3%) from the previous year.

One aspect not revealed by the current statistics is that, during 1971, births to residents of the Greenwich area of the Borough show a reduction of 12.3% whereas those for the Woolwich district indicate a rise of 3.3%. Furthermore, while inward transferable births, i.e. those births occurring beyond the Borough boundary, fell by 45% in respect of the Greenwich area, those for the Woolwich District decreased by only 7.3%.

In the absence of the 1971 Census figures, explanations for this odd distribution of current births could be, at best, only intelligent guesses. These could range from the possibility of an ageing population in the western part of the Borough with a more youthful settlement in the Woolwich, Plumstead and Abbey Wood districts to disproportionate migration within and without the area and from the disparate ratio of new housing projects in the respective areas to varying use of family planning facilities—all with overlying problems of a reduction in industrial processes in the neighbourhood and an increase in the socio-economic activity of married women.

Illegitimate Births

The degree of illegitimacy is usually evaluated by calculating illegitimate births as a percentage of total live births. This is satisfactory for the short-term assessment but, if the legitimate rate is declining and the illegitimate remains constant, there will be an apparent but not necessarily a real increase in illegitimacy. Currently we have just such a situation where illegitimate births have declined but their proportion of total live births has increased.

Although medically speaking there is no distinction between a legitimate and an illegitimate birth, nevertheless, statistically it can be demonstrated that illegitimacy reduces the chances of survival in early infancy.

It has always been assumed that illegitimacy resulted from low social standards, both cultural and material, and that it arose also where such factors as an insecure family life, poor and overcrowded housing, lack of direction and personal drive were in evidence. Although these considerations still apply today, illegitimacy knows no bounds and is to be found in all walks of life. Indeed, on occasions, it would appear to be sought by certain types.

Society, as well as individuals, shares the onus of illegitimacy and only widespread education in sexual responsibility can ameliorate

rate the trauma and burden of unplanned pregnancy. Personal counselling, not only on contraception but also on sexual and emotional problems, could be of inestimable value to the young.

In London, rates tend to be higher than that for the country as a whole possibly by reason of a higher proportion of single females but very probably because of the capital's compelling attraction to pregnant women who find not only anonymity but better facilities in the ante-natal, maternity, social and welfare fields.

Illegitimate births in Greenwich during the current year numbered 309, equivalent to 10% of all live births registered, an increase of 0.2% over that of the previous year. In effect, this means that one baby in every ten born of Greenwich residents was illegitimate. Even so, this situation was the most favourable of all the Inner London Boroughs whose average illegitimacy was 16.6%. Figures for the Greater London area and for England and Wales were 11.5% and 8.4% respectively.

It is conceivable that the reduction of illegitimate births in the Borough from 366 in 1966 to the current figure of 309 constitutes a tangible sign of the effectiveness of the Abortion and Family Planning Acts of 1967 in limiting unwanted pregnancies.

Stillbirths

There has been a steady reduction of the stillbirth rate in England and Wales from the 1930 figure of 41 to the present rate of 12.5.

It is recognised that, to some extent, stillborn babies and those who die within 7 days of birth reflect the efficiency or otherwise of the obstetric services but recent studies instituted by the Medical Research Council, *et al*, have confirmed that the mother's age, parity and social class were found also to be significant factors. Furthermore, improvements in this field were most marked in the higher social classes.

Only 3 of the 42 Greenwich stillbirths registered during the year occurred in private dwellings and the calculated rate per 1,000 total births was 13.39, an increase of 2.78 over that for 1970. Greater London returned a rate of 11.7 while that for Inner London was 11.5.

All stillbirths must be registered in accordance with the Registration Service Act of 1953 as amended by the Population (Statistics) Act, 1960, and must be accompanied by a statement as to cause. An investigation of the 42 stillbirths occurring to Greenwich

residents during 1971 reveals that congenital anomalies and placental insufficiency were the major causes. Hypertension was the underlying cause in 14.3% of the cases and, in a similar proportion, the reasons were unknown. A full analysis of causes of stillbirths is given in the following table :—

Abruptio placenta	1	Macerated foetus (cause unknown)	2
Accidental haemorrhage			
—concealed	1	Multiple pregnancy	1
—hypertension	1	Placenta praevia	2
—infarcted placenta	1	Placental insufficiency	5
Anencephaly	4	—essential hypertension	1
Ante partum haemorrhage (hypertension)	2	—pre-eclamptic toxæmia	1
Congenital anomalies	3	Precipitate delivery	1
Cord round neck	3	Prematurity—puncture rupture of membranes	1
Diabetes mellitus	1	—breech delivery and congenital anomalies	1
Eclamptic fit (hypertension)	1	Retro-placental clot	1
Intra-uterine death (ac. hypertension)	1	Rhesus incompatibility	1
		Unknown causes	6

Of the Borough's 42 stillbirths (19 males and 23 females) 6 were illegitimate.

Fertility

Fertility is a measure of the rate at which a specific community adds to itself by births. It is not to be confused with population growth which is the net result of gains from births, losses by deaths and adjustments in connection with the movements of persons in or out of the area. Nor must too much reliance be placed upon the crude birth rate which, although a convenient way of giving the gross rate of increase of a population by births, serves only as a short-term measurement of the flow of births.

True fertility rates must be based not upon the total population but upon the "population at risk" i.e. live births expressed as a

rate per 1,000 of women of child-bearing age. This rate is called the "general fertility rate" and for even greater accuracy, this should be sub-divided into legitimate and illegitimate rates.

As 90% of all births are legitimate it follows, therefore, that the extent to which people marry influences the flow of births. Moreover, the number of persons marrying is related to the availability of men and women within the marriageable age period which, in turn, is dependent upon antecedent births and the marriages which give rise to them. Thus it can be seen that future fertility is contingent upon past fertility. Furthermore, fertility varies not only with age, marriage and its duration but also with occupation and social class, with area of residence (whether urban or rural), with race and religion and with several other factors.

In the decade 1955/64 fertility rose. However, the narrowing of the intervals between marriage and the first child and between first and second births noted during this period has been reversed and, although the proportion of women bearing pre-maritally conceived children remains high, there has been a marked diminution in the numbers of children conceived within the first 3 months of marriage. These relative delays in childbearing have the effect of lowering fertility and may even presage a reduction in final family size.

Experience has previously shown that earlier marriage leads to higher fertility. This may no longer be true. Although the recent lowering of the age of majority from 21 to 18 years by the Family Law Reform Act, 1969, resulted in a surge in fertility rates at the youngest ages (a phenomenon likely to prove transient), widespread contraceptive knowledge and facilities made available under the Family Planning Act, 1967, coupled with the full implementation of the 1967 Abortion Act are undoubtedly having their effects upon fertility rates.

In such circumstances, long-term forecasting becomes even less reliable than hitherto.

Based upon the 1966 Census and preliminary statistics from that for 1971, the following table compares fertility rates calculated for the Borough since 1965 with those for Greater London and for England and Wales in which (c) is the most and (a) the least accurate of the three methods usually employed to portray fertility. Rates for the current year are slightly distorted owing to the downward adjustment of population statistics necessitated by discrepancies between the Registrar-General's estimates and actual figures revealed by the 1971 Census.

Fertility

	6 years' average 1965/70	1971		
		E & W	Gtr. London	G'WICH
GENERAL				
(a) Crude Birth Rate (per 1,000 pop.)	15.18	16.0	15.2	14.26
(b) General Fertility Rate (per 1,000 women 15-44 years)	76.00	82.5	76.2	75.58
LEGITIMATE				
(a) Crude Birth Rate (per 1,000 pop.)	13.75	14.6	13.4	12.84
(b) Fertility Rate (per 1,000 women 15-44 years)	68.83	76.6	66.8	68.03
(c) Fertility Rate (per 1,000 married wo- men 15-44 years)	109.10	112.9	109.5	105.99
ILLEGITIMATE				
(a) Crude Birth Rate (per 1,000 pop.)	1.44	1.3	1.8	1.42
(b) Fertility Rate (per 1,000 women 15-44 years)	7.21	7.0	8.7	7.55
(c) Fertility Rate (per 1,000 unmarried women 15-44 years)	19.74	21.8	22.9	21.07

Fertility of Immigrants

Hitherto, very little accurate information has been available concerning immigrants and their fertility although it is generally understood that not only are their completed families larger but that, age for age, they have a higher fertility rate than the native population.

As a result of Regulations introduced by the Registrar-General on 1st April, 1969, birth registration must now indicate the birth-place of the parents. Following these changes, an analysis of births registered in the 2nd and 3rd quarters of 1969 was under-

No. in Short List.	CAUSES OF DEATH 1971	Sex	Deaths at subjoined Ages of "Residents", whether occurring within or without the District.												
			All Ages	Under 1 year		1 and under 5.	5 and under 15.	15 and under 25.	25 and under 35.	35 and under 45.	45 and under 55.	55 and under 65.	65 and under 75.	75 and over	
				Under 4 Wks	4 wks and under 1 year										
	All Causes	M F	1295 1250	22 10	10 11	5 3	2 12	16 10	16 9	23 28	106 57	281 137	392 283	422 690	
4	Enteritis and other Diarrhoeal Diseases	M F	— 1	— —	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
5	Tuberculosis of Respiratory System	M F	2 1	— —	— —	— —	— —	— —	— —	— —	— 1	— 1	1 —	1 —	— —
6	(1) Late Effects of Resp. T.B.	M F	2 1	— —	— —	— —	— —	— —	— —	— —	— 1	— —	— —	— —	— —
	(2) Other Tuberculosis	M F	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 1
16	Malaria	M F	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— —
17	Syphilis and its Sequelae	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
18	All other Infective and Parasitic Diseases	M F	3 4	— —	— —	— —	— —	— 1	— —	— —	— 1	— —	1 —	— —	— 2
19	(1) Malignant Neoplasm-Buccal Cavity, etc.	M F	4 1	— —	— —	— —	— —	— —	— —	— —	— —	1 —	1 —	1 —	— —
	(2) Malignant Neoplasm-Oesophagus	M F	4 6	— —	— —	— —	— —	— —	— —	— —	— 1	— —	1 —	3 —	— 4
	(3) Malignant Neoplasm-Stomach	M F	39 28	— —	— —	— —	— —	— —	— —	— 1	4 —	14 —	12 —	8 —	— —
	(4) Malignant Neoplasm-Intestine	M F	42 35	— —	— —	— —	— —	— —	1 —	1 —	7 —	12 —	12 —	9 —	— —
	(5) Malignant Neoplasm-Larynx	M F	4 —	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— —	— —	— 3
	(6) Malignant Neoplasm-Lung, Bronchus	M F	132 28	— —	— —	— —	— —	— —	— —	— —	— 3	17 2	38 7	44 10	33 6
	(7) Malignant Neoplasm-Breast	M F	— 56	— —	— —	— —	— —	— —	— —	— —	— 3	— 16	— 13	— 12	— 12
	(8) Malignant Neoplasm-Uterus	M F	18 21	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— 3	— 5	— 12
	(9) Malignant Neoplasm-Prostate	M F	7 11	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— 1	— 1	— 4
(10)	Leukaemia	M F	64 91	— —	— —	— —	— —	2 —	2 —	3 —	2 —	7 6	21 20	15 28	14 29
	(11) Other Malignant Neoplasms, etc.	M F	3 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
20	Benign and Unspecified Neoplasms	M F	3 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
21	Diabetes Mellitus	M F	14 15	— —	— 1	— —	— —	— —	— —	— —	— —	— —	3 1	3 5	7 7
22	Avitaminoses, etc.	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
23	Anaemias	M F	2 5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1 —	1 3
24	Meningitis	M F	— 2	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— —	— —	— 1
25	Active Rheumatic Fever	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
26	Chronic Rheumatic Heart Disease	M F	12 18	— —	— —	— —	— —	— —	— —	— 1	— 1	— 1	1 —	7 6	2 5
27	Hypertensive Disease	M F	14 26	— —	— —	— —	— —	— —	— —	— —	— 1	— —	5 2	6 7	— 17
28	Ischaemic Heart Disease	M F	329 248	— —	— —	— —	— —	— —	— —	— —	— 5	34 7	85 20	103 63	102 155
29	Other Forms of Heart Disease	M F	30 49	— —	— —	— —	— —	— 1	— —	— —	— 1	2 2	6 2	2 10	17 37
30	Cerebrovascular Disease	M F	128 171	— —	— —	— —	— —	— —	— 1	— 1	— 1	9 6	13 14	44 60	60 120
31	Influenza	M F	1 —	— —	— —	— —	— —	— —	— —	— 1	— 2	— —	— 6	1 —	— —
32	Pneumonia	M F	96 176	1 —	— 1	— —	— —	— —	— —	— —	— —	— 1	4 2	29 4	60 31
33	(1) Bronchitis and Emphysema	M F	121 34	— —	— —	— —	— —	— —	— —	— —	— —	— 2	23 5	65 11	31 16
	(2) Asthma	M F	2 1	— —	— —	— —	— —	— —	— —	— 1	— 1	— —	— —	— —	— —
34	Peptic Ulcer	M F	17 8	— —	— —	— —	— —	— —	— —	— —	— 1	— 1	— —	7 2	7 4
36	Intestinal Obstruction and Hernia	M F	7 9	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 2	— 1	— 6
37	Cirrhosis of Liver	M F	5 4	— —	— —	— —	— —	— —	— —	— —	— —	— 1	4 3	— 1	— —
38	Nephritis and Nephrosis	M F	8 4	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 3	— 3	— 2
39	Hyperplasia of Prostate	M F	2 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 2
40	Abortion	M F	— 2	— —	— —	— —	— —	— —	— —	— —	— 2	— —	— —	— —	— —
41	Other Complications of Pregnancy, etc.	M F	1 10	— 3	— 4	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
42	Congenital Anomalies	M F	11 5	2 5	4 —	— —	1 —	1 —	— —	— —	— —	— —	— —	1 2	— 1
43	Birth Injury, Difficult Labour, etc.	M F	4 4	4 4	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
44	Other Causes of Perinatal Mortality	M F	12 4	12 4	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
45	Symptoms and ill-defined conditions	M F	— 4	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 3
46	(1) Other Endocrine Diseases	M F	2 5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— 3	— 1
	(2) Other Diseases of Blood, etc.	M F	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— —
	(3) Mental Disorders	M F	— 7	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
	(4) Multiple Sclerosis	M F	— 2	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 7
	(5) Other Diseases of the Nervous System, etc.	M F	9 8	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
	(6) Other Diseases of the Circulatory System	M F	48 53	— —	— —	— —	— —	— —	— —	— —	— —	— 2	10 2	14 14	22 37
	(7) Other Diseases of the Respiratory System	M F	17 9	1 —	4 2	— —	— —	— —	— —	— —	— —	— 1	— 1	— 1	— 2
	(8) Other Diseases of the Digestive System	M F	8 16	— —	— —	— —	— —	— —	— —	— —	— —	— 2	— 1	4 3	1 10
	(9) Other Diseases of the Genito-urinary System	M F	4 17	— —	— —	— —	— —	— —	— —	— —	— —	— 1	— 1	— 4	— 11
	(10) Diseases of Skin, Subcutaneous Tissue	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
	(11) Other Diseases of the Musculo-skeletal System	M F	4 11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
47	Motor Vehicle Accidents	M F	24 11	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
48	All Other Accidents	M F	16 18	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
49	Suicide and Self-inflicted Injuries	M F	15 10	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
50	All Other External Causes	M F	5 3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —

taken by the R.G.'s department and a table was compiled to show the situation as revealed in the Borough at that time.

Since 1969, no further statistics on these lines have been issued for specific areas but the Registrar-General has estimated that, of the total birth occurrences in England and Wales during 1971, 5.8% were to parents of New Commonwealth ethnic origin. The current national figure shows no significant change from that for 1970.

If this situation obtains in Greenwich, then the current fertility rate of resident females born in the New Commonwealth countries is continuing on a course similar to that calculated for 1969, namely, at something more than $2\frac{1}{2}$ times that of the indigenous population.

Deaths

Populations are not similarly constituted and their crude Death Rates therefore fail as true comparative mortality indexes in that their variations are not due to mortality alone, but arise also from differences in their population constitution. For instance, a town with a population consisting of aged persons would register more deaths than one composed entirely of young and vigorous adults. Again a town containing a larger number of males than females records more deaths with a consequent higher Death Rate than one in which females preponderate.

To overcome this difficulty the Registrar-General has worked out for each area in the country an adjusting factor which is termed the *area comparability factor* and is based on the last census population figure. The *factor* for Greenwich, viz. 1.07, may be regarded as the population handicap to be applied which, when multiplied by the crude Death Rate for the year, modifies the latter so as to make it comparable with the country as a whole or with any similarly adjusted area.

The net number of Greenwich deaths registered during 1971 was 2,546 of which 1,296 were males and 1,250 females compared with last year's total of 2,606. This gives a crude Death Rate for the Borough of 11.73 per 1,000 of the population, representing an increase of 0.17 over that calculated for the previous year. When the *area comparability factor* is taken into account the rate is increased to 12.55 for comparative purposes.

The comparable Death Rates for Greater London and for England and Wales are 11.61 and 11.6 respectively. Inner London returned a crude Death Rate of 12.3.

In Greenwich, the crude death rate per 1,000 living was 12.28 for males and 11.13 for females compared with 12.12 and 11.11, the respective national rates.

The inset table showing the causes of deaths at all ages has been supplied by the Registrar-General and is included in accordance with the Ministry of Health's request.

In the Appendix to the Report will be found a table giving by districts, the causes of, and ages at death of residents whilst indicating the numbers actually dying in Public Institutions.

Age Mortality

The age mortality and the distribution of the deaths between the different quarters of the year are shown by the following table:—

Of the four quarters, the first registered the highest proportion of the year's total deaths and the third the lowest, viz. 30.1% and 21.5% respectively.

Deaths	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Under 1 year of age	12	19	14	8	53
Between 1 and 2 years	2	—	—	1	3
Between 2 and 5 years	1	1	2	1	5
Between 5 and 15 years	1	7	1	5	14
Between 15 and 25 years	8	4	9	5	26
Between 25 and 35 years	8	3	9	5	25
Between 35 and 45 years	15	9	10	17	51
Between 45 and 55 years	44	31	50	38	163
Between 55 and 65 years	118	110	79	112	419
Between 65 and 75 years	215	159	138	163	675
75 years and upwards	343	244	236	289	1,112
TOTALS	767	587	548	644	2,546

It will be observed from the following table that during 1971 the deaths in the age group 0–5 years accounted for 2.4% and that of the “over 65's” 70.6% of the year's total. Figures for the previous four years are given for comparative purposes.

Age Group	1967	1968	1969	1970	1971
Under 1 year	73	59	58	72	53
Between 1 & 5	13	11	9	12	8
Between 5 & 15	8	11	11	13	14
Between 15 & 25	19	17	22	15	26
Between 25 & 65	658	587	672	637	658
65 and over	1,708	1,875	1,779	1,857	1,787
Totals	2,479	2,560	2,551	2,606	2,546

The current year saw the death of three centenarians, a male and a female each of 101 years of age and one male of 100.

Deaths in Institutions

Although since 1965 overall deaths have remained more or less constant, those occurring in hospitals, etc., have been rising at an average annual rate of 1.5% and the current total now stands at 79.1%, i.e. approximately 4 out of every 5 deaths.

The following table gives the number of deaths of Greenwich residents in Public Institutions during the last seven years:—

DEATHS OF GREENWICH RESIDENTS			
Year	Total	In Public Institutions	
		No.	% of Total Deaths
1965	2,544	1,825	71.7
1966	2,560	1,854	72.4
1967	2,479	1,844	74.3
1968	2,560	1,888	73.7
1969	2,551	1,902	74.6
1970	2,606	1,991	76.4
1971	2,546	2,014	79.1

Maternal Mortality

Statistically, maternal deaths should be related to all those women who are pregnant during the period of the review. However, as this is impracticable (for miscarriages are not registerable and many pregnancies are terminated unbeknown to the authorities), the extent of maternal mortality is measured against the total of live and stillbirths registered which gives a reasonably accurate basis for enumerating pregnancies during the interval of assessment.

Maternal mortality is conveniently defined as the number of women dying from complications of pregnancy, childbirth or puerperium during the year. This is then related to the number of live and stillbirths during the same period to give the *maternal death rate*. Abortion, because of the possible criminal element, is often excluded but, when included, the fact should be stated.

Studies have shown that expectant mothers on a poor pre-natal diet become greater obstetric risks and the incidence of miscarriages, stillbirths and premature births increases. Moreover, the offspring of such mothers appear more prone to illness and infection subsequently.

Compared with a NIL return for 1970, three maternal deaths

were registered for Greenwich during the current year giving a rate of 0.96 per 1,000 total births. Of these, 2 were the result of therapeutic abortions (ages 37 and 42 years) and the other was due to pulmonary embolism in a female of 30 years arising from phlebothrombosis of pelvic and leg vein after full term pregnancy.

For England and Wales the rate (*ex. abortion*) was 0.14 and for Greater and Inner London rates of 0.12 and 0.17 were respectively returned. The rate recorded for Greenwich was 0.32.

An abortion rate of 0.03 was registered for England and Wales whilst that for Greater London was some three times greater at 0.09. The Greenwich rate was substantially higher at 0.64.

Infantile Mortality

Infant Mortality of any given locality is measured by relating the number of deaths of children under one year of age recorded during the year to the number of live births registered for that particular area during the same period.

Bad housing, overcrowding, poor sanitation, low standards of education, illegitimacy, all tend to produce higher infant mortality rates. It follows therefore that the infant mortality rate should provide a reasonably accurate indication of the social circumstances of any particular area. However, it must be borne in mind that as infant mortality has now reached relatively small proportions, any slight deviation in the number of deaths tends to misleading fluctuations in the rate and only a long-term appraisal is likely to reflect the true position.

Substantial improvements have been achieved in this field of public health since the beginning of the century. The infant mortality rate for the area now known as the London Borough of Greenwich was 130 per 1,000 live births in 1901, the actual number of children dying before reaching the age of 1 year amounted to 818. Comparable figures for 1971 are 17.12 and 53 respectively.

Registering a decrease of 5.60 from last year's unusually high figure our present infant mortality rate of 17.12 is not only 2.52 less than the average for the previous 6 years but it is also the lowest recorded since the formation of the new Borough in 1965. It compares favourably with the rate of 17.5 for England and Wales and with that of 17.4 for Greater London. Inner London returned a figure of 19.2.

Prematurity is by far the most common cause of infant mortality and it may well be that, in many instances, the mere occurrence of

a premature birth is an indication of the existence of conditions, as yet occult or perhaps not fully understood, which are not conducive to the establishment of a viable infant. However, during the current year deaths from prematurity fell by 35% to a total of 13.

Last year's unexpected surge in infant mortality arose mainly from an increase in respiratory deaths which accounted for 32% of the total. Cases of tracheo-bronchitis had almost doubled to 13, twelve of which occurred in infants outside the neonatal period. During 1971, this total was reduced to 5 but, again, 4 of these deaths occurred in children over 1 month of age.

In respect of tracheo-bronchitis, often a cause of precipitate death in apparently healthy infants, pathogenesis is still obscure but cytogenetic evidence is being accumulated which supports the view that these mysterious deaths could be the result of virus infection of the foetus prior to birth. Furthermore, investigations into such tragedies have revealed greater chromosomal abnormalities and a higher proportion than normal of babies with the "*simian*" line, an hereditary characteristic which can be produced by the rubella virus before birth.

Congenital abnormalities and inherited metabolic diseases continue to present a hard core of all infant deaths although recent progress in this latter field is making the recognition of deviations arising from chromosomal aberrations somewhat easier. So much so that the counselling of prospective parents at "*genetic clinics*" where investigations can be instigated has become a practicable proposition and could be a logical extension of both local health authority and hospital services.

Unfortunately, it is still true that unmarried mothers seek ante-natal help considerably later than their married counterparts. Their babies are more likely to be stillborn or born prematurely and it is usual for their infant mortality rates to exceed by far the legitimate rates. This pattern, however, appears to be changing possibly as a direct result of recent legislation concerning family planning and abortion or, what is more likely, the fact that society's attitude and authority's treatment of illegitimacy is becoming more humane. Currently, in Greenwich, the infant mortality rate for illegitimate babies has fallen dramatically from 38.58 to 12.94.

Actual infant deaths recorded during the year, viz. 53 (19 less than last year) comprised 32 males and 21 females of which 32

occurred in hospitals within the Borough, 17 in hospitals without and 4 at home. The following table shows the causes of and ages at death:—

INFANTILE MORTALITY DURING THE YEAR 1971

Deaths from stated Causes in Weeks and Months under 1 Year of Age.

CAUSE OF DEATH	Under 1 week	1—2 Weeks	2—3 Weeks	3—4 Weeks	Total under 1 Month	1—3 Months	3—6 Months	6—9 Months	9—12 Months	Total Deaths under One Year
Abortion	2	—	—	—	2	—	—	—	—	2
Accidental - asphyxia (hanging)	—	—	—	—	—	—	—	—	1	1
Acute - gastro-enteritis	—	—	—	—	—	—	—	1	—	1
- otitis media	—	—	—	—	—	1	—	—	—	1
- tracheo-bronchitis	—	—	—	1	1	2	1	—	1	5
- upper respiratory infection	—	—	—	—	—	1	1	—	—	2
Anoxia - intra partum	2	—	—	—	2	—	—	—	—	2
- intra uterine	1	—	—	—	1	—	—	—	—	1
Atelectasis - pulmonary	1	—	—	—	1	—	—	—	—	1
Bronchopneumonia	—	—	—	—	—	—	1	—	—	1
Cerebral haemorrhage	1	—	—	—	1	—	—	—	—	1
Congenital anomalies -										
Anencephaly	1	—	—	—	1	—	—	—	—	1
Heart disease	1	—	—	—	1	—	—	—	—	1
Intraventricular septal defect	1	—	—	—	1	—	—	—	1	2
Meckel's diverticulum	1	—	—	—	1	—	—	—	—	1
Meningomyelocele	—	1	—	—	1	1	—	—	—	2
Stridor - epiglottitis	—	—	—	—	—	—	1	—	—	1
Transposition of Great Vessels	—	—	—	—	—	—	1	—	1	2
Trisomy 18 - Edward's syndrome	—	—	—	—	—	1	—	—	—	1
Diabetes mellitus	—	—	—	—	—	—	—	1	—	1
Endocardio - fibrositis	—	—	—	—	—	—	—	—	1	1
Haemorrhage - ante partum	1	—	—	—	1	—	—	—	—	1
Haemosiderosis - pulmonary	—	—	—	—	—	—	1	—	—	1
Malabsorption - alactasia	—	—	—	—	—	—	1	—	—	1
Placental - infarction	1	—	—	—	1	—	—	—	—	1
- insufficiency	1	—	—	—	1	—	—	—	—	1
Prematurity	13	—	—	—	13	—	—	—	—	13
Respiratory distress syndrome	1	—	—	—	1	—	—	—	—	1
Rhesus incompatibility	2	—	—	—	2	—	—	—	—	2
Sudden death (cause unknown)	—	—	—	—	—	—	1	—	—	1
TOTALS	30	1	—	1	32	6	8	2	5	53

Males 32

Females 21

Neonatal Mortality—From the accompanying table it can be seen that neonatal mortality, i.e. infants dying before attaining the age of one month, accounted for 32 deaths, equivalent to 60.4% of all infant deaths and giving a Neonatal Mortality Rate of 10.34 per 1,000 live births. This rate is 3.86 less than that calculated for the previous year and compares favourably with the figure of 11.6

for Greater London and that returned for England and Wales, which was also 11.6. Inner London registered a rate of 12.7.

Besides being 2.57 less than the average for the previous 6 years the current rate for Greenwich of 10.34 is the lowest recorded since the formation of the present Borough.

Early Neonatal Mortality—Thirty infant deaths occurring during the first week of birth gives an Early Neonatal Mortality Rate of 9.69 per 1,000 live births compared with rates of 9.7 for Greater London and 9.87 for England and Wales. The comparable figure for Inner London was 10.6.

As with our other infant mortality statistics the rate for early neonatal mortality is 1.87 less than the average for the previous 6 years and the Borough's lowest since its inception.

Of the 30 deaths recorded, 18 (60%) occurred during the first day.

Perinatal Mortality—The Perinatal Mortality Rate, calculated from a total of 42 stillbirths and 30 deaths of infants under 1 week, was 22.95 per 1,000 total births, showing a decrease of 0.46 from that for 1970. The equivalent rate for England and Wales is 22.3 and that for Greater London 21.3. Inner London recorded a rate of 22.0.

Reproductive Wastage—A combined total of 95 stillbirths and infantile deaths gives a Reproductive Wastage Rate of 30.28 per 1,000 total births, a decrease of 2.81 from that calculated for the previous year. Figures for England and Wales and Greater London are 29.85 and 28.97 respectively.

REMARKS ON OTHER VARIOUS DEATH CAUSES

For international statistical comparability certain basic requirements are considered indispensable and these are covered in the articles of the Nomenclature Regulations, 1967, adopted by the Twentieth World Health Assembly on 22nd May, 1967.

Following the Nineteenth World Health Assembly in 1966 which, by resolution, adopted the Eighth Revision and Amendment of the International Classification of Diseases to come into effect as from 1st January, 1968, the Registrar-General, from this date, has brought into use a new classification with regard to records and statistics. Although these new categories are broadly equivalent to the old, inevitably occasional difficulties will be met in reconciling present with previous statistics and exact comparability cannot be assumed.

Classification of Deaths—It should be borne in mind that the

statistical data compiled locally relating to cause of death may not entirely agree with the figures furnished to Local Authorities by the Registrar-General. Classification of the cause of death is taken from one or more causes as stated on the medical certificate in accordance with the rules generally adopted throughout England and Wales.

The Registrar-General is able, in cases where it is deemed desirable, to obtain fuller information from the certifying practitioner. This enables his department to modify the original classification—hence the possibilities of discrepancies in some cases between the figures prepared locally and those referred by the Registrar-General.

General

While, nationally, total deaths fell by 1.4%, those in respect of Greenwich residents declined by 2.3%. Heart disease registered a decrease of 53 (6.8%), mainly of the ischaemic type, and, as expected, following the abatement of the Hong Kong A2 influenza outbreak of 1969 which had persisted into 1970, there was a reduction of almost 10% in respiratory mortality. Although there was a slight decrease in deaths from “all forms” of cancer and those from carcinoma of the lung fell by 7% to 160, those of the breast and uterus showed advances of 10% and 50% respectively. Increases in deaths from cerebrovascular disease, motor-car accidents, suicide and congenital anomalies were marginal.

Although, statistically, variations in rates may sometimes seem substantial, in many instances actual numbers are small and lead to wide and often only temporary fluctuations.

Heart Disease

Current local mortality from heart disease is at a level almost 10% below the average for the previous 6 years.

Recognised as the principal “killer” complaint of modern times this classification, covering as it does (a) chronic rheumatic, (b) hypertensive, (c) ischaemic and (d) other forms of heart disease, it was responsible for 727 deaths (386 males and 341 females) during the current year. This total, which was a decrease of 53 from that of the previous year, formed 28.5% of the total deaths from all causes and gives a rate of 3.35 per 1,000 of the population. The rate for 1970 was 3.46.

Deaths in the Borough from ischaemic heart disease alone

accounted for 578 (330 males and 248 females), some 43 less than the 621 who died from this disease in 1970. Of the 330 males who succumbed from this cause, 36.3% were between the ages of 45 and 65 years compared with slightly less than 11% of similarly grouped females.

In contrast with the figures returned for England and Wales and Greater London, viz. 2.93 and 2.71, both indicating a rise over the previous year, the Borough rate of 2.66 showed a slight reduction of 0.09.

Cerebrovascular Disease

Of the total of 299 deaths arising from cerebrovascular disease during the year, 4 more than 1970, 171 were females. Apart from ischaemic heart disease and pneumonia, this constituted the main cause of death in females, being responsible for almost 14% of all female deaths during the year, the greater proportion of which, viz. 147 (86%) occurred in women over the age of 65 years and only 10 (5.8%) in those under 55 years.

The present rate of 1.38 shows a slight increase of 0.07 over that for 1970 but still compares favourably with that of 1.41 for England and Wales.

Cancer

Second only to heart disease as the principal cause of death in the community, this disease, which has so many psychological connotations not met with in other diseases, claimed 591 victims (317 males and 274 females) during the year under review, a decrease of 15 from those recorded during 1970 but producing a rate of 2.72 per 1,000 population.

During 1971, deaths arising from cancer of the lung, stomach, intestines and oesophagus fell slightly and their rates were more favourable than those for the previous year. For carcinoma of the breast and uterus, however, the rates were less satisfactory and a persistence of current trends will demand closer surveillance. Of the 9 cervical cancer deaths, 6 were over the age of 65 years, the remaining 3 cases being in the 45/54 years age group. Cancer of the bladder accounted for 17 deaths (12 males, 5 females), a fall of 48.5% from the previous year, of whom 10 men and 3 women were over 65 years of age.

The total of 591 cancer deaths was equivalent to 23.2% of deaths from all causes, indicating that approximately one death in every

four resulted from some form of cancer. The following table shows the various sites affected:—

Site	Male	Female	Total	Rate*
<i>Malignant Neoplasms:—</i>				
Buccal Cavity, etc.	4	1	5	0.02
Oesophagus	4	6	10	0.04
Stomach	39	28	67	0.31
Intestine	42	35	77	0.35
Larynx	4	—	4	0.02
Lung, Bronchus	132	28	160	0.74
Breast	—	56	56	0.26
Uterus	—	18	18†	0.08
Prostate	21	—	21	0.10
Leukaemia	7	11	18	0.08
Others	64	91	155	0.71
Totals	317	274	591	2.72

* Per 1,000 population

† Cancer of the Cervix—9 (rate 0.04)

Lung Cancer—The continuing rise in total cancer deaths throughout the country is due, almost entirely, to an increase in cancer of the lung, deaths from which have been advancing at a rate of almost 1,000 per year since 1960; indeed the present total of 30,746 for England and Wales with a calculated rate of 0.63 indicates an average yearly increase of 3.5% over the last decade. Following the national trend, Greater London returned a rate of 0.78 but, contrariwise, the local rate of 0.74 which shows a fall of 0.02 from that for 1970, equals the Borough average for the previous 6 years.

Although death rates in the country for women who die from lung cancer continue to increase, there are still five times as many men as women who die from this cause. In Greenwich this pattern is repeated, the rates for males and females dying from this cause during 1970 were 1.25 and 0.25 respectively.

The accompanying table giving deaths from lung cancer in the

Borough since 1965 is included in order that current trends in this disease may be studied:—

DEATHS FROM CANCER OF LUNG
(including Bronchogenic Carcinoma)

Year	AGE GROUPS												Totals		Grand Total	Rate per 1,000 Pop.
	25 and under 35 yrs.		35 and under 45 yrs.		45 and under 55 yrs.		55 and under 65 yrs.		65 and under 75 yrs.		75 yrs. and upwards					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
1965	—	—	2	3	16	7	47	10	59	9	23	8	147	37	184	0.79
1966	—	—	6	3	17	6	44	5	46	4	19	6	132	24	156	0.68
1967	1	—	2	3	15	4	39	16	55	21	27	7	139	51	190	0.82
1968	—	—	1	1	21	2	35	7	65	6	18	5	140	21	161	0.70
1969	—	—	1	—	17	3	47	3	51	8	23	5	139	19	158	0.70
1970	1	—	—	2	15	4	39	13	55	8	23	12	133	39	172	0.76
1971	—	—	—	3	17	2	38	7	44	10	33	6	132	28	160	0.74

Respiratory Deaths

Pneumonia—There were two children under one year of age and 198 persons over 65 years in a total of 272 deaths from pneumonia registered during 1971. The total, which consisted of 96 males and 176 females, showed a decrease of 3 from that of the previous year.

Compared with rates of 0.81 and 0.97 for England and Wales and Greater London respectively, the Borough returned a rate of 1.25 which was 0.03 greater than that for 1970.

Bronchitis and Emphysema—During the current year Greenwich had a total of 155 bronchitis deaths, 121 males and 34 females, a decrease of 44 from those recorded for the previous year.

The rate computed for the Borough is 0.71, a fall of 0.17, compared with that of 0.55 for England and Wales and 0.60 for Greater London.

Influenza—One influenza death occurred during the year under review, a male over the age of 65 years, giving a rate of 0.004 for the Borough. The national rate was 0.01 and that for Greater London was identical.

There were 7 deaths recorded in the Borough during 1970, producing a rate of 0.03.

Asthma—Although hitherto not so classified, asthma is now regarded as a respiratory condition and there were 3 deaths in 1971 from this cause, giving a rate of 0.01. England and Wales and Greater London both returned a rate of 0.02.

Other Respiratory Deaths—Compared with a figure of 39 deaths for 1970 the current year's total of 26 registers a fall of 33.3%. After an unexpected rise in total deaths "under 1 year" during

1970, viz. 15, the current year saw a reversion to the more normal pattern of 7.

Tuberculosis

Recent years have seen lung disease in the form of tuberculosis effectively controlled by chemotherapy and the breeding of tuberculin tested herds of cattle has been eminently successful in almost eliminating the dissemination of other forms of tuberculosis.

As in 1970, total deaths in the Borough from all forms of tuberculosis numbered 7, producing a rate of 0.03. Of the deaths registered, 4 were males and 3 females, with 1 female case being of non-pulmonary type.

The comparable rate for England and Wales was 0.03 and that returned for Greater London was 0.04.

Two deaths, both female (one non-pulmonary), were over 75 years of age.

Violent Deaths

As a classification, the term "violent death" includes those deaths arising from motor vehicle accidents, suicide, homicide and "other forms" of accident.

During 1971 there were 102 deaths from violence in the Borough, an increase of 20 over 1970, giving a rate of 0.47 per 1,000 population compared with a rate of 0.49 for England and Wales and 0.43 for Greater London.

Motor Vehicle Accidents—Road accidents, which are now the commonest cause of death in adolescents and young adults, were responsible for 7,071 deaths in England and Wales during the year, an increase of 5% over the previous year when the total was 6,727.

Thirty-five persons in the Borough died from motor vehicle accidents during 1971, 6 more than those recorded for the previous year. The calculated rate of 0.16 compares with 0.14 and 0.12, the rates for England and Wales and Greater London respectively. Of the Borough total, 11 (31.4%) were under 25 years of age and 10 (28.6%) were over 65 years.

Home Accidents—This year's total of 19 deaths from home accidents is identical with that for 1970, giving a rate of 0.09. Of these deaths, 6 resulted from falls to persons over 60 years and whose average age was 70. Seven persons succumbed to carbon monoxide poisoning including 4 children, 3 of 6 years and 1 of 4, whose deaths arose from paraffin heater fires. A male of 78 years died from burns sustained when his clothes were ignited by an overturned paraffin lamp and a female of the same age died as a result of a faulty domestic boiler. Two children died

from accidental asphyxia, one a female of 11 months who was strangled by a harness in her pram. The remaining 2 cases concerned females, one of 60 years who died from accidental barbiturate poisoning and the other of 76 years whose demise was attributed to traumatic rupture of the aorta.

Suicide—Contrary to general belief, suicide continues to claim a substantial number of victims. In England and Wales, the number of suicides during 1971 amounted to the formidable figure of 3,944, giving a rate of 0.08 per 1,000 population. Moreover, of this total almost 20%, viz. 765, were recorded in Greater London, giving a rate of 0.10. These compare with 25 deaths (15 males and 10 females) and a rate of 0.12 for Greenwich, both figures showing marginal increases over those for 1970.

In this Borough, suicide was accomplished mainly by the ingestion of drugs, a method particularly favoured by women (8 out of a total of 10). Hanging accounting for 2 males and self-inflicted injuries for a further 4, all but one being under 60 years of age. In addition to 2 deaths arising from carbon monoxide poisoning there was one from drowning and the swallowing of corrosive liquids accounted for a further 2.

Against a background of rising world rates, that for England and Wales has declined by over one-third since 1962. Up to a decade ago, by far the most popular method of suicide was gas poisoning which was then responsible for 50% of all suicides. It would appear that our reduction could be related, *inter alia*, to the switch to non-poisonous North Sea gas, the introduction of anti-depressants and the influence of organisations such as the "Samaritans".

Once again, figures for London in particular throw into relief a psychiatric problem which is becoming very familiar in the cities of countries which sustain high living standards. Deaths from suicide in the Metropolis were almost treble those for tuberculosis and nearly equalled the total deaths from road accidents.

Homicide—Two of the 5 cases registered during 1971 occurred in the previous year. Four victims were males of 18, 20, 21 and 24 years, all dying of stab wounds. Defendants in 2 cases were convicted of murder, one of manslaughter and one was discharged. The remaining case concerned a girl of 10 years who died as a result of an assault by a man cohabiting with her mother—he was convicted of murder.

Common Infectious Diseases

There were no deaths registered during the current year from diseases such as measles, scarlet fever, whooping cough and diphtheria, but a female of 7 months died from acute gastroenteritis.

SECTION III

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES

Truthfully it could be asserted that modern conditions are far from ideal. Nevertheless, they are greatly in advance of those prevailing during the middle 1800's when Chadwick established a connection between material environment and health. What was remarkable for that era was that, against substantial opposition, he succeeded in getting this fact officially accepted. At that time, for very practical reasons, Chadwick was constrained to concentrate upon the material and physical aspects of the problem and, perhaps because of this historical association epidemiology, which by definition is concerned with occurrence and distribution of all diseases, had acquired a narrower concept linking it, fortuitously, with infectious disease. But if the conquest of disease generally is to be achieved, then our cumulative knowledge, not only of its epidemiology but also its aetiology, must be expanded and expertly applied to its most important function, namely, that of prevention.

Progress in preventive medicine is usually measurable or discernible only over extended periods and is probably expressed in language not readily understood by the public at large. However, even in these terms, success there has been in abundance and this has been traced in previous Reports not only by the general decline in morbidity and mortality rates but also by the increase in the expectation of life at birth which has almost doubled during the last 150 years.

Although principles substantiated by Chadwick are still tenable, health is seen today as the result of the interplay of physical, mental and social circumstances. Hitherto, since being obliged to appoint Medical Officers of Health before the close of the last century, local health authorities have been concerned primarily with preventive medicine encompassing as it does environmental health in all its aspects as well as the care of the mother and her child, school and mental health and, indeed, the welfare of society in general. As a result of their sustained efforts over the years they have seen the gradual shift of emphasis from acute infections to the more progressive and degenerative diseases but, fundamentally, there has always been a strong belief that only in the unification of general practice, hospital services and public

health (including care, after-care and family case-work) could the maximum benefits to society be realised.

As early as 1920, this logical extension into a "one-tier" system was the subject of a Report by Lord Dawson of Penn and it should occasion no surprise, therefore, that the Government's decision to implement a separate Social Services Act was received with some dismay in the ranks of the supporters of "unification" and with the feeling that a great opportunity has been lost to set the nation's health services on the right road. Apprehension has also been expressed about the fact that full success will now be dependent not upon integration but upon co-operation with all its inherent disadvantages. However, it would be a serious error to pre-judge such an issue and, assuredly, time will prove an adequate arbiter.

Although the merits of a single agency will be argued *ad nauseum*, nevertheless, the Secretary of State has insisted that inauguration of the Area Health Boards in April, 1974, will usher in an entirely new structure, the purpose of which is to eliminate artificial barriers and, by combining the hospital and primary care or practitioner services with those of community health, to promote a service which will be a source of pride to public and staff alike. This impending and unique re-organisation will give, for the first time ever, an opportunity for all medical, paramedical and administrative services to work in unison for the common good, untrammelled by sectional interests. Watched by a critical world-wide audience we must not fail.

It would be unrealistic not to acknowledge that a re-organisation of this magnitude will inevitably precipitate some problems which will not fit neatly into pre-selected niches. Among these will be the allocation of responsibility for epidemiological investigations and preventive actions involved in the control of serious infectious diseases as exemplified by the diphtheria outbreak at Manchester and the tuberculosis affair at Plymouth during the current year.

At present the Medical Officer of Health, with the skilled assistance of the Public Health Inspectors, has the statutory powers to bring all resources into play and to deploy them with the utmost expediency, an arrangement which has proved to be outstandingly successful. However, the coming re-organisation will leave these officers within the jurisdiction of dissimilar authorities. Speed of action in the application of "expertise" is so vital in such circumstances that the future line of responsibility needs to be clear and defined and, if continuity is not to be lost, warrants urgent consideration and an early decision.

As stated in the previous Report the extent to which monies

need to be raised and allocated for National Health purposes and how they may be deployed is a policy matter for Central Government. Out of a total of £2,255 millions estimated to be expended on the National Health Service for the year ending March 1972, local authority health departments are expected to be responsible for £121 millions, a figure some £63 millions less than that for the year 1969/70. Much of this reduction is undoubtedly due to the transfer of former health and child care duties to the Social Services. Nevertheless, taking into account increases in salaries and wages together with the general rise in inflation, the present allocation seems somewhat meagre for such an important preventive function, particularly in the light of the fact that the average weekly cost of maintaining a patient in hospital continues to rise, e.g. from £66.70 in 1970/71 to £78.58 in 1971/72.

An authority's first contact with disease usually arises via the practitioner service and it is encouraging to learn that, during 1971, the number of principals in England giving full general medical services rose by 1.4% to a total of 19,374, thereby continuing a trend evident since 1966. (Doctors born overseas, however, still form a considerable proportion of the total). Correspondingly, average patients per doctor fell by 18 to 2,460, this being the second consecutive year of such an occurrence.

An essential ingredient in the control of disease is health education. Although based upon the results of epidemiological investigations and knowledge gained empirically in the actual treatment of the sick, it is not the mere accumulation of information. For example, how often do we meet people who, despite being well-informed of the inherent dangers, continue to smoke to the detriment of their health. Rather is health education the sum total of all experience and knowledge wisely used to influence behaviour towards healthier practices. Our own health education section is organised for the furtherance of just such objectives and its impact on the public is becoming progressively more marked. The W.H.O's definition of health is a condition of "complete physical, mental and social well-being" but this can hardly be considered realistic for there would be few, if any, who could lay claim to being healthy in accordance with such criteria. It has been suggested that a more practical exposition would be that a healthy person is one who, though on occasions suffering from some disability or discomfort, could remain socially and economically active. Effective health education would support such a suggestion in that it would inculcate a more personal responsibility for individual good health, discourage unnecessary treatment, prevent an over-loading of the general practitioner and hospital services and thereby offer enhanced

opportunities for the latter to play their part in producing a healthier society. With the fulfilment of these possibilities the coming merger will surely enable the problems of lung cancer, alcoholism, drug addiction, mental illness, venereal disease and the many other chronic and degenerative and inherited diseases to be tackled with greater chances of success.

Alcoholism

Alcoholism is regarded by the W.H.O. as the fourth most important problem in the world today but when one looks at efforts made for its treatment or eradication, this country can hardly be considered in the forefront.

Psychiatry offers no precise cause for alcoholism but seems to agree that anxiety in adolescence, depression in middle age and loneliness in old age are important contributory factors. Obviously these can form only part of the aetiology because all members of these particular groups do not become alcoholics—we must delve deeper. Unquestionably, there is an urgent need for factual and epidemiological information, the lack of which renders successful preventive work somewhat fortuitous.

The action of alcohol on the addicted takes the form of an allergy which means that these unfortunates can never imbibe the smallest of tots with safety. No doubt, aversion techniques, including electric shock treatment, will claim their successes (even the *Lysistrata* approach by wives of alcoholics in Australia has, on occasions, proved effective) but the overall picture is far from satisfactory. A fair summary of the situation would seem to be that the general public has yet to accept the fact that the alcoholic is a person with a disease problem and that, so far, neither medicine nor any other profession has been able to find a cure for alcoholism. Its spread during the last decade, after a period of recession, has probably been aided and abetted by the increase in consumption per head of the population of wines, spirits and beer during 1971 by 3.6%, 16.6% and 3.5% to totals of 3 pints, 7.7 pints and 184 pints respectively, according to figures issued by the Ministry of Agriculture, Fisheries and Food.

Excessive drinking does not necessarily lead to alcoholism and the late Dr. Jellinek suggested that in certain individuals there would seem to be a predisposing constitutional factor favouring its development. In others a genetic association could be postulated for, in his own experiments, 52% of his alcoholics had an alcoholic parent. Expectancy of alcoholism among children of alcoholics is approximately 25% compared with 2% for

the population as a whole. It would seem that there is a delicate balance between heredity and environment.

What is the extent of alcoholism in the community today? No serious investigations into its incidence have been undertaken for some considerable time and we continue to rely on the surveys carried out by Jellinek and Parr. These produced some generalisations, viz., that 1.1% of the adult population were alcoholics, that 2 males to every female were affected and that the problem was not confined to one socio-economic class although more patients from the higher social groups sought treatment. Surprisingly little is known of the incidence of alcoholism in those industries where workers are acknowledged to be "hard" drinkers and where reliable statistics could have been expected to be available. Suffice to say that estimates of its cost to the country's industrial life vary between £99 millions and £250 millions according to the source of the intelligence.

In estimating the cost, not only in financial terms but also in human misery, family disruption and social ostracism, published statistics are of limited value (except, perhaps, to prove that such a problem exists) for it is clear that few patients consult their doctors on account of alcoholism. As a direct result of our neglect to treat alcoholism as a disease it has, over the years, acquired such a repugnant aura and degrading stigma that it requires great courage on the part of the addict, of his own volition, to make public his problem. Shame, family pride and a propensity of the alcoholic for untruths, all militate against the collation of accurate information and data. Indeed, despite the recent emergence of a more "permissive" society and the development of greater tolerance, especially with regard to minority groups, there is still no positive policy directed towards solving the "alcoholic" problem.

Recognising, rather belatedly, the growing menace of alcoholism, particularly among the young, parliament granted, late in 1970, £2 millions for additional treatment facilities and counselling and, during the current year, the existing services were being improved and expanded and another 5 special units consisting of 72 beds were being established.

At the close of 1971, and in accordance with a Report by the Working Party on Habitual Drunken Offenders, proposals were being entertained for the introduction into specified hospitals of pilot "detoxification" centres where immediate diagnosis could be provided for persons found drunk in public and measures taken for their present and future treatment. Inherent in the operation of these centres is the supposition that facilities exist

in the community for the long-term help that the alcoholic needs and for which the hospitals are ill-equipped to supply. Unfortunately, at present, most of the community facilities are minimal and are provided by voluntary organisations with some financial assistance from local authorities, but the Department of Health and Social Security is encouraging both voluntary and statutory bodies to co-operate in this venture of expansion.

It was reported by the Chief Inspector of Constabulary that prosecutions for drunken driving rose by 36% to 21,389 during 1971 and "breathalyser" convictions by 49.8% to 34,863, yet we are now seriously considering a relaxation of our drinking laws. Recent experiences of other countries, such as Finland, in the liberalising of their laws governing consumption of alcoholic beverages, is that such actions stimulate drinking which, in due course, give rise to further cases of alcoholism.

No evidence is available which could indicate the extent of alcoholism locally but, according to Jellinek's formula, we could expect up to 1,400 cases in the preliminary stages of addiction of whom some 350 would be of the chronic type. Cases usually come to light via the agencies of hostels, hospitals, churches, soup kitchens, prison and reception centres, various welfare and social organisations, etc., but nowhere is there a means of co-ordinating all this information.

Basically it must be remembered that, at best, treatment can only be partially successful and that prevention remains the sole effective method of control. It will also prove to be the most economical.

Cancer

While it is true to say that treatment of cancer has advanced rapidly, especially in recent years, and that some survival rates have, as a consequence, improved substantially, nevertheless, it is a fact that this has had little effect upon reducing the numbers of persons eventually succumbing to malignant disease. Indeed, throughout the country over the last 20 years, cancer mortality as a percentage of total deaths has been rising steadily by an average of 0.25 per annum to its present figure of 20.7%.

In England, during 1971, malignant disease accounted for 110,299 deaths and was responsible for 9% of all bed usage in non-psychiatric hospitals. Undoubtedly there are disturbing features about the rise in breast cancer in women and the more substantial increase in bronchogenic carcinoma in both males and females. During the last two decades, deaths from breast cancer in women have increased by 25% to the current figure of 10,529 with a rate of 0.44. Lung cancer in men has advanced

from a rate of 0.53 per 1,000 in 1951 to 1.07 in 1971, an increase of 102% whilst that in women has risen by 155% from 0.9 to 0.23 over the same period.

Although slightly less favourable than the country's average percentage of total deaths, malignant disease in Greenwich, with the exception of lung cancer, continues to follow the national trend. Borough deaths from all forms of cancer during 1971 numbered 591, representing 23.2% of total deaths and producing a rate of 2.72 per 1,000 population, the rate for males being 3.00 and for females 2.45. The present figure of 591 is 22 higher and the rate 0.49 greater than the respective averages for the previous 6 years. With a current total of 56, carcinoma of the breast shows a rise of 8% over the average for the last 6 years. Similarly, cancer of the uterus which was the cause of 18 deaths during the year was some 50% higher than the 6-year average and the 9 cervical cancer deaths included in this figure showed an identical advance. In Greenwich, bronchial carcinoma exhibited a trend contrary to that of the nation as a whole in that both males and females have shown a reduction from their averages for the previous 6 years.

Recently, two new approaches to this serious problem have been made public. At Newcastle-upon-Tyne, medical scientists have discovered that white blood cells of people with cancer develop a special reaction to a protein detectable in malignant tumours before symptoms are discernible in the patient. Use is being made of this process in that area for the diagnosis of cancer of the cervix uteri. Unfortunately the tests are very difficult and time consuming which makes large scale use out of the question. Moreover, as there is no effective method of treating cancers in unknown locations, the result of its use in screening would be merely to create anxiety in those found to be positive without the compensating hope of a full recovery. Ten years ago an interest at Birbeck College in London was centred on the body's method of controlling the division of cells in different tissues. An active ingredient of the outer skin layers was discovered which inhibited cell division and which they termed "chalone" and, further, that each tissue had its own chalone. Last year an international scientific conference in America has intimated that these substances might well be useful in the control of cancer and experiments on these lines are proceeding.

Although essentially practical and technically feasible, screening programmes in the field of malignancy would make demands on resources, both financial and manpower, that could not, at present, be justified.

Naturally, treatment cannot await full aetiological explanations

for the causes of cancer but, clearly, prevention is the only sure method of control and this, ultimately, depends upon such knowledge becoming available. Cancer registration and the establishment of oncological centres are moves in the right direction, meanwhile, the personal approach such as cessation of cigarette smoking could make a significant impact in reducing the incidence of malignancy.

Dental Caries

Dental ill-health is the country's most widespread disease, amounting to epidemic proportions.

For some years now, the Greenwich Council has been supporting a campaign for the fluoridation of water supplies in the firm belief that this is the most effective way to combat dental caries and the only efficient method to strengthen children's teeth and confer life-long benefits on them. (In areas, where free fluoride drops have been introduced as an alternative, thereby involving "personal responsibility", the uptake has been minimal and the schemes have proved to be failures.)

During this time, in pressing the case for preventive measures, these Annual Reports have outlined, often at great length, the reasons for dental decay and methods most likely to produce a practical solution. It is alleged by users of mass media that repetition is a successful way of impressing a point of view on the public, an observation which provides sufficient grounds for a reiteration of some of the important aspects concerning dental decay.

Dental caries, which is almost entirely preventable, is the name given to the process of decalcification of the mineral elements of teeth and the decomposition of the organic matrix which take place in an acid medium (*pH 5.2 or lower*) such as is created when soluble carbohydrates are available to acidogenic bacteria. This decalcifying solution is kept in constant contact with tooth surfaces by residual food particles in the mouth thereby giving rise to dental plaque. Refined carbohydrates like sucrose produce more plaque than other foods and far worse teeth are developed in those babies who are fed on sugared comforters such as sweet milk and syrup than those who are not. (Recent studies have revealed not only that fluoride inhibits falls in *pH* values between the plaque and tooth surfaces which are so conducive to the production of caries, but that a re-mineralisation of enamel by calcifying fluids, now considered possible, is greatly enhanced by its presence.)

It would seem that we care too little about dental hygiene and that we tend to accept the incidence of bad teeth as inevitable.

Statistics reveal the inescapable truth that dental caries occurs in 98% of the population, the cost of which is in excess of £65 millions per annum. In a "normal" child the chances are that it will have as many decayed teeth as years and if, at 16 years, an adolescent has no cavities he/she will be alone among 1,000 others. By the age of 50, the overwhelming odds are that a person will be wearing some artificial denture. Of all adults in England and Wales, one third are edentate (in part probably due to the fact that many people, especially in the North and West of the country, prefer extraction to filling).

A consensus of informed medical and lay opinion is that fluoridation is an efficient method of safeguarding teeth from dental decay. However, the preventive properties of fluoride really need no advocacy, merely publicity. Nature, herself, has proved effectively that in areas where fluoride occurs naturally in drinking water, a very substantial level of prevention is conferred.

Fluoridation can be a money saver. Ten years of fluoridation at Hastings, New Zealand, have reduced expenditure of public funds on dental treatment to less than half and statistics in respect of authorities in England and Wales where the average fluoride content of domestic water supplies is at or above the recommended concentration show that the cost per head for dental treatment is substantially less than where the converse is true.

In urging fluoridation of water supplies two recent Reports, those of the Health Education Council and the British Dental Health Foundation, state that it remains a first priority in preventing tooth decay yet only 22 water authorities were supplying about 3 million people with treated water. It was reported that although 99% of children suffered from dental caries, because of staff shortages, only about 25% received school dental treatment. Moreover, it was further stated that 10% of 5-year-old children have rampant caries, a quarter of whom will be forced to wear dentures by the age of 20 years.

Continuing health education programmes are apparently having some beneficial effects upon the dietary habits of school children who use school "tuck shops". According to the results of a survey published in "Education", crisps have taken the place of the traditional cream bun as the most popular item and the sale of nuts and raisins and savoury biscuits is rising. Less confectionery is sold although chocolate biscuits remain a heavy market but, due to the problem of storage and rapid deterioration, fresh fruit is not often available. It would seem that older children tend to make more use of tuck shop facilities and these

groups, therefore, present greater opportunities for the health educationalists to make their influence felt.

It is ironic and regrettable that the cheapest and most effective method of prevention proves, at the moment, to be unacceptable to so many authorities.

Drug Addiction

Although there is international control of narcotics, previous legislation enacted in the United Kingdom covering all aspects of drug abuse is consolidated in the *Misuse of Drugs Act, 1971*, which will operate from 1972/73. This Act aims not only to continue restrictions on existing drugs but it will enable the Home Secretary, by regulation, to control new introductions without the need for further substantive legislation. New penalties and fines for various drug offences will also be brought into force.

In 1969, drug dependence was defined, rather technically, by the W.H.O. as *"a state, psychic and sometimes physical, resulting from the interaction between a living organism and a drug, characterised by behavioural and other responses that always include a compulsion to take the drug on a continuous or periodic basis in order to experience its psychic effects, and sometimes to avoid the discomfort of its absence. Tolerance may or may not be present. A person may be dependent on more than one drug"*. In simple terms this means that there can be physical and/or psychological dependence and that physiological changes inflicted on the body by drug usage may, on its withdrawal, produce illness. Further, it also implies that even after physical withdrawal symptoms have abated a psychological craving for the drug may persist. Tolerance means the body's resistance to a drug which gradually develops after regular use so that eventually a larger dose is needed to produce the same effect.

Although, currently, drug addiction seems to have lost its "topicality", nevertheless, its threat to society continues. Of the community, two sections, namely, adolescents between 13 and 17 years and middle-aged women between 34 and 50 years, are considered to be most vulnerable. Adolescents, because even non-users tend to believe that drug takers are more "with it" and therefore more socially acceptable; middle-aged women, because a significant proportion become dependent upon drugs regularly prescribed for depression, anxiety and sleeplessness. (Some 40% of these patients have repeat prescriptions—many extending over 16 years and 50% for more than 4 years.)

It has been estimated that, in 1960, there were 24,000 cannabis users and that the present figure is in excess of 2 millions.

Researches in colleges and universities suggest that 34% of students in these establishments are casual users of cannabis.

Although it is the contention of some experts that the "drug" situation has become more or less stabilised, cases known by the Home Office to be receiving narcotic drugs on prescription at the end of 1971 was 1,580, an increase of 10.5% over the figure for the previous year. Again, this is unlikely to portray the true position for the number of persons indicted for drug offences continues to rise, the current total being 10,844 compared with 8,800, the figure for 1970.

In the London area where the situation is most acute, it would seem that persons receiving "in-patient" treatment (now fluctuating between 50 and 80) is declining whilst those undertaking "out-patient" therapy (varying between 900 and 1,000) is increasing.

Two Greenwich residents, one an "in-patient" and one an "out-patient" were officially notified as being under treatment at the end of 1971.

Because heroin, morphine and synthetic opiates have been known to us for some considerable time we can say with some accuracy that the death rate in addicts to these drugs is 1 in 10 per year irrespective of age. Convictions for possessing heroin rose from 153 in 1970 to 433 in the current year.

Knowledge of the effects of cannabis is somewhat more vague although we are aware that it blunts concentration and short-term memory and affects mood, sense of time and intensifies sensory perception. Cannabis affects the liver's ability to metabolise drugs and the more extended its use the more common and striking the effects become and there is accumulating evidence to the effect that a high intake leads to prolonged if not permanent damage to the nervous system. With a total of 7,520, convictions concerning cannabis during 1970 showed an increase of almost 60% over the figure for 1969 and are still rising.

As the most notorious hallucinogen, L.S.D. is, at present, the most dangerous. With limited laboratory facilities and a little skill it is relatively easy to produce which means that its strength and purity become questionable. This gives rise to serious overdoses leading, in many instances, to very tragic consequences. At 757, convictions involving L.S.D. during 1970 were almost 5 times as high as the 1969 figure.

It would be fatuous to think that the drug problem is curable. Centuries of effort on the part of Eastern countries proves this objective unobtainable but, with improved methods of detection

and treatment, we can be cautiously optimistic that it could at least be contained.

Patients, generally in the older age groups who, for a variety of reasons, depend upon drugs for a pattern of living are usually known to their own doctors. It is the adolescent and the illegal use of drugs, often far from pure, which constitute the greatest danger to the community and presents us with our most difficult problems, both medical and social.

Drug dependence is a complex and emotive subject which is not only a symptom but a cause of serious disruption in the life of the community, but it would be fair to say that addiction is seldom found in the emotionally normal or mature individual. Nevertheless, there is growing public concern about the increase in non-medical drug taking, especially among young people, for the age at which this takes place for the first time continues to fall. Moreover, with official and parental anxieties goes a fear that this "soft-drug" beginning will eventually degenerate into an addiction for the "hard" drugs. Drug-taking in these terms is illicit so there is a real difficulty in being able to assess the extent to which this is practised although it is believed that thousands of children are now taking "blues" or other "soft" drugs. A recent survey of 1,126 children in Yorkshire revealed that 1 in 10 admitted taking drugs for purposes other than medical and that teenage children are raiding the family medicine chests for sleeping pills, "pep" pills, cough linctus and even abducting solvents, cleaning fluids, fly sprays and glues, etc., for experimental use. It is indeed fortunate that with most children the practice is very quickly abandoned and although some, a minority, become attracted to cannabis or even L.S.D., very few finish up as hardened addicts to heroin or its associates. However, we do know that 40% of registered heroin addicts started on drugs before the age of 18 years and that some 14-year-olds are addicted to other substances.

In some parts of the world, inhalation of fumes from plastic and rubber cements, paint thinners, nail polish removers, lighter fuels, etc., is becoming a group activity. The fact that recently, in England and Wales, several young people are known to have died from this cause gives rise to concern lest this may presage its wholesale adoption in this country. In California, since its discovery in the late 1950's, this habit has caused at least 110 deaths and 50 similar deaths in young people have been reported in Sweden during the last few years.

Failure of society to control powerful euphoriant chemicals has undoubtedly been an important contributory factor in the

spread of drug-taking among certain vulnerable young people who appear to have difficulty in maturing normally. An almost indiscriminate distribution of sedatives, stimulants, anti-depressants, etc., in earlier years by general practitioners has now been curbed by doctors voluntarily banning prescriptions of these drugs for certain treatments. However, with a constantly expanding pharmacopoeia comes a greater range of drugs which could prove to be dangerous in unauthorised hands, although it is not part of preventive medicine to advocate withdrawal of extremely useful drugs because, on occasions, they are seriously abused by the young.

Reasons for drug taking in children are many and varied but would include curiosity, initial pleasure, defiance of authority, need to join "peer" groups, "dutch" courage in uncertain and grave situations, escape from real life to one of fantasy, avoidance of stress, etc., to name but a few. Contrary to popular opinion, family background would seem to have little to do with the habit of drug-taking which is common to all social classes in that each adolescent has his/her own peculiar problems not necessarily connected with low achievement or a broken home. This is not to deny, however, that there is a small but important group of drug mis-users who come from disturbed homes and who provide a fertile field for criminal elements to manipulate them as drug "pushers" or as petty thieves acquiring amphetamines and similar substances by raiding chemist shops. Experience tends to indicate that an adolescent's dissatisfaction with his/her "showing" *vis-à-vis* contemporaries is taken by the individual as a personal failure apparent to the world "at large" which demands from him/her a demonstration of maturity in other directions. Often this attitude is instrumental in the adoption of more hectic leisure-time activities with older teenagers in pubs, out dancing, discotheques, etc., in far from salubrious surroundings with their associated dubious habits of smoking and drinking which the modern youngsters are now able to afford. It is understandable that, with such attendant influences, impulsiveness is heightened and the path to drug-taking made too easy.

Most surveys into this comparatively novel phenomenon of teenage drug-taking are inclined to indict "lack of communication" as the main cause for its commencement and, polarisation of attitudes within the family regarding behaviour, character, friendships, etc., only exacerbate the problem. Confidence between parent and child is a *sine qua non* in establishing an ambience within which common sense and, if necessary, the experience and understanding of a doctor and/or social worker can work towards a solution. It is regrettable that by the time a

teacher becomes aware that a child is addicted, effective action is likely to be involved and prolonged.

Heart Disease

Great play has been made in recent years by mass media on heart disability and it is perhaps not surprising to find that many people now regard it as synonymous with "coronary" disease. Indeed, among society generally, there is now not only a greater awareness of the damaging effects of a disease which strikes in such a sudden and unpredictable manner but also an understandable growing fear on the part of the community of its own vulnerability.

Undoubtedly, epidemiologically, heart disease is proving to be modern society's greatest menace for it ranges over the whole span of life from genotypic conditions, through those acquired as residual effects of disease to the types concomitant with old age.

It can be demonstrated that, surgically, a considerable measure of success is being achieved with some congenital heart conditions and those precipitated by a previous rheumatic fever episode and, with the aid of the pharmacist, heart failure arising from stress of high blood pressure is becoming rarer. Nevertheless, mortality from coronary artery and ischaemic heart disease continues to rise and has already reached epidemic proportions in the Western world. A high mortality rate for ischaemic heart disease is common in advanced countries and, in international terms, of 14 such countries returning accurate statistics it is highest in Finland with Scotland taking 3rd place and England and Wales in 7th position. Moreover, in the upper part of this "league" table more than $\frac{1}{3}$ rd of all adult males succumbed to this disease. It is true that there is some substance in the proposition that, prior to 1930, examination of coronary arteries at autopsy was frequently omitted and that the subsequent declared increase in ischaemic heart disease is therefore suspect. However, recent experience in these countries points to a real increase, particularly in the younger age groups and evidence already exists to show that persons removing from a low to a high prevalence area acquire, in due course, the higher prevalency rate.

Results of studies already carried out would seem to indicate that, clinically, coronary artery disease is correlated with such risk factors as obesity, high serum cholesterol, increased blood pressure, family history in respect of the disease and cigarette smoking. Other influences which are difficult to evaluate in this connection include indolence, stress and hormonal activity and,

obviously, combinations of such factors bring proportional increases in risks. Indeed, it has been estimated that up to $\frac{1}{3}$ rd of men aged 30/39 years with high cholesterol and blood pressure will develop clinical signs of the disease within 10 years. Furthermore, a Medical Research Council survey covering civil servants in 12 large towns revealed that those living in soft water areas registered higher blood pressures, more blood cholesterol and faster heart rates than those from the hard water regions. Fatty changes in the coronary artery linings induced by these agencies tend, eventually, to give rise to the formation of thrombi or clots which occlude the artery and damage the heart. Mortality arising from an initial coronary attack varies between 35% and 40% of which total 16% of deaths occur instantaneously and up to approximately 63% within one hour. A number of cases from the latter group could probably be saved if an electrical defibrillator was close at hand for immediate use. It is encouraging to learn that some 70% of patients who survive an initial attack are alive after 10 years.

It must be pointed out that every week some 1,000 Londoners have an attack of coronary thrombosis of whom over 300 die and one half of these deaths occur within one hour of the attack. It has been estimated that special care units in hospital could reduce this mortality by up to 30% but much depends upon the speed with which the cases reach hospital.

The fact that the first stages in a process giving rise to coronary thrombosis can begin in childhood and remain symptomless until adulthood is evidence of the need for early preventive measures on general lines without awaiting the development of clinical signs or a full aetiological exposition. In this respect our views on what constitutes ideal nutritional standards need modification. In the early years of life the young are deliberately encouraged to raise their intake of "protective" foods such as butter, cream, cheese, eggs and meat etc., the very foods which are considered causal agents in the increase in ischaemic heart conditions. When does a rich or "protective" diet become harmful?

Given that the genetic aspects of causation are not, at present, capable of solution, then manipulation of environmental circumstances remains the sole method open to preventive services in their efforts to contain this scourge of modern, wealthy societies. However, it is undeniable that many of the predisposing factors have their origins in the self-indulgence engendered by a growing affluence which so often leads to dietary indiscretions, excessive use of the motor car and addiction to smoking and alcohol and which demand a "positive" health education

approach if headway is to be made in reducing mortality from heart disease.

Primary preventive action, however, appears to be having little or no demonstrable success, perhaps because the necessary drive is absent or existing measures lack the glamour of curative procedures or, maybe, that there is a dearth of suitable educative material. A similar situation obtains with secondary prevention, i.e. those measures taken in respect of patients who have already developed clinical disease. Here, theory coincides with experience which shows that the more advanced the disease the more irreversible it becomes.

Although hypotensive treatment in relation to coronary disease has yet to be proved beneficial, abandonment of the smoking habit in doctors clearly shows that the risks are thereby substantially reduced. Moreover, adopting a lower fat intake, especially where these fats are of the unsaturated type, is considered internationally to be justified as a preventive measure in the light of existing knowledge. Screening procedures could, undoubtedly, treble the numbers already known to be at risk in middle age and so expose them to preventive health education but resources, both financial and manpower, preclude this approach in present circumstances.

To talk of retirement to the victim of a coronary attack is contraindicated not only physiologically but psychologically too. It destroys his will to live, throws extra strain on his impaired circulation and, if he is a married man with responsibilities, the damage to family relationships is incalculable. Rather, after recuperation, should he be encouraged to take exercise every day, keep his weight at the standard for his age, travel comfortably without haste or overburdening cases, eat moderately (especially of fats and sugars), cut out cigarettes, use alcohol sparingly, avoid sudden extremes of temperature and shun people who make him lose his temper. If he desires to extract the best out of life he should return to his former occupation, if this is at all possible, for this is the one which he knows best and is likely to cause him least strain in adjustment during his rehabilitation.

Mental Illness

Modern societies are beginning to learn that sickness, pain and premature death are not inevitable and that such afflictions are not to be accepted fatalistically.

Although immense strides have been made in the improvement of health in many fields, the ever-increasing problems of mental health remain grave and further complicated by the present rapid

social and moral changes in the community. Our not insignificant successes in recent times in eliminating threats to life from a number of infectious and deficiency diseases were founded upon the identification of causal organisms or deficient substances and introducing effective preventive measures. Some authoritative circles postulate that the same approach to mental illness would bring a similar success story but, as usual, there are complications.

It is certain that since recorded history the human species has had to wrestle with the problem of mental illness. Indeed, until comparatively modern times, it was the recognised responsibility of religious and spiritual healers to treat such disability and, in cases of failure, to attribute same to the patient's blameworthy existence. However, we must not dismiss their efforts too lightly for a great deal is owed to these traditional healers who were often thoroughly familiar with herbs (and therefore drugs) and many manipulative procedures with which modern treatment and care for the mentally sick has much in common.

Medically speaking, we have moved on from those days but our preventive actions are somewhat impaired by the use of an inexact terminology, the significance of which ought to be identical to all engaged in the mental health field. What, for instance, do we mean by "mental health"? Is it just freedom from mental illness or is something more implied? One fact stands clear—all societies are aware of members who are "different", who are mentally disordered and who are unable to play their part in the community. It is at this point that our difficulties begin. How do we successfully "prevent", "treat" or "cure" a disability where the aetiology is so indeterminate and the medical phraseology insufficiently circumscribed? Even the numbers involved are no more than an estimate which varies from one to two per cent of the population, a figure which could easily be doubled if account is to be had of similar illnesses of a milder form.

Whilst genes determine and limit an individual's potential, it is the interaction of this "genotype" with the environment that settles which of the genetically possible features will become fully developed and which, relatively speaking, will be neglected. In the adult, the sum total of such reciprocity produces the "phenotype", a fact which in 1947 prompted a W.H.O. Commission to frame a definition of mental health, viz. *"Mental health is a condition which permits the optimal development, physical, intellectual and emotional, of the individual, so far as this is compatible with that of other individuals"* and qualified this with a further definition, namely, *"A good society is one that allows this development to its members while at the same time ensuring its own development and being tolerant towards other societies"*.

Unfortunately for medical purposes, value judgements are made upon definitions which then begin to mean different things to different people and religious, political and social influences are to be observed in the use of such terms as "optimal development".

Under the broad heading of mental illness, changing patterns of disorders, both mental and emotional brought about by modern conditions, introduce forms not usually associated with mental disability such as alcoholism, prostitution, crime and drug addiction, etc., which demand from local health authorities more varied and extensive support services. This immediately confronts us with a further dilemma—does mental health care begin preventively with the basic health services or is its introduction to be made only when deviation from the "norm" is established by consensus?

What is inescapable is that a nation's future is bound up with its past and the link—its children—is its most precious resource and it is in our understanding of them that success lies. Their health and development are of paramount importance and society must spare no effort to achieve these ends.

Children are individuals with varying constitutions and there is no ideal or normal child behaviour pattern but, notwithstanding, there is a constant search for the average "norm" which tends to be a damaging influence in diagnosis. Mental illness in children presents in many ways such as fear, rebellion, deliberate isolation from and lack of stable relations with others, learning difficulties, inability to give or receive affection, sleeping and eating problems, incontinence or constipation at an age when these problems should have been mastered, tantrums and/or crying episodes, etc. Patently, in itself, no single symptom is abnormal and, clearly, the duration and severity of symptoms must be thoroughly assessed before a diagnosis of mental illness is made.

Research has shown how reactive the young are to environmental stimulation and, without doubt, a home in which a child can receive tender loving care is a *sine qua non* for all children and adolescents. In the modern society this is becoming progressively more elusive but, for the preventive services, this offers a fertile field for innovation. Chemotherapists are being constantly urged to explore techniques to improve care and treatment for the autistic and schizophrenic child and the biochemists and endocrinologists are similarly being pressurised to explain behavioural problems and to suggest remedies. Recent studies at Aberdeen University show that significant reductions in epilepsy in children could be achieved by eliminating many of the adverse perinatal conditions closely associated with perinatal mortality.

Society, as a whole, has been somewhat insensitive to the plight of the mentally ill and retarded, indifferent to the treatment they receive and most reluctant to afford them the resources, financial and manpower, for their needs. For instance, in hospital schools for the mentally handicapped, nearly 75% of all teaching staff, dedicated but unqualified, are operating equipment for the physical needs of their pupils which, charitably, can only be termed fair. Of a total of approximately 9,000 mentally sub-normal children in hospital, current statistics suggest that some 25% are receiving no education whilst a further 20% are taught only in the wards. Persistence with such methods merely condemns patients to a permanent institutional life and, seemingly, perpetuates a system denounced several years ago when the government recommended the gradual phasing out of our large mental hospitals. Custodial care is effete—its continuance in a substantial number of cases has proved to be detrimental to the patients and it is well-known that our worst catatonics are to be found in our ill-equipped, overcrowded, understaffed and outdated asylums. Even allowing for the country's recent economic troubles, nationally, the paucity of local authority non-medical residential or day-care provision is lamentable. Segregation is dehumanising and, since all societies must eventually provide for their handicapped members, initial planning with such groups in mind will prove a more logical and economical approach than the establishment of separate facilities in the future. Diagnosis of a child's physical and psychological status should be early; it should also involve disciplines other than medical; it should not label a child for all time and his/her abilities as well as disabilities should be suitably stressed. With regard to the latter, family counselling is indispensable to enable parents to participate in developing their child's full potential and so reduce the necessity for future formal care and, moves to integrate the mentally handicapped into the normal education system are to be applauded.

Paradoxically, after a century or more of treatment by isolation, modern psychiatry is reverting to the age-old method of dealing with mental illness, namely, in the patient's own home and environment and it is here that the local authority services will have their greatest impact. It was in this vein that, during the current year, plans for the development of services for the mentally handicapped were outlined in the Government's Command Paper *"Better Services for the Mentally Handicapped"* indicating the range of services which should be made available. For the first time ever, local authorities have been given targets in respect of residential homes, schools and adult training centres and, similarly, Hospital Boards have been set limits to the

provision of accommodation at their larger establishments in order to stimulate the introduction of better facilities for in-patients nearer their own community.

Nevertheless, despite all recent advances, it must be admitted that the larger part of the burden of the mentally disabled will continue to be carried by the extended family and we would do well to resign ourselves to the fact that it will be some years before official health, and social services are sufficiently developed to undertake these duties even if considered desirable. For the foreseeable future our services will, of necessity, be predominantly supportive and much will depend upon the co-operation between general practitioners and Social Workers which the recent Social Services Act has tended to jeopardise.

As a matter of interest the following Declaration of Rights of Mentally Retarded Persons was formally adopted by the United Nations General Assembly on 20th December, 1971: —

1. The mentally retarded person has, to the maximum degree of feasibility, the same rights as other human beings.
2. The mentally retarded person has a right to proper medical care and physical therapy and to such education, training, rehabilitation and guidance as will enable him to develop his ability and maximum potential.
3. The mentally retarded person has a right to economic security and to a decent standard of living. He has a right to perform productive work or to engage in any other meaningful occupation to the fullest possible extent of his capabilities.
4. Whenever possible, the mentally retarded person should live with his own family or with foster parents and participate in different forms of community life. The family with which he lives should receive assistance. If care in an institution becomes necessary, it should be provided in surroundings and other circumstances as close as possible to those of normal life.
5. The mentally retarded person has a right to a qualified guardian when this is required to protect his personal well-being and interests.
6. The mentally retarded person has a right to protection from exploitation, abuse and degrading treatment. If prosecuted for any offence, he shall have a right to due process of law with full recognition being given to his degree of mental responsibility.
7. Whenever mentally retarded persons are unable, because of the severity of their handicap, to exercise all their rights in a meaningful way or it should become necessary to restrict or deny some or all of these rights, the procedure used for that restriction or denial of rights must contain proper legal safeguards against every form of abuse. This procedure must be based on an evaluation of the social capability of the mentally retarded person by qualified experts and must be subject to periodic review and to the right of appeal to higher authorities.

Total persons under care in the Borough for mental conditions at 31st December, 1971, was 1,198, equivalent to 0.55% and classified as under:—

	Under 16 years		16 years and over		TOTAL
	M	F	M	F	
Mentally Ill	3	2	218	410	633
Mentally Infirm (65 years and over)	—	—	55	46	101
Psychopathic	—	—	1	—	1
Mentally Handicapped	12	19	83	80	194
Severely Mentally Handicapped	69	46	70	84	269
TOTALS	84	67	427	620	1,198

Obesity

From our first tiny cry—asking for food—to our “seventh age of slippered ease”, what we eat completely shapes our general health. It was put very succinctly by a previous resident of the Borough in the following rhyme—

*“It’s a very odd thing,
As odd as can be;
That whatever Miss T. eats,
Turns into Miss T.”*

—Walter de la Mare.

It is not without significance that *gluttony* is listed as one of the seven deadly sins for, today, we are bedevilled with freak nutritional patterns and diets which encourage the development of obesity. Moreover, as a result of the removal of much of the fibre from our foods each year, some £20 millions are spent on laxatives and 40,000 gallons of liquid paraffin are drunk to prevent costiveness.

Although perhaps by definition overweight is not a disease, nevertheless, its danger as a “trigger” mechanism to many serious medical conditions continues to be under-rated. Recognition of the fact that obesity underlies much of the country’s ill-health is becoming universal, albeit too slowly. Today, even the man in the street is aware that all is not well with society’s overweights and it would seem that only in the last decade or two have the dangers of obesity to community health been fully recognised and given due publicity.

Obesity does not just arrive overnight. It has a history of

insidious development over a number of years and its elimination is certain to prove equally protracted. It is true that since the evolution of man he has been confronted with obesity and its complications but, over the years, its connotations have changed. Up to modern times plump people were usually regarded as the symbols of prosperity, abundance and the good things of life. Indeed, the corpulent state was the hallmark of success, good health, good nature, strength and influence. We now know better and, during the past few years, there has been a dramatic revision in the attitude towards fat people. Reubens' ideal of feminine pulchritude, euphemistically called "embonpoint" is no longer acceptable in the 20th Century not only in "fashion" circles but in the medical world generally.

That obesity is often slow to claim its eventual victims in no way vitiates its potential for ill and it is rapidly becoming recognised as the causal agent of many of society's prolific killers. Statistics show that, for obese individuals, life expectancy is shortened not only by heart disabilities but also by a number of other degenerative conditions such as liver, kidney and gall-bladder diseases, diabetes, etc., which, in many instances, are accompanied by the painful and crippling effects of arthritis. Furthermore, apart from the rise in incidence rates of hernias, varicose veins, blood pressure and other circulatory disorders, treatment of respiratory diseases such as bronchitis and emphysema is rendered less effective and accidents and operative risks are correspondingly greater. It has been estimated that more than 6% of men and over 11% of women are more than 20% overweight.

Overweight women find more difficulty in conceiving and, even when they do conceive, they frequently run into pregnancy troubles. With the average woman there is a weight gain during pregnancy of approximately 9lbs. (excluding the baby and the products of conception) which consists mainly of additional food stores laid down for motherhood and which remains after the baby is born. Often no efforts are made to shed this extra weight which probably accounts for much of the obesity found in middle-aged women.

In men, the incidence of obesity and its disabilities appear to have risen proportionally with the increase in popularity and availability of the motor car.

In infants, rapid weight gain is associated with artificial feeding and the early introduction of cereals for, whereas there is a natural limit to the intake of calories in the breast fed baby, over-feeding is possible (and common) with the artificially fed child.

Naturally breast milk is by far the best form of nutrition for infants of this age but it is clear that the number of breast-fed babies is declining. It follows, therefore, that more children in this category are receiving processed milks which, despite diverse formulae, have never proved complete substitutes. Human breast milk is relatively low in saturated but high in unsaturated fatty acids whereas with cows' milk the reverse is true, a fact which has never been given sufficient publicity. It would seem that concentration on "calorie intake" of infants at this time has been almost to the exclusion of the intrinsic qualities of its ingredients.

Many mothers have the idea that a fat baby is a healthy baby. As a result, overfeeding occurs and the foundations for abnormal dietary habits are laid which prove extremely difficult to break in later life. Threatened by the mass media with malnutrition of all kinds from avitaminosis and trace element deficiencies to a lack of energising carbohydrates if certain foods are not ingested and, with minimal attention to a balanced diet, the cossetted off-spring is quickly weaned on to cereals and encouraged to over-eat by anxious, over-zealous but conditioned parents. Later, the child's diet is further adversely affected when increased pocket money enables the attractions of the tuck shop to wreak their seductive havoc. Replete with a host of bad dietary habits the child advances towards adulthood with all the disadvantages of obesity often to a life of miserable disability or one prematurely shortened by disease. Evidence clearly points to the fact that the "fat" child is extremely likely to become an obese adult.

With such a situation, it should occasion no surprise to find that of school children inspected in the Borough during 1971, viz. 15,255, some 113 were noted for treatment and a further 310 for observation in connection with obesity, equivalent to 27.73 per 1,000 children examined.

Use of terms such as "overweight" and "obesity" suggests the existence of a standard of normality with which comparison may be made. This is not so. Neither this country nor any other country has really solved the problem of collating reliable information on a national scale, partly because of the enormity of the task and partly because of the difficulty of devising a single study with "terms" that would satisfy the nutritionalist, the sociologist and the economist or, for that matter, the biochemist, the anthropometrist and other technical participants.

There is neither an ideal nor a normal weight but only an average weight which, by general agreement, is calculated from the tens of thousands of experiments, measurements and observa-

tions carried out by research workers and insurance companies all over the country. Results are tabulated and appear as desirable weights for particular heights at maturity and beyond. Even these are subject to variation according to the type of skeletal frame genetically inherited.

Identification of the population at risk is a prerequisite to any preventive programme. Somewhat unexpectedly the problem turns out to be one mainly concerning the older women in the lowest social class and young children.

Because obesity is indissolubly linked with food and its assimilation we need to look more closely at our views on nutritional standards and how best they can be achieved without precipitating overweight problems. Are we right to encourage a greater intake by children and young adults of the "protective" foods such as butter, cream, cheese, eggs, etc., or should their place in the diet be strictly regulated?

During life, the average person eats about 30 tons of food at a cost of approximately £6,000 but pays little attention to its nutritional content. Yet nutritional knowledge is not only a matter of health but, particularly in the poorer sections of the community, it should form part of a family's economic policy of getting "value for money". Unhappily palates, those most variable and deceiving of senses, are the usual arbiters in food selection.

Prevention of obesity is difficult for, in a relatively affluent society, over-eating is usual and even stimulated by high pressure salesmanship exerted via the well known advertising mediums. An intrinsic difficulty in the relief from obesity lies in the fact that it demands a modification by the individual of habits from which some satisfaction is derived. Naturally, this change is more easily accomplished at the earlier ages when habits are flexible and the problem is not so great. To be effective, preventive efforts must begin at the ante-natal clinic and continue through school to adulthood.

Adherence to an appropriate balanced diet is essential for successful weight control but, with children, this needs parental understanding, support and encouragement. Young children learn eating habits from their parents who, in general, have little knowledge of and scant regard for the dietetic values of food and to many of whom a balanced diet seems beyond comprehension. Over-indulgent grand-parents and well intentioned neighbours are also factors to be reckoned with in the struggle for a suitable regimen.

Is there a treatment for obesity?

Informed opinion is inclined to the view that, today, under-

nourishment is rare—rather do we suffer from malnutrition as a result of faulty diets. Scientific investigation has revealed that obesity in early life tends to produce increases in 'fat' cells which dieting in later life may well empty but will not eliminate. A subsequent relaxation of a regimen recharges these cells and obesity is perpetuated.

If there is an understanding of food values and a realisation of the necessity for balanced diets from infancy, then prevention will be a practical proposition. Failing this, a fully satisfying adult existence could be marred by an unavoidable choice between the threat of premature degenerative disease or a lifetime of controlled food intake.

Respiratory Diseases

Respiratory illness spans a wide clinical spectrum affecting all ages and ranges from the common cold at one extreme to lung cancer at the other.

With the measure of control of pulmonary tuberculosis obtained in recent years by chemotherapy has come an assumption by many that the menace of respiratory disease has been eliminated.

Nothing is further from the truth. It is undeniable that nearly one fifth of all deaths in England result from respiratory disease with bronchitis, pneumonia and lung cancer accounting for approximately $\frac{1}{3}$ rd each of the total.

It is equally indisputable that the latest annual National Insurance statistics show that new spells of certified incapacity from diseases of the respiratory system during the year amounted to 4,827,000, equivalent to 45.5% of the total from all causes. Of the country's total certified incapacity, namely, 342 million days, some 92.6 millions or 27% was attributable to respiratory disease. Average length of incapacity for males per person at risk from these disabilities was 5.03 days, 28.7% of the total from all causes, whilst the figures for females were 3.73 and 20.7% respectively. However, National Insurance statistics concern new cases only and, therefore, do not reflect long-term sickness, a great deal of which concerns respiratory disability. Moreover, these figures relate only to persons insured for sickness—the children, the aged, the non-employed and "exempt" married women are not included.

Even this lamentable tale is not the whole story. Respiratory disease places a substantial burden on the general practitioner and hospital services; on the one hand it is the commonest reason for consultation, 26 per 1,000 patients per year and, on the other,

it is second only to rheumatic disease in the average duration of stay, namely, 28.8 days.

The tragedy of this distressing situation is that the bulk of these deaths and the permanent disability so often preceding them are the direct or indirect results of cigarette smoking, the elimination of which could reduce the enormous physical and financial burden being carried by the country's medical and welfare services. Assimilation into the circulatory system of oxygen, that indispensable commodity without which life is impossible, can be effected only by means of the lungs and yet the defiling of these organs on such a large scale merely demonstrates a human capacity for self-immolation. Indeed, it is arguable whether such self-inflicted respiratory disability has a moral right to preferential treatment despite its serious nature.

Over the years man has learned to release nature's stored energy to modify his surroundings but in such a way that he has polluted his environment—a mistake which, at very great expense, he hastens to rectify. Certainly Britain has the reputation of being a country with the ever-burning hearth which, together with its damp climate, constitutes a constant and serious respiratory hazard to the very young and the very old. Lung cancer and bronchitis rates are higher in towns and cities than in rural areas, suggesting that air pollution adds to the problem of chest infections. This postulation was substantiated by the "smogs" of 1952 and 1958/9, when a combination of atmospheric conditions produced heavy death tolls from respiratory causes and which the Clean Air Acts now seek to remedy.

Nevertheless, despite improved environmental conditions, an ageing population is much more susceptible to chest infections particularly in those instances where there is financial hardship leading to enforced dietary deficiencies and restricted home heating. Moreover, diabetes, stroke or cancer, often the concomitants of old age, also pave the way for pneumonia and, in other conditions where cytotoxic drugs or cortisone are the selected forms of treatment, pneumonia can advance insidiously because of absence of prodromal symptoms.

Between the two World Wars it was recognised that some pneumonias differed clinically from the ordinary bacterial kinds such as the pneumococcal and streptococcal types and were, as such, referred to as primary atypical pneumonia. Subsequently, as a direct result of progress in microbiology and virology, various rickettsiae and viruses were revealed as causal organisms.

Certain viruses which appear to have a predilection for the young include the respiratory syncytial virus and the para-influ-

enza virus type 3 which affect the majority of pre-school children and give rise to the serious conditions of acute bronchiolitis and bronchopneumonia.

Over 100 viruses exhibiting great diversity in their manifestations, are known to affect the respiratory tract and slowly, but surely, these are being classified. In the main there appears to be two types—those which, like influenza, enter the cells of the respiratory tract and give rise to local disease and those which, like measles and chickenpox, merely use the tract as a portal of entry to the body. It is estimated that of the total number of children affected by measles each year some 20,000 will suffer from residual respiratory complications.

Chronic bronchitis, an almost inevitable sequel to cigarette smoking, reduces resistance and leads to complicating bacterial infections which, because of limited knowledge of the causal agents, are very difficult to treat. Although the duration of exacerbated chronic bronchitis is reduced by antibiotics, the frequency of the attacks seems to be unaffected suggesting that other factors such as mycoplasmas or viruses may be involved. Progress of this disease is insidious with a gradual loss of respiratory efficiency and by the time a patient is compelled to seek medical assistance, the lung damage is often severe and irreversible.

As reported last year, the level of bronchitis in the young adult depends to a very large extent on the occurrence and treatment of the disease during childhood and, with the community's youngest members, some recent investigations show that obesity (q.v.) has a direct relationship with respiratory infection. It was noted that an increase in lower respiratory infection occurred in babies whose weight gain was excessive, especially in those whose weight at birth was 2.5 kgms. or less and in those who were introduced to solids at nine weeks and under. In most instances the causal organism is unknown but it is thought, by some reliable authorities, to be due to a virus arising from infection of the foetus prior to birth. There is no logical reason to suppose that upper and lower respiratory infections have different aetiologies and, so far, virology and pharmacology have failed to find an effective counter to such infection. In such cases, imprecise knowledge precludes the application of recognised preventive measures. Treatment remains supportive and confined to relief of symptoms in which drugs have little or no part to play.

Since the publicising of the pollen count in daily newspapers asthma, that most distressing of complaints with psychosomatic

as well as physical origins and familial connections, would appear to be more prevalent than previously supposed.

Only recently considered a respiratory disease, asthma is one of the disorders about which we know very little and which has not had the attention it warrants, although the introduction of the new steroid drugs into its treatment has saved many lives.

Previously, we had considered that relief of spasm, sufficient to re-establish normal lung ventilation, was all that was needed but we are now learning that the removal of airway obstruction does not automatically enable more oxygen to be taken up by the blood. It has been found that it takes a matter of days for blood oxygenation to become normal. Without reducing "allergy" research it seems that we must get to know more about "lung functions" and its complex blood supply before we can control this disabling malady which creates so much misery and disablement.

Closely associated with this disability are fungoid diseases such as aspergillosis and sporotrichosis and discovery of man's hypersensitivity to antigens from some fungi (giving rise to such disabilities as Farmer's Lung) and from avian excreta (the suggested name for which is Bird Breeder's (Fancier's) Lung), shows that intensive research is gradually revealing causes, hitherto unknown, of a number of respiratory complaints.

Tuberculosis remains a lethal infectious disease despite our chemotherapeutic successes and any sign of complacency would be most culpable. Recent disquieting information indicates that we need to pay much more attention to those predisposed to tuberculosis such as diabetics, alcoholics, and long-term corticosteroid patients as well as to certain close communities including old people's welfare homes, reception centres and lodging houses.

All available evidence points to the fact that cigarette smoking is a major aetiological factor in chest diseases and lung cancer, one of its undoubted "by-products", with an annual death toll of over 30,000, is now killing more people than tuberculosis did seventy years ago.

Problems confronting respiratory medicine are legion and they can now be seen to concern a wide range of scientific disciplines. Because many respiratory infections defy identification, treatment is almost solely confined to the discriminatory use of antibiotics. It is true that, as yet, no remedies exist for the treatment of viral disease and so far, in this field, success has been limited to immunising procedures in respect of selected types. Our hopes and aspirations are centred upon greater use of the electron mic-

roscope and immunofluorescence for speedier and more accurate diagnosis in the future.

However, the greatest single preventive measure with regard to respiratory diseases is already in the hands of the public. It is for health education authorities to convince people that abstinence in terms of cigarette smoking, is not only to their advantage financially but will also lead to a fuller, healthier life.

Following publication early in the year of *Smoking and Health Now*, the Royal College of Physician's 2nd Report on smoking, government action was confined to a voluntary agreement with the tobacco industry that warning notices be displayed on cigarette packets and that this action should appear on press and poster advertisements. Again with the industry's co-operation, a Standing Scientific Liaison Committee was to be established whose remit would be the investigation into less dangerous forms of smoking and the desirability of publishing tar and nicotine yields of branded cigarettes.

As with the original publication, this Report's impact was fleeting and we now find the tobacco industry proudly advertising its agreed warning in such a way as to suggest official support for the sale of its products.

Opposition to smoking is receiving treatment similar to that afforded to the proponents of pasteurisation some 40 years ago. Although the facts are known, as yet, they are unaccepted universally.

Unborn children are the first to suffer from this pernicious habit which not only reduces the oxygen but increases the carbon monoxide content of the mother's blood, thereby giving rise to mental and physical stunting. Children born to women smokers are, on average, $\frac{1}{4}$ lb. to $\frac{1}{2}$ lb. lighter at birth and we now know that the injurious effects upon the baby's brain could last for years and, indeed, may be permanent. Educational advancement in these circumstances is correspondingly retarded.

All physical effort is impaired by cigarette smoking. In the young, where prowess and achievement is highly prized, it must be said that smoking lowers capacity for strenuous physical activity and reduces stamina. For instance it is estimated that, on an average, it takes 5 secs. longer for the ordinary individual to run 400 metres and 24 secs. extra to complete 1,500 metres after he has been smoking for six months. Athletic training produces less improvement in smokers than in non-smokers (6.6% compared with 10.6%).

Comes maturity and we find that acceleration of the disease process corresponds closely to the rate of smoking and the age at

which it commenced. Facts concerning substantial increases in "smoking assisted" diseases such as bronchogenic carcinoma, chronic bronchitis, emphysema, peptic ulcer, circulatory diseases and coronary thrombosis have failed to make any impression on the confirmed smoker, who, in continuing to fill the air at home, in the office, workshop, train, bus or plane with obnoxious fumes and ash, neglects the most elementary rules of hygiene and makes exertions for a cleaner atmosphere under the Clean Air Acts, a sham.

Although some smokers suffer much more than others, nobody escapes "scot" free from its harmful effects. Smoking affects the cleansing action of the cilia in the lung's linings and infection is invited to take up residence in the resultant thickening phlegm. The onset of bronchitis and emphysema is preceded by the slight "smoker's cough", in the first instance during the winter months and later extending to the whole year. Subsequently, coughing becomes more frequent, more prolonged and more violent and the elimination of purulent phlegm, which produces retching and vomiting, becomes a permanent morning ritual. Disability supervenes and even the action of standing and walking a few yards becomes agony. Eventually, sleep becomes elusive, health rapidly declines until the body becomes virtually immobile and death, mercifully, intervenes.

But, then, smoking is so enjoyable!!!

As a health problem, the situation is deadly serious and health educators must not vacillate in condemning smoking by word and especially by example. Suggestions that "safer" cigarettes are to be tolerated smacks of ambivalence and should be opposed. Reducing the sugar content of cigarettes is of limited value as it does not eliminate carcinogenic tars or other toxic substances and switching smokers of cigarettes to the less harmful forms of tobacco consumption, viz. pipes and cigars, is fraught with danger for the addict persists in inhaling a smoke which is higher in tar and nicotine concentrations. We know the facts and if our efforts to reform existing smoking practices are unproductive, our best chance to influence the young is by blocking every opportunity for smoking by banning the habit in all public places. We owe this much to posterity.

Rheumatic Diseases

Rheumatism in its broadest sense is one of the oldest diseases known to affect mankind. It attacks people of all ages and is responsible for more prolonged absences from work or school than any other disease. Resultant heart damage or joint defor-

mity are often so tragically disabling that early diagnosis, prompt treatment and well directed after-care are vitally important.

It is only too clear that rheumatic diseases constitute a major medical, social and economic problem for the nation. For example, general practitioners consider that 10% of all their work is concerned with this group of diseases and official statistics show that more than 27 million working days per year are lost as a result of rheumatic disabilities.

Analysis of hospital returns indicate that the average duration of stay of a patient in all their rheumatological departments is 30.8 days, the highest of any medical speciality. Days of certified incapacity per person at risk from diseases of the musculoskeletal system and connective tissue, as given in the latest annual National Insurance figures, were 1.71 for males and 1.74 for females representing 9.8% and 9.6% of their respective totals for all causes.

According to Lawrence's epidemiological survey of rheumatic disease, the Borough would present some 430 cases of ankylosing spondylitis and approximately 2,150 rheumatoid arthritics. On a similar basis there should be 25,000 symptomatic osteoarthritis and a further possible 6,500 cases of rheumatoid arthritis.

However, "rheumatism" and "arthritis", terms familiar to and lightly used by the layman, cover more than 150 various inflammatory and degenerative conditions of joints. For instance, in rubella, an arthropathy closely resembling rheumatoid arthritis may develop and which remits within 2 or 3 weeks. Again, on occasions, arthritis can occur in mumps and smallpox but, fundamentally, rheumatic diseases are considered to be of two types; that in which the disease is essentially the result of inflammatory conditions such as rheumatoid arthritis and ankylosing spondylitis and that where degeneration is the main ingredient as exemplified in osteoarthritis and intervertebral disc disease.

Of all arthritis, rheumatoid, in its severe form, is the most feared for, with its generalised systematic illness, it taxes the emotional as well as the physical strength. Victims are aware that their disease could be prolonged and, because recrudescence may occur at any time in quiescent joints, they fear the future perhaps even more than they resent the present. Family complications and threats to economic stability merely serve to exacerbate the problem. Studies have shown that prognosis is best in those whose onset is acute and who receive hospital treatment promptly.

The pathogenesis of rheumatoid arthritis and related diseases remains obscure. Nevertheless, increasing attention given by

research teams to this problem in recent years seems, at long last, likely to yield results. There is evidence to support the view that the disease is initiated by an exogenous antigen but that its continuance is the result of a secondary induced auto-immune response. If this is substantiated then there are grounds for anticipating more effective methods of treatment and a reduction in the alarming disability rate occasioned by these diseases.

Osteoarthritis, the most common of the rheumatic complaints though accompanied by recurrent problems of pain and disability especially in the elderly, seems to be tolerated surprisingly well even when there is gross involvement of major joints. Perhaps this is because, more often than not, the onset is insidious and occurs later in life. It is estimated that the incidence ranges from 20% in all men and 30% in all women over the age of 15 years but radiological evidence indicates that, over the age of 65 years few people, if any, are free from intervertebral disc degeneration. In these cases much can be achieved by reducing or abolishing excessive physical stresses and strains in industry by increased mechanisation, the application of anthropometry and the education of workers in the correct methods of handling and lifting of heavy loads. An increasing number of patients are benefiting from the replacement of joints by modern techniques which, in many instances, results in a return to a useful degree of function.

Due to its internal geometry, the hip joint appears always to be under strain and it would seem that 13% of the adult population over 45 years have degenerative changes in their hips. Some orthopaedic surgeons and radiologists believe that the tilt deformity of the head and neck of the femur is a hazard of the keen athlete. In a recent examination in a London hospital the rate in highly athletic patients was estimated to be double that of a random sample and that in the juveniles examined there was a statistically significant increase in "growing pains" in those developing a tilt deformity.

Clinical gout may antedate arthritis by a number of years and, preventively, any person with hyperuricaemia, even though asymptomatic, must be considered a potential victim. However, of the rheumatic diseases, gout is one of the most satisfactory for the physicians to treat for they now have in their armoury an impressive range of sophisticated drugs with which to control inflammation and subsequent arthritis.

Improvement in the treatment and rehabilitation of the rheumatic groups is of great concern to local authorities for it becomes their responsibility to sustain individuals and their families when they become registered as disabled. It should be the

authorities' aim, whenever possible, to ensure that after-care is such as to improve the functional state and so maintain morale which is so essential in such cases.

An analysis of persons registered as handicapped with local authorities reveals that the arthritic and rheumatism group comprises some 30.5% of the total and if only those over 65 are considered, then this figure rises to 44.4%. However, at the present time, registered handicapped persons represent only 8% of a possible total of 3 millions of whom some 2.4 millions would be over the age of 60, the greater proportion of whom would be of the rheumatic and arthritic type probably resenting registration.

Rheumatic induced immobility in the elderly often results in a regimen of "tea and bread-and-butter". It falls to the vigilance of the geriatric visitor, in her preventive role, to assess the situation and, accordingly, to arrange for supportive services (including the use of nursing and medical aids) to avoid the development of avitaminosis and anaemia arising from such a deficient diet.

It is pertinent to record that out of a total of 1,530 persons registered as physically handicapped in Greenwich in 1970, 468 or 30% are disabled due to the effects of rheumatism.

Venereal Diseases

Morality and transmitted serious infections are combined to render venereal disease unique in the field of preventive medicine. Apart from the considerable morbidity occasioned by these infections, much misery results from the associated heightened sense of guilt and shame notwithstanding that, in modern communities, this "guilt" complex is rapidly waning. That sexually imparted disease can indeed have catastrophic effects on happiness and family life has been formally recognised in the Matrimonial Causes Act of 1950 which gives undisclosed communicable venereal disease at time of marriage as justifiable grounds for causing such a union to be invalidated.

Legally, the Act of 1917 defines venereal disease as syphilis, gonorrhoea and chancroid but there are a number of other infections transmitted sexually such as: —

Viral: Herpes genitalis; moluscum contagiosum; condylomata and lymphogranuloma venereum.

Protozoal: Trichomonas vaginalis infections.

Parasitic: Pediculosis pubis and scabies.

Fungoid: Candida albicans (monilia or thrush).

Unknown aetiology: Non-specific urethritis.

There can be little doubt but that sexually transmitted diseases

are on the increase and the fact that this is world-wide owes much to rapid and relatively cheap travel facilities. Not only does this compound freer associations among people and sexes but it can result in the transport of infection from high incident areas to home before the incubation period elapses.

Increased tourism, immigration, drug addiction, social conditions such as broken homes, maladjustment, overcrowding, low intellectual standards have all tended to aggravate the situation. Homosexuality, possibly aided and abetted by recent liberalising legislation, is also adding its quota to the rising totals.

Promiscuous, enlightened, free or permissive are all epithets which could be applied to the 1960s depending upon one's point of view. Unfortunately, in discarding its inhibitions, youth has been mainly responsible for the rapid spread during this decade of venereal disease to the extent that it is double that for 1950 and is fast approximating to the epidemic proportions of 1946 despite modern treatment techniques. Although, nationally, new cases of syphilis at 1,606 are only 1/10th of those of 25 years ago, with this decline has come a corresponding surge in gonorrhoea to an all-time record level of 55,988.

Whatever factors have been involved in the undoubted change in our society's mores over the past two decades, youth's *volte face* from the Victorian-based family morality is unmistakable. Sexual activity is at its most potent in young people—it has never been otherwise—but there are newer elements in the situation, in particular sex education (which is proving a double-edged weapon) and the female contraceptive pill. The "pill", although not necessarily producing promiscuity, has unquestionably relieved many women of the fear of pregnancy and this has affected their attitude towards sex and has encouraged sexuality. Popularity for the "pill" which, unfortunately, predisposes female genitalia to certain infections, has resulted in a reduction in the use of the condom (an effective barrier to contamination) and would seem, therefore, to be largely instrumental in the recent increase in the spread of sexually acquired diseases.

The extension of sexuality among females can be demonstrated in a number of ways. At the special clinics, the ratio of males to females, which in the early '50's was about 4:1, is equalizing rapidly and the average age is falling; pregnancies in females under the age of 16 years have trebled during the last decade and some 2,531 abortions were effected in girls of this age group during 1971; illegitimate births have risen in 20 years from 4.7% of all live births to the current rate of 8.5%.

Country-wide dissemination of venereal disease continues to

be at its highest incidence in the 20/24 years age group although increases are registered in all groups under 25 years. Notwithstanding that the rate for the congenital type has increased by 12.8% over the previous year, that for syphilis as a whole has risen only slightly. In males the rate was 5.67 and in females 1.42 giving a combined rate of 3.48 per 100,000 population compared with 3.42 for 1970, the marginal increase being among females. In the current year, the male/female ratio was 3.8:1 whereas that for last year was 4.8:1, but this is somewhat misleading in that if homosexually acquired infections are omitted the present ratio reduces to 2.4:1. Evidence of a slight rise in congenital syphilis is sufficient reason for the continuation of the practice of blood testing pregnant women.

In an era of great demographical change and in a socio-economic environment where previously closed sexual circles are being overtly broken, where there is increased and precocious promiscuity together with an unacceptable level of ignorance of the effects of venereal disease, it is surprising to find that, statistically, syphilis cases are tending to remain static. Perhaps this situation can be partly accounted for by the fact that *treponema pallida* is extremely sensitive to penicillin and the present widespread use of this antibiotic has undoubtedly resulted in the cure of many early but undetected cases of syphilis. However, because of penicillin's immuno-suppressive effects no immunity is conferred by the attack and re-infection is becoming commonplace.

Despite its susceptibility to treatment, gonorrhoea continues to give cause for anxiety and its increasing incidence in young people remains a serious threat to the future health of the nation. Infections in females under 16 years of age (400) are about three times those of males and, in the 16/19 age group, female cases numbered 5,588 compared with a total of 4,393 in males, all groups showing increases over the 1970 figures. With total new cases amounting to 55,988, an increase of 4.4% over those for 1970 and the highest ever recorded, it is clear that gonorrhoea is still uncontrolled. There were 53 cases of gonococcal ophthalmia included in the total, most of which could have been prevented by ante-natal genital tests.

From this year on, separate totals are to be supplied for *other sexually transmitted diseases* and previous statistics are therefore not strictly comparable. We shall need the benefit of several years' figures before any reliable trends in specific infections can be detected.

Despite the fact that, at 1,216, the new cases of venereal disease treated at the Greenwich District Hospital Centre during 1971

showed an increase of 19.3% over those for the previous year, there were marginally fewer instances of syphilis and gonorrhoea, the increase being confined to *other conditions*.

At the Dreadnought Seamen's Hospital Centre, although the total new cases treated increased by 16.3% to 1,635, those concerning syphilis fell by 15% to 40. However, instances of gonorrhoea rose by 7.3% to 250 but, again, the main advance was found to be in *other conditions* which increased by almost 20%.

I am indebted to Drs. A. Grimble and D. Erskine, Physicians i/c at the Miller and Dreadnought (Seamen's Hospital) Treatment Centres respectively for the following statistics for 1971.

NEW CASES TREATED AT CENTRES WITHIN THE BOROUGH

Treatment Centre	Syphilis		Gonorrhoea		Other Conditions		TOTALS	
	M	F	M	F	M	F	M	F
Greenwich District Hospital Miller Wing:	16	6	174	106	564	350	754	462
Dreadnought Seamen's Hospital:	40	—	250	—	1,345	—	1,635	—

Contrary to the national trend, cases of syphilis in Greenwich residents coming to the notice of the department during the year showed an increase of 2 to a total of 14. Although numbers are relatively small, this advance is of the order of 16.6% and the position needs to be kept under review. Again, countrywide, cases of gonorrhoea rose by 4.4% but the Borough figure, at 148, remained static. It is in the category of *other conditions* where we find the greatest increase and, here, the figure for residents rose by 53.6% to a total of 1,069.

For the first time, separate figures are given this year in respect of other sexually transmitted diseases. Of these, the so-called *non-specific genital infections* continue to form the major group and if, as is generally believed, these infections are sexually transmitted, then it would indicate that there are many undiagnosed symptomless females in the community.

Borough rates per 1,000 population for new cases of syphilis, gonorrhoea and *other conditions* were 0.06, 0.68 and 4.92 respectively. As a whole the venereal disease group returned a rate of 5.67 compared with 3.79 for 1970.

NEW CASES OF RESIDENTS TREATED DURING 1971
(as given in returns from the undermentioned Centres)

Treatment Centre	Syphilis	Gonorrhoea	Other Genital Infections	Other Conditions	TOTALS
Greenwich District Hospital Miller Wing:	10	60	203	125	398
Dreadnought Seamen's Hospital:	3	51	151	185	390
St. John's Hospital:	—	6	28	36	70
London Hospital:	—	2	21	21	44
Middlesex Hospital:	1	6	60	46	113
St. Bartholomew's Hospital:	—	2	31	8	41
King's College Hospital:	—	8	21	9	38
St. Thomas's Hospital:	—	9	54	26	89
Westminster Hospital:	—	4	32	12	48
TOTALS	14	148	601	468	1,231

Undoubtedly standards of behaviour are personal matters but those of public health are of general concern. It would seem that the time has come for society to weigh the advantages of the new-found "freedom" and of changing moral attitudes against the decline in the stability of family life and all the complex emotional relationships upon which it depends and, in this particular instance, the resultant increase in severe illness, anxiety neurosis, sterility and unhappiness. However, whether sexual freedom is approved or not, provision must be made for control of its side effects.

Dissemination of venereal disease depends upon two major factors—sexual promiscuity and a reservoir of infected persons. Hitherto, prostitution had been considered to be the predominant method of spread but, in recent years, it has contributed little to the increased infections. In a promiscuous society the disease is much more likely to be caught from acquaintances free of charge.

It is a fact that venereal disease is being propagated at a faster rate than the accumulation of associated medical knowledge which renders its management that much more difficult. For its control there are those who consider the problem one of infectious disease and others as one socially oriented and concerning personal relationships, i.e. a matter for public health and medical measures or health education and social action. Without doubt, a combination of both will be necessary.

Without question, in a sexually continent society management of venereal disease would be easy but an inability to control this

infection only serves to emphasise the clamant need for prevention, an equally difficult task. Health education is a *sine qua non* but the mere imparting of knowledge is plainly no deterrent. A great deal depends upon family and group environment and the subject's susceptibility to example. A local authority's role is a limited one, viz. education and assisting in contact tracing the results of which, unfortunately, leave much to be desired.

In England, venereology is a specialty and its services the best in the world but, even so, control of sexually transmitted disease has not been achieved. Our venereal disease centres have served us well since the Act of 1917 which led to their establishment but with the present recrudescence of these diseases our specialists, whose numbers have remained virtually unchanged over the last 10 years, are becoming overwhelmed. In England, at the end of the year, only 150 doctors were engaged, full-time, in venereology of whom 83 were consultants. What is even more disturbing is the fact that one third of all registrar and senior registrar posts, where future consultants are trained, remain vacant.

Although, in this specialty, there is great potential for clinical and epidemiological research, venereology, as a career, is not a popular choice. Recruitment to this field of medicine is poor and may, in part, be related to working conditions. Many clinics are held in uninviting and depressingly institutionalised premises, often tucked away in hospital basements, so that the difficulty in attracting staff is not surprising. Of the 179 clinics surveyed in England recently, 70 were considered inadequate and we can hardly expect our specialists to maintain their undoubted high standards without ample support and modern facilities. It is conceivable that a change of nomenclature from venereology to genito-urinary medicine, a more accurate and less emotive description of the nature of the specialty, would stimulate and encourage entrants.

NOTIFIABLE INFECTIOUS DISEASES AND FOOD POISONING

Legislation

No further national legislation was enacted during the year under review.

General

During 1971, the number of Infectious Diseases notified under Sections 47 to 49 of the Health Services and Public Health Act, 1968, and associated Regulations was 710. Two cases, however, were not confirmed and the corrected total was therefore 708, a

reduction of 99 from the previous year. The decrease is accounted for, almost exclusively, by the fall in the incidence of measles.

Details showing age groups, sex and districts are given in the table in the appendix.

Exclusion from work

From time to time it is necessary that a suspected "carrier" of, or a person in contact with, an infectious disease should be precluded from work in order that the risk of transmission of the disease is minimised. This is especially necessary when the person concerned is a "food handler".

National Insurance Act, 1946

Regulation 3(b) of the National Insurance (Unemployment and Sickness Benefit) Regulations, 1948, made under the above Act, enables any person excluded from work under the foregoing provisions to claim sickness benefit on production of a certificate issued by the Medical Officer of Health.

In the Ministry of Health Circular 115/48 it has been suggested that the Medical Officer of Health should be prepared to furnish such a certificate if, in his opinion, circumstances are such that this action becomes necessary.

Any sickness benefit would of course be taken into account when compensation is made to a person for the loss occasioned by his exclusion from work.

It was not found necessary during the course of the year to take any action under Section 41 of the 1961 Public Health Act.

International Certificates

The International Sanitary Regulations prescribe forms of International Certificates of Vaccination against Cholera, Smallpox and Yellow Fever. The form in respect of Smallpox was amended by the *Public Health (Aircraft) Regulations, 1966*, and the *Public Health (Ships) Regulations, 1966*, and the new form became compulsory after the 1st January, 1967.

To be valid each certificate must bear an approved stamp which certifies that the signature of the Vaccinator is that of a practising medical practitioner.

During the year 7,157 certificates of persons proceeding abroad were so authenticated. Of these 3,833 were in respect of Smallpox, 2,788 for Cholera, 176 for Typhoid, and 360 were recorded for combined Cholera and Typhoid Vaccination.

Immunisation and Vaccination

Regulation 9 of the Public Health (Infectious Diseases) Regulations, 1968, provides that a medical officer of health may vaccinate or immunise, without charge, any contacts or possible contacts of a case of infectious disease now to be notified (other than tuberculosis) who are willing to receive such treatment.

Smallpox

No cases were notified during the year, but 15 persons were reported arriving in the Borough from abroad without valid certificates and these were kept under surveillance for the requisite period of time.

Vaccination—Smallpox is a very dangerous and disfiguring disease and prior to the introduction of compulsory vaccination in 1853, nine-tenths of smallpox victims were children under 5 years of age. Subsequent to this period, children, by and large, escaped. However, since 1898, when the "conscientious objection" clause made its appearance, vaccinations have declined steeply and the position deteriorated still further from 1948 when vaccination became optional.

Recently attention has been drawn to some serious complications resulting from childhood smallpox vaccination. These, though small in number, are nevertheless out of proportion to the risks involved and vaccination of children as a routine procedure has been discontinued whilst efforts continue to encourage its retention in cases of travellers to areas where smallpox is endemic.

Glycerinated calf lymph is the standard vaccine used in this country and the number of primary vaccinations carried out in the Borough during 1971 was 1,503, 1,156 under Council arrangements and 347 by general practitioners, the total indicating a fall of 1,123 (42.8%) over that of the previous year. Figures for re-vaccination were 51 and 264 respectively.

Measles

Current notifications which, at 486, show a fall of 104 from the previous year, indicate an interruption to the pattern of biennial fluctuation usual in this disease. Normally, 1971 would have been a "measles" year but when one reviews the totals of 1,080, 2,345 and 2,608 for the years 1969, 1967 and 1965 respectively, it is clear that our measles vaccination scheme, introduced in May 1968, is beginning to produce beneficial results.

Ten of the notified cases were admitted into hospital, but I am happy to report that no deaths were recorded.

During the year, a total of 2,262 children were vaccinated against measles, 2,000 in accordance with Council arrangements and 262 by local general practitioners.

Scarlet Fever

There were 26 notifications of scarlet fever received compared with 44 in 1970. Two cases were admitted to hospital, one of which was subsequently rediagnosed as tonsillitis.

No deaths were recorded.

Whooping Cough

The number of cases of whooping cough notifications received was 36, a decrease of 21 compared with the previous year's total.

Three cases were admitted to hospital. No deaths were recorded.

Some 2,731 whooping cough immunisations were carried out during the current year. Of these, 405 were effected by local general practitioners who were also responsible for giving 216 reinforcing doses out of a total of 409.

Diphtheria

No case was registered for the year under review, a result similar to that of the previous year.

During the year 2,940 primary immunisations were completed in the Borough of which 424 were effected by general practitioners. Most diphtheria immunisations which are given form part of a combined antigen therapy and, in addition to these primary treatments, some 3,657 reinforcing doses were given, 419 of which were carried out by local doctors.

Antitoxin—Since January, 1949, arrangements have been made for a small stock of diphtheria antitoxin to be held at Greenwich District Hospital for use by general practitioners in emergencies.

Typhoid

No cases of typhoid were notified during the year, a position similar to that for 1970. However, 5 contacts in the Borough were kept under surveillance for the requisite period.

Cholera

Attention continued to be focused on the outbreaks of cholera arising on the continents of Europe and Asia during the latter part of 1970 and the early months of 1971. As a result, all persons entering the country without a valid vaccination certificate

were kept under surveillance for 5 days. A total of 147 persons were so observed.

Dysentery

This disease is usually characterised by diarrhoea, fever and, to a lesser extent, vomiting. Although modern methods of treatment are effective and usually rapid, nevertheless the disease has become a serious nuisance and difficult to control. It is normally mild but in infants, young children and the very old it can produce serious illness and debility, especially if the patients are already slightly below normal health. In adults it is an irksome inconvenience and, if they work in the food trade, it can cause economic hardship.

Some 55 notifications of dysentery were received during the year, a total which is 26 higher than for 1970. Thirty-one of these cases occurred in an outbreak at Goldie Leigh Hospital among patients admitted primarily as "long term" cases. Of the remaining 24 cases, 2 were also admitted for hospital treatment.

Ophthalmia Neonatorum

There were no cases notified during the year under review, a situation similar to that for 1970.

Poliomyelitis

As with the previous year, no case was recorded during 1971.

Completed primary poliomyelitis inoculations carried out during the current year numbered 2,938, 454 of which were by general practitioners. Reinforcing doses totalled 3,657, again with 472 being given by general practitioners.

Polio Vaccine Trial

In common with several other London Boroughs, the Council agreed to assist in the assessment of a new oral polio vaccine which had been approved by the Committee on the Safety of Drugs but which required further trials to test its immunising efficacy. This vaccine, it was hoped, would prove to be even more valuable than the well-tested preparation in current use.

The Greenwich trial, planned in 1970 to take place during the following year, did not alter the current immunisation programme for infants.

Acute Meningitis

Of the total of 17 cases notified, 16 were admitted to hospital. There were 2 instances of *pneumococcal* infection (one notified posthumously) and one case each of *streptococcal meningitis* and

h. influenzae; in 4 instances the cause was viral, a further 7 were considered aseptic and in 2 others the organisms remained unidentified.

Acute Encephalitis

(Infective or Post-Infectious)

The one case notified during 1971 was "*post-infectious*" which developed after an attack of chickenpox. There was recovery after hospital treatment.

Tetanus

(prophylaxis)

During the year, 2,924 persons were protected against tetanus and 3,578 reinforcing doses were given, both being part of combined antigen therapy. Of these treatments, 422 and 418 respectively were effected by general practitioners.

Malaria

Three cases of malaria, all contracted abroad, were notified during the year under review. A similar total was returned for 1970.

This year it is necessary to record a death from cerebral malaria in respect of a seaman admitted to the Dreadnought Hospital and who succumbed the following day. Enquiries of the Port Health Authority revealed that the man, a cook on the tanker 'Border Reiver' had arrived at Tilbury on 24th November and was immediately brought into hospital, the onset of illness being given as the 19th day of the same month. This case is not included in those notified.

Infective Jaundice

Persons notified as suffering from infective jaundice during the year totalled 37 compared with 28 in 1970.

Ten patients were admitted into hospital but there were no recorded deaths.

Leprosy

No case was recorded during the current year a situation similar to that of the previous year.

It is interesting to record that there has been much publicity about the controversial history of the drug thalidomide and its alleged effects upon the foetus during the first trimester of pregnancy. Its beneficial use, however, on abolishing the distressing lepra reactions (those serious drawbacks arising from employment

of the anti-leprosy drug dapsone) has only recently been made known. With suitable safeguards, it may yet perform a useful function for humanity in the treatment of this tuberculous type organism.

Tuberculosis

There were 48 notifications received during the year of which one was subsequently not confirmed. Of the 47 confirmed cases, 39 were of the pulmonary type and 8 non-pulmonary, i.e. tuberculosis of parts of the body other than the lungs. From sources other than formal notification there were 4 cases, 3 pulmonary and one non-pulmonary, three derived from the deaths returns and a pulmonary case was notified via the Coroner's Officer. In 1970 there were 37 pulmonary and 4 non-pulmonary cases notified.

Although not always essential, disinfection was offered and carried out in respect of 13 premises during which 15 rooms and 210 articles were disinfected.

During 1971, some 2,472 Greenwich school children and students received B.C.G. vaccination under the direction of School Medical Officers. A further 169 contacts were also vaccinated.

The number of notified cases of tuberculosis remaining on the Register at 31st December, 1971, was as follows:—

PULMONARY					NON-PULMONARY				
Men	Women	Children		Total	Men	Women	Children		Total
		M	F				M	F	
470	350	11	10	841	37	42	1	3	83

During the current year restrictions were imposed on the operations of Mass Radiography Units in general and, in this Borough, examinations carried out under these arrangements fell by approximately 33½% to a total of 7,809.

Greenwich Chest Clinic

I am indebted to Drs. P. Forgacs and D. G. Wraith, Consultant Physicians at the Greenwich Chest Clinic, for the following Report on their work during 1971:

"There were 8 new cases of pulmonary tuberculosis notified during the year. This included 4 males over 45 years of age, one under 45 and 3 women under 45. There were two cases of non-respiratory tuberculosis.

Some 78 persons were X-rayed because they had been in con-

tact with a tuberculous patient but none was found to have tuberculous disease. Of these contacts 46 were given BCG.

Thirty-one children were referred to us because they were found to have a positive tuberculin test at school but none of these had evidence of tuberculous disease.

A total of 5,786 patients attended the clinic. These patients included various chest conditions such as bronchitis, asthma and carcinoma, and healed tuberculosis who were being kept under observation.

Supportive and financial help was given to many patients as before.

Unfortunately at present we are without an Occupational Therapist, a service which is greatly missed by many of our handicapped patients."

Woolwich and Brook Chest Clinic

I am also indebted to Dr. A. MacManus, Consultant Physician at the Woolwich and Brook Chest Clinics for the following Report on her activities at her establishment during the current year:

"There was an increase in the number of new cases of pulmonary tuberculosis notified during the year. The figures for 1970 are given in brackets.

NEW NOTIFICATIONS

	<i>Men</i>	<i>Women</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i> 1971
Pulmonary	20	10	1	2	33 (22)
Non-pulmonary	2	4	0	0	6 (4)

NUMBER ON TUBERCULOSIS REGISTER 31.12.71

	<i>Men</i>	<i>Women</i>	<i>Boys</i>	<i>Girls</i>	
Pulmonary	355	268	10	6	639 (622)
Non-pulmonary	25	27	0	3	55 (50)

TRANSFERS INTO BOROUGH

	<i>Men</i>	<i>Women</i>	<i>Boys</i>	<i>Girls</i>	
	8	4	2	0	12 (11)

ATTENDANCES AT CLINICS	<i>St. Nicholas</i>	<i>Brook</i>	<i>Total</i>
Total	3056	3848	6904 (6395)
New	527	511	1038 (1044)
B.C.G.	75	48	123 (100)
Contacts	296	92	388 (208)
New Cancer Patients	20	22	42 (55)
Positive Mantoux Schoolchildren	53	19	72 (128)

One schoolgirl who was referred to the Clinic because she had a positive tuberculin test was found to have active pulmonary tuberculosis.

Most of the Chest Clinic work now is the investigation and treatment of patients with non-tuberculous pulmonary diseases, especially asthma, bronchitis, neoplasm and industrial diseases. Where indicated they are kept under supervision.

Many personal, social and economic problems were dealt with by our Welfare Officer who has a close liaison with our Health Visitors.

Our Occupational Therapist held two Diversional Therapy classes weekly and also visited and instructed housebound patients in interesting and profitable hobbies."

Mass Radiography

Introduced primarily for the early detection of tuberculosis, the Mass Radiography service is responsible for revealing many other chest malformations and disabilities which would doubtless have remained undetected perhaps for years.

As a direct consequence of the diagnosis of these ailments treatment is made possible at a very early stage, thereby enabling a much more favourable prognosis to be entertained.

Despite imposed restrictions, surveys continued to be carried out in the Borough during the year by the South East London Mass Radiography Unit. Dr. J. M. Morgan, the Director of this Unit to whom I am indebted for the following analysis of the results, observes that "the total cases of tuberculosis in the year reached 0.9 per 1,000 and carcinoma of lung reached 1.1 per 1,000. These figures show an increase over the previous year.

One tuberculous case of outstanding interest was a 49 year old

lady showing her occupation as 'school meals' who had extensive and possibly cavitated disease with a positive sputum.

You will note that we have been obliged to reduce the total number examined in the Borough from 11,000 to about 8,000 but, in spite of this, numbers of abnormalities detected have remained more or less unchanged".

SUMMARY OF SURVEYS CARRIED OUT IN THE BOROUGH FROM
1ST JANUARY TO 31ST DECEMBER, 1971

TOTALS EXAMINED

MEN	...	...	...	4,348
WOMEN	...	...	...	3,461
				<hr/> 7,809 <hr/>

ABNORMALITIES DETECTED

(a) *TUBERCULOUS*

Total numbers of proved cases

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Cases requiring close supervision or treatment	3	1	4
Cases requiring occasional supervision ...	1	2	3
Cases previously known requiring close supervision or treatment	—	—	—
Cases previously known requiring occasional supervision	—	—	—
	<hr/> 4	<hr/> 3	<hr/> 7
Still under investigation	—	—	—
Failed to attend follow-up	—	1	1
	<hr/> 4	<hr/> 4	<hr/> 8
Total			

(b) *NON-TUBERCULOUS*

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Carcinoma of lung	7	2	9
Carcinoma of lung (previously known)	—	—	—
Malignant neoplasms other than carcinoma of lung	—	1	1
Other non-tuberculous abnormalities (<i>see below</i>)	31	20	51
	<hr/> 38	<hr/> 23	<hr/> 61
Still under investigation	—	—	—
Failed to attend follow-up	—	—	—
Unfit for investigation	—	—	—
	<hr/> 38	<hr/> 23	<hr/> 61
Total			
TOTALS—all abnormalities	42	27	69

ANALYSIS OF "OTHER NON-TUBERCULOUS ABNORMALITIES"

	Men	Women	Total
Non-malignant neoplasms	2	3	5
Lymphadenopathies, excluding sarcoids ...	—	—	—
Sarcoids	—	1	1
Congenital cardio-vascular abnormalities ...	1	—	1
Acquired cardio-vascular abnormalities ...	5	3	8
Pneumoconiosis without P.M.F.	—	—	—
Pneumoconiosis with P.M.F.	—	—	—
Pneumonitis	5	1	6
Bronchitis and emphysema group	2	—	2
Bronchiectasis	—	—	—
Diaphragmatic hernia group	1	2	3
Spontaneous pneumothorax group	—	—	—
Other miscellaneous abnormalities	10	5	15
Previously known abnormalities	5	5	10
Totals	31	20	51

ANALYSIS OF SURVEYS

	Numbers Examined			Cases of Tuberculosis requiring treatment or close supervision			Cases of Tuberculosis requiring occasional supervision		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Small Community Surveys	675	1,032	1,707	—	—	—	—	—	—
Regular Services for L.As. and G.P. Referrals	1,740	1,225	2,965	2	1	3	—	1	1
Firms—	1,566	278	1,844	1	—	1	1	—	1
Contacts	218	509	727	—	—	—	—	1	1
Hospitals, Colleges, etc.	149	395	544	—	—	—	—	—	—
Homes and Hostels	—	22	22	—	—	—	—	—	—
TOTALS	4,348	3,461	7,809	3	1	4	1	2	3

Food Poisoning

During the year, 35 cases were notified, 4 were otherwise ascertained and one case of dysentery was subsequently rediagnosed food poisoning, making a total of 40. Four patients received hospital treatment. In the previous year there were 80 cases of whom 9 received hospital treatment.

All cases were investigated, including visits to a works canteen, a café and a delicatessen, with the following results: —

No. of	Organism (if known)	No. of Hospital Cases	Remarks
1	<i>Salmonella mendoza</i>	1	A posthumous notification. The deceased, who had a history of diverticulitis, partook of meals with her married son and family; only one other member of the family had slight symptoms. No particular food was suspected. The Coroner recorded a verdict of intestinal perforation due to <i>Salmonella mendoza</i> infection.
1	<i>Salmonella seftenberg</i>	1	A two-month-old baby, no particular food suspected.
4	<i>Salmonella typhimurium</i>	—	Four individual cases. Cauliflower with cheese sauce was suspected in one case, another case suspected chicken, but verification was not possible in either instance. The third case suspected a meal consumed abroad. No particular food was suspected in the fourth case.
4	<i>Salmonella virchow</i>	2	Three cases occurred in an outbreak in an old People's Home. Two cases were resident in the home and a third case was a member of the staff. The Public Health Inspector who carried out an investigation into the outbreak is of the opinion that the infection was brought into the Home by one of the two resident cases, returning after a visit to relatives. No particular food was suspected in the fourth case.
1	<i>Salmonella westerstede</i>	—	Shellfish consumed abroad was the food suspected.

No. of Cases	Organism (if known)	No. of Hospital Cases	Remarks
2	<i>Clostridium welchii</i>	—	A posthumous notification. The suspected food was a stew, which had been prepared, cooked and then had remained over-night in a warm kitchen. The next day the stew was reheated and consumed for the evening meal. The Coroner recorded a verdict of Death by misadventure. The remaining case suspected no particular food.
2	<i>Salmonella Group B</i>	—	Two individual cases, no particular food was suspected in either instance.
2	<i>Salmonella Group C</i>	—	A meal consumed abroad was suspected in one case, no particular food suspected in the remaining case.
1	<i>Salmonella Group C2</i>	—	A meal consumed abroad was suspected.
1	<i>Salmonella Group D</i>	—	No particular food suspected.
1	<i>Salmonella Group E</i>	—	No particular food suspected.
20	No organisms detected	—	Six cases occurred in two households, no particular food was suspected in either instance. Fourteen individual cases, although various food were suspected in no instance was it possible to verify the suspected commodity.
40	TOTALS	4	

Local Morbidity

I am indebted to the Regional Controller of the Department of Health and Social Security (London South Region) for the following statistics relating to claims for sickness and industrial injury benefits during 1971.

Local offices of the Ministry of Social Security concerned mainly with the London Borough of Greenwich are those located at Deptford, Eltham and Woolwich. Regions covered by these offices are, unfortunately, based upon postal districts and not upon local authority areas but, nevertheless, for most practical purposes the figures quoted are reasonably representative of the Borough's morbidity, subject to the following considerations:—

(a) *Figures refer to new claims only—they do not indicate the current "live load" which includes a good deal of long-term sickness.*

(b) *Figures relate only to persons insured for sickness benefit. Sickness, therefore, in children, the aged, the non-employed and "exempt" married women is not included.*

(c) *Injury benefit figures relate to all employed persons.*

NEW CLAIMS TO SICKNESS AND INDUSTRIAL INJURY BENEFIT YEAR ENDED 31ST DECEMBER, 1971

		Sickness	Injury	
Quarter ended 31.3.71	Deptford	3,647	252	
	Eltham	5,594	286	
	Woolwich	5,533	342	
		<hr/> 14,774	<hr/>	880
Quarter ended 30.6.71	Deptford	3,384	236	
	Eltham	4,353	264	
	Woolwich	4,240	361	
		<hr/> 11,977	<hr/>	861
Quarter ended 30.9.71	Deptford	3,117	232	
	Eltham	3,810	280	
	Woolwich	3,644	297	
		<hr/> 10,571	<hr/>	809
Quarter ended 31.12.71	Deptford	3,370	190	
	Eltham	5,300	272	
	Woolwich	5,181	299	
		<hr/> 13,851	<hr/>	761
	Totals	<hr/> 51,173	<hr/>	<hr/> 3,311

Compared with 1970, new claims to sickness benefit fell by 13.6% and those for industrial injury by 9.4%.

SECTION IV

PERSONAL HEALTH AND RELATED SERVICES

Traditionally, local government has been structured to carry out pre-determined tasks and departments have tended to be organised on these lines with a result that many have become somewhat hide-bound in outlook. Such situations have stimulated the adoption of "corporate planning," a method of control which seeks to break down sectional barriers and to provide solutions to problems identified not by departments but by the authority itself. In practice this has produced, *at the centre and by the centre*, an organisation better equipped to deal with hard statistical data than the softer, delicate and diverse problems of public feeling and opinion. However, it is not out of statistical analysis, useful though this may be, but within the environment that problems arise, the "learning" of which takes place at the periphery. It is unfortunate but, by the very nature of complex organisations, the numerous levels of command develop a penchant for filtering out ideas born of empiricism and they become progressively unresponsive as procedures inevitably become more rigid. Indeed, there are now indications that we are becoming more obsessed with the smooth running of the engine and paying less regard to the direction in which the ship is heading.

Personal reactions to set circumstances are notoriously unpredictable, a fact which has always militated against detailed planning of future services concerning basic human affairs. Statistical analyses and assessments provide useful "guide lines" but success in such a field is to be found rather in prudent application of wise counsel than in slavish adherence to depersonalising mathematical formulae.

Wisdom, a quality of inestimable value in any sphere of life, is indispensable if public health and personal services are to be successfully implemented. Such a quality is not adventitious, it does not arrive overnight nor is it secured merely by erudition. Rather is it the faculty, founded on knowledge but born of long experience, to judge and act rightly in any particular case. It is, indeed, a product of evolution not revolution and, in combination with a wider, looser planning concept, together with a modicum of "vision", there is little that cannot be accomplished.

Such was the reasoning underlying the Health Department's undoubted success. Many of its services, empirically based and

highly regarded nationally, had the benefit of full council support and approval and had flourished accordingly. Certainly its geriatric services were second to none. With a cadre of well-qualified and skilled "public health officers" it had pioneered incontinent laundry and bathing facilities and added pedicure and hair-washing for good measure; its luncheon clubs and meals-on-wheels schemes, introduced early in the 1950's were providing meals greatly in excess of other local authorities; its organisation and training of "home helps" was unsurpassed and their co-operation with geriatric visitors and district nurses led to an eminently effective and sensitive instrument for service to the community; its arrangements for chiropody and its provision for the elderly to spend a vacation at its own "holiday hotel" were the envy of many authorities. Moreover, the undoubted success of our "old peoples' clubs" owes much to the stimulation and unstinted support, encouragement and assistance afforded by the department since the war. All these and many other functions were undertaken and extended *within the existing legislation*.

Notwithstanding all the accompanying publicity it must be noted that, on close examination, the new Social Services and Chronically Sick and Disabled Persons Acts added little to the powers already at hand to local authorities under the Public Health, National Health Services and National Assistance Acts, although the resources about to be made available in accordance with these new Acts would have been "riches beyond avarice" to the original establishment. It is fair to say that local authorities not taking advantage of the permissive powers under the previous legislation are hardly likely to prove paragons in respect of the new statutes.

In respect of our own integrated Directorate, the nature of which was unique in local government, it was anticipated that the net result of the new legislation would be merely to add impetus to plans already formulated for the expansion and development of extant services. Eventual division of the Directorate was therefore seen as an impediment to the previously successful *modus operandi*.

It will be recalled that, in 1970, on the subject of the Seebohm Report, the Central Health Services Council made the following observation to the then Secretary of State—"the proposed separation of medical and social work would not only be administratively disastrous but would be to the great disadvantage of the patient." In general, perhaps with the exception of the

word disastrous, the views expressed were in accord with most of the informed opinion with extensive knowledge of the preventive and personal health service. That the views and advice were ignored is now history and the Social Services Act has been operative for almost a year.

Next to the Education Department, that of the Social Services is now the government's biggest spender and, as in the Health Services before, it will find itself short of resources to match its ever-growing needs. Moreover, much more will be expected than it can ever hope to achieve and it is at this point that it will find wisdom and experience in this field of community health invaluable. Even so, such a sudden and unprecedented increase in expenditure resulting from the deliberate separation of health and social work will surely have its repercussions and will need to be justified, health-wise and cost/benefit-wise. Only history will reveal whether this dichotomy was a stroke of genius or a serious error of judgement.

It is true we were forewarned, nationally, that in the transitional period there was likely to be a diminution both in the quality and quantity of service but we were assured that, eventually, improvement would be dramatic.

However, at the outset it was obvious that the new Directorate would have to operate under great difficulties for it was faced with two major problems—it was about to enter into a field in which preventive and personal health has an equal, if not a dominant role, and that it was to attempt to undertake this task not only with insufficient staff but of whom only 25% were qualified. Inevitably much time and effort would be needed, first to recruit and then to train entrants into this new service, the majority of whom were likely to be young and inexperienced.

Clearly, it is during this rather extended interim period that the greatest danger exists of a hiatus developing particularly in the more firmly established and traditionally health-based services such as child and geriatric care where a change of visiting personnel as well as duties is involved. A side effect of these function transfers will be that efforts to reduce the number of callers at particular households will be frustrated and demarkation problems intensified.

Already some alienation has taken place among psychiatrists and social workers as a result of the introduction of the Social

Services Act with the true interests of the mentally ill and handicapped possibly languishing "between two stools".

With remarkably good grace but with many misgivings the health visitor has accepted the restraint placed upon her work by the new Act in relation to children and families. But for such wealth of experience and "know-how" compulsorily relinquished to be taken up by less qualified staff is to court serious disruption if not disaster in the continuity of community health and fills her with dismay. Despite a traditional doctor/nurse relationship it has taken a life-time for the majority of the medical profession to understand and evaluate the health visitor and her work in society. It would be surprising if social workers were accepted and appreciated in less time. Nevertheless, if society is to gain maximum benefit from the newer, wider concept of community health envisaged in the re-organisation of the National Health Service, then means must be found to establish a close and successful liaison between hospitals, doctors, health and social workers, ably supported by an experienced, understanding and compassionate administration.

Ante and Post Natal Clinics

As expected, attendances at these Clinics continued to decline during 1971 for the majority of mothers desiring a hospital confinement can now obtain a booked bed although, as recognised in the Peel Report, there will always be a small number of mothers who prefer to have their babies at home. Unfortunately some of these are women who should be confined in hospital due to urgent medical or social reasons.

Attendances at Council Clinics during the year fell by 31.2% to a total of 3,724 and sessions by 62.5% to 190.

Many mothers booked for hospital confinements continue to have their initial ante-natal care in the Council's Welfare Centres where they receive the attention of general practitioner obstetricians and domiciliary midwives. There was also a decline of 14.3% in attendances at G.P. obstetrician sessions over the same period.

The following table indicates the use made of these various Clinics, compared with the figures of 1970 which are given in brackets: —

No. of Women in Attendance: Ante-Natal ...	288
Post-Natal ...	58
	— 346
Total No. of Attendances made ...	3,724
	(5,409)

No. of Sessions held by:

Medical Officers	...	...	...	...	53
Midwives	...	...	...	...	—
G.P.s on Sessional Basis	...	...	...	...	137
Hospital Medical Staff	...	...	...	...	—
					190

General Practitioner Obstetricians

No. of Sessions held	...	...	...	446
No. of Attendances: Ante-Natal	...	...	4,802	
Post-Natal	...	...	306	
			—	5,108
				(5,961)

Preparation for Childbirth

There were 474 psychoprophylaxis and 489 mothercraft sessions during 1971. Attendances at these classes, which were 3,352 and 3,455 respectively, showed an encouraging and increasing interest by mothers and senior school girls in the facilities provided. In addition, 545 prospective parents attended the 36 parentcraft evening sessions.

Health Visitors also gave talks to 5 organisations outside the Borough services, at which there were 196 attendances. Such work is welcomed as it enables the health visitors' skills to be made available to a wider audience than those of age groups which normally attend clinics and who are visited as part of the daily routine of these officers.

Selection of Women for Hospital Confinement

It is obvious that the number of emergency hospital admissions can be reduced by the correct booking of place of confinement in accordance with certain criteria. The following tables are included to indicate the degree of success of the selections made in the Greenwich area during 1971. They serve also as a reminder of the need for persistent effort to ensure hospital delivery for women in the high risk groups.

Of the total of 356 home confinements listed, 22 concerned illegitimate babies and 3 mothers over the age of 35 years who had had 4 or more children previously and who clearly belonged to a high risk category for whom delivery in a consultant maternity department with full facilities is constantly urged.

Live Births by Age and Parity of Mother and by Place of Occurrence

Parity of Mother	Place of Deliv'y	ALL AGES	AGE OF MOTHER						
			Under 20 yrs.	20 to 24 yrs.	25 to 29 yrs.	30 to 34 yrs.	35 to 39 yrs.	40 to 44 yrs.	45 and over
0	1 (a)	22	6	9	6	1	—	—	—
	(b)	955	155	469	238	64	21	7	1
	2	64	14	28	18	3	1	—	—
	3	11	1	6	4	—	—	—	—
1	4	1	1	—	—	—	—	—	—
	1 (a)	29	—	16	10	2	1	—	—
	(b)	672	33	252	246	101	29	11	—
	2	106	4	42	42	13	5	—	—
2	3	141	10	63	54	10	4	—	—
	4	6	—	5	1	—	—	—	—
	1 (a)	6	—	3	1	2	—	—	—
	(b)	289	2	84	97	70	28	7	1
3	2	37	—	10	15	10	2	—	—
	3	122	3	40	47	25	7	—	—
	4	—	—	—	—	—	—	—	—
	1 (a)	7	—	3	2	1	1	—	—
4	(b)	116	—	14	39	43	14	6	—
	2	17	—	1	8	4	4	—	—
	3	48	—	5	20	19	3	1	—
	4	—	—	—	—	—	—	—	—
5-9	1 (a)	—	—	—	—	—	—	—	—
	(b)	65	—	4	22	16	17	5	1
	2	5	—	—	—	2	3	—	—
	3	8	—	—	2	4	2	—	—
10-14	4	—	—	—	—	—	—	—	—
	1 (a)	—	—	—	—	—	—	—	—
	(b)	46	—	1	7	8	20	9	1
	2	7	—	—	2	2	2	1	—
15 & over	3	4	—	—	1	2	1	—	—
	4	—	—	—	—	—	—	—	—
	1 (a)	—	—	—	—	—	—	—	—
	(b)	2	—	—	—	—	2	—	—
Illegit.	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—
	1 (a)	8	1	5	1	1	—	—	—
TOTAL	(b)	260	92	86	40	22	16	4	—
	2	18	—	10	1	5	2	—	—
	3	22	—	6	4	8	4	—	—
	4	1	1	—	—	—	—	—	—
TOTAL	1 (a)	72	7	36	20	7	2	—	—
	(b)	2,405	282	910	689	324	147	49	4
	2	254	18	91	86	39	19	1	—
	3	356	14	120	132	68	21	1	—
TOTAL	4	8	2	5	1	—	—	—	—

1. (a) N.H.S. with G.P. Mat. (non-obstetric); (b) Other N.H.S. (non-mental)

2. Non-N.H.S. (non-mental)

3. At home

4. Elsewhere

Elderly Primiparae

Thirty mothers over the age of 35 years gave birth to their first viable child all of whom were delivered in properly equipped units or hospitals. This total represents 0.9% of all live births to Borough residents during the current year.

No elderly primipara was concerned with a multiple pregnancy.

Multiple Pregnancies

Multiple pregnancies in the Borough during 1971 numbered 39 (some 1.3% of all pregnancies resulting in live births) 37 of which were delivered in hospital or maternity home, the remaining 2 occurring at home.

Multiple Births by Age and Parity of Mother and by Place of Occurrence

Parity of Mother	Place of Deliv'y	ALL AGES	AGE OF MOTHER						
			Under 20 yrs.	20 to 24 yrs.	25 to 29 yrs.	30 to 34 yrs.	35 to 39 yrs.	40 to 44 yrs.	45 and over
0	1(a)	—	—	—	—	—	—	—	—
	(b)	10	—	6	3	1	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
1	1(a)	—	—	—	—	—	—	—	—
	(b)	11	1	7	2	1	—	—	—
	2	3	—	1	1	1	—	—	—
	3	—	—	—	—	—	—	—	—
2	1(a)	—	—	—	—	—	—	—	—
	(b)	4	—	2	—	2	—	—	—
	2	3	—	1	2	—	—	—	—
	3	1	—	1	—	—	—	—	—
3	1(a)	—	—	—	—	—	—	—	—
	(b)	1	—	—	—	1	—	—	—
	2	—	—	—	—	—	—	—	—
	3	1	—	—	1	—	—	—	—
4	1(a)	—	—	—	—	—	—	—	—
	(b)	1	—	—	—	—	1	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
5—9	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
10—14	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
15 and over	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
Illegit.	1(a)	—	—	—	—	—	—	—	—
	(b)	3	—	1	—	—	2	—	—
	2	1	—	—	—	—	1	—	—
	3	—	—	—	—	—	—	—	—
TOTAL	1(a)	—	—	—	—	—	—	—	—
	(b)	30	1	16	5	5	3	—	—
	2	7	—	2	3	1	1	—	—
	3	2	—	1	1	—	—	—	—
4	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—

1. (a) N.H.S. with G.P. Mat. (non-obstetric); (b) Other N.H.S. (non-mental)

2. Non-N.H.S. (non-mental)

3. At home

4. Elsewhere

Stillbirths

Although domiciliary live births formed 11.5% of the Borough's total, only 7.1% of its stillbirths arose from home confinements.

Stillbirths by Age and Parity of Mother and by Place of Occurrence

Parity of Mother	Place of Deliv'y	ALL AGES	AGE OF MOTHER						
			Under 20 yrs.	20 to 24 yrs.	25 to 29 yrs.	30 to 34 yrs.	35 to 39 yrs.	40 to 44 yrs.	45 and over
0	1(a)	—	—	—	—	—	—	—	—
	(b)	18	3	7	6	1	—	1	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
1	1(a)	—	—	—	—	—	—	—	—
	(b)	5	—	2	2	—	1	—	—
	2	1	—	1	—	—	—	—	—
	3	1	—	1	—	—	—	—	—
2	1(a)	—	—	—	—	—	—	—	—
	(b)	6	—	3	2	—	1	—	—
	2	—	—	—	—	—	—	—	—
	3	1	—	—	—	1	—	—	—
3	1(a)	—	—	—	—	—	—	—	—
	(b)	4	—	—	1	—	1	2	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
4	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
5—9	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
10—14	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
15 and over	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—
Illegit.	1(a)	—	—	—	—	—	—	—	—
	(b)	4	—	3	1	—	—	—	—
	2	1	1	—	—	—	—	—	—
	3	1	1	—	—	—	—	—	—
TOTAL	1(a)	—	—	—	—	—	—	—	—
	(b)	37	3	15	12	1	3	3	—
	2	2	1	1	—	—	—	—	—
	3	3	1	1	—	1	—	—	—
	1(a)	—	—	—	—	—	—	—	—
	(b)	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—

1. (a) N.H.S. with G.P. Mat. (non-obstetric); (b) Other N.H.S. (non-mental)

2. Non-N.H.S. (non-mental)

3. At home

4. Elsewhere

Midwifery

Again it is pleasing to report that, throughout the year, the mutually useful liaison between the Borough and the local hospitals continued and, in this respect, the staff particularly appreciated their monthly meeting with colleagues at the British Hospital for Mothers and Babies.

From September of the current year plans for a Midwives Liaison Scheme, drawn up during 1970 for Council midwives to attend confinements in the Greenwich District Hospital, were put into operation. After an induction course of one week and under the general supervision of a Consultant Obstetrician, 3 midwives began attending hospital confinements in respect of mothers booked for planned 48-hour discharges.

Clinic services were maintained for General Practitioner Obstetricians but, with a continuing reduction in the number of home confinements, the decline in the use of these facilities by the doctors persists.

A substantial fall from 605 to 58 in attendances for post-natal examinations during 1971 merely indicates the accelerating rate at which confinements are being hospital orientated.

Practising Midwives

In accordance with the Midwives Act, 1951, notifications of intention to practise as midwives in the London Borough of Greenwich during 1971 were received from 112 trained staff. Of these, 97 were in respect of hospital midwives and the remainder, i.e. 15, were from those engaged in the Council's service.

Domiciliary Services

The Borough has 7 full-time and 4 part-time midwives operating within its area.

During 1971 there were 362 home confinements. In addition there were 36 mothers booked for home confinements, but transferred to hospital due to complications, and 394 patients were discharged from hospital after 48 hours or more.

Domiciliary confinements during the year fell by 13.8% to a total of 362 and the number of mothers discharged home early after hospital confinement increased by 20 to a figure of 394, of which 203 were booked discharges.

Domiciliary Confinements Attended and Hospital Deliveries Nursed at Home

	<i>Doctor Present</i>	<i>Doctor not Present</i>
Doctor Not Booked	—	—
Doctor Booked	31	331
Totals	31	331
No. of Hospital Deliveries attended by Midwives on discharge before 10th Day	394	

Domiciliary Confinements by Age and Parity during 1971

<i>Age</i>		<i>Total con- fine- ments</i>	<i>Parity</i>						
			0	1	2	3	4	5 and over	Not known
Under 20	No. %	13 3.6	1 0.3	9 2.5	3 0.8	— —	— —	— —	— —
20-29	No. %	262 72.4	8 2.2	125 34.5	88 24.3	32 8.8	6 1.7	2 0.6	1 0.3
30-39	No. %	79 21.8	— —	9 2.5	30 8.3	28 7.7	6 1.7	6 1.7	— —
40 and over	No. %	2 0.6	— —	— —	— —	1 0.3	1 0.3	— —	— —
Not known	No. %	6 1.7	— —	2 0.6	3 0.8	— —	1 0.3	— —	— —
Total	No. %	362 100.0	9 2.5	145 40.1	124 34.3	61 16.9	14 3.9	8 2.2	1 0.3

Emergency Obstetric Units

These units, manned by hospital staff, are based at the British Hospital for Mothers and Babies, St. Alfege's, Lewisham, and Dartford Hospitals. They were called upon 12 times during 1971 to aid medical practitioners or midwives who were in need of additional assistance at domiciliary confinements.

Premature Baby Units

A few years ago mortality in premature babies was as high as 25% and many survived only to be handicapped in some way or other. Today, average mortality is down to approximately 10% and some 90% of the remainder are mentally and physically normal.

Premature babies who require special nursing are transferred to units at the British Hospital for Mothers and Babies or to the Lewisham Hospital. When hospital nursing is found to be necessary for premature babies born in the district and if transport under normal conditions in an ambulance is considered to be undesirable, then a doctor and nurse may be sent from hospital with a mobile incubator to transfer the child.

During the current year it was necessary to transfer two babies to the care of these units. Six other babies born prematurely in the district were able to be nursed at home.

Low Birth-Weight Mortality

There exists a close relationship between birth weight and mortality and in England and Wales some 58.9% of live-born babies in the lowest weight category die within 24 hours.

Unfortunately, from available data, no distinction can be made between the low birth weight resulting from a shortened gestation period and that arising from slow foetal growth, although it has been estimated that the latter is responsible for one-third of all low-birth-weight babies. With modern methods of contraception, estimating gestation periods is becoming progressively more unreliable and the use of ultra-sonic scanning for this purpose is increasing.

Not one of our eight premature babies born at home died within the first 28 days of life although the neo-natal mortality rate for low-birth-weight babies in England and Wales for 1971 was 108.0 per 1,000.

Domiciliary Births—Prematurity and Mortality by Birth Weight

Weight	Number	Proportion per 100 live premature infants	Deaths in 24 hours		Survivors at 28 days	
			Number	per 100 live premature infants	Number	Per 100 live premature infants
2lb 3oz or less	—	—	—	—	—	—
3lb 4oz or less	1	12.5	—	—	1	12.5
3lb 5oz to 4lb 6oz	—	—	—	—	—	—
4lb 7oz to 4lb 15oz	1	12.5	—	—	1	12.5
5lb to 5lb 8oz	6	75.0	—	—	6	75.0
All cases	8	100.0	—	—	8	100.0

Maternity Outfits

In all cases of confinements, other than in hospital, maternity outfits are made available and during the current year some 398 packs were distributed.

Conditions for which Midwives summoned Medical Aid during 1971

(Figures for 1970 in brackets)

During Pregnancy			During labour		
High Blood Pressure	....	5 (0)	Premature labour	....	6 (5)
Abnormal Presentation	....	3 (4)	Ante-partum Haemorrhage	....	6(15)
Pyelitis	....	2 (2)	Early rupture of membrane	....	4 (0)
Post-maturity	....	2 (0)	Delay in 1st stage	....	3 (3)
Ante-partum			Delay in 2nd stage	....	4 (4)
Haemorrhage	....	5 (15)	Retained placenta	....	3 (3)
			Post-partum Haemorrhage	....	3 (1)
			Ruptured perineum	....	35(34)
			Foetal distress	....	4 (3)
			Maternal distress	....	0 (2)
During Puerperium					
For mother—			For infant—		
Thrombo-phlebitis	....	1 (7)	Foetal distress in labour	....	4 (3)
Pyrexia	....	4 (1)	No movements in 1st stage	....	2 (0)
Engorged Breasts	....	1 (0)	Asphyxia (severe cyanosis)	....	6 (6)
Abdominal pain	....	2 (0)	Rectal bleeding	....	2 (2)
Depression	....	1 (0)	Jaundiced	....	4 (1)
High Blood Pressure	....	0 (1)	Oral thrush	....	2 (0)
Haemorrhoids	....	0 (2)	Septic spots	....	5 (0)
Uterine Infection	....	2 (2)	Sticky eyes	....	2 (3)
Chest pains	....	0 (1)	Prematurity	....	1 (1)
Severe head cold	....	0 (2)	Vomiting	....	2 (2)
			Sever Coryza	....	0 (5)
			Bleeding from cord	....	3 (0)

Phenylketonuria—Guthrie Test

Phenylketonuria is one of the few causes of mental retardation to be successfully isolated and controlled by scientific research. Its control demands a protein free diet tailored to suit the individual but early diagnosis is essential.

Development of a reliable blood test (the Guthrie Test) has enabled an early diagnosis to be made of this condition and during 1969 there were arrangements between the local hospitals and the Department for all infants whether at home or in hospital to have this test on the 6th day of life. In the case of domiciliary births and early discharge cases the Local Authority midwives take the blood specimens and despatch them to the laboratory.

No cases of Phenylketonuria were detected during the current year.

Midwifery Training—Part II

A scheme for the training of midwives is undertaken in co-operation with the British Hospital for Mothers and Babies, with each pupil spending 3 months on the district.

No. of Pupils completing Course during year	...	27
No. of Pupils in Training at 31/12/71	... ..	6*
*British Hospital for Mothers and Babies		5
Greenwich District Hospital		1

Refresher Courses

In accordance with the rules of the Central Midwives Board, six midwives attended Statutory Refresher Courses during the year, each of one week's duration.

In addition, midwives were released for courses as under:—

3 Study Days—B.H.M.B.

One midwife attended a Day Release Course on "Training for Parenthood".

Some 42 obstetric nurses spent a day with a midwife and attended 5 ante natal G. P. Obstetrician clinics.

Cervical Cytology

Despite the general and individual publicity again utilised during 1971 to encourage women, particularly those in "risk" categories, to make use of this service, the surge in attendances noted last year was not sustained.

Paradoxically, it appears that the women most at risk of developing carcinoma of the cervix are not coming forward for examination in sufficient numbers. This is, of course, difficult to prove for many women are investigated in the surgeries of their family doctors or at the Family Planning clinics with which we have an arrangement for them to examine all who attend.

A more accurate assessment of the situation will be possible when a new national recall scheme becomes operative. From January 1972, the national recall scheme for routine cervical cytology will involve forwarding to the local health authority of a 5-year recall/report form whenever and wherever a resident female of 35 years or over has had a cervical smear taken. As part of this scheme it is intended that the local health authority will remind each woman, by letter, when the next smear test becomes due with the hope that these patients will then re-visit their general practitioner or a clinic for further examination. This is in addition to our own local scheme which is more extensive in that all well women of 25 years or more, together with

any woman who has been confined within the previous 12 weeks, are invited to attend our cervical cytology clinics with arrangements for recall in 3 years.

There are indications that cervical cytology investigations are being refused through fear. In a Group Practice survey recently, 430 women in the age category 35/39 were canvassed but only 56% eventually consented (12% after a second letter). Over 50% of refusals were for the following reasons—"can't find time", "fear of smear proving positive" and a number of flat "refusals". Resistance proved higher in unmarried and in the lower social groupings.

Numbers taking advantage of the Council's services during the current year decreased by 42.9% to a total of 1,055 and the following statistics indicate the work carried out at the various clinics:—

<i>Clinics</i>	<i>No. of Smears Taken</i>			
Rustall Lodge	303
Shooters Hill Road	156
Burney Street	105
Plumstead High Street	132
Market Street	218
Local Firms	141
Total at 31/12/71				1,055

<i>Age Groups</i>	<i>No. of Smears Taken</i>			
Under 25 years	29
25—35 years	315
35—45 years	338
45—55 years	297
Over 55 years	76
Total				1,055

<i>Parity</i>				
No. with no Children ... ..	...	...	...	168
No. with 1 Child ... ..	...	...	...	203
No. with 2 Children ... ..	...	...	...	375
No. with 3 Children ... ..	...	...	...	176
No. with 4 Children ... ..	...	...	...	83
No. with over 4 Children ... ..	...	...	...	50
Total				1,055

Of the 1,055 smears obtained, one required further investigation giving a rate of 0.95 per 1,000 examined.

With regard to carcinoma of the cervix uteri, there were 9 deaths recorded in the Borough during 1971 which gives a rate of 0.04 per 1,000 population. This is 0.01 more than the rate for 1970 but it again compares favourably with that for England, viz. 0.09.

Breast Examinations

No. examined	...	...	...	...	1,034
No. requiring further examination	...				8

Breast examinations decreased by 36.0% to a total of 1,034 for the current year. Those cases requiring further investigation numbered 8, i.e. six less than for 1970, equivalent to a rate of 7.7 per 1,000 examined.

With a total of 56 deaths, cancer of the breast produced a rate of 0.26 per 1,000 population, an increase of 0.03 over that for 1970. The rate for England was 0.44.

Family Planning

All evidence points to the fact that, beyond a certain level, overcrowding produces social breakdown and individual behaviour becomes distorted. Moreover, dangers arising from maternal exhaustion from too many pregnancies are self evident. When one considers the serious problems of poverty, malnutrition, overcrowding, disease and illiteracy, etc., the case for family planning is unanswerable. Indeed, with our limited knowledge of genetically determined disease it is the only sensible method of preventing perpetuation of hereditary defects.

To be fully effective, family planning needs to be world-wide for, with improving mortality rates and no corresponding limitation of births it is true to say that as a species we are out of control. Emergent nations are becoming progressively poorer by reason of uncontrolled population growth, results of which can be seen on the continents of Africa, Asia and South America and this, despite prodigious practical and financial assistance from richer countries.

However, a number of groups remain unconvinced of the need for family planning, maintaining that there are untapped world resources sufficient to support the expected population growth. That such resources exist cannot be denied but, unfortunately, there is always a "time lag" between the possible and the practi-

cal, and the geometrical progression of increasing population is unlikely to allow these two to coincide. It follows that, as with food, so with housing, medical, social and other personal and public services.

Family planning affords relief from the economic consequences of a family too large for parents to handle and amelioration of the tensions, ill-temper, neuroses and mental disability born of fatigue, frustration, anxiety and depression all too frequently met with in the prolific household. Other advantages accruing from planned parenthood are, less "problem" families and a corresponding reduction in demands made on the health, welfare and social services, the financial savings on which could be substantial.

Family planning has been a constant feature of this Council's health services for almost half a century and, in collaboration with the Walworth Women's Welfare Centre, a Birth Control Clinic was established in the Borough as early as 1934.

Today, in accordance with the National Health Service (Family Planning) Act, 1967, the Family Planning Association is used by the Council as its agent. No fees are paid by any patient for medical advice and/or examination and no charges are made for drugs and appliances supplied to medically or socially necessitous cases. However, it is the Council's intention to introduce an entirely free Family Planning Scheme for residents and workers in the Borough, including domiciliary facilities, and discussions are now taking place with the F.P.A. with this aim in mind.

Increasing use is being made by all classes of the family planning services provided in the Borough, including immigrants of various nationalities. Attendances during the year rose by 16.3% to 15,299, sessions by 7.1% to 933 and new cases by 18.3% to a total of 2,043. Council expenditure on family planning is currently at a rate of £16,308 per annum.

Under present arrangements trained visitors from the association give information to maternity cases at the British Hospital for Mothers and Babies and at the St. Nicholas and Military Hospitals and, when requested, make appointments to be taken up by mothers on their discharge.

The scheme also provides facilities at Langton Way Welfare Centre for young persons over 16 years of age to discuss their emotional, moral and sexual problems with experienced advisers.

I am indebted to Mrs. P. Regester, Administrator of the South East London Branch of the Family Planning Association, for the following account of her association's activities in this Borough during the year.

"Throughout 1971, F.P.A. clinics in the Borough of Green-

wich continued to be well attended and in February an additional clinic was opened at Woolwich Memorial Hospital.

An urban aid grant was obtained by the Borough Council with which to establish a free domiciliary family planning service, using the F.P.A. as its agents. Some preliminary arrangements for commencing the service took place in 1971, although the doctor and nurse team were not actually appointed to it.

Hospital visiting continued at three hospitals in the Borough: The British Hospital for Mothers and Babies, St. Nicholas Hospital in Plumstead, and the Woolwich Maternity Hospital. The purpose of this scheme is to try to motivate both mothers in maternity wards and other patients, especially those who have had terminations, to seek birth control advice either from their doctors or from family planning clinics.

The following table shows not only the increased clinic sessions held in 1971, but also that new patients to F.P.A. increased by approximately 18% over 1970."

FAMILY PLANNING — STATISTICAL ANALYSIS

Clinics	Sessions		New Cases		Attendances	
	1970	1971	1970	1971	1970	1971
Abbey Wood	50	51	128	145	888	1,122
Blackheath	147	152	323	295	2,033	2,344
Deptford	58	60	88	67	771	668
Eltham	100	99	375	418	3,054	3,097
Greenwich	196	205	226	277	2,268	2,469
District Hospital (Miller Wing)	50	50	54	65	582	573
Plumstead (St. Nicholas Hospital)	81	101	200	334	1,386	2,398
Plumstead Reception & Barnfield	101	103	150	142	778	906
Woolwich	88	87	185	201	1,394	1,442
Woolwich (Memorial Hospital)	—	25	—	99	—	280
TOTALS	871	933	1,729	2,043	13,154	15,299

Abortion

During 1971, 126,774 abortions were notified throughout England and Wales, 54,366 (43%) from N.H.S. hospitals and 72,119 (57%) from "approved" places. Of the total, 48% were in respect of single women of whom almost 5% were under the age of 16 years. Some 10,716, equivalent to 8.4% of the country's total, were notified in the S.E. Metropolitan Regional Hospital

area and, of these, 6,172 or 57.5% were forwarded from "approved" places.

Detailed analyses of legally induced abortions carried out in respect of Greenwich residents during the current year showed an advance of 30.7% to a total of 762 of whom 324 (42.5%) were single women. Of the total, some 142 (18.6%) were under 20 years of age of whom 11 were actually under 16.

The calculated abortion rate for Greenwich of 18.5 per 1,000 women between the ages of 15 and 44 is an increase of 5.7 over that for 1970. Of the Borough's total of 762 abortions, 502 were carried out at N.H.S. hospitals, 488 actually taking place within the S.E. Metropolitan Regional Hospital area.

Congenital Malformations

Voluntary notification of congenital malformations observed in the newborn continued during the year for it is recognised that only by early notification will the aetiologies of these abnormalities be revealed and perhaps, in due course, prevented. Such children are afforded the opportunity to develop to their fullest possible potential while parents receive advice, support, counselling and, where necessary, material assistance.

A total of 64 live and stillborn babies with congenital malformations was recorded during the year, an increase of 28% over the 1970 figure.

The following tables give information regarding malformations notified to the department during 1971 compared with those for the previous year and for England and Wales.

CONGENITAL MALFORMATIONS
(Numbers Notified According to Site)

Site	No. Notified 1971	Rates per 1,000 Total Notified Births		
		Greenwich		England & Wales 1971
		1971	1970	
ALL BABIES	76	24.06	19.67	18.20
Central Nervous System	21	6.65	1.87	4.26
Eye	—	—	—	0.13
Ear	2	0.63	0.62	0.50
Cleft lip and/or palate	6	1.90	1.56	1.34
Intestines	—	—	1.25	0.67
Cardiovascular system	3	0.95	0.62	0.90
External genitals	9	2.85	2.19	1.43
Limbs	27	8.55	6.24	6.56
Chromosomes	3	0.95	1.56	0.80

NOTE:—This table indicates the number of malformations NOT the number of children.

CONGENITAL MALFORMATIONS NOTIFIED DURING 1971

	GREENWICH				% E & W 1970
	Live	Still	Total	%	
Babies with					
One malformation	48	7	55	85.9	82.9
Two malformations	5	2	7	12.0	13.2
Three malformations	1	—	1	1.6	2.8
Four malformations	—	1	1	1.6	1.1
Five or more mal- formations	—	—	—	—	
Total babies	54	10	64	100.0	100.0

Congenital malformations among Greenwich children increased by 20.6% to 76 during 1971, the incidence rate rising from 19.67 to 24.06 per 1,000 notified births. The increase was due mainly to the birth of more children with defects of the central nervous system such as spina bifida, hydrocephalus and cerebral palsy, the reasons for which are obscure. If continued, this would give cause for anxiety since although these children receive the optimum medical, educational and social care, only a relatively small proportion are able to live normal lives. For example, a recent survey has indicated that only one third of children with hydrocephalus, both treated and those not requiring surgical intervention, developed normal levels of intelligence. The rate for notified malformations of the central nervous system rose from 1.87 in 1970 to the present figure of 6.65.

Limb Deformities

A slight increase in notified limb deformities also occurred during the current year, the rate rising from 6.24 to 8.55 per 1,000 total notified births. Congenital dislocation of the hip and talipes were the main deformities which can usually be completely cured especially when given expert treatment from birth. Such treatment is immediately available to all babies born in this country. Every infant attending the Child Health Clinics is examined by the doctor for congenital dislocation of the hip which, unlike talipes, is not always immediately recognised on neo-natal examination but, when detected and treated at an early age, causes no locomotor problems when the child begins to crawl and walk.

Anencephaly—Of all the malformations recorded, most research has been carried out in respect of anencephaly perhaps

because this is a condition which is easily and reliably identified. Statistics with regard to this defect, therefore, tend to reflect the true position.

In Greenwich, the 1971 rate per 1,000 total notified births was 1.89 compared with a figure of 0.94 for the previous year.

Mongolism (Down's Syndrome)—This is another reasonably easily identified defect with a local rate for 1971 of 0.95 per 1,000 total births. The rate for 1970 was 0.93.

In an average year there are approximately 1,300 mongol births in England and Wales giving a rate of 1.67 per 1,000 live births. This rate rises with maternal age producing rates of 5.0 and 15.0 for the age groups of 35/39 years and 40 years and over respectively.

Karyotyping cells by means of amniocentesis is a possible future diagnostic technique with offer of abortion after the 18th week of pregnancy.

Rubella Vaccination

Congenital defects arising as a result of an attack of rubella during the first trimester of pregnancy are well known. On an average, one in every six children born in these circumstances is likely to suffer from such defects.

In co-operation with the Inner London Education Authority a scheme was commenced to vaccinate school girls aged 11-13 years against rubella. It is anticipated that, in future years, this will eliminate the birth of babies damaged by the rubella virus acquired by their mothers during pregnancy.

During the year, 2,169 school girls received these injections, 2,078 at school and 91 from their family doctors.

Observation/Handicap Register

Plans to incorporate the "At Risk", Handicapped and Deaf lists into one composite Register were put into effect during 1968 and its compilation continued throughout the current year. At present, for administrative reasons, the "At Risk" register remains separate.

A child with multiple handicaps is listed once, according to the most severe defect. Statistics can now be obtained with ease and all children are reviewed periodically by a Medical Officer to ensure continuing assessment throughout pre-school and school life. No handicapped child should now approach statutory school age without having been seen several times by a Local Authority

Medical Officer. Subsequently, in consultation with its parents, a team approach by these officers, hospital and family doctors, health visitors, teachers and, in many cases, hospital and local authority social workers, enables the most acceptable and rewarding plans to be made for a child's entry into the educational system.

It is hoped that an increasing amount of Nursery School provision will be made available for these children from the age of 2-3 years, according to the particular handicap. Experience has shown that, within reason, the earlier the training of these children commences, the more likely they are to reach their full developmental potential and their parents to view the future with optimism.

The following table indicates that the number of children under six years of age on the Register at December 31st, 1971, was 326 compared with 359 for the previous year and that the total of all handicapped children to school-leaving age totalled 1,385, a slight decrease compared with the previous year (1,669). When the handicapped child leaves school, its name is removed from this Register and, if it is considered that he/she will require the services of a Social Worker, his/her name and relevant details of the condition are passed to the Directorate of Social Services. However, almost all the children requiring this after-care service are already known to the Social Workers, as it is the policy to introduce them to these families as soon as it becomes apparent that care will be needed at some future date.

Observation and Handicapped Register

Analysis of children on the above Register at 31st December 1971:-

System Affected	Children aged 0-5 years			Children aged 6-18 years			Total Children		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Central Nervous System	19	20	39	58	47	105	77	67	144
Eye, Ear or Speech defect	9	6	15	39	41	80	48	47	95
Alimentary System	17	18	35	3	5	8	20	23	43
Cardio-Vascular System	16	27	43	38	31	69	54	58	112
Respiratory System	6	3	9	58	23	81	64	26	90
Uro-Genital System	13	6	19	11	6	17	24	12	36
Limbs	26	26	52	25	10	35	51	36	87
Blood and Metabolic Systems	7	3	10	24	21	45	31	24	55
Mentally Retarded	12	12	24	315	215	530	327	227	554
Unconfirmed Mentally Retarded	16	14	30	10	6	16	26	20	46
Possible Battered Babies	14	9	23	1	1	2	15	10	25
Miscellaneous	8	19	27	49	22	71	57	41	98
TOTALS	163	163	326	631	428	1059	794	591	1385

OBSERVATION AND HANDICAPPED CHILDREN'S REGISTER

Analysis of Primary handicaps as at 31st December, 1971:-

Primary Handicap	Under 6 yrs.			Over 6 yrs.			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<i>Central Nervous System:-</i>									
Epilepsy	3	7	10	14	19	33	17	26	43
Cerebral Palsy	5	4	9	24	13	37	29	17	46
Neuro Muscular	2	1	3	8	2	10	10	3	13
Spina Bifida	4	7	11	8	8	16	12	15	27
Other Congenital	3	-	3	3	1	4	6	1	7
Other Acquired	2	1	3	1	4	5	3	5	8
<i>Eye Defect:-</i>									
Blind	1	1	2	-	2	2	1	3	4
Partially Sighted	2	3	5	2	5	7	4	8	12
Squint	-	-	-	1	2	3	1	2	3
<i>Ear:-</i>									
Deaf	4	1	5	14	11	25	18	12	30
Partial Hearing	2	1	3	19	21	40	21	22	43
<i>Alimentary System:-</i>									
Cleft Palate/Hare lip	13	10	23	1	3	4	14	13	27
Colostomy	-	-	-	-	-	-	-	-	-
Other	4	8	12	2	2	4	6	10	16
<i>Cardio Vascular System:-</i>									
Congenital	16	27	43	34	29	63	50	56	106
Acquired	-	-	-	4	2	6	4	2	6
<i>Respiratory System:-</i>									
Fibrocystic	3	2	5	3	2	5	6	4	10
Bronchiectasis	-	-	-	-	1	1	-	1	1
Severe Asthma	1	-	1	43	14	57	44	14	58
Other	2	1	3	12	6	18	14	7	21
<i>Uro Genital System:-</i>									
Congenital	13	6	19	7	3	10	20	9	29
Nephritis/Nephrosis	-	-	-	4	2	6	4	2	6
Other Acquired	-	-	-	-	1	1	-	1	1
<i>Limbs:-</i>									
Limb Abnormality	22	20	42	7	4	11	29	24	53
Kyphoscoliosis	-	1	1	4	2	6	4	3	7
Other Congenital	2	4	6	3	1	4	5	5	10
Other Acquired	2	1	3	11	3	14	13	4	17
<i>Blood Diseases:-</i>									
Haemophilia/Abn Haemoglobin	2	-	2	4	2	6	6	2	8
Leukaemia	1	1	2	3	2	5	4	3	7
Purpura	-	2	2	-	1	1	-	3	3
<i>Metabolic:-</i>									
Diabetes	-	-	-	10	10	20	10	10	20
Other	4	-	4	7	6	13	11	6	17
<i>Skin Diseases:-</i>									
2	4	6	6	6	6	12	8	10	18
<i>Mentally Sub-normal:-</i>									
E.S.N	-	-	-	221	129	350	221	129	350
S.N and S.S.N	12	12	24	77	59	136	89	71	160
<i>Psychiatric:-</i>									
Maladjusted	-	-	-	17	23	40	17	23	40
Autistic/Psychotic	-	-	-	-	4	4	-	4	4
<i>Other:-</i>									
Socio Medical	-	-	-	4	2	6	4	2	6
Unconfirmed SN/SSN	16	14	30	10	6	16	26	20	46
Other Eye/ear defect	3	5	8	33	10	43	36	15	51
Speech defect	-	-	-	3	-	3	3	-	3
Miscellaneous	3	10	13	6	4	10	9	14	23
Possible Battered Baby/Child	14	9	23	1	1	2	15	10	25
TOTAL	163	163	326	631	428	1059	794	591	1385

OBSERVATION AND HANDICAPPED CHILDREN'S REGISTER

Details of Items marked on the 'Primary Handicap' Analysis as 'OTHER'

Primary Handicap	Under 6 yrs.			Over 6 yrs.			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<i>Central Nervous System:-</i>									
<i>Other Congenital:-</i>									
Hydrocephalic	3	-	3	3	-	3	6	-	6
Neurological condition	-	-	-	-	1	1	-	1	1
<i>Other Acquired:-</i>									
Choreiform movements	-	-	-	1	-	1	1	-	1
Post Polio	-	-	-	-	2	2	-	2	2
Neurofibromatosis	-	-	-	-	2	2	-	2	2
Head Injuries	1	1	2	-	1	1	1	2	3
Post Meningitis	1	-	1	-	-	-	1	-	1
<i>Alimentary System:-</i>									
Coeliac disease	2	2	4	-	1	1	2	3	5
Pilonidal Sinus	1	-	1	-	-	-	1	-	1
Micrognathia	1	-	1	-	-	-	1	-	1
Insufficient digestion	-	2	2	-	-	-	-	2	2
Tracheo-Oesophageal fistula	-	2	2	-	-	-	-	2	2
Malformed anus	-	1	1	1	-	1	1	1	2
Perforated Ileum	-	1	1	-	-	-	-	1	1
Pulmonary Stenosis	-	-	-	1	-	1	1	-	1
Renal Glycosuria	-	-	-	-	1	1	-	1	1
<i>Respiratory System:-</i>									
Chestiness	-	1	1	-	-	-	-	1	1
Neurofibroma	1	-	1	-	-	-	1	-	1
Cong. Laryngeal Stridor	1	-	1	-	-	-	1	-	1
U.R.I.	-	-	-	10	4	14	10	4	14
Debility	-	-	-	-	1	1	-	1	1
Bronchitis	-	-	-	2	1	3	2	1	3
<i>Uro-Genital System:-</i>									
Urinary Infection	-	-	-	-	1	1	-	1	1
<i>Limbs:-</i>									
<i>Other Congenital:-</i>									
C.D.H.	-	3	3	-	-	-	-	3	3
Talipes	2	1	3	3	1	4	5	2	7
<i>Other Acquired:-</i>									
Still's Disease	-	1	1	1	-	1	1	1	2
Perthes' Disease	1	-	1	5	1	6	6	1	7
Culunosis Circumscripta	-	-	-	1	-	1	1	-	1
Arthritis	1	-	1	4	2	6	5	2	7
<i>Metabolic:-</i>									
Coeliac Disease	2	-	2	4	1	5	6	1	7
Thyroid deficiency	-	-	-	3	-	3	3	-	3
Phenylketonuria	-	-	-	-	2	2	-	2	2
Hypothyroid	-	-	-	-	2	2	-	2	2
Adrenal tumour	-	-	-	-	1	1	-	1	1
Obesity	1	-	1	-	-	-	1	-	1
Neonatal Hypocalcaemia	1	-	1	-	-	-	1	-	1
TOTAL	19	15	34	39	25	64	58	40	98

“At Risk” Register

For administrative reasons this Register is still maintained separately from that of handicapped children. During 1971 2,242 children from a total of 3,095 births were at risk due to factors

affecting the pregnancy, delivery, puerperium and family history. Fortunately the majority were found to be free from difficulties and were removed from the "At Risk" Register between the ages of one year and 18 months.

The following figures give the number of children on the "At Risk" Register since 1965 with the comparable number of live births in each year: —

	<i>No. on Register</i>	<i>No. of Live Births</i>
1965	933	3,722
1966	1,486	3,715
1967	1,869	3,600
1968	2,280	3,404
1969	2,271	3,263
1970	2,273	3,169
1971	2,242	3,095

During 1971 there were 25 infants on the "At Risk" register who were observed because they were at risk of becoming "*battered babies*".

Battered Babies

A disturbing feature of the present register is the necessity to include 25 infants who may suffer from the "battered baby" syndrome.

It has now been realised that some infants who appear in hospital casualty departments suffering from fractures, bruises and abrasions reputed to be caused by inexplicable "falls" have, in fact, been assaulted by their parents.

These parents are often very young, immature and mentally disturbed, unable to budget adequately or provide themselves with proper housing in which to rear a family. If evidence of ill-treatment is sufficiently strong and it is thought that the child's life is in danger, legal proceedings are undertaken in order that the child may be taken into care. The child may be removed from its parents or may remain at home while the family is supervised and guided by frequent visits from a Child Care Officer and Health Visitor.

During 1970 a Circular on this subject of "battered babies" was received from the Department of Health and Social Services advising local authorities to review their machinery for detecting and observing these vulnerable children. A more concentrated and detailed examination of children is the probable explanation for the increase of 9 in the total of 25 detected during 1971.

In order to encourage and streamline co-operation between all

interested agencies a meeting was held in this Department attended by local paediatricians, representatives of the family doctors and Borough medical staff, medical social workers, child care officers, nursing officers, police and the N.S.P.C.C. A comprehensive scheme has now been established whereby a child "at risk" is notified to this Department and all workers concerned are kept informed.

Several case conferences with similar attendances have been held at local hospitals to ensure the safety of a child in-patient in this category and to provide assistance for its parents in instances presenting particularly difficult problems.

Home Nursing

Despite a slight decrease in new patients by 44 to a total of 4,188, the current year showed an advance of 12,434 to 221,448 in visits undertaken by the District Nurses. Referrals of new patients from general practitioners fell by 61 while those from clinics, hospitals, geriatric visitors and district nursing services rose by 17.

Average visits to each patient increased due partly to the greater number of frail, chronically sick and disabled of whom 3,621 (65.2%) were over the age of 65 years. Furthermore, patients suffering from malignant conditions and requiring day and night care increased by 22 and, in the later stages of their illness, many require 4 to 6 visits each day.

During the year 2 more general practitioner/district nursing schemes were commenced and at 31st December, 1971, there were 54 general practitioners and 26 district nursing staff involved in liaison arrangements. Of the 3,040 new cases referred by general practitioners, 88% or 2,676 (74% or 2,292 in 1970) were from the doctors forming part of this scheme.

Case loads remained fairly constant although somewhat higher in the regions covered by the "scheme" than in the geographical areas. Visits per full-time staff averaged 3,444.

Sources from which New Cases were Referred

General Practitioners	...	...	...	...	3,040
Hospitals	...	...	...	...	858
Clinics: Chest, Ante Natal and Diabetic	...	...	...	...	15
Geriatric Visitors	...	...	...	...	90
District Nursing Service	...	...	...	...	185
					<hr/>
					4,188
					<hr/>

<i>Classification of New Cases</i>					No. Cases	%
Medical	...	...	...	...	3,475	83.0
Surgical	...	...	...	...	618	14.8
Maternal Complications	...	...	...	...	71	1.7
Early Maternity Discharges	...	...	...	...	1	0.1
Tuberculosis	...	...	...	...	15	0.4
Mental Ill-health	...	...	...	...	8	0.2
Total					4,188	100.0

Patients and Visits

Total number of Patients	...	...	...	5,554
Total number of Visits	...	...	...	221,448
Average number of Visits to each patient	...	...	...	40

Long-term Cases

Patients Nursed for 3 months or more...	...	118
<i>(equivalent to 2% of all cases nursed)</i>		

Type of Treatment and where effected

Treatment	At Patients' Homes	Elsewhere (e.g. Nurses' Homes)	Total	%
Injections only	14,701	815	15,516	7.0
Injections plus other treatment	27,387	236	27,623	12.5
Other Treatment only	176,869	1,440	178,309	80.5
TOTALS	218,957	2,491	221,448	100.0

Age Distribution of Patients

Age Group	No. of Patients	%
0 to 4 years ...	51	0.9
5 to 64 years ...	1,882	33.9
65 years and over ...	3,621	65.2
Total	5,554	100.0

District Nurses—Full-time equivalent (31/12/71) 64.3

Recruitment

Recruitment gradually improved over the year and, as well as trained staff, two full-time and two part-time Nursing Auxiliaries were employed, a factor which has materially assisted in ameliorating the general situation but, due to the increased number of visits needed, the staff remain hard-pressed and, at times, over-worked.

Marie Curie Day and Night Nursing Service

Duties undertaken in the Borough by this organisation involved the services of a night nurse for 45 patients. One patient had day care and a further case received day and night attention, while a further 98 received financial assistance.

Woolwich and Plumstead Relief in Sickness Fund

In accordance with this scheme some 1,500 patients received financial help and assistance in the provision of linen, clothing, toilet necessities, special equipment, extra nourishment, travelling expenses, plants and fuel, etc.

Training

During 1971, eleven State Registered Nurses successfully undertook the National District Nurse Training Certificate and one State Enrolled Nurse attended an "in-service" 10 week Day Release training course.

4 Nursing Auxiliaries—10 x $\frac{1}{2}$ day "in-service" training.

4 Integrated Students—9 weeks training.

9 Integrated Students—8 days.

Refresher Courses

Arrangements were made for 37 District Nursing Sisters to attend refresher courses as under: —

2—2 weeks Practical Work Instruction.

5—1 week "Current Hospital Practice".

3—2 days "Treatment of Varicose Ulcers".

2—1 day "Care of the Feet".

2—1 day "Multiple Sclerosis".

3—1 day "Continuity of Patient Care".

2—1 day "Community Coronary Care".

4—1 day "Renal Dialysis".

11— $\frac{1}{2}$ day "Practical Work Instruction".

Nursing Officers

1—2 weeks Middle Management.

1—4 weeks First Line Management.

Total 36 staff—107½ days.

Observation Visits

3—Queen Alexandra's Royal Army Nursing Corps 6 weeks

107—Hospital Students 1 day

24—Pupil Midwives 1 day

6—Senior Hospital Sisters 1 day

1—Nursing Officer Hospital 1 day

1—Midwifery Teachers Diploma 1 day

Health Visiting

Despite considerable staff shortages our Health Visiting Service continued to give a priority care to the ante-natal mother, the new-born infant and the pre-school child. Within this range, a growing preventive service diminishes the effect of risk periods throughout the remainder of life for, undoubtedly, healthy physical, mental and emotional development at the beginning of existence increases an individual's quality potential.

Home visiting gives families the time and opportunity to discuss their problems and anxieties with a health visitor who is able to help them express their feelings and to assess their need for counsel.

Services were continued on similar lines to those of previous years and the following table summarises the visiting carried out during 1971: —

NO. OF CASES VISITED BY HEALTH VISITORS

Children born in 1971 ...	...	...	...	3,387
Children born in 1970 ...	...	...	...	3,800
Children born in 1966/69 ...	...	...	...	8,475
				<hr/> 15,662
Persons aged 65 years and over ...	...	...	...	114
Persons aged 65 years and over (<i>visited at special request of G.P. or Hospital</i>) ...	...	...	...	30

Mentally Disordered Persons	35
Mentally Disordered Persons (<i>visited at special request of G.P. or Hospital</i>)	2
Persons Discharged from Hospitals other than Mental (<i>excl. maternity cases</i>)	11
Persons Discharged from Hospital other than Mental (<i>excl. maternity cases</i>) (<i>visited at special request of G.P. or Hospital</i>)	11
Tuberculous Households Visited	3
Households Visited re Other Infectious Diseases ...	33
Total Effective Visits and Re-Visits	51,074
Unsuccessful Visits	12,227
Health Visitors— <i>Full-time equivalent 31/12/71</i> ...	23.2
T.B. Visitors and T.B. Health Visitors— <i>Full-time equivalent 31/12/71</i>	5.2

Co-operation with Hospital Departments

By attending the paediatric clinics at the Memorial and Greenwich District Hospitals, health visitors are more able to ensure support to families with a handicapped pre-school child, furthermore, by virtue of the practice of attending the ante-natal and diabetic clinics at the District Hospital they are enabled to exert an influence for good on the family in general and advise mothers of services available.

Medical staff, Health Visitors and Midwives attended Study Days at the British Hospital for Mothers and Babies on three occasions during the year and we are most grateful for these kind invitations received from the hospital authorities.

Problem Family Index

There are in the Borough 188 families with serious problems due perhaps to difficult housing, unemployment, mental stress or definite inadequacy and sometimes arising from a combination of all these factors.

Such families have received continuous help and support, especially with their 254 children under 5 years of age, of whom 10 were on the Observation Register as suspected or proven battered babies. These babies are reviewed frequently and in most cases there is improvement following the support and help given by the Health Visitors and colleagues.

Other Health Visitor Activities

At the Child Health Centres the health visitors are closely involved with the physiotherapist and her special classes for post-natal exercises and with the associated Mother's Clubs and occasional crèches.

In all their work the health visitors are competently supported by clinic nurses who assist at clinic sessions as well as with centre work generally and help in routine non-advisory visiting. Without this able and effective assistance the health visitors would have less time to devote to parents and their children.

Recently, there has been increased co-operation with general practitioners and health visitors are working in close liaison with many groups of doctors. These liaison schemes are functioning well. It is hoped that the numbers will be augmented still further with corresponding benefits to the public at large.

Health Visitor Training

Health Visitor training continues under the agreed revised rules submitted to the Council for the training of Health Visitors to the Minister in 1965 in accordance with Section 2 of the Health Visiting and Social Work (Training) Act, 1962.

During September of the current year 11 Borough sponsored student health visitors began their training and it is hoped that they will be ready to join the staff next September. In addition, 18 student health visitors received their field work instruction in the area.

An Assistant Nursing Officer attended a course at the Royal College of Nursing and a health visitor has been taking the City and Guilds evening course on Health Education at Westminster Technical College.

Six first year students from the 4-year integrated Course sponsored by King's College Hospital and Croydon Technical College came into the Borough for their intermediary 2 weeks of health visiting experience.

Field Work Instructor Courses

Three members of the health visiting staff attended a 6-week course at Croydon Technical College to become qualified Field Work Instructors.

Refresher Courses and "In Service" Training

One health visitor undertook a 2-week Refresher Course at St. Gabriel's College, Wimbledon and a number of staff attended

teaching courses on preparation for childbirth and screening courses on the testing of infant's hearing at the Institute of Otology and Laryngology. Study days and conferences on a variety of relevant subjects including renal dialysis, diabetes, mental handicap and school health, etc., were suitably supported by the department.

Management Courses

A one month Course at the King Edward College of Hospital Management, Bayswater, was attended by the Deputy Chief Nursing Officer and 2 Centre Superintendents were seconded to First Line Management Courses at Thames Polytechnic.

Observation and Other Visits

A programme of visits to 4 Special Schools was arranged for 19 doctors on a post graduate course at Lewisham Medical Centre. This programme, which comprised a total of 16 sessions, received considerable co-operation from the Head Teachers.

A total of 488 hospital student nurses spent 900 sessions in the Borough observing the Health and Social Services and our Nursing Officers continued to visit the Nursing Education Departments of local Hospitals to give lectures on the Community Services.

There were also many requests from other disciplines for a day of observation visits with field staff, for all of whom programmes were prepared.

Child Health Centres

Attendances at the Child Health Centres rose during the current year by 8.2% to a total of 11,096. These increased attendances at our Centres are probably due to the expansion in the number of Development Assessment Clinics arranged for infants and children up to the age of 5 years. Parents appear to find this a worthwhile examination and it is much appreciated. Many more defects, however slight, are diagnosed at a much earlier stage with the result that close observation is ensured and a fruitful liaison established with general practitioners.

Our Health Visitors' emphasis on home visiting presents the parents, in particular mothers, with the opportunity freely to discuss their anxieties and difficulties and to claim the help and advice which the health visitor is qualified to give.

Statistics for 1971 relating to Child Health Centres are given in the following table: —

Attendances

No. of Children born in 1971...	...	...	2,966
No. of Children born in 1970...	...	...	3,205
No. of Children born in 1966/69	...	...	4,925
			<hr/> 11,096

Sessions held by: —

Medical Officers	...	...	...	436
Health Visitors	...	...	...	267
G.P.s on Sessional basis	...	...	...	1,742
Hospital Medical Staff...	...	...	...	—
				<hr/> 2,445

No. of Children referred elsewhere ... 436

No. of Children on "At Risk" Register 31.12.71 ... 2,242

Suitably modified for local needs our immunisations schemes have been adjusted in accordance with the recommendations contained in the Department of Health and Social Security Circular of 1969 and the new timing of injections has meant fewer visits to the clinic or family doctor.

Counsel offered by Health Visitors and advice and examinations given by clinic Medical Officers is supplemented in the case of certain children who are referred to the Special Clinic which is held on behalf of the Borough by a Principal Medical Officer from County Hall. Here children undergo special medical tests of physical and mental development and parents are advised accordingly. Children with problems are kept under observation and, when necessary, recommendations are made regarding the type of education most suited to their requirements. Such assessments are made periodically throughout a child's school life so that changes may be made according to its changing needs.

An examination of children between the ages of 4 and 5 years is of particular importance in that it enables medical officers to advise on any special help which a child may need on first entering school. A health/education *rapport* is thereby established which is so essential if a child is to move happily and successfully through its school life.

Since such an examination before school entry is not obligatory a number of children do not receive the benefits of this service.

Perhaps, in the reasonably near future, consideration could be given to the abolition of the statutory 5-year old examination in favour of one at 4½ years to be carried out at the school—the child's future "occupational environment". In this way, many children might be saved from unhappy days of re-adjustment to new surroundings and the teaching staff from frustration in overcoming the various individual problems sometimes encountered in the new school entrant.

Smallpox Vaccination

For some time there has been disquiet that in sophisticated societies the incidence of complications, some of which are serious, following smallpox vaccination are not justified by the few cases of imported disease which are quickly dealt with by the community health authorities.

Accordingly, except for those members of the health services whose duties would bring them into immediate contact with a sufferer from smallpox before diagnosis had been made, only those requiring vaccination for the purpose of travelling abroad are recommended to receive protection.

On the advice of the Department of Health and Social Security, routine vaccination against smallpox was discontinued unless, despite medical counselling, it was specifically requested by parents.

Medical Staff

Six full-time and 63 sessional Medical Officers (equivalent to 7.3 full-time doctors) are employed by the Council for clinical duties in the Child Health Centres.

As already mentioned, an increasing emphasis is now placed on the value of the development assessment of the young child. With this in mind and with the kind assistance of the Centre Staff, a training course was arranged at the Brook Hospital Post Graduate Medical Centre in February at which Dr. Dorothy Egan from the Newcomen Centre at Guy's Hospital lectured and demonstrated developmental testing at various age groups to 2 full-time and 6 part-time Council doctors. A few general practitioners, not employed by the Council in a part-time capacity, as well as members of the Hospital medical staff also attended. The course proved invaluable in extending the scope of the work carried out in the Council clinics.

Medical Officers also attended day and week-end Post Graduate Courses in Paediatrics at the Brook Hospital, the Sydenham Children's Hospital, the Institute of Child Health at Great Or-

mond Street and the University College Hospital. In addition, one doctor completed the Course of the National Association for Mental Health which enables her to assess the educational needs of those considered sub-normal.

Our medical staff are particularly grateful for the liaison with the Brook Hospital Post Graduate Medical Centre whereby they are able to meet medical colleagues working in different specialties and which affords them the use of the excellent facilities of a comprehensive medical library, where the staff are always so helpful.

A further link has been forged with the British Hospital for Mothers and Babies where a monthly obstetric meeting is held between the hospital and local authority doctors and nurses.

Health Education (including Centres and Schools)

It is the practice in this Borough for a health education committee consisting of Health Visitors and School Nurses to meet monthly and, with the help of the Health Education Officer, to cover each month of the year with a planned topic. Posters and leaflets are selected to support the topic chosen for the month and, if no suitable material is available, the Health Education Section with ideas from this committee, is able to fill the gap. This committee also reviews new films, leaflets and posters and assesses their suitability for use in health visiting and school fields.

Health Visitors continue to teach various groups both in the Health Centres and outside in the community but it was in the primary school that we made our greatest impact. Our successful Health Education programmes for the Primary School child continued on a high plane throughout 1971 when 226 school sessions were undertaken.

There is a growing awareness by teachers in local schools of the wide range of health topics that can be used in learning programmes for their pupils. After discussion with the School Health personnel many teachers have been happy to continue the instruction themselves, although some schools continued to rely on the School Nurses or Health Visitor to carry out the teaching; in others, teaching and nursing staff have co-operated in the programmes.

In two Secondary Schools, teachers specialising in Health Education were engaged, thereby relieving School Health personnel from the tasks for which they had previously been responsible. This accounts for the decrease in the number of sessions throughout the year.

Much is heard about the cycle of deprivation which is becom-

ing more apparent in society since the rapid advance in health, social and educational services have tended to level the inequalities of previous decades. It is now recognised that mal-adjustment, delinquency, crime and violence have not decreased as the early social planners had predicted. Indeed, it can be observed that children and young people with such troubles are frequently, although not invariably, the progeny of parents who have similar problems.

Understandably, the quality of life is now of increasing importance and the vicious circle leading to so much personal unhappiness and social deprivation can, perhaps, be broken only by introducing health education to future parents at a much earlier stage, i.e., while they are still at school.

However, such education must have readily apparent relevance to the current situation and the child, with the subject matter adjusted carefully to the particular age group so that it will be assimilated and put into practice at the right time.

Child-Minders and Private Day Nurseries

With the introduction of the Social Services Act of 1970, responsibility for the supervision of Nurseries and Child-minders passed to the Directorate of Social Services. Nevertheless, it was mutually agreed that this Directorate would not only continue its control as hitherto until the new administration had managed to solve its staffing difficulties but that this department would still advise on the sanitary aspects of premises used as nurseries and would also place information concerning childminders at the disposal of the new Directorate.

The current year was the fourth in the implementation of the Amendment of 1968 to the Nurseries and Child Minders Regulation Act, 1948.

Registration of premises and persons continued satisfactorily and there was an increase in applications from prospective play group leaders and child minders. More children in the London Borough of Greenwich are now enjoying pre-school activities than in any previous year. Some of the existing play groups applied for and were granted an increase in registered numbers to meet the demands of the area and 3 additional Play Groups were registered and are being conducted most successfully. Children of immigrant families are encouraged to attend these Play Groups to enable their integration into the community to be substantially achieved before they enter school.

With medical advice as necessary, supervision of Play Groups was carried out by an Assistant Nursing Officer and Health

Visitors were responsible for a like service in respect of all registered Child Minders. The standard of care was found to be extremely high and the Play Group Leaders and Child Minders were always ready to seek help and advice.

Registrations effected by 31st December, 1971, are given in the following table which indicates the considerable growth of this valuable service since 1968: —

	1968	1969	1970	1971
Play Groups Registered ...	13	36	40	42
Places Available ...	301	829	954	1,066
Child Minders Registered ...	35	236	326	370
Places Available ...	198	622	768	814

Each month there are approximately 4 applications from prospective Play Group leaders and an average of 15 to 18 for registration as child minders.

Further expansion took place in the Council's sponsorship scheme in respect of medically and socially necessitous children in Day Nurseries and when these children attended regularly there was invariably a marked improvement in health and social adjustment.

Supervisors of these Private Day Nurseries were particularly most sympathetic in their handling of handicapped children and the scheme has illustrated the benefit of integrating the physically or mentally handicapped child with its normal peers at an early age. In these circumstances, as each child offers help to the other it fosters a caring attitude and an acceptance of limitations that is so essential if both are to live amicably in the adult world. This is of special relevance now that modern medical techniques are likely to enable the handicapped to survive into old age.

The successful holiday Play Centre at the Beverley School for the Deaf was repeated during the summer holiday and was again staffed by Social Workers (School Health Service) aided by parents and other volunteers.

Occasional Crèche Service

Five occasional crèches are held at four Child Health centres and these have proved to be very worthwhile. They are held once a week (one centre has two crèches, each held weekly) where children under five years are cared for while their mothers attend sessions at the centre, keep hospital appointments, or go shop-

ping on their own. The nominal charge is abated when necessary, and no charge is made to any mother who uses the service when attending hospital.

Rehabilitation of Mothers

On occasions mothers become anxious about breast feeding difficulties or are confronted with infant dietetic troubles. In suitable cases arrangements can be made for mothers of young children to be sent (with or without their children) to a recuperative centre for a residential course in mothercraft. For these purposes the Council makes use of the Violet Melchett Mothercraft Unit and the normal period of training ranges from four to six weeks. A weekly charge is made according to the financial circumstances of the parents.

The services of this organisation were not made use of during the current year.

Mothers' Clubs, etc.

These Clubs continue in five of the Council's health clinics. There were 52 sessions during 1971 at which 596 mothers met for discussion and talks by experts in a variety of skills which are useful to mothers.

There were also 47 meetings of sewing clubs which attracted 677 mothers.

Four other such clubs called "Home Advice Groups", two of which were held in Borough welfare clinics, were organised by the Greenwich Council of Social Service.

Recuperative Holidays

Previously provided under Sections 22 and 28 of the National Health Service Act, these holidays are for those needing to maintain or regain positive health and are frequently vital adjuvants to medical treatment obtained in hospital or from family doctors. They are of value in cases of both physical or mental illness and can frequently prevent serious breakdown in those suffering from environmental stress.

Today, although the new Social Services Act places general responsibility for these functions in the hands of the Borough's Directorate of Social Services, in the case of unaccompanied school children the holidays are arranged and the cost born by the I.L.E.A. School children accompanied by parents are still subvented by the Education Authority but the holidays are organised by the Borough's Social Services department.

The following table indicates the use which was made of the scheme in 1971:

Type of case	No.
<i>Adults:</i>	
Psychiatric	15
Tuberculous	1
Other Adults	139
Expectant and Nursing Mothers	—
Other Mothers	12
<i>Infants:</i>	
Accompanied	20
Unaccompanied:	
Aged 0-1 year	—
Aged 1-2 years	—
Aged 2-5 years	6
	— 26
<i>School Children:</i>	
Accompanied	13
Unaccompanied	103
	— 116
Total Holidays	309

Unsupported Mothers

Unsupported mothers are put in touch with the Social Services Directorate and/or Moral Welfare Workers who, in most cases, arrange for admission to a Mother and Baby Home during the ante-natal period.

Following confinement, most mothers return to the Mother and Baby Homes, some rejoin their families while others prefer to find lodgings. Occasionally, mothers request the Children's Department to arrange for the adoption of their babies. However, where the mother wishes to rear her child, every assistance is given by the health visitors who support its priority admission to a Day Nursery or recommendation to known child minders.

During 1971, 93 women contacted the undermentioned Moral Welfare Organisations in Greenwich: —

Southwark Catholic Children's Society	8
Southwark Diocesan Association	85

Compiled from information supplied by the Registrar-General

and the G.L.C., the following table gives the total number of illegitimate births in the Borough during the current year and indicates the numbers and ages of mothers seeking advice and assistance: —

<i>Illegitimate Births</i>	<i>Ages of Mothers</i>	<i>Number Seeking Help</i>
—	Under 15 years	—
94	15—19 years	57
107	20—24 years	27
46	25—29 years	6
36	30—34 years	3
26	35 years and over	—
—	Not known	—
<hr/> 309 <hr/>	Totals	<hr/> 93 <hr/>

Of the nine women seeking help after their arrival in London, some 7 or 77.7% were already pregnant. Fourteen of the total of 93 given assistance were not of British origin.

During the year, there were 5 illegitimate births to girls under 16 years of age and a further 15 to those under 17 years.

Adoption, Foster Parents and Boarding Out

Although properly the responsibility for these functions now lies with the Social Services' Directorate, this department's observations are variously sought on occasions when health aspects are likely to be of significance in the Childrens Section's decision making.

Adoption

One of the most serious social problems of the country today (although happily of no great moment in this Borough at present) is the difficulty experienced in the assimilation into society of coloured immigrants in order that hostility and discrimination may be avoided.

A corollary of this situation, which, is becoming progressively more important, is that of the settlement of children of differing racial origins who, for various reasons, are deprived of a family life.

Responsibility, generally, for the placement of these children rests with Adoption Societies and with Social Service Director-

ates and, for most adopters, there is an obligation, under Section 3 of the Adoption Act, 1958, to notify the local authority of their intention to adopt.

Health Visitors are often in close contact with such children and their records are of considerable value to the Medical Officer when his observations are sought by the various agencies concerned with adoption.

Foster Parents

In accordance with the Boarding Out of Children Regulations, 1955, the department's observations are also sought with regard to foster homes listed by the Social Service Directorate into which children have been placed by its officers in the course of their duties.

Boarding Out

On the recommendation of the Chest Physician, arrangements can be made for the boarding-out of children exposed to infection in their own homes or whose parent or parents are receiving residential treatment for tuberculosis and cannot arrange for the care of their children. Similar arrangements can be made to enable segregation to be achieved during immunisation with B.C.G.

Surveys

All staff are called upon from time to time to participate in national and pilot surveys. Throughout 1971, the following surveys were assisted by Borough Doctors, Nurses and Administrative staff:

Childhood Cancers

Of 5 childhood deaths included in the survey occurring in Greenwich, only one of the involved families remained in the area and this was visited by a Medical Officer for the usual enquiries.

Survey on the Development of Feeding Skills in Cerebral Palsied and Normal Children

Visits to mothers with young infants were arranged for a research fellow at the Wolfson Centre.

A New Oral Polio Vaccine

Council staff and certain parents and children participated in a pilot survey on the efficacy of a new oral vaccine against poliomyelitis.

Survey of Children's Development—Heights and Weights and their Correlation with Educational Growth and Development

Assistance was given to Professor Jack Tizard of the Child Development Research Group and his colleagues, involving 11-year-old children attending schools in the Borough.

South-East Regional Survey of Certain Chromosome Anomalies and Congenital Malformations

This survey continued throughout 1971, staff notifying the Paediatric Research Unit at Guy's Hospital on live and still-born children who suffer from—

- Major defects of the central nervous system
- Hare-lip with or without cleft palate
- Cleft palate without hare-lip
- Hirschsprung's Disease
- Autosomal chromosome anomalies

Congenital Rubella Survey

As mentioned elsewhere, rubella vaccine became widely used for girls between their 11th and 14th birthdays and it is hoped that this will result in an eventual decline in the incidence of congenital defects due to intrauterine infection with rubella virus. Recent experience has shown that it is usually possible to differentiate such defects from those due to other causes by means of the clinical manifestations and by laboratory tests.

Paediatricians and Medical Officers of Health have been requested to report clinical details and to send laboratory specimens on children who are suspected to be suffering defects due to this congenital infection as it is believed that a significant number of the children may be seen for the first time in Audiology and other Clinics run by Local Health Authorities, or even at school entry.

British Birth Survey

This study continued during the current year. A national sample of children examined during the work of the previous year were followed up by questionnaire and simple developmental screening by Medical Officers.

Welfare Foods

Since the closure of the local offices of the Ministry of Food in 1954, responsibility for the distribution of National Welfare Foods has passed, via the London County Council, to the London

Borough of Greenwich. Under the Ministry's scheme, food and nutrients to the extent of £1,498.46 were sold from the Council's Health Centres and included the following items:—

- National Dried Milk
- Cod Liver Oil
- Vitamin "A" and "D" Tablets
- Concentrated Orange Juice

Sales of additional proprietary foods at special prices and in the manufacturer's "welfare" packs were running at a rate of approximately £19,000 per annum.

Registration of Nursing Homes

In accordance with Part VI of the Public Health Act, 1936, Part III of the Mental Health Act, 1959, and the Nursing Homes Act, 1963, registration and inspection of nursing homes is a responsibility of the local health authority.

As in the previous years and under existing legislation there is only one nursing home registered within the Borough providing accommodation for 19 persons as under and this was visited regularly by a Medical Officer and Public Health Inspector.

<i>Nursing Home</i>	NUMBER OF BEDS		
	<i>Mental</i>	<i>Maternity</i>	<i>Others</i>
Lady Edith Marsh Nursing Home, 14 St. German's Place, S.E.3	—	—	19

Chiropody Services

Despite a reorganisation enabling available staff and equipment to be utilised to much greater advantage, clinical chiropody in the Borough has seen attendances fall by almost 4% to 33,648 but the number of new patients rise by 9.6% to 988.

A summary of the 1971 Report of the Council's Chief Chiropodist, Mr. K. Reeve, is given below: —

Previous Reports have referred to the local authority chiropodist and his role in maintaining the mobility of the populace and that the degree to which this can be achieved is largely dependent upon the staff situation. Certainly, given sufficient staff, more persons can receive treatment at shorter intervals—but this was not to be in 1971. Although the numbers of chiropodists began to decline, case-loads increased steadily with the inevitable results that attendances fell during the current year. Fortunately, the first Borough sponsored student to qualify joined

our staff in July, thereby slowing the rate of personnel loss. It is to be hoped that our sponsorship scheme will at least maintain staff numbers for the duration of the contracted period and that, ultimately, prospects with this authority may be made sufficiently attractive to induce some chiropodists to remain in the service.

To ensure maintenance of high treatment standards it is essential that adequate time be allotted for each patient and that pressure of work must not be allowed to affect the quality of these criteria for time, taken in the application of skills aimed at long-termed benefits, is well spent. In pursuance of this policy appliance centres, albeit small and inadequate, have been established at two of the clinics and it is proposed to extend these facilities to other clinics and so obviate the need for referrals when suitable cases present.

The last few days of the year saw the arrival of the first of the electro-hydraulic chairs which are being installed in the larger clinics to assist in the treatment of disabled or infirm persons. A problem of the non-hydraulic chair is the presence of a step of some eleven inches—necessary because the patient has to be seated higher than in a normal chair to enable treatment to be carried out without raising the legs far beyond the horizontal. Two steps with risers of half the height of the existing step would, if of adequate depth, intrude on the space required for the chiropodist's chair. Thus, some years ago, when a design for a fitted, folding step was considered too expensive and difficult to incorporate in this type of chair, I designed a portable, non-tilting intermediate step (constructed in a workshop for the handicapped) which proved of value but not the ideal solution.

Hydraulic chairs of the time were jerky in operation, unsteady at full height and with a step which did not descend far enough. When altered to remedy this, the maximum seating height was insufficient. This new chair goes a long way to meeting our requirements, in that the lift is of sufficient range to enable persons of quite short stature to be seated directly in it and raised smoothly to adequate height. It is a chair to which modifications could be made and from which other models will probably stem, incorporating further desirable features when economically possible.

The well-being of staff is always of concern and investigations have shown that the fine dust produced by use of the chiropodial drill can constitute a serious health hazard to the chiropodist. The most effective method of dealing with this is to install a suction nozzle at the site of drilling thereby removing fine particles before distribution into the surrounding atmosphere. Drills

incorporating such a device have now become available and it will obviously be of advantage to examine the possibility of bringing clinical equipment to this higher degree of safety in due course.

Bathing Centre—Tunnel Avenue

A chiropody clinic established at Tunnel Avenue Bathing Centre in September, 1963, for the treatment of cases (mainly geriatric) brought to the Centre for bathing services, was discontinued during the current year and patients transported to the clinic in the vicinity of their homes.

Chiropody Treatment during 1971

No. of Chiropodist Sessions ...	...	...	...	4,366
<i>Attendances:</i>				
Children 0-4 years ...	...	4		
5-14 years ...	...	116		
			120	
Males 15-64 years ...	...	2,062		
65 years and over ...	...	4,790		
			6,852	
Females 15-59 years ...	...	7,178		
60 years and over ...	...	19,498		
			26,676	
Total Attendances				33,648
No. of New Patients ...	...	...	...	988

Domiciliary Chiropody

Requests for domiciliary chiropody are referred to the Greenwich Council of Social Services which makes all the necessary arrangements. Most of these cases tend to be geriatric types and close liaison is maintained by this organisation not only with the Senior Public Health Officer but also with the Chief Chiropodist.

During 1971, some 2,997 domiciliary treatments were effected in respect of 712 persons, a decrease of 4.5% in treatments and a fall of 11.6% in case load, both figures reflecting the extreme difficulties met with in obtaining qualified chiropodists to perform this very useful service.

With such acute staffing difficulties, to ensure the greatest benefit for the genuinely housebound aged, it is essential that all referrals fall within this category—other facilities are available for those of limited mobility.

DENTAL TREATMENT

(Maternity and Child Welfare) •

F. ELSTON, L.D.S., R.C.S.Eng., the Chief Dental Officer, reports: —

In any resumé of the Maternity and Child Welfare Dental Service reference must be made to the fact that only administratively is it separate from that of the schools and that, clinically, it is part and parcel of the Borough's whole dental service. Consequently it is, *ipso facto*, subject to the same problem which besets the school dental service, namely, inadequate facilities. In previous Reports it has been made abundantly clear that, whilst the N.H.S. scheme of free dental service provides adequately for the expectant and nursing mother, there remains a clamant need for a similar service specialising in preventive and restorative dentistry for the young child. Our normal reaction to such a situation would have been to fill this void by encouraging mothers, by all means at our disposal, to make periodic visits to the dental clinic an integral part of the child's pre-school life. As previously reported, with considerable regret, such action has been precluded by reason of the fact that it would decimate the present available facilities to such an extent that neither the infant nor the school child would be left with an adequate dental service. Of necessity, our policy has been one of concentrating on the young school child together with an emphasis on the dissemination of preventive knowledge to parents as well as children. It has been noted with satisfaction that this knowledge is indeed being applied to the younger siblings of school children whose parents have been given suitable health education and preventive advice. Such a circumscribed policy, dictated by circumstances beyond our control, is inescapable when one considers that at only four clinics are M. & C.W. facilities available and our dental surgeons operating at secondary school surgeries are in no position to assist in ameliorating the situation. Comparative statistics must, therefore, be viewed accordingly.

From the appended statistical analysis it can be seen that the treatment pattern in 1971 followed that of preceding years. With due consideration to over-booked sessions and an ever-increasing waiting list of school dental service patients, we gave what

priority could be afforded. Partly owing to staff problems (see also School Dental Service Report) and partly pressure of backlog of established patients seeking treatment, M & C.W. sessions were somewhat reduced. Although, as an impact on the community, the 779 visits made by children under 5 years of age (of which 6% were emergencies) were insignificant, the fact that *not one tooth was extracted* in nearly 800 attendances may serve to sweeten the bitter pill of inadequacy. In this context, inadequacy is not to be regarded as phlegmatic resignation but rather as the result of a rise in confidence in a now firmly based reputation whereby a surfeit of parents, both of school and pre-school children, have sought our acceptance of their offspring for dental care and guidance.

Previous Annual Reports have rightly concerned themselves with the paramount need for prevention. Today's dentist no more resembles his "pulling" and "plumbing" predecessor in the market-place than the modern surgeon bears to the blood-letting, surgeon-barber of yesteryear. All communities have an undoubted responsibility to eradicate diseases of known and avoidable causation and dental health is no more nor less than a branch of "public health". Public dental health has been defined as the *"science and art of preventing and controlling dental diseases and of promoting dental health through organised community effort"* and it is indeed fortuitous that most dental diseases are of simple causation. In the fight against dental disease, therefore, application of disseminated knowledge demands little community effort but offers considerable prospects of success.

As far as teeth of the average person are concerned, it is not an over-simplification to say that the majority of oral disease is due to the presence of infected "plaque". Plaque, variously described as "bacterial" or "dental" or "germ layer" or, even more simply, as "dirt," is a film of soft yellow-white material directly related in amount, extent and thickness to an individual's oral hygiene. Basically, plaque consists of a "matrix", traces of food and countless bacteria, which clings tenaciously to tooth surfaces; it is not to be confused with food rests which can be removed by water sprays or forceful rinsing. Without entering into a dissertation on the actual disease process, it is known that accumulations of plaque on tooth surfaces or around gum margins pro-

duces decay and disease respectively. Suffice to say that germs plus plaque results in gum disease causing loss of underlying bone and a loosening of teeth whilst germs plus plaque plus starchy foods, particularly sugar, lead to the disease known as tooth decay. In this latter condition not only do the germs in the plaque act as the staff of a "chemical factory" by converting food supplies into substances which attack the teeth but there is also evidence that sugar is built up into large molecular chains of building materials for the said "chemical factory". After 30 minutes or so of "clearance time" during which the destructive processes exhaust themselves nature, by "remineralisation", attempts to repair the damage. It can clearly be seen that the decay-forming powers of plaque, if its presence is permitted, depend not only upon the availability of raw materials, especially sugars, but also on the frequency with which these carbohydrates, both liquid and solid, are supplied. Such an exposition can be counted unusual in an Annual Report but it is justified on the grounds that it clarifies the conditions against which preventive measures must be aimed, viz. bacteria, unhygienic oral conditions and faulty diets. Elimination of micro-organisms from the mouth cannot be achieved without affecting other parts of the body, principally the alimentary tract. Plaque, on the other hand, can only act if it is present and, logically, tuition and conscientious application of proven oral hygienic procedures will largely prevent its formation. It has been shown beyond contradiction that as the community's consumption of fermentable carbohydrates increases, so the rate of dental decay rises. Control of dietary sugars, and therefore plaque, lies in the hands of the individual.

No outline of a preventive programme could be complete without reiterating the place of fluoride as an effective preventive measure, particularly in the minute physically harmless concentration of one part per million in drinking water. The attraction of such a method is that its efficiency is independent of the active participation by the individual. Its life-long benefits are independent of parental supervision or of "patient" co-operation. Its effectiveness is independent of a community's socio-economic structure. Its competency as a preventive measure is independent of dental surgery attendance. It is infinitely cheaper than dental treatment. It is, unfortunately, not available,

Statistical Analysis—1971

ATTENDANCES:

	1971	1970
First visits	320	355
Subsequent visits ...	459	607
Total visits	779	962
Emergency patients ...	57	65

TREATMENT:

No. of Treatment Sessions	74.9	102.4
Total No. of Teeth Treated	490	557

(a) Mothers:

No. and percentage—

Filled	29 = 90.6%	62 = 79.5%
Extracted	3 = 9.4%	16 = 20.5%

(b) Children:

No. and percentage—

Filled	458 = 100%	476 = 99.4%
Extracted	Nil	3 = 0.6%
Other operations ...	222	298
Dentures	1	2
General anaesthetics ...	nil	nil

GERIATRIC SERVICES

Over the years, the community's attitude towards senescence has changed substantially. When old age was rare, as in primitive societies, it was an honoured estate but, today, it has become commonplace and, though it may sometimes attract compassion or pity, it commands little respect. Indeed, with few exceptions, there is an unmistakable but understandable tendency on the part of youth to dissociate itself from old age largely perhaps because it is a constant reminder to the young of its own ultimate fate.

Yet such an attitude is not exclusive to youth. Only in recent times has the Government made determined efforts to comprehend the needs and to institute measures to improve the lot of the aged. In contrast, locally, the health and welfare of elderly Greenwich residents have been the subjects of active Council policy since the early 1930s.

To most middle-aged people, retirement is a vague term signifying a state of existence which bears no relationship whatsoever to the present and, therefore, warranting no more than a passing thought and even less time to its planning. Nothing could be further from the truth and to approach retirement with no better equipment than the limited horizon of one's own job is to court disaster. Nowadays, on retirement, men and women can expect to live up to another 20 years, a period equal to that between birth and marriage and one which the advances in social and environmental conditions could conceivably extend. Clearly, it is the duty of our preventive services to ensure that this period is not merely one of prolongation but also one of improving quality.

To a casual observer it may appear that our services have evolved in a haphazard fashion inasmuch as they were designed to meet needs as they arose and were recognised at the time. A closer examination, however, will reveal that there was a pattern of consistency which may not be immediately obvious. All our efforts have been, and still are, directed towards assisting the elderly in preventing deterioration in their health or welfare, reducing illness and eliminating accidents. Only by the closest association and co-operation with doctors, nurses, hospitals, social workers and those voluntary organisations that have an interest in home care has this been made possible. It has also meant the encouragement of the elderly to make the maximum use of their facilities, particularly to remain active; to have regular social contacts; to pay the greatest attention to diet; to maintain

a high standard of personal hygiene and appearance and not to sink into apathy and despondency.

Undoubtedly health in old age is the real key to a happy retirement and, if this remains good, then most other disadvantages can be overcome or, with suitable help, effectively withstood. Regrettably, age often brings with it a number of disagreeable disabilities such as failure of muscle power, loss of memory, accident proneness, introspection, etc., and adjustments rendered necessary by environmental changes are badly tolerated. Moreover, minor ailments which, in the young, occasion only a day or so of discomfort, confine the elderly to bed for perhaps two or three weeks.

Among the many hazards of retirement which demand an individual's reappraisal of his position such as maintenance of living standards, preservation of mental and/or physical health, loss of prestige, self-esteem and sense of "belonging", is the very real problem of nutrition.

Malnutrition, even when sub-clinical, reduces resistance to infection, a condition which, in some way, alters all the normal metabolic and endocrine functions of the body. It follows, therefore, that infection worsens an individual's nutritional state. Closely allied to malnutrition and of equal importance is the intake of vitamins and, whereas a family with an average income is likely to obtain adequate amounts of vitamins, the elderly, for various reasons, are prone to minor deficiencies.

While lack of vitamin "A", sufficient to lead to hyperkeratinisation, is of little moment in the elderly of this country, low levels of "B" group of vitamins would appear to give rise to anorexia, fatigue, constipation and emotional disturbances as well as a number of skin conditions. However, of the greatest importance to older persons, especially those living alone or in institutions, is an ample supply of vitamin "C" which modern research suggests constitutes preventive action against the ever-present danger of thrombosis.

In common with all surveys, accuracy is limited by the validity of data obtained. Although, on the whole, old people are very co-operative, experience shows that where information required impinges on personal pride, independence, financial position, opinions or social values its veracity becomes questionable and, moreover, further distortion occurs if strangers conduct the enquiry.

Apart from one or two small studies no large scale investigation on nutrition among the elderly has been carried out since 1952. Contrary to popular belief, overt malnutrition among old people,

although undoubtedly present in some measure, appears not to be extensive and, where it does exist, it would seem to arise in those persons presenting with pathological conditions. Logically, identification of these and other cases of sub-clinical malnutrition would seem to fall within the purview of medical and nursing activities and, ideally, responsibility for the initial assessments should be a matter for the health services. In Greenwich, this has always been a duty of our women public health officers for it had long been realised that with malnutrition comes the more serious problem of hypothermia.

Normally, the body has a highly efficient automatic system of adjusting blood vessels to maintain a constant temperature of 98.4°F. It achieves this by a combination of physical activity and partaking of food and this is stimulated or depressed by the wearing of suitable clothing. Danger arises when heat is being lost faster than it can be replaced and a person then begins to exhibit signs of "exposure" and, if treatment is not instituted to arrest this fall in temperature, unconsciousness supervenes and the patient dies. This is known as "hypothermia" and its association with the elderly retired and sometimes home-bound person is manifest.

A diagnosis of hypothermia, in the earlier stages particularly, demands some medical knowledge for it is made on the sum total of a number of vague symptoms including unexpected and unreasonable behaviour, physical and mental lethargy, abnormality of vision, slurring of speech, shivering fits, sudden outbursts of energy (perhaps physical resistance to help), falling episodes or clumsiness, cramps, ashen colour, fainting and nausea accompanied by complaints of coldness and tiredness.

In the elderly, the onset of this "accidental hypothermia" tends to be insidious and often passes unnoticed by the individual concerned or even by friends and relations. Living alone in a frail condition is a common factor in hypothermia which may well be exacerbated by such disorders as lowered thyroid function and by the taking of tranquilising drugs.

Walking the person, rubbing skin surfaces, heating with hot water bottles and the giving of alcohol are clearly *proscribed* for these all tend to bring blood to the surface and away from vital internal organs.

When hypothermia is suspected and the doctor summoned, the patient should be put to bed and given a warm, well-sugared drink and the room temperature raised as quickly as possible to the 65°/70°F. mark.

Fortunately, most elderly residents likely to be subject to malnutrition (and therefore hypothermia) are known to the geriatric

visitors and, with the Council's long-standing schemes for meals-on-wheels, luncheon clubs and cheap food supplements, the numbers now at risk are minimal.

There is, however, one aspect of modern life which is developing to the nutritional disadvantage of the older and one-person household. It is the growth of the supermarket. Unlike the small shopkeepers, these emporiums are not geared to cater for the smaller quantities of comestibles needed or that come within the budget of the retired person. Whilst such a situation persists it would seem reasonable for small groups of elderly people to combine to buy the larger packetings for eventual division, in order to produce a more varied and economical diet for the participants.

Enquiries into conditions such as malnutrition and hypothermia in the aged open up a much larger field for investigation. There is growing concern about the need to assess physical and mental disability in the elderly and to diagnose and treat the underlying disease processes. Recent events have shown that there is a clamant need for medical, paramedical and nursing personnel to be trained in modern geriatric practice. With the growing numbers of elderly persons the serious shortages of staff in this field become even more evident and this has a crippling effect upon the rehabilitation of the older citizen whose ability for improvement seems sadly under-rated. Whenever staff is in short supply the geriatric services are among the first to suffer but appointing more social rather than health workers will not retrieve the situation. It is at this point that a genuine divergence of opinion arises.

A recent Office of Population survey has indicated that some 70% of the handicapped of Great Britain are elderly. Perhaps, in this revelation, the Social Services see grounds for augmenting their establishments but, logically, theirs is not the prime problem. Clearly, prevention or rehabilitation is the first priority and only after these avenues have been fully explored to produce the maximum improvement does the need for the social aspect become paramount. No one doubts but that the social and health services are facets of the same endeavour to improve the quality of life. However, successful prevention depends upon surveillance of the whole field at risk and not upon a restricted and narrow prospect. It was this "all-embracing" concept that led to the introduction in Greenwich of the geriatric visitors who, *inter alia*, are qualified health visitors.

During the early 1950s, when first contemplating the need for a geriatric service, the Council, after considerable deliberation, came to the conclusion that a specialist health visitor was the best

possible person to tackle the inherent and sometimes complicated problems of the aged. The reasons were substantial. A health visitor is not merely a qualified nurse. Additional training, fitting her for her profession, enables her to deal with all members of the family from the latest addition to the ageing grandparents, covering both the emotional and intellectual aspects as well as the physical. Health education and individual counselling form her stock-in-trade which, together, constitute the instruments for guidance and support. Furthermore, for over half a century, she has laboured under a statutory duty to visit every family where there is a young child and it has been her responsibility to assess and decide on matters now considered to be "social". Contrariwise, a social worker depends largely upon an individual's recognition of a problem and his seeking professional help to solve it. Indeed, social work is essentially an amalgam of many fragments of many disciplines and to divide the task of caring for the aged into separate health and social spheres of influence will surely prove to have been wholly unjustified and inimical to the best interests of our elderly. The current and almost indecent haste to expand previously restricted financial resources to achieve this dichotomy will not necessarily produce the best service for the secret of success in this field is not to be found in money alone.

We need to treat our elderly as responsible individuals and to respect their desire to remain independent as long as possible. Let us give heed to what they themselves want and not be too dogmatic about what we think they require. Let us pay more than lip service to a regard for human dignity and good human relationships, remembering that aberrant conduct of the aged often stems from our own attitudes towards them. Much of the mundane, menial and sometimes downright unwholesome tasks performed on behalf of the elderly in their twilight years are carried out by relatives and friends—they deserve our full and unfailing support.

Visits by Women Public Health Officers

Total Visits by Officers during year	15,630
1st Visits	912
Subsequent Visits	13,036
Unsuccessful Visits	1,682

Visiting

Visits made during 1971, amounting to 15,630, show a decrease of 14.5% from those of the previous year. This fall is due partly to the introduction of the new Social Services Act of 1970 and partly to the secondment of two geriatric visitors to full-time courses prior to transfer to the Social Services Directorate.

Elderly People in Receipt of Visits and Other Services

Number in Register at 1st January, 1971	7,977
Number in Register at 31st December, 1971	7,891

Elderly Handicapped Persons included in the above Register :

	<i>Males 65 years and over</i>	<i>Females 60 years and over</i>	<i>Total</i>
(i) Blind	91	207	298
(ii) Partially Sighted	25	93	118
(iii) Physically Handicapped	304	818	1,122
Totals	420	1,118	1,538

Bathing Service

This very personal service which is much appreciated by the elderly who view it also as a social occasion to have a chat and a cup of tea in a congenial atmosphere, operates at 3 Centres, Tunnel Avenue, Plumstead Baths and Lionel Road.

The functions of this service, which are two-fold, are carried out as originally envisaged in accordance with Section 43 of the London County Council (General Powers) Act, 1953, and the following table lists the facilities made available at the various centres. Compared with 1970, total baths undertaken in the home increased by almost 5% and those carried out at the centres by 15.5%. Demands for pedicure rose by almost 40% whereas the need for hairwashing declined by 23%.

Home Bathing—Such a service was introduced for elderly persons not ill enough to need a District Nurse but, owing to varying disabilities, require assistance; these include a small number of all age groups who, due to some crippling deformity, are unable to cope either on their own or with help from relatives.

Bathing at Bathing Centres—Elderly people who are concerned with this service are conveyed to the centres by minibus and they consist of those persons who have inadequate bathing facilities at home coupled with blindness, failing sight or suffer with other physical disabilities. Hair-washing and pedicure have become indispensable off-shoots of the bathing service for although many old people are able to bath themselves they lack the range of movement and dexterity to perform these very necessary personal functions.

	Tunnel Avenue	Plumstead	Lionel Road	Total
Number bathed at home	3,150	5,920	2,592	11,662*
Number bathed at centre	3,084	1,973	1,174	6,231†
Pedicure	449	701	374	1,524
Hair-washing	317	300	352	969

* Males 3,759 Females 7,903

† Males 2,423 Females 3,808

Miscellaneous—Treatment of scabies and the cleansing of verminous persons are also duties falling to the staff of the bathing centres.

Incontinent Laundry Service

This service has been established to:—

- (i) relieve the pressure on families who are managing under extreme difficulties with seriously ill patients;
- (ii) assist many old persons who, although not seriously ill, have a stress incontinence or kidney condition.

Although dealing mainly with laundry from the homes of the elderly, this service is extended to all like cases of all ages at home or in residential care. Collections are usually daily but they can vary from twice to three times per week. There is no doubt but that this service is frequently the means whereby elderly persons are enabled to pass their remaining days among their own surroundings when otherwise they would be hospital patients.

Ancillary to this service is the loan of mackintoshes and a limited number of sheets and draw sheets are also available for urgent needs. Both this and the Bathing Service are worked in closest co-operation with the District Nurses.

There are two laundry centres, one at the Tunnel Avenue Centre and the other at the White Hart Road Centre. How effective and valuable this service is proving to be is shown by the following statistics which reveal that the demand remains unabated.

<i>Articles Laundered</i>	<i>Tunnel Avenue</i>	<i>White Hart Road</i>
For Incontinence	90,278	92,225
Other Items	25,521	6,574
Totals	115,799	98,799

Home Cleansing Service

Not infrequently the rooms of elderly people deteriorate into a muddled dirty state and the task of cleaning up becomes too

complex for the relations or home helps. In such cases, having first gained the consent of relations or persons concerned, a team consisting of two bath attendants with transport, supervised by a Public Health Officer and equipped with the necessary protective clothing and apparatus, deal with the offending conditions and remove the accumulated rubbish. After such operations, the home help can then carry out her normal duties.

Cleansing Services Effected

From Plumstead Bathing Centre	8
From Tunnel Avenue Bathing Centre	11
From Lionel Road Bathing Centre	5

Chiropody Services

Owing to a shortage of chiropodists the weekly chiropody sessions, under the control of the Council's Chief Chiropodist, and previously held at Tunnel Avenue Bathing Centre for patients who were unable to walk and needed the Centre's services and were conveyed there by minibus, have had to be discontinued.

However, a domiciliary chiropody scheme for Borough residents which is operated by the Greenwich Council for Social Service has managed to absorb most of the cases unable to obtain treatment at Tunnel Avenue. Full consultation with the department's geriatric branch ensures the treatment of priority cases.

COUNCIL OF SOCIAL SERVICE—Treatments: 2,997

Persons: 712

Geriatric Advisory Clinics

Due to reorganisation problems arising from the implementation of the Social Services Act, geriatric advisory clinics were suspended during the current year.

Geriatric Adviser to the Council

In his Circular 10/65, the Minister of Health pointed out that although the various Health and Welfare Services for the elderly are not under one authority, their purpose is to provide what is essentially a single service for each individual who needs it.

There are indications that, despite every effort made to the contrary, much undiagnosed illness and undisclosed disability in the elderly exists.

It was clear that early recognition of changes in the physical or mental condition of our old folk in the Council's homes would be most satisfactorily achieved by a doctor responsible both to the hospital and to the local authority. This desire for a closer association between the Health and Welfare department and the hospitals'

geriatric services was satisfied by the decision of the Council to appoint the Consultant Geriatrician at the Greenwich District Hospital (St. Alfege's Wing) as its geriatric adviser on its own services for the elderly. This appointment has led to a situation where each elderly person now receives appropriate care from the appropriate authority.

Geriatric Units

Since 1st April, 1965, close links with the Geriatric Units in the Borough have been further strengthened and regular discussions at the District (St. Alfege's) Hospital Staff Meetings give rise to greater understanding of common problems.

The following hospitals have Geriatric beds under the supervision of Dr. Nicholson, Consultant Geriatrician:—

Brook Hospital
St. Nicholas Hospital
Memorial Hospital

The Greenwich District Hospital also provides Geriatric beds under the care of Dr. Boyd, Consultant Geriatrician.

Voluntary Units

Among the many duties undertaken by the B.R.C.S. in respect of the elderly is the efficient management of their home for geriatric patients at the "Gables", Blackheath Park. The following statistics indicate the use made by local hospitals of this valuable asset:—

Patients Admitted	.....	.....	326
Patients Discharged	.....	.....	330
Average Daily Occupancy	.....	.....	97%
Average Length of Stay	.....	.....	50 days

As so often reiterated, many families provide full-time care for infirm relatives and, in this onerous task, they deserve all the support that can be given. In addition to the use made of the Council's Part III accommodation, opportunities for relatives to take a well-earned rest whilst their charges convalesce are also provided by the B.R.C.S. at their "Edith Priday" Home in St. John's Park. The accompanying figures reveal the advantages of having such a unit located within the Borough with which we maintain such close associations:—

Patients Admitted	.....	.....	814
Equivalent Number of Bed Days	.....	.....	14,323 (94.3%)
Average Length of Stay	.....	.....	18 days
Average Age of Patients	.....	.....	80 years

Homes for Old People

All our elderly people in Part III accommodation are housed within the Borough boundaries in seven small, purpose-designed homes with a total of 462 places. Two further homes are planned, the building of one of which is expected to commence shortly.

Part III Accommodation

Home	Places
Bryceson	60
Elmgrove	60
Perrygrove	62
Plumstead Lodge	96
Sunbury Lodge	64
Tegel	60
Weybourne	60
	—
Total	462
Admissions	—

Currently, close assessment of the needs of applicants for admission continues to be exercised by the "Admissions Panel" led by the Deputy Medical Officer of Health although responsibility for these services is now one for the Social Services Directorate.

With an increasing elderly population, demands for such facilities are advancing and the waiting list grows correspondingly.

National Assistance Act 1948/51

Section 47 of the 1948 Act enables the Medical Officer of Health compulsorily to remove to hospital or institution any aged or infirm persons unable, adequately to care for themselves or who are not receiving from others proper care and attention.

Where delay of even a few hours may prove decisive the Medical Officer of Health, in accordance with the *National Assistance (Amendment) Act, 1951*, is empowered to arrange for the removal of urgent cases without the necessity of giving 7 days notice. Order for removal can be made by a Court of Summary Jurisdiction or a single Justice on an application certified by the Medical Officer of Health and another registered general medical practitioner and where agreement to receive such patients has been reached with the hospital or institution authorities. If necessary the court of justice may act *ex parte*. Orders so made under the Amendment Act are limited to a period not exceeding 3 weeks and

applications for extensions of this period must be made in accordance with the procedure laid down in Section 47.

During the year no cases occurred where the provisions of the National Assistance Act for compulsory removal had to be enforced. Experience shows that friendly persuasion is the best method especially if the situation is explained carefully to old people that the Health Department is here only to serve their best interests.

It is a measure of the success of our geriatric services that there has been no necessity to invoke the provisions of these Acts since the formation of this Directorate in 1965.

Holiday Relief for Relatives

Many families provide full-time care for seriously infirm relatives and, in this onerous task, they deserve all the support we can give them. A scheme providing temporary accommodation for old people in order to enable their relatives to take a holiday has been of major importance in the Council's policies regarding its geriatric services and has been the subject of increased publicity during recent years. In accordance with this scheme, arrangements are made for persons to be admitted to Voluntary Old People's Homes or are provided with accommodation in the Council's own residential establishments, generally for a period of 2 weeks.

Of major importance is the Avery Hill Holiday Scheme and Miss Hatfield, Senior Public Health Officer in charge of the venture reports:—

"Once again, as the result of a combined effort of trained staff and voluntary help, some 65 old persons who also had considerable disability were enabled to enjoy a holiday under the Council's Avery Hill Holiday Scheme and their relatives afforded a much needed break.

In this scheme, use was made of the College students' ground floor single rooms to provide our 65 homebound old people with very comfortable quarters as well as day and night nursing assistance and care. The holiday stay included a full recreational programme and the department's special transport conveyed the elderly to and from their homes and to the social outings arranged during the fortnight.

As in previous years, guests for the scheme were selected for the following reasons:—

1. *In order to allow dependants' relations to have a holiday.*
2. *Those living alone and room-bound.*
3. *Those suffering from a disability which precluded them from taking a holiday at the Greenwich Hotel at Westgate.*

This year, on Friday, 65 guests arrived at Avery Hill in two parties, one before and one after lunch with a similar procedure being adopted for the return journey 14 days later. Their main disabilities were as listed below and 53 were on one or more medications which was supervised by the Public Health Officers and the Nursing Staff engaged for the duration of the holiday.

<i>Confused and Hypertensive</i>	.....	.....	.....	14
<i>Crippled Arthritics</i>	.....	.....	.....	16
<i>Cardiacs</i>	.....	.....	.....	16
<i>Chronic Bronchitics</i>	.....	.....	.....	5
<i>Asthmatics</i>	.....	.....	.....	2
<i>Parkinsons</i>	.....	.....	.....	2
<i>Diabetics</i>	.....	.....	.....	4
<i>Anaemic</i>	.....	.....	.....	2
<i>Partially Sighted</i>	.....	.....	.....	2
<i>Blind</i>	.....	.....	.....	2

Of these guests 6 were chairbound, 4 could only walk with "zimmer" aids and the age groups were as follows:—

<i>Over 90 years.</i>	<i>Over 80 yrs.</i>	<i>Over 70 yrs.</i>	<i>Over 60 yrs.</i>
5	33	26	1

STAFFING OVER THE PERIOD

<i>Health & Welfare Staff</i>	<i>Day</i>	<i>Night</i>
Public Health Officers	9	—
Bathing Attendants and Drivers		
Male	7	—
Female	11	—
Social Workers	2	—
Trainee Social Worker	1	1
<i>Paid Outside Staff</i>		
Nursing Sisters	2	3
Students	3	1
<i>Voluntary Staff</i>		<i>Evenings</i>
Task Force	10	—
Adults	4	—
British Red Cross	1	—
St. John Ambulance & Nursing Service	—	26

Visiting

Our guests received 150 visitors and approximately one dozen letters of appreciation were received from them and their relatives.

OBSERVATIONS:

As last year, the advantages of engaging nursing sisters for day and night duties were considerable and, once again the professional staff were well selected by the Nursing Bureau. Indeed, one had been with us last year but all were very interested in the exercise.

When the occasion demanded, general practitioners were requested to visit their own patients or give permission for our residential Medical Officer to attend. Although the valuable services of Dr. Walker were again available during his daily visits, fortunately there were no serious incidents.

Aid from voluntary sources came, once more, from two members of the Avery Hill Townswomen's Guild (Messrs. Walker and Cuffley) whose help in our holiday schemes dates from the very first function organised by the Metropolitan Borough of Woolwich in 1964. Besides their own valuable assistance, they gave the benefit of their considerable experience to other voluntary workers. Evening voluntary help was maintained, as usual, by the stalwart personnel of the St. John Ambulance Brigade.

This year we had the privilege of listening to the Pipe and Drum Band of the R.A.M.C., R.A.V.R. from Chelsea Barracks and their colourful uniforms made an unforgettable impression on all the guests and visitors who heard them in such an ideal setting.

Summary

Now that responsibility for these schemes will rest with the Social Services Directorate, it is pertinent to emphasise the enormous value of this type of holiday which should never be underestimated when thought is being given to future ventures."

Holiday Hotel

To meet increasing demands by elderly residents for holidays, the Council operates its own hotel for the exclusive use of Greenwich residents at Westgate-on-sea.

The present hotel, which is managed by a Resident Superintendent and Assistant with appropriate staff, is an annexation of the previous Greenwich and Sea Grange Hotels and it can cater for almost 1,700 guests annually. Its operation is now controlled by the Social Services Directorate.

Existing accommodation at the combined hotels includes a kitchen serving the whole establishment, several lounges with sea views, a bar lounge and three dining rooms all on the ground floor. Inclement weather is countered by enclosed balconies and there are ample facilities for indoor entertainment and pastimes, including television and radio.

It is the Council's intention to provide a cheerful holiday with

recreational facilities for guests and, although the holiday-makers are generally expected to be active, provision is made for frail and handicapped elderly persons to be accommodated on the ground floor.

These excellent holidays provided by the Council for retirement pensioners resident in the Borough, i.e. men aged 65 years and over and women of 60 years or more and not in full-time employment, are comparable with the best. Holidays commence on Friday and bookings are for a fortnight. Parties are conveyed by escorted coaches from the various "picking-up" points in the Borough to and from Westgate. Less active guests are further transported by minibus to and from their own homes and the "picking-up" points.

Every fortnight, during the period June to October, eight of our elderly citizens, who for medical reasons require ground floor accommodation, go to the Greenwich Hotel. Each case, which is submitted to very careful consideration, is visited to ensure that the term "holiday hotel" (*not convalescent home*) is preserved.

The new combined hotel remains open to enable "out of season" holidays to be taken. Charges are very reasonable and, when possible, applicants who accept an "off-season" for their initial holiday are offered a summer booking when the opportunity for a second holiday arises. Accommodation for the Christmas period is reserved for persons living alone.

During 1971, some 1,518 guests were accommodated in parties averaging about 80.

Lunch Clubs and Mobile Meals

Meals-on-wheels are delivered in metal foil containers, a method introduced in 1969 as an economy measure and, at the end of the year, these were being delivered at an annual rate of 230,000, an increase of 31% over the figure for 1970. Persons receiving Mobile Meals at the end of 1971 numbered 1,050.

A restricted service, for cases of special need, was provided during Bank Holidays and over the Christmas and Boxing Day period when meals were delivered to elderly people without charge.

Emergency food packs were again distributed to old people on the Mobile Meals Register to cover the possibility of the non-delivery of a meal during severe weather.

Lunch Clubs, introduced during 1963, were a logical extension of the Meals-on-Wheels Scheme which, with Council support, has been operating in the Borough for more than a quarter of a century. Today, no elderly person is more than $\frac{3}{4}$ of a mile from

a Lunch Club which will not only provide a hot midday meal but also opportunities for companionship and social contacts.

By the end of the current year Lunch Clubs were providing 1,220 persons daily with a meal at a yearly rate of 310,000, an increase of 18% over the figure for 1970.

A number of elderly homebound persons are conveyed to Lunch Clubs on days when an established Old People's Club meets on the premises during the afternoon. Thus they can enjoy a hot lunch and then stay to enjoy the social activities in the afternoon.

Since the introduction of the Social Services Act, responsibility for providing these facilities has passed to the Directorate of Social Services.

Nutritional Supplements

A scheme is in operation throughout the Borough for the sale to *bona fide* retirement pensioners, at preferential rates, of various nutritional commodities.

Distribution is effected mainly via Old People's Clubs, which make regular purchases of foods such as Ovaltine, Marmite, Horlicks, Bovril, Ribena, Complan and Supro for resale to their members at a discount price. Sales are also made from the W.R.V.S. Offices at Woolwich, Citizens' Advice Bureau at Eltham, the Burney Street Welfare Centre at Greenwich and certain Lunch Clubs.

Supplies are restricted to persons of pensionable age and only in sufficient quantities considered reasonable for that person's own consumption. For this purpose, the old person is issued with a Registration Card. Relatives and friends may purchase supplies on behalf of a homebound elderly person on production of this Registration Card.

During the year, sales of Nutritional Supplements to retirement pensioners were averaging £19,000 per annum.

Housing

Because of the importance of housing circumstances in the lives of our aged residents, regular consultation takes place between the Public Health Officers and representatives of the Housing Departments of this and the Greater London Councils. Furthermore, active participation in the selection of elderly persons for residence in local almshouses and Housing Society properties is also undertaken by the department's officers.

Publicity

It was found that many old people had little or no knowledge of the local services available to them. To help remedy this situation 16,000 copies of a booklet specially prepared as a guide to the services available to elderly people have been distributed. In addition, the Department issued a comprehensive guide to the Health and Welfare Services to all local general practitioners, hospitals, statutory and voluntary organisations and to all workers in the health, welfare and social fields. Revision of the Guide has been delayed on several occasions pending clarification of the likely effects of recent legislation on the Department's integrated structure.

Recreation Facilities for the Elderly

All the recreational facilities established under the former administration have now become the responsibility of the Directorate of Social Services which is gradually assuming control as and when reorganisation becomes effective and practical, having due regard to staffing difficulties.

Library Services

The Council's Library Service to Old People's Homes is extensive and collections of books are changed regularly.

A mobile library, operating from Monday to Friday, caters for elderly residents who are unable to make the journey to and from branches of the Council's public library.

Arrangements have been made for friends, relatives and Home Helps to borrow books on behalf of homebound persons who cannot visit the libraries themselves. Homebound readers who have no one to help them in this way are encouraged to contact the Hospital Librarian at Greenwich Library who endeavours to arrange a delivery service.

Voluntary groups in the area are prepared to collect and deliver library books to homebound elderly persons under a special extended loan scheme.

In Greenwich there is available at each branch library a collection of books in specially large type to meet the needs of elderly persons with failing sight.

Civic Entertainment

I am indebted to Mr. C. Field, Director of Recreational Services, for the statistics given hereunder :—

“The O.A.P. Club entertainments were provided by the Recreational Services Committee, whilst the other Shows were arranged in conjunction with the Directorate of Social Services.

<i>Type of Show</i>	<i>Total Functions During Year</i>	<i>Total Venues</i>
O.A.P. Club Shows	367	67
Film Shows O.P. Homes	84	7
Avery Hill Shows	14	1

Professional entertainers were engaged for the O.A.P. Club Shows and colour films were screened in Council's residential homes during the months of January to March and October to December.

The functions for homebound people arranged at Avery Hill College from 30th July, to 13th August included a variation of Shows.”

Old People's Clubs

In order to foster the recreational activities of Old People's Clubs the Welfare Committee makes an annual grant of £10 to each club which provides a satisfactory service for its members. During the year, grants were made to 66 established clubs.

Almost all of the clubs meet regularly once a week; they arrange their own programmes, including outings, Christmas Festivities, etc.

Other Facilities

A list is given hereunder of recreational and other facilities introduced over the years to alleviate problems of the retired and/or infirm elderly, full descriptions of which have been given in previous Annual Reports.

Day Clubs for the Elderly

Day Clubs for the Homebound

Television and Radio Sets

Concerts and Outings, etc.

Christmas Shopping, Parcels, Gifts and Parties

Carol Services

Mayor's Fund

Observers

Because of their *avant-garde* character and comprehensiveness, services provided in this Borough for the elderly have always attracted observers from many sources and representatives of interested organisations have been welcomed and given every opportunity to study our arrangements.

Advantage is also taken of our services by Health Visitors and Hospital Students in accordance with their various curricula.

Voluntary Help and Friendly Visiting, etc.

Since the establishment of "Task Force" in the area during 1968, much of the individual voluntary effort in respect of aged persons has declined. Nevertheless, there are several voluntary bodies such as the B.R.C.S., W.R.V.S. and various church organisations working within the Borough with whom the department maintains close and constant contact.

For example, among the many duties undertaken by the B.R.C.S. in respect of the elderly is the efficient management of their home for geriatric patients at the "Gables", Blackheath Park, and their convalescent home at St. John's Park. Both are of inestimable value to the Directorate in their services to the elderly.

In Greenwich, the W.R.V.S., are responsible *inter alia*, for 14 old people's clubs, one afternoon and one lunch club; they distribute welfare foods, supply escorts for outings and holidays arranged by the Council, provide a trolley shop at one old people's home and clothing and bedding for the elderly homebound. Veritably a very present help in trouble.

MISCELLANEOUS SERVICES

Works of Adaptation

Arrangements for Renal Dialysis

Under powers contained in Section 28 of the National Health Service Act, 1948, it is the Council's policy to accept full responsibility for such adaptations and that no charge is to be made to the patient.

Following the precedent set in 1967, during the current year the Council agreed to adapt a dwelling on behalf of a renal failure patient and 2 were under active consideration at the end of 1971. In situations where premises are not adaptable aid is sought from the Housing Department for suitable alternative accommodation.

Since the scheme's inception, of the 10 patients for whom adaptations have been made to enable them to undertake home dialysis, 2 have since died.

At least once a week special arrangements are made for the collection and disposal of waste arising from the use of dialysis machines in the home.

Loan of Equipment

Our scheme for the loan of nursing equipment and sick-room aids (including gadgets) for handicapped and elderly persons continued during the year. Such equipment is provided on free loan at the request of the Family Doctor, District Nurse, Medical Social Worker, Health Visitor, Old People's Visitor, etc. Total issues during the year numbered 3,459 as compared with 3,441 during the previous year which is some 4 times greater than the demands met during 1965.

Medical Arrangements for Long-Stay Immigrants

Long stay immigrants are often unfamiliar with our customs and, in particular, ignorant of the scope and arrangements of the National Health Service. Accordingly, at ports of arrival, they are given a "hand-out" printed in languages which they are likely to understand, the aim of which is to encourage them to get on to the list of a medical practitioner in the vicinity of their residence. Destination addresses are forwarded to the health department so that they can be visited in order that they may be persuaded to act on the advice given in the pamphlet. Special emphasis is placed in trying to secure a chest X-Ray as soon as possible after their arrival in this country. This is particularly so in respect of those whose country of origin has a high incidence of tuberculosis. Details of immigrant families with children are particularly noted so that a health visitor can call and advise.

Regrettably, many visits prove to be abortive by virtue of the fact that some addresses given are often merely those of convenience or, on occasions, non-existent.

The following statistics show the number of immigrants notified to this Directorate during the past 5 years. It would seem, at the time of going to press, that 1972 will register a decided increase.

<i>Year</i>	<i>Number of Immigrants</i>
1967	289
1968	273
1969	243
1970	218
1971	214

SECTION V

ENVIRONMENTAL HEALTH SERVICES

Ecological change, although normally imperceptible, is constant and inevitable and man's problem in this respect is to adjust and accommodate without destroying or endangering the structure of society. By many, change is viewed as a menace to an established and comforting stability but society, in recent times, has become increasingly conscious of the fact that its environment is not something to be taken for granted. Indeed, it is now not only aware that apathy leads to serious deterioration in living conditions but that responsible action can be most rewarding and evidence of such enlightenment in the community is to be found in the emergence of a number of *ad hoc* organisations.

Clearly, in this respect, local authorities have a responsibility to their communities and the mere possession of a site with requisite staff and necessary funds is not, *ipso facto*, sufficient justification for deciding to alter or expand and so disrupt existing thriving residential districts. Indeed today, more than ever before, circumstances are such that society requires aspects other than expediency to be considered and subjected to close scrutiny and thorough investigation before any scheme is undertaken. In this category, matters of extreme importance environmentally which demand critical analysis and prior examination include the effects of such schemes upon pollution of all kinds, noise nuisance, sewage and refuse disposal, medical and nursing facilities, schools, public utilities, eventual viability socio-economically of the resultant area, etc. In particular, architects have a special responsibility to ensure that new buildings, generally, preserve local character and blend with existent settings and that construction is of materials that will not readily disfigure and subsequently mar the environs.

In short, a local authority should strive by all means within its powers to advance the quality of life in its area and so to improve the actual physical surroundings that the social, economic and aesthetic needs of its residents are satisfied. Furthermore, by public education it should seek to stimulate civic pride and awareness in order to create a climate in which measures designed to improve the environment will be apparent to all. Only by

these means will advancement or regeneration of community spirit and values be achieved. Reliance, by past planners, on statistical evaluations of schemes has led too often to near disasters in the economic, social and psychological fields. Although planning must be recognised as an integral part of slum clearance and rehousing, of new roadways and shopping complexes, of parks and recreational facilities, etc., success lies in the hands of dedicated officers who will apply existing legislation with appropriate sincerity and sensitivity and with due regard to the wishes of inhabitants without whose support all efforts will end in failure. Beauty, enhancement and cleanliness of any neighbourhood depends ultimately upon the energies and convictions of the local authority ably supported by a well-informed electorate.

For all our advances in technology and material progress we must recognise that there is a price to pay other than in cash. We need to see that the cost is neither too high nor that it results in a debasement of the quality of life. Health, man's most precious possession, is largely dependent upon environmental circumstances. Its promotion and maintenance, often in an ambience of prejudice and sometimes of downright hostility and with minimal resources, has been and will continue to be the objective of this Directorate's preventive services. It can be proud of its record to date.

New Legislation

Rag Flock and Other Filling Materials Regulations, 1971

These Regulations supersede the previous Regulations of 1961 and 1965 and prescribe: —

- (a) the materials mentioned in Reg. 3 as filling materials (other than those already listed in s. 33 of the Rag Flock and Other Filling Materials Act, 1951) to which that Act applies;
- (b) standards of cleanliness for each kind of filling material to which the Act applies;
- (c) Analysts for the purposes of tests under the Act, the fees which may be charged by an analyst making such a test, and the form in which a certificate of the results is to be given; and
- (d) the form in which records are to be kept by occupiers of premises registered under the Act for the use of filling materials, or licensed for the manufacturer or storage of rag flock, the manner in which the records are to be kept and the information which is to be recorded.

The principal changes from the previous regulations are: —

- (1) the prescription of additional filling materials as filling materials to which the Act applies;
- (2) the increase in analysts' fees; and
- (3) the prescription of additional analysts.

Sanitary Circumstances of the Area

The table in pages 233 and 234 summarises, as far as possible, the sanitary work of the Department; from these it will be seen that a total of 42,113 houses and premises have been inspected or re-inspected during the year; 1,012 Preliminary and 296 Statutory or Abatement Notices were served. Registered complaints numbered 7,654.

Factories Act, 1961

During the year 204 inspections were made by the Council's Inspectors in relation to the 510 registered factories. The latter figure includes 9 premises where mechanical power is not used.

Defects were found in 9 instances, all of which were remedied.

FACTORIES ACT, 1961

Inspections for purposes of provisions as to health

Premises	Number on Register	Number of		
		Inspections	Written notices	Occupiers prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	9	5	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	479	177	8	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	22	22	—	—
TOTAL	510	204	8	—

Cases in which defects were found.

Particulars	Number of cases in which defects were found				Number of cases in which prose- cutions were instituted
	Found	Remedied	Referred		
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S.1)	—	—	—	1	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) insufficient	—	—	—	2	—
(b) unsuitable or defective	7	7	—	10	—
(c) not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offen- ces relating to Outwork)	2	2	—	1	—
TOTAL	9	9	—	14	—

Outwork—(Sections 133 and 134)

Nature of work	Section 133			Section 134		
	No. of out-workers in August list required by Sect. 133 (1) (c)	No. of cases of default in sending list to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing } Making apparel } etc.	93	—	—	—	—	—
Linen	3	—	—	—	—	—
Lampshades	151	—	—	—	—	—
Braid	13	—	—	—	—	—
Artificial Flowers	1	—	—	—	—	—
Leather Goods	3	—	—	—	—	—
Embroidery	2	—	—	—	—	—
TOTAL	266	—	—	—	—	—

OUTWORKERS—In the last return made by employers of labour, the total number of outworkers in the Borough was shown to be 266, compared with 179 in 1970. Local firms employ 65% of

these outworkers, the remainder being employed by firms in various parts of the country.

Local industry also employs 226 outworkers who reside outside the Borough.

Periodical inspections of the outworkers' homes are made by the Council's Public Health Inspectors. Altogether 266 such visits were made in 1971 to ensure that the home working conditions were satisfactory.

The Offices, Shops and Railway Premises Act, 1963

The broad purpose of this Act which, for the purpose of registration came into force on 1st August, 1964, is to give office and shop workers standards of working conditions and safety as favourable as those which apply to factory workers under the Factories Act, 1961.

A statistical summary of the Annual Report, as forwarded to the Ministry of Labour in respect of the work carried out during 1971, is given in the following tables:—

Registration and General Inspections

Class of Premises	No. of Premises Registered during year	Total No. of Premises Registered at end of year	No. of Premises receiving General Inspection during the year
Offices	15	386	45
Retail Shops	19	1,137	478
Wholesale shops, Warehouses	2	55	9
Catering Establishments, Canteens	5	182	95
Fuel Storage Depots	—	5	2
TOTALS	41	1,765	627

Analysis by Workplace of Persons Employed in Registered Premises

Class of Workplace	No. of persons employed
Offices	6,450
Retail shops	6,961
Wholesale departments, warehouses	1,502
Catering establishments open to the public	1,153
Canteens	200
Fuel storage depots	28
	*16,294

**Males 7,280 Females 9,014*

A total of 1,360 visits including 627 general inspections were made to premises during the year. As a result of the service of 94 informal notices, the following contraventions of the Act were remedied: —

No. of thermometers provided	...	...	...	25
Abstract of the Act provided	...	...	...	32
First Aid Kits provided	...	...	...	25
Defective floors repaired	...	...	...	6
Washing facilities provided	...	...	...	—
Defective stairs or handrails repaired	...	...	...	6
Electric lighting provided or improved	...	...	...	6
Insufficient seating accommodation remedied	...	...	...	—
Inadequate heating remedied	...	...	...	1
Additional locker accommodation provided	...	...	...	2
Inadequate ventilation remedied	...	...	...	3
Defective sanitary accommodation remedied	...	...	...	11
Dirty conditions remedied	...	...	...	5
Wall surfaces repaired or renewed	...	...	...	21
Hot water supply provided	...	...	...	7
Guards provided on dangerous machines	...	...	...	—
Other contraventions of the Act remedied	...	...	...	80
Total	...	...	...	230

Exemptions

No applications were received under the exemption provisions of Section 46 of this Act.

Notification of Accidents

Notice of an accident in the prescribed form is required to be sent to the appropriate enforcing authority if it occurs in any premises to which the Act applies and causes loss of life or disables an employee for more than three days from doing his usual work.

Of the 107 notifications received during the year, in only one case was it considered necessary to write to the firm concerned suggesting alternative measures in order to prevent a recurrence of a similar accident.

Again, I am happy to report all of the cases notified were non-fatal and mostly of a minor nature. The respective District Public Health Inspector investigated each case and proffered advice where necessary.

Each quarter a return is made to the Ministry of Labour of notification of accidents. The reported accidents and their analy-

sis for the year under review are summarised in the following tables: —

Reported Accidents

Workplace	No. Reported		Total No. Investigated	Action Recommended			No Action
	Fatal	Non-Fatal		Prosecution	Formal Warning	Informal Advice	
Offices	—	3	3	—	—	—	3
Retail Shops	—	45	45	—	—	1	44
Wholesale Shops, Warehouses....	—	57	57	—	—	—	57
Catering Establishments open to public, canteens	—	2	2	—	—	—	2
Fuel Storage Depots	—	—	—	—	—	—	—
TOTALS	—	107	107	—	—	1	106

Analysis of reported accidents

	Offices	Retail Shops	Wholesale Warehouses	Catering establishments open to public, canteens	Railway Buildings
Machinery	—	1	—	—	—
Transport	—	1	9	—	—
Falls of persons ...	—	18	9	—	—
Stepping on or striking against object or person	—	2	—	—	—
Handling goods	—	2	7	—	—
Struck by falling object	—	3	3	1	—
Fires and explosions	—	—	—	—	—
Electricity	—	—	—	—	—
Use of hand tools	—	8	—	1	—
Not otherwise specified	3	10	29	—	—
Totals	3	45	57	2	—

Defective Dwellings

REPAIRS—With regard to houses found not to be in a reasonable state of repair, the following procedure, classified under two headings is generally adopted:—

(1) *Complaints from or on behalf of the occupier*—The District Public Health Inspector makes inspection and a preliminary Notice is sent to the owner specifying the work necessary to abate the nuisance. Where necessary, the circumstances are reported to the Health Committee for authority to serve a Notice to enforce abatement of the nuisance. The premises are reinspected and, if work required is not executed within a reasonable period, an Abatement Notice is served. In cases of non-compliance the Town Clerk is instructed to institute proceedings.

(2) *Housing Defects*—These are cases where the conditions are such that they cannot be remedied under the procedure of the Public Health Acts, and are dealt with under the Housing Act, 1957, as being houses unfit for human habitation. Representations are made to the Health/Housing Committee to consider as to whether such houses can be repaired at a reasonable cost having regard to the value of the premises, or whether Closing and Demolition Orders should be made.

Rent Act, 1968

During the current year, all three applications received resulted in the issue of Certificates of Disrepair. Three landlords applied to the Council for cancellation of Certificates of Disrepair already in existence and three letters of cancellation were issued.

River Pollution

Prevention of pollution in the River Thames and the tidal reaches of its tributaries is the responsibility of the Port of London Authority. In London, however, sewage and its disposal, amounting to a daily dry flow of approximately 550 million gallons from an area of 500 square miles serving a population of 7 millions, is under the control of the Greater London Council and, after treatment at the northern and southern outfalls at Beckton and Crossness respectively, the resultant sewage effluent is discharged into the Thames. It is then considered by various authorities to be a pollutant which, on occasions, gives rise to complaints.

The ability of plants to synthesize carbon dioxide and water into carbohydrate constitutes the basis of all life and animal existence is conditioned by the distribution of vegetation which nourishes and shelters it. It follows that the quality of water must

be of paramount importance in ensuring the continuance of this vital cycle of events. As some $\frac{2}{3}$ of London's water supplies are extracted from the Thames, prevention of its contamination can be seen in its true perspective.

Water, in its natural state, possesses the invaluable power of self-purification but man's pollution of this essential commodity reduces this unique property. Ecologically, growth of aquatic plants and animals is not haphazard—it is determined by the requirements of temperature, light, presence of chemicals and concentration of dissolved gases, particularly of oxygen. Here, then, is the *raison d'être* for preventive measures in relation to contamination of the River Thames.

Apprehension regarding pollution of the Thames is not new. It was of some considerable concern to Sir Christopher Wren when, after the Great Fire of London in 1666, he suggested that his plans for the rebuilding of the metropolis should include improvements to the sewage system.

During the 18th century salmon fishing was commonplace in the River Thames but, with the introduction of the water closet in 1810 and the necessity to use rainwater drains for the carriage of sewage, the quality of the river water began to deteriorate. Further exacerbation to the situation was occasioned by advancing industrialisation and the growth of London as the centre of an expanding British Empire. Together, these events resulted in a rapidly increasing population so that by the mid-nineteenth century the river was little more than a sewer.

In 1864, under the guidance of Sir Joseph Bazalgette their Chief Engineer, the Metropolitan Board of Works completed parallel intercepting sewers to the outfalls at Beckton and Crossness and these arrangements still form the basis of London's present sewerage system. Improvements over the last decade, especially in the treatment afforded to sewage, has resulted in a reversion of the river if not to its pristine quality then to something approaching a state of wholesomeness not known for a century and a half. The fact that fish are returning to the river and its estuary gives ample proof of the improving nature of the river water and the ability of the tidal Thames to sustain marine life is such that, since 1967, some 55 species of fish have been identified as inhabiting that stretch of water between Richmond and Gravesend which 15 years ago supported none. However, there is no room for complacency. Existing standards are only to be maintained if problems of modern detergents, pesticides and other chemical and metal contamination are surmounted and

this will demand the utmost vigilance from the P.L.A. and all the available skills of the G.L.C.'s Scientific Branch.

Success will lie mainly in abating, at source, all pollutants which are unlikely to be rendered harmless by natural processes, particular attention being paid to the most recent form of pollution, namely, that arising from the surreptitious discharge of waste oils during the hours of darkness by unscrupulous tanker captains. For this, co-ordination of all authorities responsible for controlling pollution in rivers and watercourses will be necessary so that such waters are made capable of supporting fauna essential for sustaining sea fisheries and allowing passage of migrating fish at all states of the tide.

In an interesting and independent development, a manufacturer with a riparian factory has, during the year, introduced an aerating process which dissolves oxygen into the river equivalent to the bio-chemical oxygen demand load of its effluent discharged. Such a responsible and co-operative action warrants replication by all industries producing effluents calling for a high oxygen-containing medium for their satisfactory degradation.

Rainfall, although modified by industrial discharges, exerts the greatest influence upon the quality of river water and, as one would expect, the higher the rainfall the more able is the river to stand pollutants. During 1971, total rainfall at 563.0 mms. was some 9.5% less than that for 1970 and 13.4% lower than the average for the previous 6 years. Nevertheless, no complaints regarding pollution were made to this Directorate during the current year.

Storm Flooding

As with 1970, no storm flooding occurred during the current year and consequently, in this respect, no requests for assistance were received.

Flood dangers arising from a combination of unusually heavy rainfall and abnormally high "spring" tides will be appreciably lessened when the scheme to introduce a "flood barrier" in the Woolwich Reach is implemented. Such conditions are likely to occur only once in every 200 years, meanwhile the G.L.C.'s interim measures to raise the height of the river wall are proceeding to prevent a repetition of the catastrophes of 1928 and 1953.

ATMOSPHERIC POLLUTION

Conversion of energy from one form to another is a characteristic of all life. With man, who has learned how to release stored energy from fossil fuels to modify his local environment, this is

accompanied by certain material by-products and it is their discharge into the air which constitutes air pollution. It is within this context that atmospheric pollution must be considered a serious threat to the quality of urban life and its prevention of prime importance to local authorities and their policies.

Employment of coal as a fuel was first recorded as early as 852 A.D. and, since that time, its use domestically by a persistently expanding population has been the main source of air pollution in towns and cities. Industry, being increasingly dependent upon coal and oil for the energy requirements needed to support these growing communities, has added to the contamination. This symbiosis between industrial and conurbation centres is a formidable obstacle confronting efforts towards a cleaner atmosphere.

Once contaminated and discharged into the atmosphere, air is virtually impossible to purify artificially and must await dispersal and dilution by natural means. It is during this period that the destructive and malign elements of the pollutants become operative. Fortunately, industrial pollution is usually emitted at a higher level than that from the domestic fire which constitutes the greater hazard to local inhabitants. (Approximately $4\frac{1}{2}$ lbs. is lost in smoke for every ton of coal burnt industrially compared with 90 lbs. for the domestic apparatus). It follows, therefore, that to be effective it is essential that pollution be controlled at source.

Constituents of pollution resulting from the combustion of raw coal may be itemised as: —

1. *Carbonaceous matter*—resulting from incomplete combustion of the volatile part of coal.
2. *Tar*—formed in the process of destructive distillation of bituminous coal.
3. *Ash*—drawn up from the fire by the rush of air passing through the fuel.
4. *Sulphur*—derived from sulphur compounds in coal (eventually forming sulphurous and sulphuric acids).
5. *Grit*—particles of unburnt coal carried away in the draught.

Research has revealed that smoke concentration is relative not to the size of an area but to the density of its population and its domestic coal consumption per square mile. My Reports have constantly drawn attention to the enormous and costly damage

to life and property occasioned by atmospheric pollution which can be summarised thus: —

- (a) *An increase in deaths from respiratory and heart diseases which appears to be proportional to the amount of impurities and length of exposure.*

A normal reaction to the constant inhalation of dust is a low grade inflammation—the lining of the lung is stimulated to secrete mucous in order to remove the soot, dust, ash or other irritant and this can and often does lead to catarrh and bronchitis. In addition, fibrosis resulting from irritation impairs the lungs' elasticity which in turn tends to prevent normal drainage so necessary with respiratory diseases. Besides radio active particles, atmospheric dust is known to contain varying quantities of other carcinogens such as arsenic, benzpyrene and other coal tar products. In certain circumstances, soot is also considered carcinogenic and it is easy to see how atmospheric pollution becomes linked with lung cancer.

- (b) *Absorption and elimination of ultra-violet rays from sunshine.*

It has been calculated that London has been losing 300 hours of sunshine per year through fog and smoke and it is a fact that lung cancer in urban areas is noticeably higher than in rural areas. It is possible that a connection between cancer deaths and lack of sunshine could be either that a smoky atmosphere predisposes to lung cancer or that sunshine is important in its prevention.

Under the influence of ultra-violet rays, the ergosterol of the skin is stimulated to manufacture vitamin 'D', an essential for the anabolism of healthy bones and teeth. Deficiency of vitamin 'D' leads to rickets and dental caries.

- (c) *Vegetation becomes stunted.*

It is pertinent to record that the plane tree, which sheds its bark annually is practically the only tree to have flourished in the London area outside the public parks. Comparison between flowers and vegetables grown in towns and those grown in rural areas is superfluous. Deterioration in herbage must have its indirect effects upon grazing animals.

- (d) *Damage to buildings, etc.*

Sulphur dioxide appears to be the culprit in this respect. At York Minster holes more than 9" deep have been discovered as a result of this form of corrosion, and magnesium sulphate crystals were found in cracks and fissures 20" from the surface of

the stonework of the Houses of Parliament. Metals and fabrics, etc. are equally affected.

(e) *Avoidable waste of material which could be of immense value to the community.*

Some 82% of heat potential of coal is lost by wasteful methods and to reduce that loss to 72% would result in a saving of some 60 million tons of coal per year.

A cheap but efficient method of extracting sulphur and/or its compounds before their discharge into the air is sought which would bring substantial benefits medically and economically.

(f) *Increase in laundry costs.*

An enquiry made just before the 1939/45 war revealed the fact that the weekly wash at Manchester took one hour longer than at Harrogate and that the soap and fuel costs averaged 3p per week more. Recently, it has been estimated that extra laundry costs in the country resulting from pollution to be in excess of £25 per annum.

Control of air pollution is maintained by the efforts of a team consisting of the Local Authority, the Department of the Environment (incl. the Alkali Inspectorate), the Police (road vehicles) and the Factory Inspectorate (dust, toxic fumes, etc., in factories). Legislation enacted for their assistance is contained in the Clean Air Acts of 1956 and 1968, the Public Health Acts of 1936 and 1961, the Public Health (Recurring Nuisances) Act of 1969, supported by the Alkali &c. Works Registration Act, 1906 together with the Alkali &c. Works Order of 1966.

Since the introduction of the Clean Air Act, 1956, the average concentration of smoke in London has declined by more than 75% and that of sulphur dioxide by more than 33.3%. Progress towards a cleaner atmosphere has been so effective that various other pollutants, previously overlooked, are becoming more apparent and subjects of formal complaints. Among these are malodourous industrial emissions and those from motor vehicle exhausts, some of which give rise to metallic pollution.

Results from a recent but limited investigation carried out by the G.L.C. Scientific Advisor into exhaust gas from motor vehicles showed that, at present, this was not harmful especially as any concentration is usually quickly dispersed by the wind. Average hourly concentrations of carbon monoxide were found to be about 10/20 p.p.m. and those for lead 1.1 microgrammes per cubic metre; those for nitric oxide and nitrogen dioxide were 1.7 and 0.2 p.p.m. respectively and none was considered a danger

to health. Further and more general research is recommended into other pollutants of exhaust gases such as hydrocarbons, aldehydes, smoke and sulphur, etc.

In the light of present day knowledge, there are only 7 metals which are more or less toxic of themselves and, of these, only cadmium, lead and nickel represent real or potential hazards to human health. However, there are two other metals which need careful supervision, viz. beryllium (used in the manufacture of springs, X-ray tubes and, with copper, in the hardening of steel) and antimony (used with lead for storage batteries and printing type, with copper and tin in anti-friction bearings and employed in the production of gutterings, tank linings, cable sheaths, etc.).

Clearly, toxic metal pollution arising from industrial fall-out and presenting hazards to human and animal life should be regularly monitored and there is a strong case for the reduction of additives in petrol. Ways and means must be found to control not only these but other compounds which are, or seem likely to become widespread contaminants.

New Legislation

The Clean Air (Measurement of Grit and Dust from Furnaces) Regulations, 1971

These Regulations, which came into operation on the 18th March, 1971, prescribe the requirements to be observed in recording measurements of grit and dust emitted from certain furnaces, the descriptions to which have now been extended. In some cases, the local authority can be asked to make and record the measurements.

The Clean Air (Emission of Grit and Dust from Furnaces) Regulations, 1971

These Regulations made under Section 2 (1) of the Clean Air Act, 1968, apply to new installations from 1st November, 1971, but their application to existing furnaces is postponed until 1st January, 1978.

Section 2 of the Act contains provisions with respect to the emission of grit and dust from the chimneys of certain furnaces and, in particular, empowers the making of regulations which prescribe specific limits on the quantities which may be emitted in particular cases. Emission of grit and dust at a higher rate will, subject to a statutory defence of "best practicable means", constitute an offence.

These Regulations prescribe limits applicable to certain furnaces.

Smoke Control Areas (Authorised Fuels) Regulations, Nos. 1, 2, 3 and 4, 1971.

These Regulations were made under s.34(1) of the Clean Air Act, 1956. Section 11 of that Act makes it an offence to emit smoke from a chimney of a building within a smoke control area unless it can be shown that the emission of smoke was not caused by the use of any fuel other than an authorised fuel. The Regulations declare "Ancit", "XL" and "Fireflo" briquettes and "Anthrite", "Anthracine", Extracite" and "Syntracite" ovoids to be authorised fuels.

The Smoke Control Areas (Exempted Fireplaces) Order, 1971.

This Order was made under s.11(4) and (8) of the Clean Air Act, 1956. Local authorities are empowered under Section 11 of the principal Act to declare the whole or any part of their district to be a smoke control area in which the emission of smoke is, generally, prohibited. This Order exempts the Rayburn CB 34 from the provisions of that section, upon conditions as to proper operation.

Clean Air Acts, 1956 and 1968

SMOKE CONTROL AREAS

Little Heath, St. Nicholas, Woolwich Town Centre and Thamesmead.

The above Smoke Control Orders were confirmed at the end of April 1970 but, following a request made by the Solid Smokeless Fuels Federation, the operative date was postponed from 1st December, 1970, to 1st July, 1971.

Plumstead No. 2, Page Estate, Riverside, Royal Arsenal Western Enclave, Nathan Way and Abbey Wood No. 4 Smoke Control Areas.

Smoke Control Orders for the above-mentioned areas were confirmed by the Secretary of State for the Environment during the current year and they will operate from 1st July, 1972. Particulars of these areas were given in last year's Report and, as a result of the confirmations, the Borough as a whole is now Smoke Controlled.

Details of the Borough's 43 Smoke Control Orders, comprising

a total of 11,721 acres, 72,172 dwellings and 3,502 non-domestic premises are set out in the accompanying table.

CONFIRMED SMOKE CONTROL AREAS

Name of Area	Operative Date	Approximate Acreage	No. of Dwellings	No. of Industrial Premises	No. of Commercial Premises	No. of Other Premises
St. Mary's	1.10.58	26	595	Nil	Nil	2
Abbey Wood (Abbey Estate)	1.11.58	202	2,515	1	17	9
Abbey Wood	1.10.59	157	1,251	Nil	13	3
Middle Park (North East)	1.10.60	163	1,122	Nil	16	6
Middle Park (South West)	1.10.60	100	722			
Abbey Wood No. 2	1.10.60	78	1,150	Nil	24	4
Clothworkers Wood	1.10.60	260	1,868	Nil	12	4
Greenwich No. 1	1.10.60	76	985	6	40	10
Coldharbour	1.10.61	350	2,806	Nil	33	4
Abbey Wood No. 3	1.10.61	380	1,973	2	59	2
St. Mary's No. 2	1.10.61	26	596	Nil	14	Nil
St. Mary's No. 3	1.11.61	12	563	Nil	Nil	Nil
Greenwich No. 2	1. 7.62	63	1,587	2	70	14
New Eltham	1.10.62	380	1,916	Nil	68	18
Greenwich No. 3	1.10.62	49	891	6	49	7
Garrison North	1.10.62	260	350	1	3	17
Glyndon	1.10.62	6	250	Nil	Nil	Nil
Horn Park	1.12.62	454	2,359	Nil	26	3
Eltham	1.10.63	1,550	5,325	6	370	47
St. Mary's No. 4	1.10.63	8	191	Nil	2	Nil
Glyndon No. 2	1.10.63	26	390	Nil	12	1
Rockmount	1.10.63	5	253	Nil	1	1
Greenwich No. 4	1.10.63	262	1,212	Nil	Nil	3
Greenwich No. 5	1.10.63	132	1,022	Nil	6	1
Well Hall	1.10.64	540	4,136	Nil	93	11
Glyndon No. 3	1.10.65	6	220	Nil	1	Nil
Shooters Hill	1.12.65	480	4,360	1	75	12
Greenwich No. 6	1. 7.66	414	1,586	Nil	29	8
Brook	1.12.66	290	1,885	Nil	34	7
Plumstead	1.12.66	324	3,733	Nil	226	23
Blackheath Park	1.12.67	620	3,390	5	61	26
Charlton	1.12.68	474	5,394	7	110	28
West Greenwich	1.12.69	530	6,134	87	450	43
Little Heath	1. 7.71	150	1,314	4	26	8
St. Nicholas	1. 7.71	80	1,490	3	48	14
Woolwich Town Centre	1. 7.71	130	295	6	294	22
Thamesmead	1. 7.71	900	—	—	—	—
Plumstead No. 2	1. 7.72	225	3,024	3	217	25
Page Estate	1. 7.72	310	2,704	—	7	14
Riverside	1. 7.72	921	614	72	53	7
Royal Arsenal Western Enclave	1. 7.72	85	—	35	—	—
Nathan Way	1. 7.72	185	—	239	—	—
Abbey Wood No. 4	1. 7.72	35	—	3	—	50

Suspension Orders

Following the recommendation of the London Boroughs Association and acting on the advice of the Minister of Housing and Local Government as given in Circular 63/70, the Council decided in view of the national shortage of smokeless fuels to apply to the Minister for approval to the suspension of approximately 40% of the total premises covered by smoke control orders. In all, 18 areas were affected and in respect of which a Suspension Order was made covering the period from 1st

November, 1970, to 31st March, 1971. The areas concerned were as follow: —

<i>Greenwich No. 4</i>	<i>Abbey Wood No. 2</i>
<i>St. Mary's</i>	<i>Garrison North</i>
<i>Shooter's Hill</i>	<i>St. Mary's No. 3</i>
<i>Glyndon No. 3</i>	<i>Glyndon</i>
<i>Abbey Wood</i>	<i>Rockmount</i>
<i>Charlton</i>	<i>Abbey Wood No. 3</i>
<i>St. Mary's No. 2</i>	<i>St. Mary's No. 4</i>
<i>Plumstead</i>	<i>Glyndon No. 2</i>
<i>Clothworkers Wood</i>	<i>Abbey Wood Estate</i>

No difficulties were experienced during the suspension period.

A letter received from the Society of Coal Merchants in March, 1971, expressing appreciation for the assistance and co-operation of the Council during the suspension, went on to state that the Society had every confidence that adequate supplies of solid smokeless fuels would be readily available for the winter of 1971/72.

Grants

During the year 675 grants amounting to £15,503.71p were approved by the Council. These grants were in respect of applications for works of conversion or adaptation carried out which had previously been proposed by the applicants and approved by the Council within the appropriate cost limits. However, Section 95 of the Housing Act, 1964, gives a local authority, *inter alia*, discretion on the payment of grant in respect of such works effected without prior approval. Twenty discretionary grants amounting to £382.50p were so approved, giving a consolidated figure of 695 grants totalling £15,886.21p.

In cases of financial hardship, a local authority also has discretion under Section 12(1) of the Clean Air Act, to pay more than 7/10ths grant. The Council continued its previous policy and paid the full cost of reasonable and necessary works of conversion or adaptation in the case of application from occupier/owners who are retirement pensioners and in receipt of Supplementary Pension. One such payment was approved in the year and one was also made in respect of a person in special circumstances. These additional costs are borne jointly by the local authority and the Government as provided in Section 95(7) of the Housing Act, 1964, and the Government contribution in these cases is *also* 4/7ths of the grant paid.

Section 15 of the Clean Air Act, 1956, allows a local authority

to make grants at their discretion, towards the cost of necessary adaptations in churches, chapels and charitable institutions but which attract no Exchequer contributions. One such application was received in respect of the Hall of the Congregational Church in Rectory Place, S.E.18., and the installation of a gas fire was approved.

The Council, in respect of 28 late applications, authorised the service of statutory notices under Section 12(2) of the Clean Air Act, 1956.

Installations

Section 3 of the Clean Air Act requires that new furnaces not used mainly for domestic purposes and exceeding a capacity of 55,000 B.T.U.s shall, as far as practicable, be smokeless. Any person installing such a furnace must give prior notice to the Council and may submit detailed plans and specifications for the Council's approval before the works of installation commence. Thirty-two notifications were received and five approvals were given in 1971.

Section 3(1) of the Clean Air Act, 1968 requires that no furnace shall be used in a building,

- (a) *to burn pulverised fuel; or*
- (b) *to burn at a rate of 100 pounds or more an hour, any other solid matter; or*
- (c) *to burn, at a rate equivalent to 1½ million or more British thermal units an hour, any liquid or gaseous matter,*

unless the furnace is provided with plant for arresting grit and dust approved by the local authority or which has been installed in accordance with plans and specifications submitted to and approved by the local authority and that such plant is properly maintained and used. Where a local authority determine an application for approval under this Section, they shall give the applicant a written notification of their decision and, in the case of a decision not to grant approval, shall state their reasons for not so doing. Two such applications were submitted and one approval was given. The other application was not approved by reason of the fact that the process was under the control of the Alkali Inspector.

Chimney Heights

Under Section 6 of the Clean Air Act, 1968, 11 applications were received and chimney heights approved in 10 instances during 1971.

Pollution Recording

Four atmospheric pollution measuring stations are maintained by the Council and the daily mean concentrations of smoke and sulphur dioxide are calculated on readings taken at these stations. No heavy atmospheric pollution was recorded during the year.

Staff

Within the Borough a Principal Clean Air Inspector and a team of one Clean Air Inspector and two Technical Assistants are employed full-time on duties in connection with atmospheric pollution and with the surveying and inspections of properties in Smoke Control Areas. Such duties involved a total of 5,778 inspections and visits.

Lead Poisoning

On being notified of the death from lead poisoning in the Brook Hospital of a girl of 4 years, the Public Health Inspector visited the family with a view to ascertaining possible sources of lead in the home.

It transpired that the child's long-standing *pica* had been concentrated on the paintwork of a window cill, samples from which were submitted for analysis. The Public Analyst reported that the samples contained 2.3% of lead, equivalent to 23,000 p.p.m. In the case of toys, the limit imposed by the Toys (Safety) Regulations, 1967, is 5,000 p.p.m. in the dry paint film. Although covered with modern gloss paint, the lead limit of which is 1% or 10,000 p.p.m. in dry paint film, on this cill there were several underlying layers of old paint which contained lead well in excess of the present British Safety Standards and it was these concentrations which eventually led to the girl's demise.

This unfortunate incident serves to emphasise that lead poisoning is not confined to industrial workers only but that it extends to the public in general. Quite apart from the lead industry itself when dust can be disseminated into the atmosphere or carried away on workers clothing, other sources of lead pollution of the environment include dust from the weathering of lead paint, anti-knock compound in petrol, water conveyed in lead piping, solder used in food canning, lead alloys in sanitary fittings and plating of cooking utensils, etc. Some imported glazed and enamelled pottery have produced significant amounts of lead and cadmium when treated by a dilute solution of acetic acid under conditions likely to be met in cooking. Even food is not blameless. Lead has been found in various amounts and on various occasions in wine, cider, tea, curry powders, fish paste, sardines,

self-raising flour, food colouring, tartaric and citric acids, and fruits insufficiently cleaned of insecticide sprays, etc. Some cosmetics have also been indicted.

With the closure in 1969 of an Avonmouth smelting works, under pressure of the Factory Inspectorate for improvements, interest has been stimulated in lead poisoning generally. Nearer home, Southwark discovered that the lead content in dust samples from an area bordering upon a lead factory was of sufficient concentration to warrant further investigation and, locally, an industrial concern has recently come under suspicion.

Lead poisoning is usually occupational in origin but one of our leading researchers in this field has intimated that most people living in urban areas are subject to some interference with their metabolism through the absorption of lead which, even in low concentrations in the blood (0.2-0.4 p.p.m.) can inhibit enzymal activity. Recent experiments in Italy have shown that lead may not only have definite effects on the human body but that it could possibly influence heredity as well.

Fortunately, over the years, sufficient knowledge of lead and its effects on the human body has been gathered that legal limits imposed by the Factory Act, 1961, on the industrial environment and control of foodstuffs by the Food and Drugs Regulations have rendered dangers from these sources minimal.

Much of the lead which finds its way into the body via the lungs, skin and alimentary tract is excreted but a little is stored innocuously in the skeleton. Unfortunately, lead is a substance with a cumulative toxic action in that, repeated doses, each too small to produce any appreciable effect on health may, in course of time, give rise to symptoms of poisoning and interfere with brain function and the formation of blood cells. For most of us the level of lead in the body is so low that none of these functions are so impaired that we become ill and our preventive efforts are usually directed to those who work within the lead industry where regular medical examinations will ensure that the body load of lead stays within reasonable limits. However, it is known that the mature brain of an adult is unlikely to be affected by even moderate levels of lead poisoning although functional disturbances may be observed in the nerves to the arms and legs. We are becoming increasingly aware that neurotoxic substances such as lead can give rise to psychological disturbances at a much earlier stage than the clinical presentation. It follows that our main objective should be effective prevention, diagnosis and treatment of lead poisoning in the young before irreversible brain damage occurs. Children who are mentally handicapped or

who are bored, unhappy or deprived are specially at risk for their *pica* in a lead contaminated environment is potentially hazardous.

In comparison with Down's syndrome, mental handicap resulting from lead poisoning is rare but it is essentially preventable. With benefit, our present methods of control could be reviewed and new codes introduced to accord with modern thought and present circumstances.

Noise Abatement Act, 1960

Under this Act a noise nuisance is defined somewhat vaguely as "*any noise which is a nuisance*" and a local authority is empowered to deal with noise and/or vibration as a statutory nuisance. It is not necessary to prove that such a nuisance is injurious or dangerous to health. Determination of a nuisance in such circumstances becomes somewhat involved for a noise constituting a nuisance to one person may pass unnoticed or even be enjoyed by a neighbour. Moreover, in any proceedings, it is a defence to show that *the best practical means have been used to prevent or counteract the effects*. There is a clamant need for a clear and acceptable standard of "noise curve" which to exceed would be an offence.

Measurement of noise is not difficult but assessing the results in terms of "nuisance" is much more complex. Some factory workers are able to withstand a constant barrage of intense noise which would be completely unacceptable to others in different situations. Without some just and practical method of measurement official action will always be suspect.

A recent American investigation into noise and its relationship with the discotheque has produced some evidence to the effect that, over a period, a condition similar to presbycusis (an impairment of hearing due to old age) is likely to arise in habitués of such establishments. This confirms observations made by an architectural scientist in the Leeds area where noise levels of record players were as high as 110 dB(A).

Following the Wilson Report in 1963 which drew attention to the possible damaging effects of the exposure of workers to high levels of noise and which considered that 55 dB(A) was a noise level that should not be exceeded in existing classrooms, research was continued by Burns and Robinson. They devised methods of measurement of occupational noise enabling the effects of intermittent and fluctuating sound to be assessed whereby a limit of 90 dB(A) was set for normal continuous exposure in an

eight-hour day. (A booklet "*Noise and the Worker*" issued by the Department of Employment in 1971 gives practical purport to their findings).

In 1970 a Noise Advisory Council, consisting of a cross section of expert and lay opinion, was established "*to keep under review the progress made generally in preventing and abating the generation of noise and to make recommendations to Ministers with responsibility in this field and to advise on such matters as they may refer to the Council*". Its first Report reviewed the Noise Abatement Act, 1960, and recommended that it be strengthened. It emphasized the need for regular consultation between local planning and health authorities to prevent unnecessary noise and suggested that the citizen had a duty in this respect. It hinted that noise from demolition and construction works should be anticipated so that the local authority could require certain conditions to be observed to prevent or mitigate nuisance from noise or vibration. Its main objective was the introduction of a new Act. Its second Report, also issued in 1971, was concerned with aircraft noise, the planning of airport operation and expansion and its "noise" effects upon the neighbourhood. The third Report, to be published in 1972, will be a study of traffic noise.

An Industrial Health Advisory Sub-Committee, also set up in 1970, prepared a code for reducing the exposure of employed persons to noise to be published in 1972, and active consideration to the needs of those whose hearing is already affected by industrial noise is being given in the light of the appraisal by the Industrial Injuries Advisory Council of Burns and Robinson's final Report.

In accordance with this Act, 56 complaints were received and investigated during the year. In most cases the nuisances were of a relatively minor nature and were resolved by informal action on the part of the Public Health Inspectors who carried out a total of 203 inspections during the year.

Pharmacy and Poisons Act, 1933

During the year the Chief Executive and Town Clerk received 10 applications for entry of name in the Council's List of Persons entitled to sell Poisons included in Part II of the Poisons List and 129 applications from vendors for retention in the Council's List. All were duly considered and approved.

Poisons Information Service—Circular 16/63 received from the Ministry of Health drew attention to a Poisons Information Service which has been set up at Guys Hospital and which came

into operation on the 2nd September, 1963. The functions of the service are: —

- (i) to maintain an index of substances in common use—medicinal, veterinary, industrial, agricultural, horticultural, household, etc.—showing their composition and, wherever possible, their toxicity and corrective measures in cases of poisoning;
- (ii) to provide information to medical practitioners so as to facilitate treatment of cases of acute poisoning.

The service is primarily intended to deal with enquiries related to specific cases of poisoning or suspected poisoning. It will not serve as a repository of toxicological information of a general nature, nor will it be able to advise on miscellaneous toxic hazards.

Rag Flock and Other Filling Materials Act, 1951

Six premises, at which filling and upholstering with new materials is carried out, remained on the register at the end of the year. One annual licence was renewed in respect of the manufacture of Rag Flock.

Under the Rag Flock and Other Filling Materials Regulations, 1961 and 1965, (now superceded by the Regulations of 1971), three samples were submitted for examination and all proved satisfactory.

Licensing Act, 1964

During the year, 7 applications for registration as licensed restaurants and 14 for Club registrations, were made to the Chief Executive and Town Clerk involving inspections by the District Public Health Inspectors. All were considered satisfactory for their particular purposes.

Betting, Gaming and Lotteries Acts, 1963/64

During the course of the year, 65 inspections were made and reports submitted to the Chief Executive and Town Clerk.

In accordance with the provisions of these Acts, the Council issues permits in respect of: —

(i) Amusements with prizes

Applications received from proprietors of cafes, restaurants and public houses for permits are referred to this Department for reports as to the general suitability of their premises. New permits were issued on 12 occasions.

(ii) Society Registrations

The number of new registrations during the year was 23 making a total of 159 Registered Societies at the end of the year.

(iii) Betting offices

Five applications for licences were received during the year all of which were approved.

Pet Animals Act, 1951

This Act, introduced to regulate the sale of pet animals with particular reference to their welfare prior to sale, became operative from 1st April, 1952, since when it became an offence to keep a pet shop except under licence from the Local Authority.

At the end of the year 15 licences were in operation and 234 inspections were carried out by the Senior District Public Health Inspector.

Late Night Refreshment Houses Act, 1969

Eleven new licences were issued making a total of 35 licensed keepers at the end of the year under review.

Inspections were carried out and reports submitted to the Chief Executive and Town Clerk by the Public Health Inspectors.

Hairdressers and Barbers

Under Section 21 of the Greater London Council (General Powers) Act, 1967, as from the appointed day it is an offence, subject to the provision in sub-section (1), for any person to carry on the business of a hairdresser or barber on any premises in a Borough unless he is registered in respect of those premises by the Council.

This Council fixed 1st June, 1968, as the appointed day and byelaws under Section 77 of the Public Health Act, 1961, were confirmed by the Minister of Housing and Local Government.

Premises registered at 31st December, 1971	178
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Persons registered at 31st December, 1971	219
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Land Charges Act, 1925

Under this Act, enquiries in respect of properties in the Borough are received from time to time by the Chief Executive and Town Clerk concerning outstanding Notices served under any Health legislation and whether such properties are within existent or proposed Clearance, Development or Smoke Control Areas.

During the year, 5,180 reports on such enquiries were forwarded to the Town Clerk's department.

Drainage and Sewerage

Under the Public Health Act, 1936, an existing combined drain is classified as a public sewer which it is the Council's duty to maintain, cleanse and empty. "Maintenance" includes repair, renewal and improvement but, in the case of improvement includes only that which may be necessary to make the length of sewer adequate for draining the premises served by it immediately before the improvement was undertaken. A local authority is entitled to recover the expenses reasonably incurred in carrying out such works.

During the year, 1,209 public sewers were tested and maintained, cleansed or emptied.

Thirteen cesspools remain in use in the Borough and, under the Borough Engineer and Surveyor's direction, these are emptied on request.

Plans received in respect of proposed drainage work to be carried out to existing buildings are examined by the public Health Inspectors prior to their submission by the Borough Engineer and Surveyor to the Council for approval.

Radioactive Substances Act, 1960

The Act is concerned with the control of the accumulation and disposal of radioactive wastes and, as from 1st December, 1963, persons keeping or using radioactive material will, unless exempted, be required to register with the Minister of Housing and Local Government and obtain authorisation from him for the accumulation or disposal of radioactive waste.

No copies of certificates of registration were received from the Minister during the year.

Water Supply

The whole of the Borough is supplied with water by the Metropolitan Water Board, a Statutory undertaking, which, as a result of the Metropolis Water Act, 1902, was formed in 1903 when it took over the 8 undertakings which were then supplying London's water. As a Board it is committed to supply a population of some 6½ million people within an area of 540 square miles extending from Ware in the north to Sevenoaks in the south and which has an average daily consumption of 400 million

gallons. One of this Borough's two wells which supply drinking water is a prolific contributor to the Board's supplies, having a normal output of 5 million gallons per day.

The Board is responsible for the purity of its water and the supplies are regularly tested—chemically and physically for an estimation of its clarity, colour and taste, and bacteriologically for assessment of coliform colonies with confirmatory examination for *Escherichia coli*.

Water resources throughout the world remain constant whereas demands for its use are increasing. All water comes from the sea to which it ultimately returns and this cycle is continuous. Local cycles concern water evaporation from the land which, together with that given off by plants in transpiration (a cabbage gives off one litre of water each day and a tree about 200 litres), returns to earth as rainfall. In its natural state water is not separate at different levels but both rainwater and irrigation water percolate into the ground where eventually, as underground water, it shares in the general cycle by flowing into rivers, lakes or even directly into the sea. It follows that pollution of ground water leads, inevitably, to pollution of water everywhere.

Most of the earth's water is salt (98%) and almost the whole of the remainder (2%) forms the polar ice caps and is therefore inaccessible for human purposes. This leaves only the surface, ground and atmospheric water at our disposal—equivalent to less than 0.04% of the total.

In these islands water is commonplace and its cost is almost negligible yet, as a usable commodity, it is not inexhaustible. A pure domestic water supply in urban areas has become progressively more difficult to maintain.

Greater London is unique in that it is practically wholly developed. Over the years, buildings and drainage have disturbed the natural flow of water and such resources as were available have been rendered useless for the supply of pure water. Deficiencies in overground supplies within the county are met by tapping outside sources which, together with water from the higher reaches of the Thames and the Lea and the exploitation of the underground water-bearing strata, form the bulk of London's supplies. In fact, for some considerable time now, water from springs, streams and wells has been dwindling and greater use has had to be made of the Thames which now contributes more

than two-thirds of the total of the Metropolitan Water Board's supplies.

A century and a half of preventive measures have almost eliminated waterborne disease from our supplies but more insidious forms of pollution from industrial effluents and man-made chemicals are making their appearance in our rivers and tributaries. Conventional methods of sewage treatment and water purification will prove to be inadequate. Furthermore, the necessity for "re-using" water for domestic purposes is not without its hazards although, to date, these have been successfully dealt with by the Board.

There are 72,035 inhabited dwellings in the Borough with direct connections to the Board's mains.

On request and following satisfactory reports, 7 letters were sent during the year in respect of properties confirmed as having a suitable and sufficient supply of water.

I am indebted to Dr. E. Windle Taylor, Director of Water Examination for the Metropolitan Water Board, for the following information given in accordance with the Department of Health and Social Security Circular 1/72, regarding the water supplies in the Greenwich area:—

"You will understand that this information does not relate to private supplies or to supplies derived from or through other Water Undertakings (if any).

(1) (a) The supply was satisfactory both as to (i) quality and (ii) quantity throughout 1971.

(b) All new and repaired mains are disinfected with chlorine; after a predetermined period of contact the pipes are flushed out and refilled; samples of water are then collected from these treated mains and the mains are returned to service only after the analytical results are found to be satisfactory.

The quality control from these laboratories is carried out by means of daily sampling from sources of supply, from the treatment works or well stations, from the distribution system, and through to the consumer. Any sign of contamination or other abnormality is immediately investigated.

- (c) (i) The Board has no record of the number of structurally separate dwellings supplied in your area, but the population supplied direct according to the Registrar-General's estimates at 30th June, 1971, was 216,441.
 - (ii) No houses were permanently supplied by standpipe.
 - (d) No artificial fluoride is being added and, where the fluoride content is indicated in the analyses, it represents the naturally occurring fluoride in the water.
- (2) (a) The supply was derived from the following works and pumping stations: —
- River Thames—derived water from the Thames Valley group. Well water from Bexley, Crayford, Darenth, Deptford, Wansunt and Wilmington Pumping Stations.
- No new sources of supply were instituted and there were no changes to the general scheme of supply in your area. The number of samples collected and the bacteriological and chemical analyses of the supply from the above sources after treatment are shown on the attached sheets.
- (b) On account of their hardness content and alkaline reaction the Board's river and well water supplies are shown not to be plumbo-solvent. It should, however, be appreciated that all types of water pick up varying amounts of metal from the material of water piping particularly when it is newly installed; this applies to copper, zinc, iron and also to lead."

Underground Water Supplies (Wells).—In August, 1947, at the request of the Ministry of Health, a survey of underground water supplies was made and the table accompanying my Report for 1965 gave details insofar as they were known to the department at that time. In all, 55 wells are listed, of which only two are used for the supply of water for drinking purposes. Of the remaining 53 wells, 19 are used for commercial purposes and 34 disused.

As far as this Borough is concerned the two wells providing drinking water are properly supervised and have shown no sign of deterioration.

Fluoridation of Water Supplies.—Fluoride is present in most

METROPOLITAN WATER BOARD—Water Examination Department

Average Results of the Chemical Examination of the Water Supply to the London Borough of Greenwich - Year 1971

Milligrammes per litre (unless otherwise stated)

Description of the Sample (1)	No. of Samples (2)	Ammoniacal Nitrogen (3)	Albuminoid Nitrogen (4)	Nitrate Nitrogen (5)	Oxygen abs. from KMnO_4 4 hrs. at 27°C . (6)	B.O.D. 5 days at 20°C (7)	Hardness (total) CaCO_3 (8)	Hardness (non-carbonate) CaCO_3 (9)	Magnesium as Mg (10)	Sodium as Na (11)	Potassium as K (12)	Chloride as Cl (13)	Phosphate as PO_4 (14)	Silicate as SiO_2 (15)	Sulphate as SO_4 (16)	Natural Fluoride as F (17)	Surface-active material as Manoxol OT (18)	(19)	Turbidity units (20)	Colour (Burgess units) (21)	pH value (22)	Electrical Conductivity (micro-ohms) (23)
Thames-derived	364	0.029	0.084	6.1	1.04		281	90	5	23.5	5.1	34	2.3	10	64	0.15	0.02		0.1	13	7.8	580
Bexley Well	5	0.011	0.019	6.0	0.09		308	74				23				0.10			0.0	3	7.2	570
(a) Crayford No. 1	4	0.007	0.033	8.8	0.23		288	143				35				0.10			0.0	2	7.1	790
(b) Crayford No. 2	4	0.010	0.020	7.3	0.09		292	70				30				0.15			0.0	1	7.2	590
(c) Crayford No. 3	4	0.007	0.023	8.5	0.24		347	110				31				0.10			0.0	2	7.1	670
Darenth Well	4	0.009	0.021	6.2	0.11		285	60				21				0.10			0.0	1	7.2	550
Deptford Well	4	0.009	0.020	6.5	0.11		367	128				42				0.15			0.1	2	7.2	740
Wansunt Well	53	0.160	0.038	7.6	0.19		340	99				31				0.10			0.1	3	7.1	690
Wilmington Well	4	0.020	0.029	9.0	0.19		295	74				28				0.14			0.0	1	7.4	560

METROPOLITAN WATER BOARD—Water Examination Department

Bacteriological Results—Yearly averages, 1971, of Water Supplied to the London Borough of Greenwich

Source of supply	BEFORE TREATMENT							AFTER TREATMENT				
	Number of samples	Agar plate count per ml.		Coliform count		Escherichia coli count		Number of samples	Agar plate count per ml.		Coliform count	E. coli count
		20-24 hours at 37°C.	3 days at 22°C.	Per cent. samples negative in 100 ml.	Count per 100 ml.	Per cent. samples negative in 100 ml.	Count per 100 ml.		20-24 hours at 37°C.	3 days at 22°C.	Per cent. samples negative in 100 ml.	Per cent. samples negative in 100 ml.
Thames-derived,	8,154	53.9	—	40.37	12.2	54.91	5.1	3,901	8.4	—	99.51	99.97
Bexley Well	263	0.1	8	100.00	—	100.00	—	254	0.1	12	100.00	100.00
(a) Crayford No. 1	161	0.0	2	99.38	—	99.38	—	256	0.0	7	100.00	100.00
(b) Crayford No. 2	153	0.8	53	99.35	0.1	99.35	0.1					
(c) Crayford No. 3	101	0.0	1	99.01	—	100.00	—					
Darenth Well	250	0.0	14	99.20	—	100.00	—	256	0.0	4	100.00	100.00
Deptford Well	214	3.4	52	99.07	0.1	99.53	—	216	0.1	18	100.00	100.00
(a) Wansunt Borehole	249	0.1	14	99.60	—	100.00	—	254	1.2	8	100.00	100.00
(b) Wansunt Well	232	6.0	129	99.57	—	99.57	—					
Wilmington Well	248	0.8	74	97.18	0.2	100.00	—	245	0.3	13	99.18	100.00

water supplies in small amounts as a naturally occurring chemical and the concentration varies from a mere trace to 14 parts or more per million in some areas of the world. It is present in sea-water at a concentration of about 1 p.p.m. and it is also found in many foods as a trace element.

England's highest concentrations in water occur in Essex, West Mersea having 5.8 p.p.m., Burnham-on-Crouch and Maldon with 3.5 p.p.m. Areas having the lowest are found in Lancashire, Yorkshire and South Devon where it is 0.1 p.p.m. or less. Thames water contains, on an average, 0.15 p.p.m., similar to that found in the Deptford Well Water.

However, there appears to be a mechanism in the body which keeps the fluoride in the blood plasma at a level of between 0.14 and 0.19 p.p.m., and this occurs whether the water contains virtually no fluoride or as much as 2.5 p.p.m.

In recent years dental decay has increased alarmingly especially among the younger age groups. On an average, a five-year-old child has at least five decayed teeth and in fact, at the age of eleven only one child in every hundred has perfect teeth. Modern research has discovered that a minute quantity of fluorine assists the formation of healthy teeth and reduces the incidence of decay.

A majority of local authorities served by the Metropolitan Water Board favours fluoridation of water supplies as an effective and efficient dental caries preventive measure but the Board will not implement such a policy until it is satisfied that there is unanimity among all concerned.

Objections to fluoridation, other than 'ethical', stem from the mistaken idea, fostered by eccentrics that fluoride, artificially introduced into water supply, is *'poisonous, gives rise to various diseases, spoils beer, boosts the profits of aluminium companies, etc., etc.'*, accusations which have never been substantiated under strict examination. Indeed investigations carried out on behalf of the Arthritis and Rheumatism Council for Research seems to show that it has some preventive action in rheumatic diseases. Furthermore, other experiments in Britain and the U.S.A. into substantial and sustained doses of fluoride salts have shown that there is little chance of any toxic effect from fluoridation of water supplies. Investigations have indicated that with a fluoride intake many times greater than the levels proposed for drinking water, the fluoride content of the body cell fluids never rises above an early peak of 2 p.p.m. The new research shows not that a few parts per million of fluoride can be beneficial (this has already been proved) but that it is almost impossible to pro-

duce damaging concentrations of fluoride by oral methods. Moreover, it has been demonstrated that fluoride has beneficial effects in forms of skeletal decay and that regeneration of bone occurs under treatment without adverse effects on the mineral balances of the body. Bone porosity is reduced and a decrease in the incidence of fractures has been observed as has the fact that high levels of fluoride tend to prevent bone calcium loss associated with inactivity. This is of great importance in geriatrics and treatment of long-term immobile patients.

Far from being the menace as some would have us suppose, it seems that uses of fluoride in preventive medicine are grossly underrated.

This Council's firm support of fluoridation was pressed to the extent that, in 1970, it requested the London Boroughs' Association to make representations to the Secretary of State for the Department of Health and Social Security to the effect that legislation be introduced requiring fluoride to be added to all domestic water supplies. A reply received by the Association, which approved this action, was as follows:—

"The Secretary of State regards fluoridation as an important public health measure which local authorities need further encouragement to introduce. He will keep in mind the views of your Association about the desirability of legislation."

This remains the Council's attitude towards fluoridation.

Public Baths and Laundries

There are 4 Borough Council Public Baths, 2 Public Laundries and a Council Launderette.

A summary of Bacteriological Samples taken from the various swimming baths during the year with the results of the examinations is given in the following table:—

<i>Bath</i>	<i>No. of Samples</i>	<i>Satis- factory</i>	<i>Unsatis- factory</i>
Eltham—Small	2	2	—
Eltham—Large	2	2	—
Eltham—Hydro	2	2	—
Greenwich—Small	2	2	—
Greenwich—Large	2	2	—
Plumstead—Small	2	2	—
Plumstead—Large	2	2	—
Woolwich—Small	2	2	—
Woolwich—Large	2	2	—
Totals	18	18	—

I am indebted to Mr. D. F. Wallis, Baths and Sports Manager, for the following information and statistics in respect of the financial year 1971/72.

"The Council's Baths and Sports Department comprises four Indoor Baths' Establishments and one Outdoor Pool (Hornfair Lido), a Sports Centre and a Launderette and is also responsible for a number of pre-school play centres, play leadership schemes, and other indoor and outdoor sports facilities. There are two Swimming Baths at each of the four Indoor Establishments, and in addition, there is a Hydrotherapy Pool at the Eltham Baths. Warm baths for men and women are available at Plumstead, Woolwich and Greenwich. Turkish and Russian Baths are provided at Plumstead and Greenwich. There are public laundries at Plumstead and Greenwich, a Launderette on the Abbey Estate, and a Sports Centre at Eltham.

During the Winter season the Large Pools at Greenwich and Woolwich are converted into halls and a wider range of recreational activities are provided including indoor bowling, roller skating, badminton, table tennis, men's "keep fit" and five-a-side football.

During the year under review, 13,930 swimming lessons were provided through the various schemes operating in the Department, in addition to instruction given to children attending in organised school classes at which the attendances totalled 270,820.

Facilities for cricket and golf practice, rhythm and movement classes for women and table tennis are provided at Eltham Sports Centre.

In the last few years the vital importance of the development of children through their play has been increasingly realised and, during 1971/72 the Department's Pre-School Play Centres were expanded in number from 5 to 8 to give a Borough-wide service. The centres in operation at 31st March 1972 were: Charlton House, S.E.7, Elm Terrace, S.E.9, Greenwich Baths, S.E.10, Kidbrooke House, S.E.3, Plumstead Baths, S.E.18, Shrewsbury House, S.E.18, Thornham Estate, S.E.10 and West Greenwich House, S.E.10.

For the child of school age there were 12 play centres operated and these were located at Avery Hill Park, S.E.9, Brisset Road, S.E.9, Charlton Park, S.E.7, Greenwich Park, S.E.10, Hornfair, S.E.7, Plumstead Gardens, S.E.18, Queenscroft, S.E.9, Shrewsbury Park, S.E.18, Sutcliffe Park, S.E.9, Winns Common, S.E.18; and all-year-round play centres at Coldharbour, S.E.9, and West Greenwich House, S.E.10.

Established annual sports events such as the Premier Cycle

Race, the Greenwich Open Road Race, the Organised Games Finals and the Inter-Borough Games all continued to attract great interest from both competitors and the sporting public alike.

The following are the attendances for the year ending 31st March 1972:—

Service	Eltham Baths	Greenwich Baths	Horn-fair Lido	Plumstead Baths	Woolwich Baths	Abbey Estate Laundrette	Eltham Sports Centre	Totals
<i>Swimming</i>								
Public	129,503	64,967	44,661	61,238	73,580	—	—	373,949
Schools	88,824	60,949	669	71,230	49,148	—	—	270,820
Clubs	15,397	13,344	—	11,872	4,962	—	—	45,575
Tuition	7,274	2,948	—	2,813	895	—	—	13,930
Spectators	8,047	3,717	—	4,051	1,273	—	—	17,088
<i>Baths</i>								
Private	—	20,960	—	18,778	29,944	—	—	69,682
Free (O.A.P. etc.)	—	4,793	—	10,797	3,335	—	—	18,925
Turkish	—	14,593	—	5,819	—	—	—	20,412
<i>Laundries</i>	—	1,384	—	10,963	—	—	—	12,347
<i>Laundrette</i>	—	—	—	—	—	38,905	—	38,905
<i>Recreational Facilities</i>								
Roller Skating	—	6,804	—	—	—	—	61	6,865
Badminton & Table Tennis	—	1,012	—	—	—	—	87	1,099
Indoor Bowls	—	—	—	—	11,967	—	—	11,967
„ Golf	—	—	—	—	—	—	16	16
„ Cricket	—	—	—	—	—	—	18,240	18,240
Keep Fit	—	141	—	—	—	—	—	141
Rhythm and Movement	—	—	—	—	—	—	296	296
Creche	—	—	—	—	—	—	757	757
Five-a-side Football	—	2,160	—	—	—	—	—	2,160
TOTALS	249,045	197,772	45,330	197,561	175,104	38,905	19,457	923,174

During July and August 1971 the Abbey Wood Sports Centre swimming pool was made available for five weeks by the I.L.E.A. for the Council to operate for use by the public and swimming attendances were 5,812.

Sports and Play Leadership attendances during the year were as follows: Organised Games 64,316; Pre-school Play Groups 39,376; Borough Play-in 500; Lawn Tennis Coaching Courses 410; Cycle Race 1,250; Woolwich Restricted Badminton Tournament 500."

Rodent Control

General

Of the several hundred species of rodents scattered throughout the world the types met with in this country are limited and, in urban areas, only the common rat, the ship rat and the house mouse are normally encountered—usually as commensals.

COMMON RAT

(*Rattus norvegicus*—brown rat). Weight approximately 12 ozs. Blunt snout—thick, opaque, hairy ears—tail shorter than head and body combined. Colour usually brown but can occasionally be black. Suspicious of new objects—can burrow, climb, swim and jump up to 2½ ft. Its presence is deduced from a number of signs including shape and distribution of droppings. Lives both indoors and out and in sewers—evenly distributed between urban and rural areas. Said to have originated in Central Asia and introduced into this country early in the 18th century.

SHIP RAT

(*Rattus rattus*—black rat). Smaller than common rat with weight approximately 8½ ozs. Pointed snout—large, thin, translucent, hairless ears—tail longer than head and body combined. Colour varies from brown through all shades to black. Habits erratic but also suspicious of new objects. Agile climber but does not burrow. Its presence detected from traces and droppings. Lives principally indoors and aboard vessels but rarely in sewers. Found mainly in ports and in towns connected therewith by canals and rivers. Originally from S.E. Asia; said to have been imported in ships returning the Crusaders from the Holy Lands.

HOUSE MOUSE

(*Mus musculus*). Average weight ½ oz. Pointed snout—tail longer than head and body combined. Colour varies between grey and brown. Habits erratic but not so suspicious of new objects. Climbs, may possibly burrow and can jump up to 1 ft. Lives indoors and out and is equally distributed between town and country. Has its origins in the Caspian Sea area.

All three are nocturnal and need to gnaw in order to maintain sharpness of incisor teeth. This they do to pipes, cables and sheathings, etc., but the advanced position in the jaw of the incisors means that gnawings are neither tasted nor swallowed—repellent materials are therefore ineffective for control purposes.

Their spread has been via the paths of commerce and in the wake of warring armies.

Organised rodent control can be traced back to the times of Queen Elizabeth I when bounties were paid for the heads of destroyed rats and mice. In more recent years, since the discovery of an association between these rodents and the spread of plague and other infectious disease, control has become progressively more organised. The necessity to conserve food in both world wars and the need to avoid the dissemination of disease by rats displaced from sewers as a result of bomb damage added impetus to these efforts.

Leptospirosis

Rats and mice are notorious not only for the wholesale destruction and fouling of foodstuffs and for the structural damage they cause to buildings, but also for their part in the spread of disease. Leptospirosis (Weil's disease) is primarily a disease of rats and is one which can be fatal to man. The disease is transmitted by means of food, dust, mud, slime and water which has been contaminated by urine or faeces from infected rats. Efficient rodent control is the first and most important defence against this type of disease.

Prevention of Damage by Pests Acts, 1949

The Prevention of Damage by Pests Act, 1949, requires the Local Authority to take the necessary steps to ensure that, so far as is practicable, their district is kept free from rats and mice, by:—

- (i) carrying out inspections;
- (ii) destroying rats and mice on their own property; and
- (iii) enforcing the duties of owners and occupiers, as set out in the Act.

It has not been found necessary during the year to take legal action to enforce the provisions of the Act.

A Work Study Scheme introduced in June, 1968, was continued during the current year. Provided all complaints and jobs were satisfactorily dealt with it enabled bonuses up to 20% of their wages to be paid to three full-time and one part-time operators and one full-time investigator; this compares with the previous establishment of nine operators and one investigator. In addition to the total of 3,714 recorded complaints (1,822 of rats and 1,892 of mice) giving a monthly average of 309, other sur-

veys were carried out in accordance with the provisions of the Act which resulted in 15,116 inspections being effected.

During investigations, infestation was found to exist on 193 occasions in Local Authority premises, 2,944 in dwelling houses, 278 in business premises and 187 in miscellaneous properties. In all, some 3,602 treatments were effected by the Council.

Rodent Control treatments are carried out by the Council free of charge in all private dwellings; for industrial and business premises a charge is made. When it is found that defects of a structural nature are causing or aggravating an infestation of rodents the remedy is taken up with the owner of the premises.

Following the policy of tracing the source of each infestation, 28 drains suspected as a cause of rat infestation were tested by the Department's staff and in 16 cases the tests proved positive. In these instances Notices were served under the Public Health Act, 1936, and the defects remedied.

The following report was submitted to the Ministry of Agriculture, Fisheries and Food, for the year ended 31st December, 1971:—

Prevention of Damage by Pests Act, 1949

Properties Other than Sewers	TYPE OF PROPERTY	
	Non-Agricultural	Agricultural
1. Number of properties in district	90,000	1
2. (a) Total number of properties (including nearby premises) inspected following notification	4,723	—
(b) Number infested by (i) Rats	657	—
(ii) Mice	1,320	—
3. (a) Total number of properties inspected for rats and/or mice for reasons other than notification	10,393	—
(b) Number infested by (i) Rats	1,150	—
(ii) Mice	475	—

Sewers

4. Were any sewers infested by rats during the year?—Yes.

Surface Properties and Sewers

5. Any other points of interest?—None.

Baiting of Sewers

During the year sewer baiting for rats was carried out and, with the co-operation of the Borough Engineer and Director of

Basic Services and his staff some 1,008 manholes were treated on three separate occasions.

To indicate the degree of infestation a test baiting of these manholes was also effected. This showed that in 713 instances there were no takes and in 100 manholes the baits were washed away. However, in 195 cases there was evidence that there had been uptake of baits by rats.

Warfarin Resistance

Anti-coagulant resistance in the common rat (but not, so far, in the ship rat) has been acknowledged by the Ministry of Agriculture, Fisheries and Food to exist in certain defined areas of the country but, what is more important, is the Warfarin resistance in mice which is much more diffuse. This resistance in the house mouse now extends to South East England and includes, in particular, the London area.

It would seem that resistance is inherited as a single, dominant, autosomal gene and it is the use of anti-coagulant poisons which has favoured the selective breeding of a rat which, in normal circumstances, would be at a genetic disadvantage resulting from its higher demand for Vitamin K and its slower rate of propagation.

This genetic change has presented a challenge to the rodent control staff but because of the effectiveness of anti-coagulants in rodent control over the past two decades, few alternative satisfactory poisons have been developed. The situation has been met by using substances such as the narcotic Alphachloralose and various rodenticidal dusts. Acute poisons such as zinc phosphide and arsenic have been used on a limited number of occasions where it was considered there was no risk of danger to the public.

The use of these alternative methods of control has however, increased both the time required and the number of visits carried out by the rodent control staff in order successfully to rid the premises of infestations.

With the aid and co-operation of this Council's Rodent Control Section, an attempt to produce a suitable alternative rodenticide was undertaken by the Ministry of Agriculture, Fisheries and Food in field trials held in the Borough during the year. Results were disappointing but further trials with other rodenticides are continuing.

Poisons, though useful on a short term basis, tend to lose their effectiveness because immunity eventually develops. Long acting

contraceptives may soon replace poisons in the sphere of pest control. Chemosterilants are now being developed and when the problems of acceptability as baits have been overcome, they will surely become the treatment of the future. So far, trials have proved effective in respect of rats and pigeons.

Pigeon Nuisance

A local authority is enabled by Section 74 of the Public Health Act, 1961, to deal with nuisance arising from the congregation of pigeons believed to be ownerless.

During the year, 53 complaints were received and, where justified and practical, arrangements were made to reduce the pigeons to a reasonable number by members of the Rodent Control Staff.

In one instance this Department's staff co-operated with a prospective owner of a disused flat over a shop in the Blackheath area by destroying over 100 pigeons which were roosting on the premises.

The total number of pigeons caught and destroyed during the year was 2,257.

Control of Foxes

Services previously undertaken by the Ministry of Agriculture, Fisheries and Food with respect to the control of foxes in the Borough were withdrawn and, in June 1970, the Council appointed a part-time fox control specialist to deal with the problem.

During 1971, 34 complaints were received and, where foxes were located, the specialist was notified in order that he could take the required action. He visited sites in the Eltham, New Eltham and Shooters Hill areas and destroyed 14 foxes.

There is mounting evidence that foxes in urban areas are on the increase and this would appear to be the case in South East London.

Fouling of Pavements, etc., by Dogs

During the year 45 complaints were received of dogs fouling footpaths and, in an attempt to ameliorate the problem, 92 notices were fixed to lamp-posts in the areas concerned setting out briefly the provisions of the Council's byelaw with respect to the offence and penalty.

Scavenging and Refuse Disposal, etc.

Toxic and Inflammable Waste & Fly-tipping

Refuse collection, storage and disposal are current subjects of serious discussion in connection with the handling of toxic and inflammable materials. Some authorities already have local powers to prohibit the deposit of explosives, corrosive or poisonous substances in dustbins but there is an urgent need, in present circumstances, for the problem to be tackled centrally.

A government Report "*Refuse Storage and Collection*" published in 1967, recommended that, wherever possible, authorities should accept responsibility for the collection of dangerous refuse to ensure its safe disposal.

Legislation regarding the deposit and removal of poisonous waste is now being considered by the Government which will give power to the local authorities to control this serious public health nuisance. In a similar context, the G.L.C. is to seek powers to control fly-tipping which is on the increase now that disposal tips are becoming more distant in the London area.

The collection of refuse and the conduct of Public Conveniences in Greenwich are under the control of the Borough Engineer who has kindly supplied me with the following information in respect of 1971:—

Street Sweeping

Frequencies of sweeping remain constant. However, it is becoming increasingly difficult in some areas to maintain anything like the service we would prefer because of the number of cars parked for lengthy periods in certain roads.

Refuse Collection

During the year, 71,483 tons of refuse were collected and transported to Stone, near Dartford. This included arisings from almost 6,000 collections of unwanted household effects.

Unwanted and Abandoned Cars

Abandoned and cleared by Council, 361. Unwanted and cleared by Council, 524. Unwanted—delivered to Depots, 457.

Public Conveniences

Most of the public conveniences have remained open 24 hours a day—only five being closed at night. The level of vandalism has still not increased to any great extent.

Flies and Mosquitoes

During the year 57 complaints of flies and 3 of mosquitoes were received, resulting in treatments being carried out to 46 rooms and 45 external areas.

On request from the Borough and Greater London Council Housing Departments, dust chutes and containers in the multi-storey flats are treated with Gammexane.

Disinfestation of Verminous Premises

Dioldren Concentrate continues to give good results in dealing with verminous premises.

During the year the department dealt with 103 cases of dirty and verminous premises, and the disinfestation staff sprayed 249 rooms and contents.

Of other pests which necessitated the treatment of rooms and external areas, the following initiated the greater number of complaints.

Ants.—Ants normally carry no disease but their presence in human foodstuffs is objectionable. However, the very small red House or Pharaoh's ant (*Monomorium pharaonis*), being of tropical origin, breeds in temperatures around 80°F. and, *ipso facto*, is found largely in bakehouses, restaurants, larders, kitchens and sometimes in hospitals. In hospitals they become potential carriers of disease by reason of the fact that in their excursions from their inaccessible breeding places such as heating ducts and from behind tiled walls and surrounds they are liable to traverse contaminated materials which could give rise to cross infections.

Foods of a relatively high sugar content are particularly attractive to ants and the insects are prepared to go to great lengths in order to obtain a sufficiency for their community.

In the main, the 131 complaints received concerned either the black garden ant (*Lasius niger*) or the yellow meadow ant (*L. flavis*), the workers of which will gain access to houses through cracks in the walls or floors, over sills or through window frames in search of food. One hundred and twenty-six treatments involving 253 rooms and 67 external areas were carried out to combat the reported nuisances.

Cockroaches.—The cockroach (*Blatta orientalis*) and its smaller relative (*Blattella germanica*) are well known for their destruc-

tiveness, especially in relation to stored organic matter, ranging from foodstuffs to book bindings. Food is rendered repulsive from contamination not only with their faeces but also with the secretion from their scent glands, and the cockroach is strongly suspected of transmitting to man a number of pathogenic organisms especially those of an enteric nature.

Cockroaches shun the light and are most active during the night. Warmth, moisture, darkness and close proximity to food supplies constitute favourable conditions for breeding.

Forty-four complaints were received concerning this pest and thorough investigation and treatment with Dieldrin Concentrate resulted in the infestations being considerably reduced. In all 43 treatments were effected involving 236 rooms.

Clover Mite.—Four complaints were received, mainly from tenants in blocks of flats in various parts of the Borough, concerning small red or dark brown insects (*Bryobia praetiosa*) found moving over walls and windows. Treatment consisted of spraying 38 rooms and 17 exterior surfaces with Dieldrin Concentrate which produced satisfactory results.

Wasps.—Complaints received implicated three types, the Common, the German and the Tree Wasp. (*Vespula vulgaris*, *V. germanica* and *V. sylvestris*.)

Fear of the wasp is often misplaced for they rarely sting unless they are roused or frightened and, contrary to popular belief, wasps are not entirely harmful for in spring and early summer they feed mainly on insects, many of which are themselves injurious. However, after mid-summer their diet becomes more vegetarian and the workers feed on ripening fruit and other sweet substances, thus effecting serious damage in orchards, sugar warehouses, grain factories, etc., where they cause considerable wastage of goods. In houses they become a nuisance during cooking and at meal times and it is conceivable that they are instrumental in the spread of food poisoning.

The queen wasp, the only survivor from the previous year's colony, emerges from hibernation in the spring to choose a site for nesting, usually in cavity walls, lofts, under roof tiles or other sites which evoke a certain ingenuity on the part of the disinfectors in order satisfactorily to deal with the nuisance.

Two hundred and twenty-six complaints regarding this pest were received and during the year some 151 nests were destroyed, mainly by means of Gammexane powder or Dieldrin Concentrate.

Many other types of infestation were encountered and the

following is a list of the treatments which were carried out in connection therewith.

	Complaints	Treatments	Rooms	External Areas
Beetles:				
<i>Black</i>	16	14	39	—
<i>Carpet</i>	13	12	32	—
<i>Grain</i>	4	2	4	—
<i>Larder</i>	12	12	33	—
<i>Spider</i>	4	4	15	1
<i>Wharf Borer</i>	3	3	6	—
Caterpillars	1	1	—	1
Earwigs	84	87	46	82
Fleas	205	190	1,183	5
Flour Weevils	1	1	1	—
May Bugs	2	1	—	1
Meal Worms	12	12	24	1
Moths	1	1	—	1
Psocids	8	8	17	—
Red Mite	8	5	13	1
<i>(of Birds and Poultry)</i>				
Silverfish	20	16	43	—
Slugs	4	4	4	3
Spiders	5	5	12	2
Wild Bees	29	10	—	10
Wood Lice	1	1	3	—
Woodworm	15	12	28	—
Misc. Insects	26	22	56	3
Totals	474	423	1,559	111

Seventy-one requests for spraying for other reasons such as bad smells, offensive deposits, etc., were met by treatments to 251 rooms and 11 external areas.

Precautionary Spraying.—During the year, at 33 premises, unwanted bedding, furniture and miscellaneous household effects were sprayed as a precautionary measure prior to removal by the Borough Engineer's staff. Treatment was effected in 110 rooms and 6 external areas.

Verminous Conditions

The procedure adopted to combat infestation by lice and general verminous conditions is essentially the same.

Treatment for all cases and contacts is carried out at the Tunnel Avenue, Lionel Road and Plumstead High Street Cleansing

Stations and the following Return summarises the work carried out during the year: —

	Attendances	
	Vermin	Scabies
Adults	138	216
Children under school age	118	89
School children	1,020	216
Totals	1,276	521

Pediculosis

Lice are the natural vectors of typhus, trench and relapsing fevers although in temperate climates infection seems generally to be limited to skin organisms giving rise to impetigo, furunculosis and eczema introduced into the tissues by fingernails in the act of scratching.

The resurgence of verminous conditions noted during 1969 and which continued throughout 1970, persisted during the current year. Indeed, the present total of 1,276 treatments is 40.4% greater than last year and no less than 264% higher than for 1968.

Evidence, certainly in the London area, indicated that this exacerbation was due to the evolvement in the head louse (*pediculus humanus capitis*) of a strain resistant to the organo-chlorine insecticides such as DDT and gamma BHC used for present-day treatment.

A preparation containing malathion has since been developed and is now being introduced into our methods of treatment and it is anticipated that this fresh advance in verminous conditions in the community will be contained.

In the course of investigations into this comparatively recent rise in resistance it has been shown that the newer chemicals are far less toxic to humans than the residual DDT and BHC preparations.

Scabies

With regard to scabies, there was evidence during the current year of a return to a more normal situation for treatments fell by 25.8% compared with those of the previous year. This present total of 521 is still 123 in excess of the 1968 figure.

A number of cases of scabies are likely to be complicated by impetigo, a contagious complaint arising from the infection of

scratches by staphylococcal and/or streptococcal organisms. Because impetigo is not a notifiable disease our information is limited to the number of children reported by the schools as suffering from this complaint. In 1971, there were 59 children so reported.

Disinfection

The disinfection of rooms is effected by the formaldehyde spray. This is carried out on removal of the infectious case or termination of the illness, and, on request, for conditions other than notifiable. In cases of request a charge may be made depending on the circumstances of the case. Bedding and wearing apparel can be removed to the Disinfecting Station, White Hart Road, where they can be submitted to steam disinfection. Books may be treated with formalin.

The accompanying table shows in detail the work carried out during the year.

Rooms and Articles Disinfected, Year ended 31st December, 1971

DISEASES, ETC.	Premises Entered	Rooms	Beds	Mattresses	Bolsters	Pillows	Sheets	Blankets	Eiderdowns	Cushions	Quilts	Odd Articles	Wearing Apparel	Rugs & Mats	Books	Total No. Articles Disinfected
Scarlet Fever	3	1	-	2	-	3	4	3	-	-	2	11	2	-	11	38
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis	15	29	-	21	1	18	17	22	-	4	10	78	59	-	-	230
Cancer	3	3	-	5	-	6	4	4	-	-	2	1	5	-	-	27
Meningococcal Infection	3	5	-	6	-	-	-	12	-	-	1	24	10	-	-	53
Puerperal Pyrexia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Para Typhoid	2	6	-	4	-	2	2	3	-	2	1	16	3	-	-	33
Polio-Myelitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erysipelas	1	1	-	1	-	3	-	4	-	3	1	8	1	-	-	21
Acute Encephalitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	4	4	-	4	-	5	-	2	-	-	3	41	7	-	-	62
Scabies	5	6	-	6	-	6	44	26	-	1	8	5	14	-	-	110
Other Diseases	63	185	2	174	2	230	143	67	-	14	73	721	412	6	41	1,885
Vermineous Premises	26	13	-	13	-	35	24	53	-	2	16	42	206	-	-	391
Articles for Overseas	6	-	-	-	-	-	-	†	-	-	-	*	120	-	-	120
TOTAL	131	253	2	236	3	308	238	196	-	26	117	947	839	6	52	2,970

* 3 tea chests of clothing

† 1,622 bales of blankets

Eltham Crematorium

The Crematorium, situated in the grounds adjoining Eltham Cemetery, is administered by the Eltham Joint Crematorium Committee which comprises the London Boroughs of Greenwich and Bexley and the Boroughs of Dartford and Gravesend.

The number of cremations which took place during 1971

totalled 3,623. Of these, 1,310 were from within the Borough compared with 1,252 in 1970.

Exhumations

One exhumation was carried out during the current year and a Public Health Inspector was present to see that all the usual precautions were observed.

Mortuary Accommodation

Arrangements exist between Greenwich Council and the Council of Lewisham for bodies to be accommodated at the latter's two mortuaries prior to inquests and post mortems or while awaiting burial.

During the current year some 1,176 bodies were so accommodated at a cost to the Council of £3,704.40p.

Summary of Work Performed by the Public Health Inspectors during the Year 1971

INSPECTIONS—

Houses inspected (Complaints, nuisances)	4,446
" " (Infectious Disease)	1,612
" " (Overcrowding and other Housing Applicants)	420
Inspections of Factories	182
" " Licensed Victuallers and Clubs	333
" " Underground Rooms	95
" " Pet Shops	234
" " Stables and Yards	3
" " Urinals	46
" " Houses in Multiple Occupation	868
" " Outworkers' premises	266
" Under Clean Air Act	5,778
" Miscellaneous	17,843
Inspection of Premises (Clearance Areas)	548
" " " (Improvement Grants)	908
" " " (Individual Unfit Houses)	495
" " " (Rent Acts)	5
Inspections of Offices, Shops and Railway Premises	1,360
Investigations (Rats and Mice)	1,655
Investigations (Insect Pests)	262
On Notice from Architects and Builders	483
Re-inspections, calls made, etc.	4,271
	<hr/>
	42,113

DRAINS—	
Drains Tested—by smoke	39
" " —by water	18
Opened, cleansed and repaired	1,209
Yards and forecourts drained	10
W.C. Compartments erected or repaired	26
W.C. fittings repaired or renewed	65
W.C. pedestals installed or renewed	30
Sanitary conveniences or improvements effected to Factories and Workplaces	9
Urinals cleansed or repaired	3
DUSTBINS—	
Provided	3
PAVINGS—	
Yards and Forecourts	1
GENERAL WATER SUPPLY—	
Water Fittings amended	21
Water supply restored	17
Extra water supply to tenement houses	1
OTHER IMPROVEMENTS—	
Rooms cleansed and repaired	1
Rooms and staircases lighted and ventilated	517
Verminous rooms cleansed	249
Roofs, gutters and rainwater pipes repaired	365
Dampness abated	959
Underground Rooms (enforcement of Regulations)	—
Sinks, baths and lavatory basins provided	6
Sink, lavatory and bath waste pipes trapped or amended	46
Stoves and fireplaces renewed or repaired	7
Floors repaired	138
Miscellaneous repairs	1,316
OTHER NUISANCES ABATED—	
Illegal use of Underground rooms discontinued	—
Animals kept in unfit places discontinued or removed	12
Foul Accumulations removed	68
Rat infestation abated	3,602
SMOKE NUISANCES—	
Observations	683
Statutory Notices served	—
NOTICES, ETC.—	
Preliminary Notices served	1,012
Statutory or Abatement Notices served	296
Houses rendered fit by informal action	1,597

Legal Proceedings

Premises	Offence	Results of Proceedings
32 Mycenae Road, S.E.3	Non-compliance with Public Health Act 36 Abatement Notice	Summons withdrawn— Works completed
175 Eastcombe Ave., S.E.7.	Non-compliance with Notice under Section 39 Public Health Act, 1936	ditto
115 Lee Road, S.E.3	Contravention of the Food Hygiene (General) Regulations 1970	ditto
119 Annandale Road, S.E.10	Non-compliance with Abatement Notice Public Health Act 1936	ditto
2 Howick Mansions, Woolwich Road, S.E.7	ditto	ditto
15 St. Margaret's Terrace, S.E.18	ditto	Summons adjourned sine die— Works completed
23 Waverley Crescent, S.E.18	ditto	Summons withdrawn— Works completed
16 Stratheden Parade, S.E.3	Offence—Section 16 Food & Drugs Act 1955 Offence—Food Hygiene (General) Regulations 1970	Summons adjourned sine die— Works completed on eve of court hearing
146 Humber Road, S.E.3	Non-compliance Public Health Act, 1936	Summons adjourned sine die— Works completed
William IV Public House, 155 Trafalgar Road, S.E.10	Contravention Food Hygiene (General) Regulations 1970	Summons withdrawn— Works done
54 Llanover Road, S.E.18	Non-compliance Public Health Act, 1936	ditto
111 Humber Road, S.E.3	ditto	ditto

Legal Proceedings

Premises	Offence	Results of Proceedings
The Crown Public House, 176 Trafalgar Road, S.E.10	Offence—Food & Drugs Act, 1955 Contravention Food Hygiene (General) Regulations 1970	Summons withdrawn— Works completed
49 Walnut Tree Road, S.E.10	Non-compliance Public Health Act, 1936	ditto
74 Admaston Road, S.E.18	ditto	Nuisance Order granted
8 Armitage Road, S.E.10	ditto	Summonses withdrawn —Works completed
79 Wood Row, S.E.18	Non-compliance Public Health Act, 1936 Contravention L.C.C. (General Powers) Act 1928	Summonses withdrawn —Work completed
1 Mycenae Road, S.E.3	Non-compliance Public Health Act, 1936	Nuisance Order granted —Works done in default Debt recovered
37 Kinveachy Gardens, S.E.7.	ditto	ditto

HOUSING

Recent Reports have dwelt at length on modern housing design and estates and their effects upon the general health of associated communities. There are, of course, many other aspects of the housing situation of equal importance. Prior to 1939, local authority housing problems had been encountered mainly in the lower income groups and, until the Housing Act of 1949, housing powers were restricted to the benefit of the working classes only. The scene has changed. Today, this vital question of obtaining accommodation covers most income groups who now seek local authority assistance for housing, the solution to which has not, so far, been forthcoming.

Homelessness and housing are inter-related subjects which, from a local authority point of view, ought not to be dealt with separately or in isolation. However, such is the perverse nature of man that while most of the homeless struggle to obtain a roof over their heads, those already housed strive for greater living space and those with greater living space spare no effort to improve their standards of living and clamour for garage facilities—all of which intensify problems confronting housing departments, especially in urban areas. Indeed, a situation has now been reached where many applicants for council housing turn down offers of accommodation from local authorities for a variety of reasons, some of which would seem trivial to the homeless. It was estimated that in the G.L.C. area, about 60% of all people nominated for flats or houses declined first offers and that, in the previous 5 years, of 47,466 families nominated for new homes only 23,309 became tenants.

Nevertheless, it is indisputable that "hearth stones" are the foundations of a home, a community and a society for, without a secure domicile, life has little meaning or purpose. But a viable community depends not only on the provision of dwellings but also upon their proximity to industry, business and cultural centres. Oddly enough, this was precisely the formula adopted for our now old and out-dated "twilight" areas so roundly condemned by many modern planners whose schemes have tended to be on the lines of complete destruction with novel but less effective methods of replacement.

What seems to have been lacking since the war is "vision". In a period of anxiety to please and as a matter of expediency, authorities have allowed extension of high-rise accommodation despite being privy to the serious problems, both present and future, associated with similar, if less common, dwellings erected at the turn of the century.

By consensus, "point block" type of building does not provide

a satisfactory solution to the housing problem. Substitution of the small dwelling with its own little garden by munificent architectural erections, although perhaps justified on grounds of higher density occupation, has signally failed medically, economically or socially to provide the ideal milieu for family life. Experience has shown that better results are achieved by planners and architects with smaller schemes which have to be "shoe-horned" into existing situations than with the larger monolithic developments, the aesthetic designs of which are beginning to be adversely influenced by fire precaution regulations and the demand for newer building materials and methods of construction.

It is fair comment to say that vandalism, on today's scale, is a recent phenomenon and is a concomitant of the large, high density, high-rise urban estate. Moreover, the introduction of costly "damage-proof" appurtenances is a treatment of symptoms which merely serves to emphasise the inadequacy of such schemes and their unsympathetic environments. Effects of this modern tendency towards wilful and deliberate vandalism are legion, not the least of which is the growing number of dissatisfied council tenants seeking alternative accommodation by all means at their disposal thereby adding difficulties to the already overburdened housing departments.

Other problems harassing local authorities in the London area include growing lists of applications for accommodation which are directly attributable to increasing economic pressures which preclude residents from purchasing homes of their own. An even more serious dilemma confronts the G.L.C. In order to provide "elbow room" in which to tackle overcrowding, homelessness, housing shortage and deterioration of property it is, with the best of intentions, decanting businesses and economically active persons (principally skilled and semi-skilled workers) into provincial "new" towns. Unfortunately, as a result of this denudation of the capital's centres and the dissipation of some of its vital working population, we are witnessing the break-up of the social structure of communities, an event obviously not envisaged at the planning stage.

It is common knowledge that most people wish to live in town centres with all their undoubted advantages and aids to good living, but the environment needs to be adjusted to residents' requirements and not be the subject of abstruse, academic and intellectual exercises. Recognition of this fact by authorities is already apparent in the increasing number of designated "amenity area" schemes and the delegation of many responsibilities to "tenants" associations. However, with a continuance of the present metropolitan housing policy there will be a loss of artisans in the middle

age groups and the gaps between the young and old will grow—industry will be deprived of the advantages of the normal, gradual progression of the young to positions of responsibility—older persons will, perforce, have to retain seniority longer which may well alienate them from the younger element and their eventual retirement will result in a diminution of experienced personnel and a hiatus in expertise that industry can ill afford. Currently, jobs in the manufacturing industries in London are already declining at a faster rate proportionately than the capital's population. Indeed, total unemployment in Greater London, as given in Census returns, has risen from 2.0% in 1961 to 5.1% in 1971 while, over this 10-year period, employment in manufacturing trades has declined by 25.1% and in the construction industries by 28.2%. In Greenwich, the recent Census revealed that 5.3% of its economically active males were out of work, its population had contracted by 5.41% since 1961 and, during this period, the number of persons in the working-age group had fallen by 11,680.

In providing these statistics it is not the object of this Report to produce an economic survey but merely to indicate the fundamental importance of housing policy and its effects upon the fabric of society. Clearly, if not arrested or closely monitored, these side effects could prejudice London's whole viability. Housing could become adequate but, with declining industry, unemployment could become rife and, with mutilated communities, that indefinable "quality" of life which we all seek to attain would be lost. Pessimistic—maybe, but vandalism, hooliganism and loneliness are all on the increase; by 1981 it is estimated that of all London households, 20% will be made up of single-person families (in Greenwich the number of one-person households has risen from 9,476 (13%) in 1961 to 14,095 (19%) in 1971); distance travelling to obtain employment is growing at an alarming rate and these social changes could very well be early manifestations of the threatened deterioration of London life. Prolongation of such conditions will render the metropolis incapable, by its own efforts, to sustain its services to the old, infirm and under-privileged groups who would begin to form the major portion of the capital's population.

In focusing attention on the current G.L.C. problems it would be uncharitable to forget that, together with the previous L.C.C., it has a most enviable record in the housing field. Its first scheme was introduced under the Housing of the Working Classes Act, 1890, in the year that Gladstone, an erstwhile Member of Parliament for Greenwich, retired as Prime Minister. The building of this estate at Bethnal Green in 1894, which provided 1,069 flats and 18 shops, was quickly followed by others so that dwellings erected

by 1945 amounted to almost 100,000 with a present figure substantially in excess of a quarter of a million. Greenwich, itself, has not been laggardly in this respect. Before 1945, it had built 6,680 dwellings and by the end of the current year its housing stock, at 21,839, formed almost 30% of the Borough's total. It is interesting to note that density per dwelling in the Borough over the past century has fallen from 6.6 persons to 2.9.

Housing Act, 1957

Part II—The following procedures were carried out during 1971 :—

(i) PREMISES UNFIT FOR HUMAN HABITATION—*Sections 16 and 17.*—The undermentioned premises were considered unfit for human habitation and not capable at reasonable expense of being rendered fit. Orders were made in respect of the following properties :—

(a) Undertakings

NIL

(b) Closing Orders

4, Godfrey Hill, S.E.18.
1, Manthorp Road, S.E.18.
87a, Marmadon Road, S.E.18.
28, Purrett Road, S.E.18.
32, Reidhaven Road, S.E.18.
133, Reidhaven Road, S.E.18.
76, Sandy Hill Road, S.E.18.
129, Shooters Hill Road, S.E.3.
44, Roan Street, S.E.10.
71, Waverley Road, S.E.18.

(c) Demolition Orders

39, Lansdowne Lane, S.E.7.

(ii) UNDERGROUND ROOM(S) AND PART OF A BUILDING—*Section 18.*—The Council's powers to close part of a building or an underground room are provided by this Section and, in respect of the latter, as qualified by the Housing (Underground Rooms) Act, 1959. New regulations for securing the proper ventilation, lighting and the protection against dampness and effluvia or exhalation of underground rooms, received the Minister's approval and became operative on 28th August, 1961.

No Closing Orders were made under this Section during the current year.

(iii) DETERMINATION OF CLOSING ORDERS—Section 27—Closing Orders on premises and parts of premises as follow were determined :—

43, Admaston Road, S.E.18.	(whole house)
108, Crescent Road, S.E.18.	(whole house)
118, Crescent Road, S.E.18.	(whole house)
3, Garland Road, S.E.18.	(whole house)
18, Heverham Road, S.E.18.	(basement rooms)
39, Kentmere Road, S.E.18.	(whole house)
26, King George Street, S.E.10	(whole house)
8, Luton Place, S.E.10.	(whole house)
21, Raglan Road, S.E.18.	(whole house)
23, Raglan Road, S.E.18.	(whole house)
75, Victoria Way, S.E.7.	(whole house)
51, Waverley Road, S.E.18.	(whole house)
59, Waverley Road, S.E.18.	(whole house)
8, West Grove, S.E.10	(single storey rear annexe)

Part III—CLEARANCE AREAS

The following Clearance Areas were reported during the year :—

(1) RUDD STREET AREA, NOS. 1—12

Area No. 1

82 — 84 (*even*) Bloomfield Road.

Area No. 2

92, Bloomfield Road.

4 — 6 (*even*) Raglan Road.

15 — 19 (*odd*) Raglan Road.

Area No. 3

16 and 22 Raglan Road.

25 — 33 (*odd*) Raglan Road.

Area No. 4

146 — 150 (*even*) Burrage Road.

Area No. 5

128 — 142 (*even*) Burrage Road.

Area No. 6

98 — 118 (*even*) Burrage Road.

Area No. 7

- 88, Burrage Road.
- 92 — 94 (*even*) Burrage Road.
- 140 — 144 (*even*) Crescent Road.
- 148 — 152 (*even*) Crescent Road.
- 145, Crescent Road.
- 80-84 (*even*) Burrage Road.
- 17 and 18 Rudd Street.

Area No. 8

- 122 — 126 (*even*) Crescent Road.

Area No. 9

- 130 — 134 (*even*) Crescent Road.

Area No. 10

- 52 — 64 (*even*) Burrage Road.
- 70 — 72 (*even*) Burrage Road.
- 1 — 4 (*consecutive*) Rudd Street.
- 6 — 13 *consecutive* Rudd Street.

Area No. 11

- 47 — 52 (*consecutive*) Vincent Road.

Area No. 12

- 44 — 46 (*even*) Burrage Road.

(2) GLENISTER ROAD AREA

- 2 — 12 (*even*) Armitage Road.
- 2, 6, 10, 12 and 3, 5, 11 Collerston Road.
- 1, 2, 3 Denford Street.
- 49 — 55 (*odd*), 61 — 73 (*odd*) Glenister Road.
- 1, 11, 13 and 2 — 18 (*even*) Selcroft Road.
- 77, 79, 81, 83, 89 and 93 — 99 (*odd*) Woolwich Road.

House Purchase and Housing Acts, 1958/59 and Housing Act, 1969 *Improvement Grants*

Prior to the enactment of the Housing Act, 1969, authority to pay grants towards the costs of improvements on dwellings was in accordance with Section 30 of the Housing (Financial Provisions) Act, 1958, for Discretionary Grants and with Section 4 of the House Purchase and Housing Act, 1959, for Standard Grants.

Applications for grants submitted to the Directorate of Housing Services are referred to this Directorate for confirmation that the

proposed works satisfy the requirements specified by the appropriate Acts. In this connection the Housing Inspectors carried out 609 and 72 inspections for *discretionary* and *standard* grant applications respectively.

Housing Act, 1969—Part III

QUALIFICATION CERTIFICATES—The following table shows the number of Qualification Certificates issued by the Council during the year under review. Similar information is provided quarterly to the Department of the Environment.

Improvement cases

No. of applications for Qualification Certificates in accordance with Section 44(2) under consideration at the end of December 1971	12
No. of certificates of Provisional Approval issued	76
No. of Qualification Certificates issued under Section 46(3)	31

Standard amenities already provided

No. of applications for Qualification Certificates in accordance with Section 44(1) under consideration at the end of period	256
No. of Qualification Certificates issued under Section 45(2) in respect of—	
(i) Dwellings with rateable value of £90 or more in Greater London or of £60 or more elsewhere	101
(ii) Dwellings with rateable value of £60 to less than £90 in Greater London or of £40 to less than £60 elsewhere	130
(iii) Dwellings with rateable value of less than £60 in Greater London or less than £40 elsewhere	11

Exemption for low-income tenants from Section 54

No. of Certificates issued under Section 55	None
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Housing Act, 1961

Houses in Multiple Occupation—In connection with these types of properties, the general powers given to the Council under the previous legislation, viz. :—

Natural Lighting

Ventilation

Water Supply

Drainage and Sanitary Conveniences

Facilities for storage, preparation and cooking of food and for the disposal of waste water

Prevention of overcrowding of sleeping rooms

were retained under Sections 36 and 90 of the 1957 Act. However, powers enabling the Council to enforce standards under Section 36 proved to be inadequate and were repealed by Part II of the Housing Act, 1961. Regulations were made subsequently by the Minister under Section 13 of the new Act providing a management code for Councils to apply to *Houses in Multiple Occupation*. Further, for the purpose of implementing the provisions of Section 15 of the Housing Act, 1961, the Council, on the 14th November, 1962, adopted the standards of provision of amenities, as suggested in the joint report of the Advisory Bodies of Town Clerks and Medical Officers of Health of Metropolitan Borough Councils.

This Directorate has always given advice concerning houses in multiple occupation to anyone requesting information. Leaflets in printed form giving details of the minimum requirements for such premises have now been supplied to local estate agents and are available through various Departments of the Council for potential house purchasers.

During the year, 868 visits were made by the Housing Inspectors. It was found necessary to serve 107 informal and 14 formal notices requiring the execution of works under this Act.

Recent years have seen a steady growth in the number of houses being used to accommodate several families or households. In particular, immigrants often find it necessary to purchase houses to gain shelter, invariably with the aid of high interest rate mortgages. As repayments take such a large portion of income, resort is had to the letting of rooms, despite the fact that many properties are unsuitable for the numbers accommodated. Such a situation calls for action to prevent deterioration of premises and communities and the extension of slums and social evils. In view of the new and strengthened powers for regulating conditions in Houses in Multiple Occupation contained in the Housing Act, 1969, the Council, towards the end of 1970, decided that it would

- (a) *take action to formulate a combined informatory and regulatory scheme for the control of Houses in Multiple Occupation and,*
- (b) *to apply such scheme to the whole of the Borough.*

In exercise of their powers under Section 22 of the Housing Act, 1961, as amended by Section 70 of the Housing Act, 1964, and Section 58 of the Housing Act, 1969, as extended by Section 64 of the same Act, the Council introduced the following scheme:—

CITATION AND INTERPRETATION

1. This scheme may be cited as the London Borough of Greenwich (Registration of Houses in Multiple Occupation) Informatory and Regulatory Scheme 1971.

2. (1) The Interpretation Act 1889 shall apply for the interpretation of this scheme as it applies for the interpretation of an Act of Parliament.

(2) In this scheme —

"the council" means the council of the London Borough of Greenwich;
"control provisions house" means a house in respect of which application for registration is required under paragraph 6;

"house in multiple occupation" means a house which is occupied by persons who do not form a single household and *"multiple occupation of a house"* shall be construed accordingly;

"house in existing multiple occupation" means a house in multiple occupation on 1st April, 1971; and unless the contrary intention appears, other words and expressions shall have the same respective meanings as in the Housing Acts 1957 to 1969.

(3) Any reference to a numbered paragraph shall be construed as a reference to the paragraph bearing that number in this scheme.

AREA OF REGISTRATION

3. This scheme shall apply to the London Borough of Greenwich.

APPLICATION, ETC., OF THE SCHEME

4. (1) This scheme shall not apply to —

(a) common lodging-houses as defined in section 235 of the Public Health Act 1936;

(b) houses owned or controlled by the council;

(c) any house —

(i) in which on 1st April 1971 and at all times thereafter, the persons occupying the house form two households; or

(ii) which, on the said date and at all times thereafter, apart from one household (if any), is occupied by not more than four persons;

(2) (a) Paragraphs 1, 2, 3, 4, 5, 10(1), 11, 12, 13, 14 and 15 shall apply to all houses for which the council are authorised by paragraph 5 to compile and maintain a register; and

(b) in addition, paragraphs 6, 7, 8, 9 and 10(2) shall apply to all control provisions houses.

(3) This scheme shall not affect —

(a) the continued occupation of a house by the number of households or persons occupying it on 1st April 1971;

(b) any occupation of a house which is such that —

(i) the persons occupying the house form two households; or

(ii) apart from one household (if any) the house is not occupied by more than four persons.

AUTHORITY GIVEN BY THE SCHEME

5. Subject to paragraph 4(1), the council are hereby authorised to compile and maintain a register of —

- (a) all houses in existing multiple occupation;
- (b) all control provisions houses in respect of which applications for registration are accepted by them, and to —
 - (i) register the houses referred to in sub-paragraph (a) of this paragraph in Part I of the said register and the houses referred to in sub-paragraph (b) of this paragraph in Part II thereof;
 - (ii) keep the register in such form as will enable the particulars prescribed in paragraph 10 to be included therein; and
 - (iii) issue appropriate forms for the use of persons supplying information under this scheme, including forms of application for registration.

APPLICATION FOR REGISTRATION OR VARIATION OF REGISTRATION OF CONTROL PROVISIONS HOUSES

6. (1) Subject to paragraph 4(1), before any person permits on or after 1st April 1971 multiple occupation of a house to a greater extent than that mentioned in paragraph 4(3) he shall apply to the council for registration of the house.

(2) Before any person permits multiple occupation of a house beyond the number registered for the house he shall apply to the council for variation of the registration of the house.

REFUSAL TO REGISTER OR VARY REGISTRATION

7. As respects a control provisions house the council may refuse —

- (a) to register or vary the registration of the house on the ground that the house is unsuitable and incapable of being made suitable for such occupation as would be permitted by virtue of the registration or variation; or
- (b) to register the house on the ground that the person having control of the house, or the person intended to be the person managing the house, is not a fit and proper person.

REGISTRATION SUBJECT TO CONDITION

8. As respects a control provisions house the council may, as a condition of registering or varying the registration of the house, require that such works are executed as will make the house suitable for such occupation as will be permitted by virtue of the registration or variation.

NOTIFICATION OF REASONS FOR REFUSAL

9. Where the council refuse under paragraph 7 to register or vary the registration of a house or require as a condition of such registration or variation thereof the execution of works as mentioned in paragraph 8, they shall give the applicant a written statement of their reasons for doing so.

PARTICULARS TO BE INSERTED IN THE REGISTER

10. (1) For each entry in the register which the council are authorised by paragraph 5 to compile and maintain, there shall be inserted therein :—

- (a) address of the house;
- (b) the following particulars of the condition of the house —
 - (i) the total number of rooms in the house;
 - (ii) the number of those rooms used exclusively as —
kitchens or sculleries,
bathrooms (with or without water closets);
 - (iii) the total number of —
fixed wash-hand basins,
fixed sinks,
fixed baths or showers,
water closets (a) external,
(b) internal;
- (c) the following particulars of each individual or corporate body who —
 - (i) receives or intends to receive rents or other payments in respect of the occupation of the house or any part of it (whether on his own account or as agent); or
 - (ii) has any estate or interest in the house or any part of it, that is to say :—
name,
principal place of business,
place of residence (in the case of a corporate body, of the Secretary or other principal officer),
full particulars of any estate or interest held,
whether as owner, lessee or mortgagee;
- (d) the number of (A) households and/or (B) persons occupying the house at the date of notification of any of the particulars referred to in (a), (b) and (c) of this sub-paragraph or of any change in them;
- (e) particulars of any works carried out subsequent to registration, pursuant to a notice given under Part II of the Housing Act 1961.

(2) In the case of a control provisions house, there shall be inserted in the said register, in addition to the particulars prescribed in sub-paragraph (1) of this paragraph, the number of (A) households and/or (B) persons permitted by virtue of the registration, or variation of the registration, or the house to occupy the house.

INFORMATION TO BE SUPPLIED

11. The following information, so far as any such information is within his knowledge, shall be supplied in writing to the Council by the appro-

priate person prescribed in paragraph 12 in respect of any house in existing multiple occupation for which the council are authorised by paragraph 5 to compile and maintain a register and any control provisions house:—

- (a) the fact that the house appears to be registrable;
- (b) all the particulars prescribed in paragraph 10(1);
- (c) any change of circumstances which make it necessary to alter any of the particulars inserted in the register.

DUTY TO SUPPLY INFORMATION

12. The duty to supply in writing all the information specified in paragraph 11, which is within his knowledge, shall rest upon any person who is for the time being within any of the following descriptions —

- (a) any person who receives or intends to receive, on his own account, rents or other payments in respect of the occupation of the house or any part of it;
- (b) any person who receives or intends to receive rents or other payments in respect of any such occupation as aforesaid as agent or trustee for another person; and
- (c) in the case of a control provisions house, any other person entitled or authorised to permit persons to take up residence in the house or any part of it.

INSPECTION OF THE REGISTER

13. Any person having an estate or interest in a house which appears to him to be registrable or which is registered under this scheme, or in any part of such a house, or the agent of such a person, may inspect the register and take copies of any entry therein in respect of that house.

PROHIBITION ON PERMITTING NEW RESIDENTS

14. (1) Subject to paragraph 4(1), on or after 1st April 1971 no person shall permit others to take up residence in a house or part of a house so that the occupation of the house is greater than that mentioned in paragraph 4(3) unless the house is registered in Part II of the register to permit such occupation.

(2) No person shall permit others to take up residence in a house registered in Part II of the register or in any part of such a house so as to exceed the number of (A) households and/or (B) persons registered for the house under paragraph 10(2).

DATE OF COMING INTO FORCE OF THE SCHEME

15. This scheme shall come into force on 1st April, 1971:

Re-housing

(a) *Borough Council*—The number of families housed and re-housed including transfers, casual voids, etc., amounted to 2,003. Of this number 31 were in respect of families re-housed from outside the Borough.

(b) *Greater London Council*—During the year ended 31st December, 1971, the Greater London Council had provided alter-

native accommodation for a total of 636 Greenwich families. Of this figure 230 were housed on Greater London Council housing estates outside the Borough. Eight families from outside Greenwich were re-housed in the Borough under the Greater London Council scheme.

Overcrowding

During 1971 there were 420 visits carried out in respect of complaints of overcrowding and applications for re-housing, as a result of which 4 families were found to be statutorily overcrowded.

COUNCIL HOUSING SCHEMES—(*Information supplied by Mr. J. M. Moore, Borough Architect*).

(a) Schemes in operation at 31st December, 1971 :—

Site	Total Dwellings	Completed	Under Construction
Glyndon Phase I			
Stages 4 and 5	166	150	16
The Mound	20	20	—
Bison I.B. Contract	638	638	—
Maryon Road	188	158	30
Little Heath (Sheltered housing)	41	41	—
Woolwich	250	250	—
Polytechnic Hostel	Students' rooms	Students' rooms	
Brent Road	48	—	48
Plumstead High Street	70	—	70
Glyndon Phase II			
Stage 2	100	—	100
Glyndon Stage 2 (Linked Flats)	12	—	12
Mabyn Road	98	—	98
Palmerston Crescent	56	15	41
Timbercroft Lane	4	4	—
Eltham Road (Sheltered Flats)	41	—	41

(b) The following dwellings have been commenced or are planned for commencement before 31st December, 1972 :—

The Warren	129
The Heights	91
Tyler Street	109
Glyndon Phase II, Stage 3	364
Mineral Street	15
Shooters Hill Road	29
Kingsman Street	13
Lingfield Crescent (<i>Sheltered Housing</i>)	26
Kidbrooke (<i>linked flats</i>)	12

INSPECTION OF FOOD AND SUPERVISION OF FOOD PREMISES

It is a simple but fundamental truth that man must eat to live and he works to obtain his food. Indeed, much of our knowledge of early man is derived from our study of his search for food which has always been one of his major pre-occupations. With the advent of agriculture, however, his nomadic life was curtailed and we saw the establishment of communities which, over recent years, has certainly led to imbalance between supply and demand and to situations where food production has failed to keep pace with population growth or, conversely, where abundance has led to waste.

Today, many developing countries do not produce enough food for themselves and are not sufficiently affluent to purchase their requirements from abroad. Their reliance on donations often militates against their own agricultural expansion and their health problems multiply.

All national development, social and economic, ultimately depends upon the health of people which in turn flows from the elimination of disease and illiteracy and an ability to advance nutrition by improving crop growing and animal husbandry. Obviously, better food supplies can reduce or even abolish the effects of malnutrition and, in 1963, in order to solve world-wide health problems the W.H.O. established a World Food Programme in an attempt to help an estimated total of 170 millions of under-nourished mothers and children throughout the world.

Underlying the whole of this scheme is the aim to supply food to particular deprived areas until they become self-supporting agriculturally. Unfortunately, this often proves unsuccessful for, under demographic pressures, populations tend to increase faster than food production. For example, in Egypt, where only a small proportion of the country is cultivated, the building of the Aswan High Dam was to provide not only cheap power which, *inter alia*, was to be used for synthesis of nitrogenous fertilisers but also to ensure continuous irrigation of surrounding lands. It was hoped, thereby, to replace the country's dependence upon Nile floodwaters—a most unreliable policy—and so increase the country's cultivable lands. In this instance, although the intention of advancing agricultural output has been realised, the population has risen at an even faster rate and the problem of malnutrition remains unresolved.

It is, of course, contended that there are untapped world resources sufficient to support expected population growth and it cannot be denied that such reserve capacity exists. Experience shows, however, that there is always a "time-lag" between the possible and the practical and the rate of population increase is

such that, in present circumstances, these two are unlikely ever to coincide. In Asia for example, production per capita has fallen by more than 5% since 1960 and the figure for Latin America is probably worse. Clearly, for some years to come, the burden of providing under-developed countries with food will be a continuing liability on the U.S.A., advanced Western countries and Australasia. In this connection it cannot be over-stressed that most of the arable land in these countries is already under cultivation and that surplus food is being produced only by the application of modern scientific and technological methods which include improved mechanisation, artificial fertilisers, pesticides and herbicides, not to mention the use of antibiotics, coccidiostats, tranquilisers, anthelmintics and hormones in dairy farming. It would be unrealistic not to assume that some of these substances persist in the finished product and it is this probability that is of the utmost importance to this country and, in particular, to our methods of food inspection. That hazards arising from chemical residues do not endanger the health of the community is one of a local authority's major obligations and the task is becoming progressively more difficult. Whilst we may maintain rigid control over our own producers and their commodities we are constrained to rely on other agencies for the quality and purity of imported foods which, incidentally, form slightly more than 50% of this country's total consumption despite the fact that the United Kingdom can boast of having the highest food productivity rate per acre in the world. It is a sobering thought that not only are we dependent upon the productivity of other countries but that we are abstractors from the world's surplus food stores perhaps at the expense of poorer nations.

In this world-wide drive to increase protein production industrialisation, in relation to stock-farming and poultry rearing, has advanced the risks of a number of diseases known to be pathogenic to man such as flukes, worms and protozoal parasites not to mention anthrax, tuberculosis, salmonella, clostridium and brucellosis infections. Those infections occasioning most trouble to food inspectors are—*salmonella* bacteria which are present in raw meat, poultry and eggs—*clostridium Welchii*, a normal inhabitant of the bowel of many animals including man and therefore found in raw flesh—*staphylococcus pyogenes*, the causal agent of boils, styes and whitlows which can so easily be transmitted to foods in the course of their preparation. All these bacterial poisonings can produce diarrhoea and vomiting after their various incubation periods and, in certain circumstances, they can prove to be lethal.

To these problems can be added those concerning the prepara-

tion and preservation of food for human consumption which have their origins in antiquity. From the "raising" of bread to the fermentation of wine and from the making of cheeses and yoghurts to methods of preservation such as bottling, jam-making, pickling, salting and drying, we witness the "techniques" of applied microbiology. Inevitably, these processes have become "big business" and the food inspectors are in constant contact with the canners, bottlers, brewers, distillers, millers, bakers, freeze-driers, deep-freeze suppliers, dairies and meat and poultry traders for all these operations create avenues to possible food contamination. Other difficulties presenting themselves include the fermentation and "hanging" of certain foods until desired chemical changes have been achieved and are then terminated by heat or alcohol. In many of these instances determination of the line between food sensitivity and food poisoning becomes a somewhat delicate technical decision.

Still further difficulties for the food inspectors and public analysts are to be seen in long-lived fission products such as strontium 90, iodine 131, caesium 137, etc., the residues from nuclear processes which will be held in the soil for many years to come and will eventually find their way into the nation's food.

Closer attention is now being directed towards the establishment of standards of composition and nomenclature for various commodities in relation to their packaging and labelling particularly in relation to meat products. High pressure sales promotion in the advertising fields has resulted in attractively labelled foods which, on analysis, are found not to be what they are purported to be.

With the intricacies of misleading labelling and the very real dangers of infection and contamination, together with the rapid advances in food technology, the burden of responsibility on the food inspector, the public analyst and the bacteriologist grows daily more onerous. Relatively few people realise the tremendous effort and highly specialised knowledge needed to ensure purity of the public's food supplies, especially the part played in this drama by the Borough's own food inspectors.

New Legislation

The Preservatives in Food (Amendment) Regulations, 1971.

These Regulations, made under Sections 4 and 123 of the Food and Drugs Act, 1955, came into operation on the 1st September, 1971, and —

- (a) *impose limits on the amounts of sodium nitrate and sodium nitrite which may be added to bacon and ham.*
- (b) *impose a limit on the amount of sodium nitrate which may be added to pickled meat; and*

(c) *impose in respect of all pickled meat, the limit on the amount of added sodium nitrite, which formerly applied only to cooked pickled meat.*

By the principal regulations, the Preservatives in Food Regulations, 1962, as amended, subject to the same limits potassium nitrate and potassium nitrite which are permitted alternatives for sodium nitrate and sodium nitrite respectively.

The Meat Inspection (Amendment) Regulations, 1971.

These Regulations, made under Sections 13 and 123 of the Food and Drugs Act, 1955, came into operation on the 16th August, 1971, and raise the maximum charges which can be determined by a local authority for inspections of carcasses carried out in pursuance of Reg. 3 of the principal regulations.

MILK

Milk consists of approximately 87% of water holding proteins, sugar, vitamins and certain salts in solution, has an average specific gravity of 1.032 and has suspended in it finely divided globules of fat to which it owes its whiteness. Normally milk contains 3% fat and 8.5% solids not-fat; it freezes at about -0.53°C . and its chemical composition is subject to variation on a number of counts such as the season and time of milking, the breed of cow, type of feeding, etc. Milk, as drawn aseptically from a healthy cow, contains few bacteria but as it forms an excellent medium for the growth of organisms every precaution should be taken to prevent its contamination.

Milk and Dairies (General) Regulations, 1959

Under the provisions of these Regulations each person retailing milk in the Borough must be registered as a Distributor. The number of persons so registered at the end of the year was 204.

On 93 occasions the premises of distributors and dairies were visited other than for sampling purposes but in no instance was action required.

The Milk (Special Designation) Regulations, 1963 and 1965

There is one milk processing plant in the Borough in respect of which a Dealer's Pasteuriser's Licence was in force on 31st December, 1971, as were the following licences in relation to milk obtained in pre-packed form for sale to the general public:—

	<i>In Operation 31.12.71</i>
Distribution of Sterilised Milk	126
„ „ Pasteurised Milk	98
„ „ Untreated Milk	42
„ „ Ultra Heat Treated Milk	10

Sampling—Under provisions of the aforementioned Regulations, Methylene Blue and Phosphatase tests are prescribed, the former for assessing the “keeping” qualities of milk, and the latter for estimating the efficiency of pasteurisation. In addition, a Turbidity test is also prescribed for ascertaining the effectiveness of the heat treatment of Sterilised Milk.

One hundred and twenty-two samples were submitted for the Methylene Blue test, of which 6 failed.

Satisfactory reports were received in respect of 122 milk samples submitted for the Phosphatase test.

Fifty samples of Sterilised Milk were submitted for the Turbidity test and all proved satisfactory.

Analytical Examination of Milk—A total of 106 formal and 5 informal samples of designated milks were submitted for chemical analysis and all proved to be genuine.

Three samples of cream were taken and found to be genuine.

Preserved Food and Ice Cream Premises

In accordance with the provisions of the Food and Drugs Act, 1955, Section 16, all premises with the exception of schools, clubs, hotels or restaurants, used:—

(a) for the sale, or manufacture for the purpose of sale, of ice cream, or storage of ice cream intended for sale; or

(b) for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale;

are required to be registered by the owner or occupier with the Local Authority.

Preserved Food Premises (meat, fish, etc.)—The total number of premises on the register at 31st December, 1971, was 244.

Four hundred and fifty-seven visits of inspection were made to Preserved Food premises and Fried Fish shops as a result of which a number of sanitary defects were remedied.

Ice Cream Premises—By the end of the year the total number of registered Ice Cream premises stood at 604.

Visits to these premises were made on 156 occasions and 75 improvements were effected.

Manufacture and Sale of Ice Cream

Ice Cream Sampling (Bacteriological Examination)—Use was made of the Public Health Laboratory Service as provided for under the National Health Act and 73 samples were submitted for examination and the ice cream graded according to the Ministry's

provisional grading scheme. The grading is based on the results of the Methylene Blue Reductase Test and a summary of this year's reports is given in the following table:—

Samples taken	Time taken to Reduce Methylene Blue	Provisional Grade	Observations
61	4½ hours or more	1	Satisfactory
8	2½ to 4 hours	2	Sub-standard
3	½ to 2 hours	3	Unsatisfactory
1	0 hours	4	Most Unsatisfactory

On receipt of a Grade 3 or 4 report it is the practice in this Borough to obtain further samples from a vendor before administrative action is taken. It was not necessary during the year to have recourse to "administrative action".

Of the 73 samples taken during the current year, 3 were of the "soft" variety.

Quantitative Analysis—Standards for the composition of ice cream are contained in the Food Standards (Ice-Cream) Regulations, 1959.

Eleven samples were submitted for examination and all except one proved satisfactory.

Blackheath and Woolwich Common Fairs

At Easter, Whitsun and the August Bank Holiday, many thousands of Londoners from this and adjacent Boroughs once again availed themselves of the opportunity of making a visit to these sources of entertainment.

In all, inspectors made 16 visits to the fairs during these holiday periods, but in no instance was action required.

Street Traders

During the year 67 applications were received by the Chief Executive and Town Clerk from street traders engaged in the retailing of articles of food. The applications were approved and licences granted.

No formal action was necessary in respect of contraventions of the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, and (Amendments) Regulations, 1966.

Premises used for the purpose of storing articles of food intended for sale by street traders were kept under regular supervision by the Food Inspectors.

Supervision of Premises Including Factories where Food is prepared

To these establishments, the Public Health Inspectors made 5,260 visits, as a result of which 372 improvements were effected.

The following table is a statistical record of the major portion of the duties performed and inspections undertaken during the year:

Premises Inspected or Visits Made	No. of Visits	No. of Premises at which Improvements were effected	No. of Improvements effected
Caterers, Restaurants, etc.	564	36	112
Grocers, Greengrocers	285	6	11
Butchers' Shops	146	8	23
Dairies and Milk Distributors	93	22	51
Wharves and Factories	1,791	—	—
Bakehouses and Bakers' Shops	28	6	11
Ice Cream Premises, Confectioners, etc.	156	31	75
Fried Fish Shops	70	5	10
Other Non-Registered Food Premises	204	4	14
Cooked Meats and Preserved Foods	399	26	65
Visits Re. Infestations	117	—	—
" " Markets	255	—	—
" " Food Poisoning	3	—	—
Sampling Visits	593	—	—
Fair Visits	16	—	—
School Visits	64	—	—
Interviews	357	—	—
Complaints Investigated	119	—	—
TOTALS	5,260	144	372

Food Hygiene (General) Regulations, 1960

In compliance with Regulations 16 and 19, which deal with the provision of wash-hand basins and the provision of facilities for washing food and equipment respectively, the following table gives details of the fitments introduced into food premises as grouped in trade categories:—

Type of Premises	No. of Premises	No. provided with wash-hand basins	No. with facilities for washing food and equipment
Cafes, Restaurants, etc.	387	387	387
Grocers	343	343	343
Greengrocers	149	149	Not applicable
Butchers	142	142	142
Bakers	73	73	73
Confectioners	286	286	Not applicable
Fish Shops	77	77	77
Public Houses	214	214	214
Off Licences	59	59	Not applicable

Bakehouses

At the end of the year, 12 premises in the Borough were being used as bakehouses, none of which was underground.

Bakehouses and bakers' shops were visited on 28 occasions and, as a result of the inspections, 11 sanitary defects were remedied.

Catering Establishments

As a result of 564 visits of inspection to the catering establishments, insanitary conditions were remedied and improvements mainly redecoration and cleansing of kitchens, were effected on 112 occasions.

Ninety-six improvements were carried out at public houses as a result of informal action.

Food Rejected

The following table is a summary of unsound food voluntarily surrendered during the year:—

Shops, Stalls, etc.:—

Meat—

Bacon	....	....	....	....	....	1,847 lbs.
Beef	....	....	....	....	....	1,939 "
Beef Sausages	....	....	....	....	....	44 "
Chicken	....	....	....	....	....	864 "
Lamb	....	....	....	....	....	607 "
Lambs' Hearts	....	....	....	....	....	150 "
Lambs' Livers	....	....	....	....	....	374 "
Ox Kidneys	....	....	....	....	....	43 "
Ox Livers	....	....	....	....	....	214 "
Pigs' Kidneys	....	....	....	....	....	104 "
Pigs' Livers	....	....	....	....	....	114 "
Pigs' Spleens	....	....	....	....	....	28 "
Pigs' Trotters	....	....	....	....	....	46 "
Pork	....	....	....	....	....	833 "
Pork Sausages	....	....	....	....	....	51 "
Rabbits	....	....	....	....	....	255 "
Sheep Kidneys	....	....	....	....	....	20 "
Turkey	....	....	....	....	....	572 "
						8,105 lbs.

Canned and Other Foods—

Beans (Canned)	282 lbs.
Biscuits	24 "
Carrots (Canned)	80 "
Confectionery	40 "
Cooked Meats	50 "
Cooked Meats (Canned)	8,170 "
Dairy Topping	14 "
Fish	381 "
Fish (Canned)	230 "
Flour	2,306 "
Foods, Various (Canned)	2,469 "
Foods, Various (Frozen)	11,058 "
Foods, Various (Packets)	
Fruit and Vegetables	370 "
Fruit (Canned)	3,199 "
Fruit Juice	318 "
Fruit Pulp (Canned)	2,121 "
Jams and Marmalade (Canned and Jars)	148 "
Lard	40 "
Macaroni	53 "
Margarine	96 "
Milks, Various	101 "
Nuts	50 "
Peas (Canned)	287 "
Potatoes (Canned)	96 "
Rice	81 "
Soups (Canned)	39 "
Spaghetti (Canned)	138 "
Sultanas	99 "
Sweetcorn (Canned)	40 "
Tomatoes (Canned)	811 "
Tomato Puree, Paste & Juice (Canned)	325 "
	<hr/> 33,516 lbs.

41,621 lbs.

Despite a decrease of 6.5% in meat surrendered voluntarily during the current year, the total for all foods rose by 45.4%.

The Meat Inspection Regulations, 1963, and The Meat Inspection (Amendment) Regulations, 1966.

Meat Inspection—

There is only one licensed private slaughterhouse in the Borough, namely Woodlands Farm Abattoir at Garland Road, Plumstead, owned and operated by the Royal Arsenal Co-operative Society Limited, whose licence was renewed for the current year.

The total number of animals presented for slaughter and inspected at this establishment during the year amounted to 66,710 compared with 61,108 in 1970. Details are as follow:—

Carcases and Offal Inspected and Condemned in Whole or in Part, 1971

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed and Inspected	9,986	730	20	13,512	42,462
All Diseases (except Tuberculosis and Cysticerci)—					
Whole carcasses condemned	—	—	1	—	59
Carcasses of which some part or organ was condemned	1,384	109	8	254	12,123
Percentage of the number inspected affected with disease other than Tuberculosis and Cysticerci	13.8	14.9	45.0	1.9	28.6
Tuberculosis only—					
Whole carcasses condemned	—	—	—	—	—
Carcasses of which some part or organ was condemned	—	—	—	—	637
Percentage of the number inspected affected with Tuberculosis	—	—	—	—	1.5
Cysticercosis—					
Carcasses of which some part or organ was condemned and treated by refrigeration	3	—	—	—	—

Licensing of Slaughterhouses and Slaughtermen—The licence for the one slaughterhouse in the Borough was duly renewed during the year. Nine licences to slaughtermen were also renewed.

Butchers' Shops—Frequent visits are made to these shops and

in addition to the 146 formal inspections carried out, insanitary defects were remedied in 23 instances.

As with other premises, legal proceedings are instituted only after disregard of the Officers' warning and in no instance was this necessary.

Public Health (Imported Food) Regulations, 1968

The London Borough of Greenwich with a river frontage of some 9 miles with more than 40 wharves and two of London's largest and most modern cold stores receives a considerable percentage of London's imported meat stored on behalf of various importers. In addition, considerable quantities of fresh fruit, tinned foods and miscellaneous provisions are dealt with. Visits to wharves and cold stores are made by the Food Inspectors and imported food generally is carefully supervised.

Imported Food Rejected—Unsound or diseased imported meat when surrendered is passed for non-edible and refining purposes, and other unsound food, with the exception of fruit pulp and juice, processed for stock feeding.

The following foods were rejected at the wharves :—

Meat—

Beef	.....	486 lbs.
Beef Livers	.....	155 „
Lamb	.....	13,443 „
Melts	.....	43 „
Mutton	.....	125 „
Oxtails	.....	64 „
Pork	.....	597 „
Sheep	.....	124 „
Sheeps' Hearts	.....	55 „
Sheeps' Kidneys	.....	105 „
Turkey	.....	15 „
	————	15,212 lbs.

Canned and Other Foods—

Asparagus (Canned)	38 lbs.
Cheese	420 "
Cocoa Beans	616 "
Coconut	224 "
Coffee Beans	6,432 "
Dates	4,452 "
Dried Egg Albumen	396 "
Dried Egg Yolk	550 "
Dried Whole Egg	314 "
Fish (Canned)	384 "
Frozen Whole Egg	13,958 "
Fruit (Canned)	55,853 "
Fruit Juice (Canned)	5,992 "
Green Beans (Canned)	201 "
Jam (Jars)	12 "
Lard	48 "
Liver Paté (Canned)	7 "
Mangoes (Canned)	38 "
Meat (Canned)	9,883 "
Milk (Canned)	2 "
Peanuts	100 "
Pimentoes	137 "
Potatoes (Canned)	855 "
Ravioli (Canned)	107 "
Tomato Puree, Paste & Juice (Canned)	1,365 "
White Pepper	56 "
	<hr/> 108,275 lbs.
	<hr/> 123,487 lbs.

Caseous Lymphadenitis—This disease, sometimes called "pseudo-tuberculosis" occurs mainly in sheep although it is occasionally found in cattle, rabbits and chickens. It is met usually in imported sheep carcasses and is often the cause of meat being rejected as unfit for human consumption.

Results of examinations for caseous lymphadenitis are given below :—

	<i>Landed</i>	<i>Examined</i>	<i>Rejected</i>	<i>Weight</i>
New Zealand Sheep	23,657	237	Nil	Nil

Groundnuts—Presence of Aflatoxin—During the year seven samples were taken, three of "groundnut kernels", two of "flaked peanuts" and one each of "peanut shaves" and "nibbed peanuts". All samples were found to be satisfactory on examination.

Dried Egg Albumen and Other Imported Egg Products—(Conditional Releases)—Importations of Dried Egg Albumen and

other Egg Products continued during the year with the following results :—

Country of Origin	Quantity Imported	Containers Sampled	Unsatisfactory	
			Bact.	Chem.
<i>Dried Egg Albumen</i>				
America	2,108 x 50 lb. ctns.	122	—	—
"	898 x 44 lb. ctns.	43	—	—
Denmark	3,610 x 44 lb. ctns.	219	—	—
"	80 x 50 lb. ctns.	5	—	—
Holland	1 x 25 lb. drum	1	—	—
Sweden	110 x 110 lb. ctns.	15	—	—
<i>Dried Whole Egg</i>				
China	6,400 x 110 lb. cases	283	2	—
Czechoslovakia	650 x 44 lb. bags	33	—	—
Holland	4,581 x 55 lb. ctns.	105	1	—
<i>Dried Egg Yolk</i>				
America	10 x 175 lb. drums	3	—	—
Denmark	800 x 55 lb. ctns.	40	—	—
Sweden	400 x 110 lb. drums	30	—	—
<i>Frozen Whole Egg</i>				
Australia	82,368 x 28 lb. tins	137	—	—
China	13,498 x 44 lb. tins	68	—	—
Holland	9,300 x 28 lb. tins	95	—	—
<i>Frozen Egg Albumen</i>				
China	15,044 x 44 lb. tins	231	—	—
Holland	450 x 28 lb. tins	20	—	—

Incidence of Salmonella

Organism Found	Samples		
	Dried Egg Albumen	Dried Whole Egg	Dried Egg Yolk
<i>Salmonella infantis</i>	—	1	—
<i>Salmonella thompson</i>	—	1	—
<i>Shigella flexneri</i>	—	1	—

All unsatisfactory consignments were destroyed.

English Frozen Whole Egg Plant—During the year, 12 routine samples were submitted to the Public Health Laboratory Service

in accordance with the Liquid Egg (Pasteurisation) Regulations, 1963. All passed the Amylase Test.

Egg Processing Plant—Dried Whole Egg—Seventy-four samples were taken and submitted for bacteriological examination, all of which proved satisfactory.

Export Certificates

Many consignments of meat are exported from the Cold Stores located within the Borough and each has to be accompanied by an appropriate "Certificate" to the effect that such consignments have been examined and are considered fit for export for human consumption.

During the year 11 certificates were so issued and the following table indicates the country of origin of the samples, their destinations and the amounts involved :—

Country of Origin	Certificates Issued		Total Weight of Meat Exported
	Country	No.	
Australia	Bermuda	1	4,941 lbs.
"	Cyprus	1	2,100 lbs.
England	Gibraltar	2	9,600 lbs.
"	Singapore	1	1,920 lbs.
New Zealand	Antwerp	1	1,499 lbs.
" "	Bermuda	3	39,094 lbss.
" "	Sweden	1	131 lbs.
" "	Switzerland	1	14 lbs.

Food and Drugs Act, 1955

Eleven hundred and seventy-four samples were submitted for examination to the Public Analyst, of which 317 informal samples were obtained in accordance with the Public Health (Imported Food) Regulations. The remaining samples, consisting of 120 formal and 737 informal were obtained in the normal course of sampling.

Of all the samples obtained, 46 were considered by the Public Analyst to be non-genuine and of this total 33 were in respect of imported foods not on sale to the general public and, in these instances, the importers were notified accordingly.

Of the remaining 13 non-genuine samples, 4 were offences in respect of permitted ingredients not being disclosed on the labels

and these have therefore been excluded from the calculated adulteration figure of 1.05%.

Milk was one of the main foods sampled, the total being 111 samples of which 103 were in respect of milk other than Channel Islands. Of this latter figure, the average percentage of milk fat was 3.65% and solids-not-fat 8.65%, the standard being 3.00% and 8.50% respectively. However, in accordance with the *Milk and Dairies (Channel Islands and South Devon Milk) Regulations, 1956*, milks in these categories must contain a minimum of 4% milk fat and 8.50% solids-not-fat. Eight Channel Islands milks sampled in the Borough during the year proved to have an average content of 4.48% and 8.70% respectively.

Dried Milk Regulations, 1965

Two samples of dried milk taken during the year proved satisfactory.

The Condensed Milk Regulations, 1959

Two samples of condensed milk were taken during the current year and were found to be satisfactory.

Other Food Examinations

Information concerning the analyses of these samples is given in the following table :—

Article	How Obtained	EXAMINATION		Action Taken
		Bact. or Chem.	Result	
Dairy Cream Cakes	Complaint from member of the public that the cream was sour.	Chem.	Cream had a slightly oxidised flavour but no sour taste was detected. However, the acidity of the cream and that of fat of the cream were higher than normal, consistent with slight deterioration and staleness.	Complainant informed of Public Analyst's report—replacement arranged. No further action.

FOOD AND DRUGS ACT, 1955

Number and Description of Samples Submitted for Analysis under
the above Act during the year 1971

(including samples taken under the Public Health (Imported Food)
Regulations)

ANALYSES

ARTICLE	Number Examined			Number Adulterated, etc.		
	Formal	Informal	Total	Formal	Informal	Total
<i>Alcoholic Beverages</i>	11	6	17	—	—	—
<i>Baby Foods</i>	—	5	5	—	—	—
<i>Beverages</i>						
Tea & Products	—	24	24	—	—	—
Chocolate Drink	—	7	7	—	—	—
Coffee & Products	—	10	10	—	—	—
Roasted Chicory	—	1	1	—	—	—
<i>Cereals and</i>						
<i>Cereal Products</i>						
Biscuits	—	25	25	—	—	—
Bread	—	2	2	—	—	—
Breadcrumbs	—	1	1	—	—	—
Cake & Pudding						
Mixtures	—	8	8	—	—	—
Cereal Breakfast	—	1	1	—	—	—
Cereal with fruit						
and nuts	—	1	1	—	—	—
Other cereals and						
products	—	17	17	—	—	—
Confectionery,						
flour	—	40	40	—	—	—
Cream cakes	—	1	1	—	1	1
Flour and Flour						
mixes	—	13	13	—	—	—
Pastry, uncooked	—	2	2	—	—	—
Pastry mixture	—	2	2	—	—	—
Starch products	—	2	2	—	—	—
<i>Chocolate</i>						
<i>Confectionery</i>						
Chocolate						
couverture	—	1	1	—	—	—
Chocolate spread	—	1	1	—	—	—
Chocolate						
substitute	—	1	1	—	—	—
Confectionery,						
chocolate	—	10	10	—	—	—
<i>Dairy Products</i>						
Butter	—	1	1	—	—	—
Butter substitute						
(canned)	—	3	3	—	3	3
Cheese and cheese						
preparations	—	28	28	—	1	1
Cream	—	8	8	—	—	—

ARTICLE	Number Examined			Number Adulterated, etc.		
	Formal	Informal	Total	Formal	Informal	Total
<i>Dairy Products</i> (contd.)						
Ice Cream	—	12	12	—	—	—
Ice Cream mix	—	1	1	—	1	1
Margarine	—	6	6	—	—	—
Milk	107	5	112	—	—	—
Milk (canned)	—	1	1	—	—	—
Milk, condensed & dried	—	4	4	—	—	—
Milk, evaporated	—	4	4	—	—	—
Milk, other products	—	2	2	—	1	1
<i>Egg and Egg Products</i>						
Egg custard with rice	—	1	1	—	—	—
<i>Fish and Fish Products</i>						
Fish (canned) and fish products	—	37	37	—	3	3
Fish, raw or cooked	—	6	6	—	—	—
Fish curry	—	1	1	—	—	—
Fish, frozen	—	1	1	—	—	—
Fish paste or spread	—	11	11	—	—	—
<i>Flavourings and Colourings</i>	—	13	13	—	1	1
<i>Fruit and Fruit Products</i>						
Fruit (canned)	—	42	42	—	1	1
Fruit, dried	—	14	14	—	—	—
Fruit, fresh	—	4	4	—	—	—
Fruit Juice	—	26	26	—	—	—
Fruit, syruped and glacé	—	8	8	—	—	—
<i>Herbs and Seasoning</i>						
Curry powder	—	1	1	—	—	—
Herbs and Season- ing products	—	13	13	—	—	—
Pepper	—	3	3	—	—	—
Seasoning mixtures	—	2	2	—	—	—
Stuffing mixtures	—	4	4	—	—	—
<i>Jam & Preserves</i>	—	15	15	—	—	—
<i>Meat and Meat Products</i>						
Meat products	—	43	43	—	1	1

ARTICLE	Number Examined			Number Adulterated, etc.		
	Formal	Informal	Total	Formal	Informal	Total
<i>Meat and Meat Products (contd.)</i>						
Meat products (canned)	—	55	55	—	2	2
Meat products (bottled)	—	1	1	—	—	—
Meat, raw or cooked	2	4	6	—	—	—
Instant stock powder	—	1	1	—	—	—
Fried Pork Rind	—	1	1	—	—	—
<i>Nut and Nut Products</i>	—	30	30	—	1	1
<i>Oils and Fats</i>	—	20	20	—	1	1
<i>Pickles & Sauces</i>	—	57	57	—	3	3
<i>Sauce Mix</i>	—	4	4	—	—	—
<i>Soft Drinks</i>	—	24	24	—	1	1
Soft Drink powder	—	5	5	—	—	—
Shandy	—	1	1	—	—	—
<i>Spices and Condiments</i>	—	40	40	—	1	1
<i>Soups (canned and dried)</i>	—	19	19	—	2	2
<i>Sugar and Sugar Products</i>						
Sugar	—	8	8	—	—	—
Sugar confectionery	—	25	25	—	1	1
Blancmange powder	—	2	2	—	—	—
Honey & Spreads	—	2	2	—	—	—
Syrup & Treacle	—	3	3	—	—	—
<i>Vegetables and Vegetable Products</i>						
Vegetables, dried	—	22	22	—	—	—
Vegetables (canned)	—	58	58	—	3	3
Vegetables, potato	—	1	1	—	1	1
Other vegetable products	—	8	8	—	4	4
Tomatoes (canned)	—	3	3	—	—	—
Tomato paste	—	5	5	—	1	1
Tomato juice	—	3	3	—	—	—
<i>Unclassified</i>						
Angelica	—	1	1	—	—	—
Arrowroot	—	1	1	—	—	—

ARTICLE	Number Examined			Number Adulterated, etc.		
	Formal	Informal	Total	Formal	Informal	Total
<i>Unclassified (contd.)</i>						
Aspic Jelly	—	1	1	—	—	—
Powder	—	1	1	—	—	—
Barley, Pearl	—	1	1	—	—	—
Bicarbonate of Soda	—	1	1	—	—	—
Blackcurrant Pastilles	—	1	1	—	—	—
Caraway Seeds	—	1	1	—	—	—
Chewing Gum	—	2	2	—	—	—
Chop Suey	—	1	1	—	—	—
Coffee Maté	—	2	2	—	—	—
Cole Slaw Salad	—	1	1	—	—	—
Cornflour	—	2	2	—	—	—
Cough Syrup	—	1	1	—	—	—
Cranberry Sauce	—	1	1	—	—	—
Cream of Tartar	—	4	4	—	1	1
Crystallised Rose Petals	—	1	1	—	—	—
Cu-bits, Relish	—	1	1	—	—	—
Cummin Seed, ground	—	1	1	—	—	—
Custard	—	1	1	—	—	—
Dessert Powders	—	16	16	—	—	—
Dessert Preparations	—	5	5	—	1	1
Dill Seed	—	1	1	—	—	—
Epsom Salts	—	1	1	—	—	—
Fortified Soya Powder	—	2	2	—	—	—
Fynnon Salts	—	1	1	—	—	—
Gelatine	—	1	1	—	—	—
Ghee Substitute (canned)	—	2	2	—	2	2
Glycerine	—	1	1	—	—	—
Gravy preparation and mix	—	7	7	—	—	—
Glucodin	—	1	1	—	—	—
Glucose Tablets	—	1	1	—	—	—
Health Drink, Blackcurrant	—	1	1	—	—	—
Honey jel	—	1	1	—	—	—
Imps	—	1	1	—	—	—
Indigestion tablets	—	1	1	—	—	—
Jelly, table, tablets and compound	—	14	14	—	—	—
Junket preparations	—	1	1	—	—	—
Laxative tablets	—	1	1	—	—	—
Liquifruta	—	1	1	—	—	—

ARTICLE	Number Examined			Number Adulterated, etc.		
	Formal	Informal	Total	Formal	Informal	Total
<i>Unclassified (contd.)</i>						
Liver Salts	—	1	1	—	—	—
Liquid Paraffin	—	1	1	—	—	—
Marzipan	—	1	1	—	—	—
Medicines	—	9	9	—	1	1
Meringue powder	—	1	1	—	1	1
Mineral Water	—	1	1	—	—	—
Mixed Peel	—	1	1	—	—	—
Orange Juice and Rose Hip syrup	—	1	1	—	—	—
Paella	—	1	1	—	—	—
Pasta	—	2	2	—	—	—
Pease Pudding (canned)	—	2	2	—	—	—
Peel, candied	—	3	3	—	—	—
Peppermint Tablets	—	1	1	—	—	—
Pie Filling	—	1	1	—	—	—
Pizza	—	2	2	—	—	—
Polenta	—	1	1	—	—	—
Proprietary Foods	—	3	3	—	1	1
Pudding, Christmas	—	1	1	—	—	—
Ravioli in Sauce	—	1	1	—	—	—
Rice	—	2	2	—	—	—
Rosehip Syrup	—	3	3	—	—	—
Rusks	—	3	3	—	—	—
Sago	—	1	1	—	1	1
Salads	—	2	2	—	—	—
Savoury with mushroom (canned)	—	1	1	—	—	—
Sauerkraut	—	1	1	—	—	—
Soda Water	—	1	1	—	—	—
Soup Nuts	—	1	1	—	—	—
Spreads	—	2	2	—	—	—
Suet, shredded	—	1	1	—	—	—
Supro	—	1	1	—	—	—
Sweetener, Artificial	—	1	1	—	—	—
Tapioca	—	1	1	—	1	1
Toast	—	5	5	—	2	2
Whipping compound	—	1	1	—	1	1
Yeast, dried	—	2	2	—	—	—
Yeast Vite Tablets	—	1	1	—	—	—
Yoghourt	—	2	2	—	—	—
TOTAL	120	1,054	1,174	—	46	46

**Administrative Action Taken in Regard to Samples Reported to be
NOT GENUINE**

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
<i>(a) In respect of normal sampling</i>			
96	Lemon Flavouring	Contained an artificial yellow colouring matter, the presence of which was not declared on the label as required by the Labelling of Food Order.	Wholesaler advised of the Public Analyst's comments and they have been requested to arrange for the label of the product to be amended accordingly.
159	Chips (Potatoes)	Decomposing and unfit for human consumption.	Submitted following complaint of food poisoning from member of the public.
213	Oyster Soup Guinness (Canned)	Contained alcohol, 0.04%. This proportion of alcohol corresponds to only 1% of Guinness' stout, and was considered insufficient to justify the description "Oyster Soup with Guinness".	Producer advised of Public Analyst's report on the product and asked for observations thereon.
353	Apple Dessert (Bilberry Flavour)	Contained sulphur dioxide, 400 p.p.m., the presence of which was not disclosed on the label.	The Public Analyst's comments have been drawn to the attention of the suppliers of the dessert and observations have been requested.
364	Lemon Drink	Contained cyclamic acid, 0.62%. Cyclamic acid is an artificial sweetener not permitted in food.	The comments of the Public Analyst were drawn to the attention of the manufacturers and their observations requested.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
365	Cough Mixture	Contained, <i>inter alia</i> , chloroform, 0.11% instead of 0.4% as stated on the label.	The comments of the Public Analyst were drawn to the attention of the manufacturers and their observations requested.
415	Cream of Tartar, B.P. Quality	Failed to comply with the standard of the British Pharmaceutical Codex in respect of the Assay and Sulphate limits. Cream of Tartar is not included in the British Pharmacopoeia.	The comments of the Public Analyst were drawn to the attention of the manufacturers and their observations requested.
425	Cornish Pastie	The sample had a meat content of 9% according to the Meat Pie and Sausage Roll Regulations a Cornish Pasty should have a meat content of not less than 12½%.	The comments of the Public Analyst were drawn to the attention of the manufacturers and their observations requested.
G.550	Concentrated Tomato Paste	Howard Mould Count 65%. Should be not more than 50%.	The comments of the Public Analyst have been forwarded to the manufacturers for their observations.
G.555	Thick Pea Soup	Consisted of a dried soup mix and should have been so described.	The manufacturers of the Product have been advised of the Public Analyst's report and it has been recommended that the label be amended accordingly. Observations of the manufacturers are awaited.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
G.676	Savoury Tuna with Celery and Gherkins	Contained 450 p.p.m. of tin. Can corroded.	<p>The observations of the Public Analyst were conveyed to the manager of the supermarket retailing the product and the remaining stock of 37 tins was surrendered.</p> <p>The manager also gave an assurance that stocks held in other branches of the firm would also be withdrawn from sale immediately.</p> <p>Subsequent visits to food premises in the borough confirmed that the product was no longer on display.</p> <p>The supplier of the fish was also advised of the Analyst's findings and they confirmed that the stocks examined were imported from France a year ago and further supplies would not be imported.</p>
G.810	Dairy Cream Cakes	Slightly Stale.	No further action.
G.844	Prawn Cocktail Sauce	Surface mould growth due to perforated metal cap.	<p>The proprietor of the shop advised of the Public Analyst's report. No further stocks of the consignment left, however, at that time.</p> <p>When further stocks become available another sample will be taken and submitted for examination.</p>

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
<i>(b) In respect of samples taken under Imported Food Regulations</i>			
TT.14	Onions in Sauce (Canned)	The label did not bear any statement of the ingredients as required by the Labelling of Food Order.	The Importers have been advised of the Public Analyst's comments and requested to inform the suppliers that steps should be taken to ensure that future consignments of the product be labelled in accordance with the Labelling of Food Order.
TT.15	Mushrooms in Sauce (Canned)	The label did not bear any statement of the ingredients as required by the Labelling of Food Order.	The Importers have been advised of the Public Analyst's comments and requested to inform the suppliers that steps should be taken to ensure that future consignments of the product be labelled in accordance with the Labelling of Food Order.
TT.19	Longans (Canned)	Claimed to contain vitamins, but no quantitative particulars were stated as required by the Labelling of Food Order.	The Importers have been advised of the Public Analyst's comments and requested to inform the suppliers that steps should be taken to ensure that future consignments of the product be labelled in accordance with the Labelling of Food Order.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
TT.39	Corned Beef (Canned)	Contained—Sodium nitrate, 350 p.p.m., sodium nitrite 40 p.p.m., the presence of which were not mentioned in the declaration of ingredients on the label.	The observations of the Public Analyst were drawn to the attention of the Importers of the product, with a request that the suppliers be advised to amend the label in accordance with the Labelling of Food Order 1953. In a reply received from the Importers it was confirmed that all future shipments from the suppliers of the product would be correctly labelled.
TT.40	Carrots (Canned)	Contained salt, 0.6% the presence of which was not disclosed on the label.	The observations of the Public Analyst were drawn to the attention of the Importers of the product with a request that the suppliers be informed that all future consignments of the tinned carrots be labelled in accordance with the Labelling of Food Order 1953.
TT.50	Pure Vegetable Ghee (Canned)	An unsuitable description, since the product was not a form of ghee but a substitute made from hardened vegetable oils. No declaration of ingredients appeared on the label.	The attention of the Importers has been drawn to the Public Analyst's comments and advised that in view of the Analyst's remarks the product should in future be labelled "Ghee substitute". The Importers have replied stating the suppliers have been contacted and their comments will be forwarded directly they are to hand.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
TT.52	Pure Ghee Substitute (Canned)	Unsuitably labelled. The label did not specify the name and address of the packer or labeller, nor include a statement of ingredients as required by the Labelling of Food Order.	<p>The attention of the Importers has been drawn to the Public Analyst's comments and advised that in view of the Analyst's remarks the product should in future be labelled in accordance with the Analyst's recommendations.</p> <p>The Importers have replied stating they will do all they can to have the error rectified and the comments of the Public Analyst have been passed to the suppliers of the product.</p>
TT.56	Pure Vegetable Ghee (Canned)	An unsuitable description, since the product was not a form of ghee but a substitute made from hardened vegetable oils. No declaration of ingredients appeared on the label.	See sample TT.50.
TT.67	Almonds (Shelled)	Consisted of Bitter Almonds and yielded—Hydrocyanic acid, 0.20%. These almonds are poisonous and should only be sold, properly labelled, for manufacturing purposes.	The Importers have indicated that the almonds are to be used for manufacturing purposes, most probably for the manufacture after blanching of marzipan.
TT.71	Toast	Contained boric acid, 250 p.p.m. This article is not permitted to contain boric acid preservative.	The attention of the Importers has been drawn to the comments of the Public Analyst and their observations requested.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
TT.79	Dutch Processed Cheese—Rindless	Contained — Fat, 20.7%; Water, 57.3%. Processed Cheese should not contain more than 48% water unless its composition is stated on the label.	The observations of the Public Analyst have been drawn to the attention of the Importers of the produce with a request for comments and for the suppliers of the cheese in Holland to be advised of the infringement of the Cheese Regulations, 1970.
TT.97	Whipping Agent	Consisted of a mixture of soluble casein and hydrolysed starch, and contained sulphur dioxide, 360 p.p.m., an excessive proportion.	The importers of the compound have been advised of the Public Analyst's comments and the observations of the manufacturers have been requested.
TT.106	Vegetable Ghee (Canned)	An unsuitable description, since the product was not a form of ghee but a substitute made from hardened vegetable oils. No declaration of ingredients appeared on the label as required by the Labelling of Food Order.	Letter sent to the Importers advising them of the Public Analyst's comments and pointing out that the description of the product under the existing label constitutes an infringement of the Food and Drugs Act, 1955, and also contravenes the Trade Description Act, 1968. The observations of the Importers were requested.
TT.118	Cocktail Toast	Contained boric acid, 330 p.p.m., an added preservative not permitted in food by the Preservatives Regulations.	Correspondence between Importer and Manufacturer is still in progress.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
TT.125	Cooked Pork Shoulder (Canned)	Meat content, 80%. The label of the product did not bear the appropriate description required by the Canned Meat Product Regulations. Neither did it include the appropriate designation of each of the ingredients as required by the Labelling of Food Order.	The Importers were advised of the Public Analyst's comments and their observations requested. In reply the importers confirmed that the suppliers in Holland had been informed of the adverse report and instructed to amend the label accordingly.
TT.131	Tapioca	Consisted of a mixture of sago and tapioca.	Administrative error — samples satisfactory.
TT.132	Flaked Sago	Consisted of Lump Tapioca.	Administrative error — samples satisfactory.
TT.137	Hot Pickled Cherry Peppers (Bottled)	The label did not include a declaration of each of the ingredients as required by the Labelling of Food Order.	The importers were advised of the Public Analyst's comments and their observations requested. In reply the importers confirmed that the suppliers in Canada had been informed of the adverse report and instructed to amend the label accordingly.
TT.156	Confectionery (Mints)	Contained two artificial colouring matters, one of which, Patent Blue V, is not permitted in food by the Colouring Matter in Food Regulations.	The comments of the Public Analyst were drawn to the attention of the importers and as a result the consignment was subsequently shipped back to the country of origin.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
TT.177	"Frothee"	Contained benzoic acid, 1,200 p.p.m. This article is not permitted to contain benzoic acid preservative.	The comments of the Public Analyst were drawn to the attention of the importer and as a result of further correspondence the importer gave an undertaking not to sell the product in this country.
TT.178	Pure Ghee Substitute (Canned)	The label did not include a declaration as required by the Labelling of Food Order.	The Importer's attention was drawn to the report of the Public Analyst and in reply the importer enclosed a letter which they had passed to the suppliers requesting that the label of the product be amended to conform with the Labelling of Food Order, 1953.
GP.202	Ice Cream Ready Mix	Labelled entirely in a foreign language.	The comments of the Public Analyst were drawn to the attention of the Importers and their observations requested. In their reply the Importers stated that they were aware that the German directions did not comply with the Ice Cream Regulations and accordingly the packets would be provided with fresh labels, printed in English indicating that the product was a milk ice mix and not be sold as ice cream.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
GP.207	Mineral Water	Labelled entirely in foreign languages, with no indication of the minerals present.	The Importers who were advised of the comments of the Public Analyst have given an assurance that the mineral water is not for sale and was imported into the country for sole use in the Anglo-Belgium Club, S.W.1.
GP.210	Chocolate Milk	The label bore no list of ingredients.	The product was imported into this country by N.A.A.F.I. and is not for sale in the United Kingdom. The consignment has been transferred for shipment to the Far East and under the circumstances no further action is contemplated.
GP.213	Saury in Oil	The ingredients stated did not include the name of the fish.	The attention of the Importers was drawn to the Public Analyst's comments and their observations requested. The Importers have given an assurance that the suppliers in the Soviet Union have been advised of the labelling offence and further supplies of the product will not be imported into this country under the existing label.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
GP.214	Vegetable Ghee	The words constitute a false trade description.	<p>The observations of the Public Analyst were drawn to the attention of the Importers and as a result of a subsequent meeting between the Importers and Manufacturers it was agreed that the product would in future be imported and labelled as ghee substitute.</p>
GP.255	Barbecue Sauce	Contained 700 p.p.m. of non-permitted benzoic acid preservative. Ingredients not stated.	<p>The Public Analyst's observations were passed to the Importers and their comments invited.</p> <p>In reply the Importers pointed out that the particular consignment from which the sample had been submitted was not intended for distribution in the United Kingdom and it had in fact been exported in total.</p> <p>The Importers, however, have been in touch with the suppliers of the product pointing out that any further consignments intended for distribution in the United Kingdom must comply with the Labelling of Food Order, 1953.</p>

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
GP.256	Pepper	Labelled in a foreign language.	The Public Analyst's observations were drawn to the attention of the Importers. The Importers in reply advised that the consignment was obtained as a sample and was not for distribution. Any future consignments of the product would be labelled in accordance with the Labelling of Food Order, 1953.
GP.257	Herrings in Natural Oil	Had a slight taint of decomposition.	Manufacturer advised.
GP.264	Cocktail Vegetables	Ingredients and name and address not stated. "Enriched with Vitamin C":—The minimum amount present was not stated.	The observations of the Public Analyst were brought to the attention of the importers of the product who in reply advised that the sample was one of a sample consignment and in view of the adverse report, future consignments of the commodity would carry a label to conform with regulations. A sample from a fresh consignment has since been submitted for examination and the report from the Analyst is awaited.

Sample No.	Article	Nature of Adulteration and/or irregularity	Action Taken
GP.313	Spinazie	The container bore no description in English and no name and address.	The report of the Public Analyst was drawn to the attention of Importer and observations requested. In their reply the Importers stated the consignment was a sample and was not intended for retail distribution.
GP.314	Capucijners (Jar)	The container bore no description in English and no name and address.	The report of the Public Analyst was drawn to the attention of Importer and observations requested. In their reply the Importers stated the consignment was a sample and was not intended for retail distribution.
GP.315	Capucijners (Canned)	The container bore no description in English and no name and address.	The report of the Public Analyst was drawn to the attention of Importer and observations requested. In their reply the Importers stated the consignment was a sample and was not intended for retail distribution.

SECTION VI

MISCELLANEOUS

HEALTH EDUCATION SERVICE

The main functions of the Health Education Service are :—

1. To augment the numbers of health educators operating in the Borough.
2. To provide facilities and support services for those health educators.
3. To keep the level and quality of health education taking place constantly under review and to formulate and carry out activities designed to fill any gaps, notably in the areas of mass public education and groups not reached by formalised processes

In many cases the above functions become interwoven and difficult to separate in a rational manner for the purposes of a review of the Service's activities during the year. This Report, therefore, highlights some of the more notable events of 1971. It should be remembered, however, that a high level of day-to-day service is maintained throughout the year in providing support services for individuals, groups or institutions, as well as continuing research to maintain sophistication of approach and ideas and, above all, information communication and development of educational trends and aids. The numbers of topics to be handled under the umbrella title of "health education" are such that priorities have to be determined as to allocation of time and resources with the added proviso that this timetable requires sufficient flexibility to allow for the unexpected, i.e. an outbreak of infection; a new breakthrough in preventive medicine or a radical re-appreciation of a hitherto accepted method of healthy activity. The alphabetical list of topics appended to this Report will give some indication of the variety handled.

HEALTH EDUCATION OF THE COMMUNITY

(a) *LOCAL ORGANISATIONS*

Each year all local organisations in the Borough (about 400) are circulated with details of the programmes of health education provided free of charge. This has always been a popular service and resulted in 171 requests for film shows, talks, or the two combined (1970 — 169). Topics selected ranged over the whole field.

(b) *DISPLAYS*

Sites available for displays are, unfortunately, limited. Occasionally a shop proprietor will allow use to be made of a part of his premises but generally displays are confined to the foyer of the headquarters premises of the Directorate and to Child Welfare Clinics. However, a shop front in the main shopping centre of the Borough, owned by the Council, is made available to the Directorate for three periods, each of 3 weeks, during the year and a full display employing modern methods of lighting and animation is mounted. Topics selected for 1971, were Child Care; Smoking and Health; Welfare of the Disabled.

(c) *EXHIBITIONS*

(i) *Greenwich Show and Carnival*. This event, which takes place in September each year, is a major occurrence in the Council's calendar. Up to 12,000 people visit the Show which includes marquees depicting the activities of the Council. The Health Education Service is responsible for the Directorate's participation in this event and, in 1971, staged a major exhibit showing in detail the facilities available (including some 110 photographs taken, printed and mounted by the Service). A float was also provided for the Carnival Procession taking place on the morning of the Show.

(ii) *"Mind" Week: 16-23 October*. The Directorate participated fully in this national campaign mounted by the National Association for Mental Health. The whole of the Victoria Hall was taken over for a display of work by centres for the mentally disordered, including a display of paintings from the local hospital. Visitors to the exhibition were required to enter through a totally enclosed exhibit 15 ft. x 12 ft. (nicknamed the "Black Box") illustrating the symptoms of mental disorder and the older inhuman methods of "treatment". At one stage, visitors were required to pass through a section which by flashing lights, strange odours and noises, oscillating mirrors and spongy underfooting sought to simulate the effects of physical disorientation occurring in some types of mental illness. It was hoped by this means to prepare them psychologically for the remainder of the exhibition.

During the week of the Exhibition, Open Days were held at training centres and occupational day centres, and a Public Meeting was held.

(d) *CAMPAIGNS*

(i) *Smoking and Health*. During the year, a pilot survey was made as to the willingness of shop-keepers to put up signs requesting customers not to smoke. Results indicated that just over 50%

would co-operate in this endeavour providing sufficient support was forthcoming from the Council. Requests were made via the Health Committee for all premises of the Council used by members of the public to exhibit "No smoking" signs. Unfortunately response was extremely limited and consequent co-operation from shop-keepers minimal.

It has become apparent that appeals to reason are ineffective in reducing the smoking habit and it is regrettable that this attempt to introduce a swing towards making smoking unfashionable by reducing the numbers of places in which addicts can indulge was not more successful.

(ii) *Artificial Resuscitation*. From 10-21 May, public lectures of expired air resuscitation were held at various centres in the Borough. Nine sessions were held during the fortnight and response was fair, average attendance being 25.

It is considered crucial that a reservoir of members of the community experienced in this simple form of resuscitation will play a vital part in the avoidance of death from asphyxiation. The sessions consisted of the showing of a film, demonstration using resuscitation models and participation by the audience.

As an extension to this campaign, offers were made to all schools in the Borough. Nineteen schools responded to the offer and a total of 750 children were instructed in this technique.

SUPPORT FOR HEALTH EDUCATORS

Monthly meetings were held for exchange of views, communication of latest information and techniques and previews of films and other aids.

Some 15 sessions of instruction on the use of audio-visual aids were held during the year.

Regular information sheets were issued giving details of facilities available and latest developments.

Projectionist services were provided for practising health educators in child welfare centres, schools and other premises. Resource material and aids continued to be used by many disciplines: e.g. health visitors; midwives; school sisters; public health inspectors; social workers; teachers and individuals within the community.

A major development of the Service during the year was the compilation and publication in a prestige format of a catalogue of all visual aids available in health education from national as well as local sources. This was freely circulated and contributed in no small measure to the awakening of interest and involvement in this field by many potential health educators.

A further development was the initiation of production of

sophisticated posters and leaflets on a variety of subjects to supplement the diminishing availability from national sources. Many of these have been adopted by other local authorities and orders for large quantities have been received.

Our "home-produced" 28 min. colour 16mm. optical sound film "Henry" on the services provided for the elderly, made in 1970, has been an instant success. Screenings have been made to most pensioners' clubs and many other organisations and schools. Requests for loans have been received from all parts of the United Kingdom.

ALPHABETICAL LIST OF HEALTH EDUCATION ASPECTS

1. Alcoholism.
2. Artificial Resuscitation.
3. Cancer: (a) Breast, (b) Cervix, (c) Rectum, (d) Lung, (e) —
4. Careers: (a) Health Visitor, (b) Midwife, (c) District Nurse, (d) Geriatric Visitor, (e) Public Health Inspector, (f) —
5. Clean Air.
6. Clean Water.
7. Dental Health and Fluoridation.
8. Drug Addiction.
9. First Aid.
10. Food Hygiene and Food Poisoning.
11. Foot Health.
12. Health Guidance: (a) Sleep, (b) Fresh Air, (c) Exercise, (d) —
13. Health Services: (a) Environmental Health, (b) Personal Health, (c) School Health, (d) Geriatric Health, (e) Hospitals, (f) General Practitioner, (g) Dental Services, (h) Ophthalmic, (i) Other Supplementary, (j) —
14. Home Safety.
15. Housing (*Public Health*): (a) Maintenance, (b) Clearance and Redevelopment, (c) Overcrowding, (d) —
16. Infectious Diseases: (a) Tuberculosis, (b) Measles, (c) Whooping Cough, (d) Polio, (e) Diphtheria, (f) Smallpox, (g) Tetanus, (h) Influenza, (i) Cough and Colds, (j) Rubella, (k) Immunisation and Vaccination, (l) —
17. Maternal and Child Welfare.
18. Mental Health: (a) Behaviour, (b) Social, (c) —
19. Noise Abatement.
20. Nutrition and Obesity.
21. Old People's Welfare (*Health Services*).
22. Personal Hygiene.

23. Pest Control: (a) Rats, (b) Mice, (c) Insects, (d) Pigeons, (e) Foxes, (f) ———
24. Physiology of the Body.
25. Pre-Retirement.
26. Sanitation.
27. Sex Education: (a) Puberty, (b) Relationships, (c) Venereal Disease, (d) Family Planning, (e) Menopause.
28. Smoking and Health.
29. Specific Diseases: (a) Asthma, (b) Bronchitis, (c) Cardiac, (d) Chest, (e) Diabetes, (f) Epilepsy, (g) Glandular, (h) Rheumatism, (i) Stroke, (j) Ulcers, (k) ———
30. Use of Leisure.
31. Water Safety.
32. Working Condition (*Public Health*) (a) Temperature, (b) Lighting, (c) Ventilation, (d) Sanitation, (e) ———

MEDICAL EXAMINATIONS

GENERAL

When appropriate, medical examinations in respect of new entrants to the Council's service and superannuation scheme are carried out by this Directorate's Medical Officers who also undertake investigations into long-term staff sickness, results and advice on which are conveyed to the Council for consideration and action.

In addition, after arrangements have been made for a chest X-ray, trainee students are subject to an examination by one of the department's Medical Officers prior to their entering Training Colleges or Departments of Education in the Borough.

MEDICAL ASSESSMENTS—HOUSING

Under the Council's Rehousing Scheme, if an applicant's case is supported on medical or sociological grounds, a certain degree of priority is afforded.

During the current year, some 1,238 cases for re-housing or transfer were reviewed and medically assessed. A high proportion of these applications were subject to up-to-date reports from the Public Health Inspectors, Health Visitors and Social Workers in order that the degree of priority should be fairly allocated. Forty-five cases were of such medical significance as to warrant special consideration by the Housing Sub-Committee.

In 5 instances it was necessary for a Medical Officer to make a domiciliary visit to enable the appropriate assessment to be made.

DEPARTMENTAL TRANSPORT

Despite extensive changes brought about by the introduction of the Social Services Act of 1970, involving the division of the previously integrated department, such were the circumstances with regard to vehicles and staff that the Departmental Transport was obliged to continue to serve both the Health *and* the new Social Services Directorate during the current year.

Duties of the Transport Officer were made even more onerous by the fact that, with almost no increase of vehicle strength, he was constrained to cater for a 30% increase in meals-on-wheels as well as an expansion in services for the various handicapped groups.

Clearly, transport for the new Health Directorate will not be of the same order as hitherto, the scope for which has not yet been finally agreed. In addition to catering for all the Child Health Centre demands and collections and deliveries concerning immunisation, vaccination and cervical cytology services it will, of course, have to meet an increasing need for the medical loans and nursing aids scheme.

During the current year, an old L.C.C. coach which had reached the end of its useful life for the Council's purposes was sold for £300 to St. George's Hospital, Wimbledon, for carrying its wheel-chair cases.

A new minibus was introduced to the Stonefield Children's Reception Centre but the vehicle it replaced was retained as a standby.

During 1971, the policy of replacing a converted van used for conveying homebound elderly to Day Clubs, etc., by a Rootes Commer 2000 converted van with tail lift was so successful that it was the intention to introduce a further two vans of similar design early in the following year.

At 31st December, 1971, the Transport Officer was responsible for some 60 vehicles being used in the service of both Directorates.

POST-ENTRY TRAINING

Despite a particularly difficult year administratively, during 1971, the numbers of staff indicated below successfully completed training for the following qualifications :—

Health Visitor Certificate—6, District Nursing Certificate—10, Certificate of State Registration in Chiropody — 1, Diploma in Public Health Inspection — 2, Diploma in Municipal Administration — 2.

Several staff embarked on examination courses in Autumn 1971 and, throughout the year, continued and extensive use was made of facilities offered by colleges, professional bodies and other official organisations for courses not leading to qualifications.

Medical Officers attended refresher and specialised courses on paediatrics, educational subnormality, deafness, drug addiction, child psychiatry, adolescence, the handicapped child and other topics.

In addition to the usual refresher courses, nurses and midwives were nominated for a variety of other courses and seminars covering management, fieldwork and practical work instruction, health education, school nursing, rehabilitation of the cancer disabled, mental illness, multiple sclerosis, community coronary care, renal dialysis, family planning, etc.

Courses attended by Public Health Inspectors dealt with several aspects of food inspection, pollution, housing and other specialised fields of environmental health. Rodent control courses were attended by Rodent Operatives.

Courses for Dental Officers, including dental treatment of handicapped children, seminars for dental auxiliaries, courses for Chiropodists, including chiropody administration and courses on subjects of interest to the Health Education Staff were also attended during the year.

SECTION VII

SCHOOL HEALTH SERVICES REPORT OF THE PRINCIPAL SCHOOL MEDICAL OFFICER

The Inner London Education Authority is responsible for the School Health Service but, by virtue of an agreement required by Section 32 of the London Government Act, 1963, there is joint use by the Authority and the Borough of professional staff, premises and equipment. The Medical Officer of Health is the Principal School Medical Officer of the Inner London Education Authority for the area and is responsible to that Authority for the day-to-day running of the service.

Introduction

In presenting the 1971 Report on the Health Services for school children in the London Borough of Greenwich, the format continues as in previous years. Supported by *ad hoc* clinics, the School Health Service consists of routine and special medical inspections. The statistics and tabular records set out as hitherto show yet another year of satisfactory progress.

Of the 40,587 pupils attending the Education Authority's schools in Greenwich during 1971, 37.6% (15,255) underwent routine medical inspection and a further 29.4% (11,952) were reviewed in non-routine examinations. On average, each full-time School Medical Officer engaged in the work of the School Health Service in Greenwich carried out 3,944 inspections. This was surpassed by only one other Inner London Borough and was greatly in excess of the average 2,957 inspections per School Medical Officer returned for the Education Authority's area as a whole. On such occasions parents were invited to attend and, although acceptances amounted only to 58.5% (a figure slightly in advance of those for 1970), nevertheless, this proportion was second only to that of one other Inner London Borough. Again, it was parents of children attending Infant Schools who predominated.

Pupils whose physical condition at routine inspections was considered unsatisfactory numbered 189 (1.24%) which compares favourably with the figure of 294 (1.80%) for the previous year. Of the children examined, some 2,579 were referred for treatment or observation; 1,139 (44.1%) were for defects of vision. This figure is well below the average for Inner London. The remainder of the cases referred consisted mainly of defects of the skin, ear, nose

and throat and orthopaedic disabilities. Names of children are recorded in the Borough's Observation/Handicapped Register where the disability noted is such that there is necessity for special education. These pupils are reviewed at the discretion of the Principal School Medical Officer annually. However, certain cases may be reviewed more frequently where the handicap is severe.

Non-Routine Medical Examinations

Following 24,139 comprehensive and 23,003 selective surveys, 551 children, equivalent to 1.36% of the school roll, were found to be verminous. This was an increase of 84 (0.19%) over the previous year. Despite this regrettable deterioration in the Greenwich rate, it was still less than that recorded for the Inner London Education Authority as a whole. The latter increased more unsatisfactorily from 1.30% in 1970 to 1.66% in 1971.

To assess or re-assess educational needs of handicapped pupils, 524 medical examinations were effected, showing a decline of 44% from the 1970 figures. A further 3,460 non-routine examinations were carried out to determine the fitness of children to undertake school journeys. This was a total some 12% higher than that returned for the previous year.

Recuperative holiday examinations were 39, three more than in the previous year. The children were inspected mainly to confirm that they were free from infection and to ensure that they were fit to take part in various holiday pursuits. Examining School Medical Officers are also required to advise teaching staff when pupils are to be excused certain types of activity on medical grounds, for example, children who suffer from bronchial asthma, cardiac disabilities or limb weakness, etc. Restrictions on physical activities are rare in children enjoying ordinary school holiday parties.

Children examined for employment purposes totalled 431. Although these examinations increase the work-load of School Medical Officers in Secondary Schools there is no doubt that they are an essential prerequisite in ensuring that schoolchildren undertake employment which is within their physical and emotional ability. In particular, a thorough medical examination of schoolchildren engaged in the delivery of newspapers, etc. before and after school hours is necessary to ensure that a child's health is not adversely affected by undertaking such part-time work.

Special Education

During the year, tentative arrangements were made for the normal range of school medical and dental facilities to be extended to the Inner London Education Authority's newly acquired Heathview Residential School which is situated within the Borough. This

school was formerly a residential hospital school. The unit caters for severely subnormal pupils the majority of whom are long-stay semi-hospital cases. A scheme covering both medical and dental inspection has yet to be finalised by the Inner London Education Authority with the Regional Hospital Board. Intelligence and educational assessments at this establishment and at the Maze Hill School are undertaken by one of the Inner London Education Authority's own educational psychologists. The latter school (previously a Junior Training Centre under the Borough Council's control) was redesignated as a school on the 1st April, 1971.

At Charlton Park School, which includes a boarding unit for handicapped pupils, there were 170 children on roll. The School Medical Officer and various Consultants who specialise in a wide variety of physical handicaps continue to visit the school at regular intervals. As in previous years, speech therapy and physiotherapy are routinely provided within the school curriculum.

Other Special Schools in the Borough include :—

<i>School</i>	<i>Total on Roll</i>
Beverley Primary Mixed School for Deaf Children	58
Meridian Junior Mixed Infants' School for Partially Deaf Children (<i>incorporating a Nursery Class and Partially Hearing Unit</i>)	27
Hawthorn Cottage Mixed School for Delicate Children	131
Moatbridge Mixed School for Maladjusted Children	33
Griffin Manor Mixed School for Maladjusted/Autistic Children	16
Riverway School for E.S.N. Senior Boys	146
Rose Cottage Mixed School for E.S.N. Children	201
The Slade School for E.S.N. Primary Mixed and Senior Girls	168
Nansen Mixed School for Partially Sighted Children (<i>with Nursery Class</i>)	78
*Maze Hill School for E.S.N. (<i>Severe</i>) Primary Mixed and Senior Mixed	136
*Heathview School for E.S.N. (<i>Severe</i>) Primary Mixed and Senior Mixed	74
*Redesignated as schools on 1st April, 1971.	

NOTE: The above figures show the position of the rolls at the end of the year and not in May, 1971.

Child Guidance

On 1st October, 1971, the Greenwich Child Guidance Unit was transferred from 83, Rochester Way, S.E.3., to its present location at 18, Glenluce Road, SE3 7SB. Sixty-three cases were referred to the Unit during 1971 and 24 cases were awaiting their first interview at the end of the year when 42 cases were still attending the clinic; 34 cases had been closed, 18 applications to attend the Unit withdrawn and a further 38 cases re-opened. Although up to April of the current year there had been no staff changes, the full-time Psychiatric Social Worker resigned early in July and was replaced in October by a part-time officer. As before, the staff of this Unit consists of a Psychiatrist and an Educational Psychologist. Four cases were referred to the Unit directly by family doctors, a novel arrangement introduced during 1971.

Speech Therapy

Facilities in Greenwich during the current year were improved by an increase in equivalent full-time I.L.E.A. Speech Therapists from 2.9 to 3.6 which enabled treatment to 515 pupils to be undertaken. As before, however, the situation demanded the maintenance of a small list of children awaiting treatment.

Prophylaxis

Altogether, 1971 proved to be a satisfactory year and, once again, it is appropriate to comment on the high protective state of Greenwich schoolchildren in relation to other Inner London Boroughs. Excluding the City of London, this Borough occupied first place with regard to poliomyelitis prophylaxis, second in respect of diphtheria and whooping cough immunisations and fourth in small-pox vaccinations.

Compared with the percentages of 93.0, 92.9, 88.3 and 71.9 for poliomyelitis, diphtheria, whooping cough and smallpox prophylaxis in Greenwich, averages for Inner London as a whole were 89.4, 89.4, 83.9 and 67.9 respectively.

School Premises — Hygiene Reports

In a number of cases the School Medical Officers reported defects in the sanitary arrangements in certain schools and drew attention to others where standards of cleanliness and tidiness were inadequate. Such complaints were duly noted and forwarded to the Local Divisional Office for remedial action.

Observations

Despite a rise in the school roll of over 500, a reduction in the

number of pupils whose physical condition was considered unsatisfactory together with a decrease in those found to require treatment or observation would seem to indicate an improvement in the general physical condition of the Greenwich school child. Support is given to this contention by the fact that there was an overall decline of nearly 12% in children receiving medical treatment (notwithstanding the increase of 15.2% in dental attendances) and a fall of 39.6% in total defects dealt with at Minor Ailments Clinics. Moreover, there was a decrease in cases of infectious diseases as reported by heads of schools with mumps and measles, in particular, showing reduction of 81.7% and 39.6% respectively.

Regrettably, the disquieting increase in the number of verminous cases noted during 1970 persisted. This may be due to an increased resistance to organochlorine compounds shown by the causative parasite. The increase in the number of verminous cases continued throughout the current year albeit at a reduced rate. Furthermore, the provisional statistics for early 1972 indicate that the resurgence of this condition has not yet been contained. However, with the use of malathion in stubborn cases and the introduction of additional treatment facilities, it is hoped that by the end of 1972 the position will have been not only stabilised but improved.

JOHN KERR BROWN,

Principal School Medical Officer.

SCHOOL HEALTH SERVICES

STATISTICAL REPORT 1971

Number of Pupils

(as at May, 1971)

Primary	23,194
Secondary	15,627
Nursery School	611
Special, including Hospital schools	1,155
	<hr/>
	40,587
	<hr/>

Periodic General Medical Inspections

<i>Age Groups</i>	<i>Number</i>	<i>Percentage</i>
4 years and less	1,098	7.2
5 years	2,615	17.1
6 years	1,036	6.8
7 years	932	6.1
8 years	2,440	16.0
9 years	396	2.6
10 years	211	1.4
11 years	1,154	7.6
12 years	1,545	10.1
13 years	557	3.7
14 years	481	3.2
15 years and over	2,790	18.3
Total	15,255	100.0

Pupils found to require treatment at periodic General Medical Inspections
(excluding dental and infestation)

<i>Age Groups Inspected</i>	<i>For defective vision (excluding Squint)</i>	<i>For other conditions</i>	<i>Total individual pupils</i>
4 years and less	4	99	103
5 years	60	325	359
6 years	23	144	163
7 years	56	120	158
8 years	148	287	409
9 years	30	45	70
10 years	20	33	51
11 years	119	117	213
12 years	159	139	282
13 years	69	48	107
14 years	47	43	84
15 years and over	404	206	580
Total	1,139	1,606	2,579

Percentage of Children Inspected who were noted for Treatment

Age and sex		All defects	Vision defects	Defects other than vision
4 years and less	Boys	9.34	0.52	8.82
	Girls	9.42	0.19	9.23
5 years	Boys	15.74	2.51	14.52
	Girls	11.43	2.04	10.04
6 years	Boys	18.30	2.70	15.99
	Girls	13.15	1.74	11.80
7 years	Boys	20.26	7.40	15.03
	Girls	13.74	4.65	10.78
8 years	Boys	17.89	5.77	13.60
	Girls	15.64	6.35	9.94
9 years	Boys	14.48	5.14	11.21
	Girls	21.42	10.44	11.53
10 years	Boys	23.72	6.78	16.95
	Girls	24.73	12.90	13.97
11 years	Boys	18.34	9.34	11.11
	Girls	18.56	11.24	9.19
12 years	Boys	15.92	9.35	6.98
	Girls	20.26	11.09	10.73
13 years	Boys	14.91	11.29	5.24
	Girls	22.65	13.26	11.32
14 years	Boys	11.35	8.29	4.36
	Girls	23.01	11.11	13.09
15 years and over	Boys	16.55	11.70	5.54
	Girls	25.33	17.45	9.36
Total	Boys	*16.33	*6.64	*10.78
	Girls	*17.48	*8.30	*10.26
Total both sexes		16.90	7.46	10.52

* Total average percentage

Non-Routine Medical Inspections

Re-inspections	6,437
Secondary School Reviewals	—
Other non-routine inspections (see next table)	5,612
	<hr/> 12,049
Total Inspections	<hr/> 27,304

Analysis of Non-Routine Medical Inspections

		Number inspected	
		1971	1970
Bathing Centre inspections— <i>scabies</i>	.....	—	—
Bathing Centre inspections— <i>others</i>	.....	6	2
Employment Certificates	.....	431	458
Licences for Theatrical employees	.....	—	—
School Journeys	.....	3,460	3,095
Recuperative holidays— <i>prior to holiday</i>	.....	39	36
Recuperative holidays— <i>on return</i>	.....	—	—
Secondary School Annual Surveys	.....	—	3
Candidates for higher awards	.....	16	23
Nautical school entrants	.....	—	—
Outward Bound and Adventure Courses	.....	13	—
T.B. Contacts	.....	—	—
Boarding school for the delicate :			
Pre-departure inspections	.....	—	—
On return	.....	—	—
Other handicapped pupils :			
Statutory examinations	.....	120	181
Periodic special defect examinations	.....	501	754
Research investigations and enquiries	.....	2	91
		<hr/> 4,588	<hr/> 4,643
Specials, at request of :			
Head Teacher—Special book	.....	105	142
Head Teacher—other	.....	156	184
School Nurse—after health survey	.....	82	93
School Nurse—other	.....	62	52
Divisional Officer (<i>Education</i>)	.....	36	64
District Care Organiser or Care Committee	.....	55	26
Parent	.....	136	138
School Medical Officer	.....	263	220
		<hr/> 895	<hr/> 919
All other non-routine inspections	.....	129	6
Total		<hr/> 5,612	<hr/> 5,568

Medical Treatment of schoolchildren

<i>Type of Clinic</i>	<i>Sessions</i>	<i>New Cases</i>	<i>Attendances</i>
Minor ailments (<i>nurse</i>)	861	3,717	21,985
Minor ailments (<i>doctor</i>)	—	—	
Special investigation	170	196	1,129
Dental	2,050	4,341	13,801
Vision	266	1,668	3,203
Ear, nose, throat	—	—	—
Audiology	45	100	435

Defects treated at Minor Ailments Clinics

<i>Defect</i>	<i>Number</i>
Athlete's foot	110
Verrucae	853
Ringworm : Body	—
Impetigo	9
Other skin diseases	60
Eye diseases	99
Ear diseases	31
Miscellaneous bruises, lacerations etc.	3,537

Special Clinics—Attendances in 1971

	<i>New Cases</i>	<i>Total Attendances</i>
Audiology	100	435
E.N.T.	—	—
Special Investigation Clinics {	196	1,129
Enuresis		
Nutrition		
Behaviour Problems		
Rheumatism or Heart Conditions		

VISION**Routine Medical Inspections**

	<i>Boys</i>	<i>Girls</i>
TOTAL NUMBER TESTED	6,721	6,665
<i>Not Wearing Spectacles</i>	<i>Percentage of No. Tested</i>	
6/6	84.3	82.7
6/9	5.0	5.2
6/12 or worse	4.0	3.6
Noted for Treatment	3.7	3.8

Wearing Spectacles

6/6	3.3	4.6
6/9	1.4	2.0
6/12 or worse	2.0	1.9
Noted for Treatment	3.9	5.6

With and Without Spectacles

(a) Noted for Treatment	8.5
(b) Noted for Observation	3.5
Total of (a) and (b)	12.0

Defects treated at Vision Clinics

<i>Defect</i>	<i>Number</i>
Error of refraction and squint	1,622
Other eye defects	4
Spectacles ordered	681

Findings at Health Surveys

School Roll (<i>May 1971</i>)	40,587
1. <i>Comprehensive Surveys</i>	
(a) Number examined	24,139
(b) Number (occasions) found verminous	187
(c) Percentage found verminous	0.77
2. <i>Selective Surveys</i>	
(a) Number examined	23,003
(b) Number (occasions) found verminous	434
(c) Percentage found verminous	1.89
3. <i>Verminous cases</i>	
(a) Total times vermin found	621
(b) Total percentage found verminous	1.32
(c) Number of individual pupils found verminous	551
(d) Percentage of individuals found verminous (of school Roll)	1.36

4. *Action taken with verminous cases*

(a) Advice and/or Lorexane	458	
(b) Further action	163	
(c) Percentage of cases given advice and/or Lorexane requiring further action		35.59
Voluntary attendances at Bathing centres :		
Number of pupils	67	
Number of statutory notices issued		—

5. *Communicable disease surveys*

Numbers catered for :	1971	1970
Athlete's foot	6,738	4,975
Plantar Warts	6,995	5,398
Dysentery	—	—
Other Communicable diseases	1,098	968
	<hr/> 14,831	<hr/> 11,341

School Medical Inspections (excluding dental and health surveys)

School Roll (May 1971) 40,587

Routine Inspections

Number inspected	15,255
Number found not to warrant examination (7 plus "special scheme")	22

Percentage of Number inspected of

Parent present	58.5
Care Committee present	54.5
Number vaccinated against smallpox	71.9
Number immunised against diphtheria	92.9
Number immunised against whooping cough	88.3
Number vaccinated against poliomyelitis	93.0
Physical condition unsatisfactory	1.2
Referred for treatment of defects	16.9
Referred for treatment of defects other than vision	10.5

Non-Routine Inspections

(i) Specials	5,515
(ii) Re-inspections	6,437
	<hr/>
Total (i) and (ii)	11,952

Number of routine inspections as percentage of school roll 37.6
 Number of non-routine inspections as percentage of school roll 29.4

B.C.G.—1971

	SKIN TESTED		NEGATIVE		B.C.G. GIVEN	
	Schools	Further Education & Training Colleges	Schools	Further Education & Training Colleges	Schools	Further Education & Training Colleges
1st Quarter	982	25	783	12	783	12
2nd Quarter	817	—	745	—	745	—
3rd Quarter	397	—	337	—	337	—
4th Quarter	695	46	607	22	607	22
Total for 1971	2,891	71	2,472	34	2,472	34

Examinations for recuperative holidays

Thirty-nine such examinations were carried out in 1971 (36 examinations in 1970). The schoolchildren were examined after recommendations by school medical officers, the Children's Department, the Education Department or various social agencies, as being in need of a holiday which would provide fresh air, nourishing diet and adequate rest. Sometimes these children were accompanied by their siblings, while mother and children under five also enjoyed a holiday elsewhere.

Infectious Diseases in Schools

<i>Disease</i>	<i>Number</i>
Cerebro Spinal Meningitis	3
Chickenpox	273
Dysentery, diarrhoea or enteritis	22
German Measles	193
Glandular Fever	3
Impetigo	59
Influenza	5
Jaundice and Hepatitis	8
Measles	204
Mumps	49
Ophthalmia and conjunctivitis	13
Ringworm (<i>body</i>)	1
Scabies	25
Scarlet Fever	24
Sore Throat and tonsillitis	59
Whooping cough	26

Number of Children of all ages noted for Treatment or Observation

(Number of children of all ages noted for Treatment or observation expressed as a rate per 1,000 inspected)

NUMBER INSPECTED 15,255

<i>Defects</i>	<i>Treatment</i>		<i>Observations</i>	
	1971	1970	1971	1970
Skin	15.80	18.06	16.58	20.57
Eyes				
(a) <i>Vision</i>	74.66	75.67	30.94	29.88
(b) <i>Squint</i>	11.86	12.24	6.95	6.31
(c) <i>Other</i>	1.05	1.78	2.43	2.51
Ears				
(a) <i>Hearing</i>	8.85	9.73	9.18	7.65
(b) <i>Otitis media</i>	4.52	4.53	5.83	6.67
(c) <i>Other</i>	0.98	0.98	0.98	0.73
Nose and Throat	7.41	9.18	30.48	36.55
Speech	6.49	5.45	10.16	11.02
Lymphatic Glands	0.66	1.65	5.44	7.53
Heart	4.26	4.16	10.36	11.15
Lungs	8.71	7.66	12.79	14.26
Developmental				
(a) <i>Hernia</i>	2.75	1.53	2.88	3.49
(b) <i>Other</i>	4.52	4.22	6.42	5.45
Orthopaedic				
(a) <i>Posture</i>	2.23	1.78	7.08	6.06
(b) <i>Feet</i>	7.15	6.86	30.94	38.75
(c) <i>Other</i>	5.24	4.35	6.69	7.35
Nervous System				
(a) <i>Epilepsy</i>	2.88	2.63	2.03	1.78
(b) <i>Other</i>	1.18	1.47	3.02	2.33
Psychological				
(a) <i>Development</i>	1.90	1.96	14.68	11.20
(b) <i>Stability</i>	2.88	2.39	19.86	16.84
Abdomen	2.36	2.33	3.61	5.63
Other				
(a) <i>Debility</i>	0.39	0.37	1.51	2.33
(b) <i>Enuresis</i>	9.51	10.16	21.17	26.08
(c) <i>Obesity</i>	7.41	7.29	20.32	21.43
(d) <i>Other</i>	3.93	4.59	3.84	2.63
	<hr/>	<hr/>	<hr/>	<hr/>
	21.24	22.41	46.84	52.47
	<hr/>	<hr/>	<hr/>	<hr/>

Comparison of Defects noted at 7-plus routine and 7-plus "Special" Medical Examinations in 1971

(Number of children noted for treatment and observation expressed as a rate per 1,000 inspected)

Number inspected at 7-plus Routine Inspection 3,727

Number inspected at 7-plus Experimental Scheme Inspections 41

<i>Defects</i>				<i>A*</i>	<i>B†</i>
Skin	.....	.....	.....	40.8	24.4
Eyes					
(a) <i>Vision</i>	.....	.....	.....	110.0	97.6
(b) <i>Squint</i>	.....	.....	.....	20.4	—
(c) <i>Other</i>	.....	.....	.....	3.5	—
Ears					
(a) <i>Hearing</i>	.....	.....	.....	25.5	97.6
(b) <i>Otitis media</i>	.....	.....	.....	9.4	48.8
(c) <i>Other</i>	.....	.....	.....	3.0	—
Nose and Throat	.....	.....	.....	50.2	219.5
Speech	.....	.....	.....	17.2	—
Lymphatic Glands	.....	.....	.....	7.8	—
Heart					
(a) <i>Congenital</i>	.....	.....	.....	12.3	—
(b) <i>Acquired</i>	.....	.....	.....	3.8	—
Lungs					
(a) <i>Bronchitis</i>	.....	.....	.....	9.1	—
(b) <i>Asthma</i>	.....	.....	.....	15.6	24.4
(c) <i>Other</i>	.....	.....	.....	5.4	—
Developmental					
(a) <i>Hernia</i>	.....	.....	.....	5.9	—
(b) <i>Other</i>	.....	.....	.....	14.0	73.2

<i>Defects</i>				<i>A*</i>	<i>B†</i>
Orthopaedic					
(a) <i>Posture</i>	.....	.....	.....	11.5	24.4
(b) <i>Feet</i>	.....	.....	.....	42.4	—
(c) <i>Other</i>	.....	.....	.....	9.4	—
Nervous System					
(a) <i>Epilepsy</i>	.....	.....	.....	4.3	—
(b) <i>Other</i>	.....	.....	.....	4.6	—
Psychological					
(a) <i>Development</i>	.....	.....	.....	18.2	24.4
(b) <i>Stability</i>	.....	.....	.....	26.0	73.2
Abdomen	.....	.....	.....	3.8	—
Other					
(a) <i>Debility</i>	.....	.....	.....	2.1	—
(b) <i>Enuresis</i>	.....	.....	.....	37.6	48.8
(c) <i>Obesity</i>	.....	.....	.....	20.1	24.4
(d) <i>Other</i>	.....	.....	.....	6.2	—

* Column "A" refers to 7-plus routine medical inspections.

† Column "B" refers to 7-plus experimental scheme inspections.

Educationally Sub-normal Pupils Number examined: 120

Number recommended:

1. Day E.S.N. School	.....	.....	.....	62
2. Boarding E.S.N. School	.....	.....	.....	2
3. Ordinary School with special help	.....	.....	.....	55
4. Junior Training Centre	.....	.....	.....	—
5. Maladjusted School	.....	.....	.....	1

Routine Audiometer Testing

Pupils given screening tests	.....	.....	.....	7640
Pupils failing screening tests	.....	.....	.....	} 241
Pupils given pure tone tests	.....	.....	.....
Pupils failing pure tone tests	.....	.....	.....	} 100
Pupils referred to Otologists	.....	.....	.....
Percentage referred to Otologists	.....	.....	.....	1.16

Visits made to Schools in the Borough by Public Health Inspectors

VISITS—1971

Purpose	Numbers	Remarks
HYGIENE		
Food—Inspection of Canteen and Kitchens	40	Routine
Foot—Verrucae Prevention	NIL	
FOOD		
Inspection	NIL	
Sampling	NIL	
DISEASES		
Notifiable	6	On Notification
NUISANCES		
Public Health	6	On Complaint
SURVEYS		
Clean Air Act 1956	NIL	
Others	7	Alterations
RODENT CONTROL	5	On Complaint
DISINFESTATION		
Insect Pests	6	On Request
Talks on Health subjects	5	On Request
TOTAL	75	

School Health Service—Social Work

Social workers in the School Health Service are jointly employed by the Inner London Education Authority and the Borough. They aim at giving a case-work service to the school clinics and special schools in the Borough (other than the E.S.N. schools). During the past year there has been an increase in the numbers attending the special investigation and audiology clinics.

The future position of the school health social workers is unsettled and no decision has yet been made as to whether they will be part of the Social Services Department or not. They continue to work in close liaison with the Social Services and with the Education Welfare Service.

(a) *School Health Service Clinics*

Special Investigation:

Health Centre, Market Street, S.E.18.

Health Centre, Plumstead High Street, S.E.18.

Abbey Wood School, Eynsham Drive, S.E.2.

M. & C.W. Centre, Burney Street, S.E.10.

M. & C.W. Centre, Rusthall Lodge, Southend Crescent.
S.E.9.

Audiology:

Hearing Centre. Fairfield House, Fairfield Grove, S.E.7.

(b) *Special Schools*

Beverley School — Deaf.

Meridian School — Partially Hearing.

Goldie Leigh Hospital School — Diseases of the Skin.

Charlton Park — Physically Handicapped.

Hawthorn Cottage — Delicate.

Nansen School — Partially sighted.

Staff

The staff consists of three full-time and three part-time social workers. Regular case-work supervision is provided and group discussions are held. Several of the staff attended lectures, courses and conferences during the year.

THE SCHOOL DENTAL SERVICE

Report of the Principal School Dental Officer

Annual Reports from 1965 contain a great deal of information concerning the background, thoughts and evolution of the school dental service in this Borough. It is possibly not without interest, but very probably with substantial benefit, for us to review our earlier philosophies and to note their gradual realisation over the years.

Statistical data obtained by the clinical survey in 1968, and appended to the Report of that year, drew attention to the poor dental health of the Borough's children and to the need for considerable expansion in the service if it was not to become merely a token effort.

Dental disease is an unnecessary and avoidable condition and previous Reports disclose our deeply held conviction that, for the preservation and maintenance of the oral health of the school population, an effective and numerically adequate dental service is essential. Medical history is replete with sagas concerning the conquests of diseases such as tuberculosis, scurvy and plague brought about mainly by enlightenment and education. Perhaps, in the not too distant future, the same may be written of dental caries and gingivitis, both of which are now endemic. It is all the more depressing, therefore, to have to record that, although we have achieved a first class service, its availability to children in general is somewhat circumscribed.

Unfortunately, expansion of the service depends not only upon recruitment of additional staff but also upon the furnishing of facilities. Provision of dental surgeries and equipment hinges upon finance and availability of premises and although since 1965 the number of surgeries has doubled, needs and demands combine to outstrip resources. Such a situation will undoubtedly persist, even after the reorganisation due on 1st April, 1974.

It is gratifying to note, *en passant*, that our endeavours have not gone unnoticed by the population we aim to serve (as demonstrated by the highest attendance rate per session of the Inner London Boroughs) but, despite maximum efforts by all concerned the service again failed to meet the demand arising from parental requests. Nevertheless, it *was* capable of examining 11,000 child-

ren (27.5% of the school population) and providing treatment at the 14,000 attendances.

Although undue emphasis should not be placed upon statistical evaluation of a children's clinical service, it is encouraging to note that, for each tooth extracted on account of caries, there were 53.7 fillings of permanent teeth and 9.2 for milk teeth. At first sight this latter ratio would appear to be low but it must be viewed against a background of a high percentage of extractions arising from broken down roots or inflammation resulting from mobile baby teeth prior to their being shed. The figure of 1,000 emergencies dealt with reveals not only public confidence in the service but, sadly also reflects the poor dental health of the child population. It was indeed unfortunate that, despite efforts of our auxiliary and a period of "locum" assistance, illness and other circumstances beyond our control conspired to prevent us from using our already inadequate potential to its fullest extent.

Earlier Reports have stressed the important role that dental health education plays in dentistry in general and in children's preventive dentistry in particular. Our now firmly established programme of close liaison with schools including "follow-up" meetings after school inspections and the fullest of preventive instructions to patients and parents (as outlined in previous years), continued during 1971. We are deeply grateful for the I.L.E.A.'s help in the dental health education field but, of necessity, the substantial routine work had to be undertaken by our own dental auxiliary. Thankful though we are for the active part played by the staff of many of the Borough's primary schools in dental health education, we must recognise that our resources of one part-time auxiliary are woefully deficient for this most influential aspect of dentistry, tied as they are to the availability of twin-surgery clinics.

Gratification from our recently established orthodontic service is somewhat marred by the fact that it is subject to the same restricting circumstances as the rest of the school dental service and demand has similarly exceeded available facilities. Occupation of our limited surgery accommodation for the very necessary routine treatments has restricted our highly qualified orthodontic specialist to only 2 sessions per week with the result that 1971 saw a "build-up" to massive proportions of a waiting list for initial orthodontic investigations prior to treatment. Attempts to

create "priorities" within this list resulted in many cases of less immediate need being relegated still further. This situation would seem to conflict with the I.L.E.A. annual figures which show a relatively small "output" of orthodontic cases. Such an apparent paradox arises as a result of the registering by the I.L.E.A. of a "new" case only when an orthodontic appliance has been fitted. Time consuming orthodontic consultations and investigations (including impressions for study models) as well as X-rays and referrals back for observation, judicious extractions, further reviews necessitated by progressive growth of a child, form no part of the I.L.E.A.'s numerical analysis of orthodontic work and this statistical aberration does scant justice to our orthodontist.

Treatment at the major schools for our mentally and physically handicapped children during 1971, was again via the mobile unit from the Dental Department for Children at Guy's Hospital but, again, service to the less severely handicapped child was limited by lack of facilities.

As a summary for 1971, it can be said that the urgent need for increased surgery accommodation remains but that, within its limited resources, the service given gave grounds for satisfaction.

SCHOOL DENTAL SERVICE

Statistical Analysis

SESSIONS	1971	1970
Treatment	1,795.8	1,551.2
School Inspections	109.5	131.5
Orthodontic	91.6	23.0
Dental Health Education	53.4	35.2
TOTAL SESSIONS	2,050.3	1,740.9

INSPECTIONS

Children inspected at schools and clinics	11,093	11,971
Percentage found to require treatment	70.1%	67.3%

VISITS FOR TREATMENT

First	4,341	3,436
Subsequent	9,460	8,542
TOTAL VISITS	13,801	11,978
Emergency patients	1,037	870
Broken appointments	4,407	3,392
	24.2%	22.07%

TREATMENT GIVEN

(1) *Permanent teeth*

Fillings	5,408	4,722
Extractions (<i>excluding orthodontic extractions</i>)	91	89
Ratio of fillings to extractions	53.7	53.1

(2) *Deciduous teeth*

Fillings	4,242	3,820
Extractions (<i>excluding orthodontic extractions</i>)	431	313
Ratio of fillings to extractions	9.2	12.2

Total number of fillings	9,650	8,542
Teeth root-filled	146	94
Other operations	5,196	4,848
General Anaesthetics	Nil	Nil

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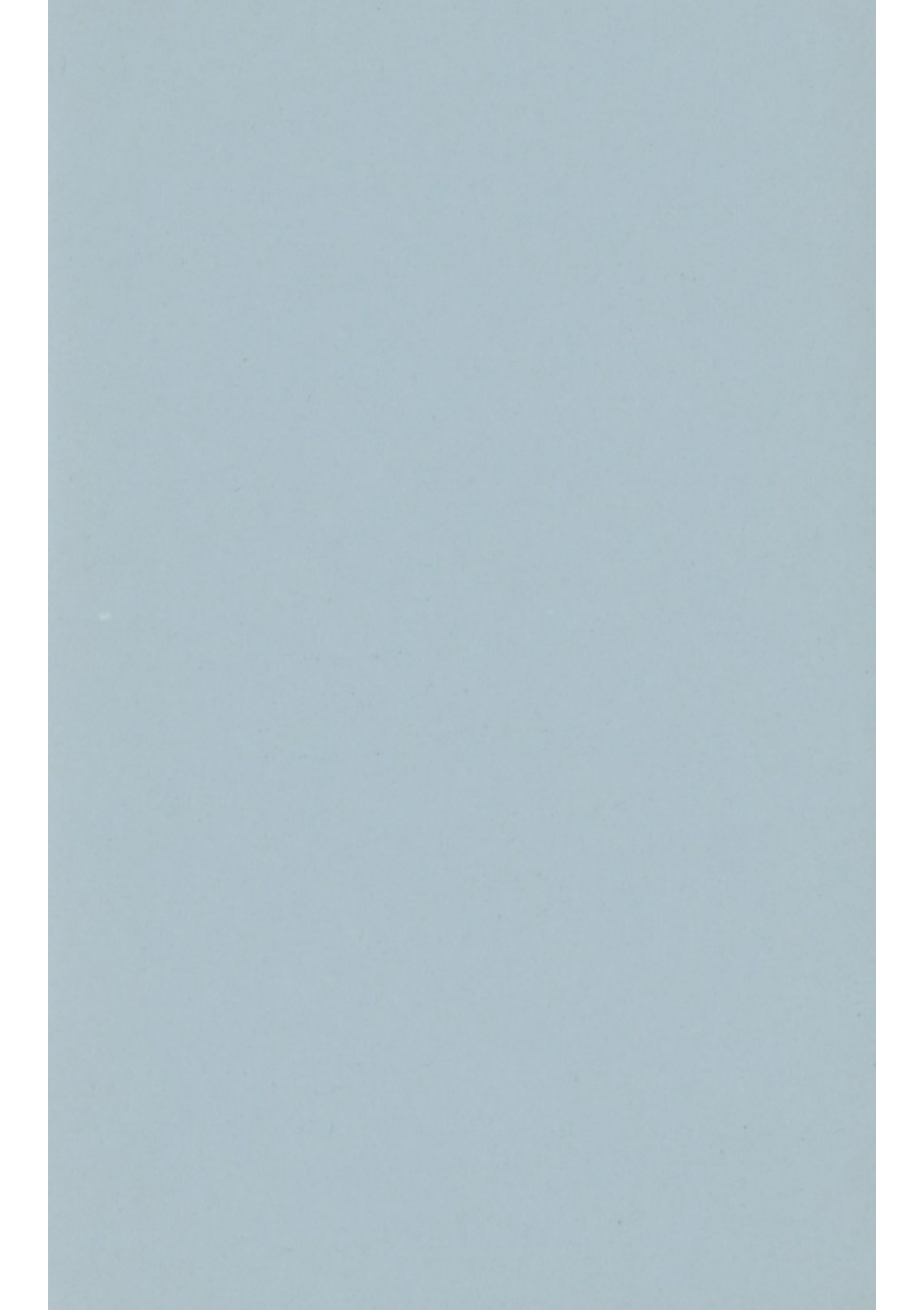
CASES OF INFECTIOUS DISEASE notified during the Year ended 31st December, 1971

NOTIFIABLE DISEASE	CASES NOTIFIED IN WHOLE DISTRICT																								TOTAL CASES NOTIFIED IN EACH LOCALITY	
	Age & Sex Group																									
	At all Ages		0 to 1		1-2		2-3		3-4		4-5		5-10		10-15		15-25		25-45		45-65		65 & over		Greenwich	Woolwich
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Small-Pox	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Encephalitis { Infectious	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
{ Post-Infectious	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	33	22	1	-	3	1	-	1	-	-	2	2	9	8	12	6	-	-	4	3	2	1	-	-	8	47
Infective Jaundice	19	18	-	-	-	-	-	1	-	-	2	2	5	4	1	2	5	4	5	5	1	-	-	-	22	15
Acute Polio-Myelitis { P.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
{ N.P.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	16	10	-	-	1	-	2	1	4	-	-	1	4	7	4	1	1	-	-	-	-	-	-	-	13	13
Typhoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningitis	6	11	2	-	-	-	-	-	1	-	-	-	1	3	2	1	-	4	-	1	-	1	-	1	3	14
Measles	231	255	12	9	20	40	19	27	38	42	38	35	95	97	6	3	3	1	-	1	-	-	-	-	144	342
Whooping Cough	20	16	-	3	1	-	4	1	1	3	-	4	12	5	1	-	-	-	-	1	-	-	-	-	14	22
Malaria	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	2	1
Ophthalmia Neonatorum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis, Pulmonary	22	17	-	-	-	-	-	1	1	-	1	-	-	1	-	-	3	4	4	6	8	4	5	1	7	32
" Non-Pulmonary	3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	1	-	2	2	6
TOTALS	352	356	15	12	25	41	25	32	45	45	43	44	127	125	26	13	12	14	15	19	14	7	5	4	215	493

NOTE:—The above table refers to "Corrected Notifications" only, i.e., all cases in which the diagnosis was not confirmed have been ignored

TOTAL CAUSES OF, AND AGES AT, DEATH during the year ended 31st December 1971.

No. in Short List	CAUSES OF DEATH	Deaths at Subjoined ages of "Residents" whether occurring within or without the District											Deaths at all Ages of "Residents" belonging to Localities, whether occurring in or beyond the District		Deaths of "Residents" in Public Institutions											Total Deaths whether of "Residents" or "Non-Residents" in Public Institutions in the District	
		All Ages	Under 1		1 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and upwards	GREENWICH	WOOLWICH	St. Alge's Hospital	Seamen's Hospital	Miller Hospital	Herbert Military Hospital	Brook Hospital	St. Nicholas Hospital	Memorial Hospital	B.H.M.B.	F. & M. Hospital	Other Institutions		Outside Institutions
			Under 4 wks.	4 wks. and under 1 yr.																							
1	Cholera
2	Typhoid Fever
3	Bacillary Dysentery and Amoebiasis
4	Enteritis and other Diarrhoeal Diseases	2	..	1	1	..	2	1	1	4
5	Tuberculosis of Respiratory System	8	..	..	..	..	..	2	1	1	3	1	1	7	..	..	..	..	3	..	..	..	..	..	2	5
6	Other Tuberculosis incl. late effects	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
7	Plague ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	Diphtheria ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	Whooping Cough ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	Streptococcal sore throat and Scarlet Fever ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
11	Meningococcal Infection ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	Acute Poliomyelitis ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	Smallpox ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
14	Measles ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	Typhus and other Rickettsioses ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	Malaria	1	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	1
17	Syphilis and its sequelae ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	All other Infective and Parasitic Diseases	7	..	1	..	1	..	1	..	1	..	3	5	2	..	..	..	..	1	..	..	..	..	..	6	3
19	(1) Malignant Neoplasm Stomach	69	..	..	..	..	..	1	6	17	24	21	15	54	8	1	1	1	11	12	1	..	..	..	11	56
	(2) Malignant Neoplasm Lung, Bronchus	156	..	..	..	..	..	3	16	49	51	37	61	95	19	4	3	1	20	18	2	..	..	4	55	124
	(3) Malignant Neoplasm Breast	58	..	..	..	..	..	2	16	14	15	11	18	40	5	..	5	..	8	3	..	..	2	1	20	34
	(4) Malignant Neoplasm Uterus	18	..	..	..	..	..	3	3	7	5	3	15	1	..	..	..	3	4	4	..	..	1	3	17	..
	(5) Leukaemia	20	..	..	2	2	..	1	3	5	7	8	12	4	..	..	..	5	1	..	..	..	1	6	21	..
	(6) Other Malignant Neoplasms etc.	265	..	..	1	1	4	11	24	64	78	82	84	181	37	5	11	1	38	35	3	..	8	9	61	245
20	Benign Neoplasms and unspecified Neoplasms	7	..	..	1	..	..	1	..	4	1	1	2	5	..	..	1	..	2	2	..	..	..	..	2	18
21	Diabetes	26	..	1	..	..	..	1	4	6	14	7	19	4	1	..	1	..	7	10	..	..	..	1	1	31
22	Avitaminoses and other Nutritional Deficiency	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	2	1
23	Anaemias	10	..	..	..	2	..	..	..	..	2	6	2	8	1	..	..	..	3	2	..	..	..	..	..	8
24	Meningitis	2	..	..	..	..	..	..	..	..	1	1	..	2	..	..	..	2	..	..	..	..	..	..	..	6
25	Active Rheumatic Fever	2	..	..	..	..	..	..	1	1	..	..	..	2	1	..	..	..	..	..	..	..	..	..	1	1
26	Chronic Rheumatic Heart Disease	28	..	..	..	..	1	1	3	5	11	7	10	18	3	..	2	..	7	5	..	..	..	1	2	41
27	Hypertensive disease	36	..	..	..	..	1	1	7	11	16	17	19	3	..	1	..	7	3	..	..	..	..	1	7	25
28	Ischaemic Heart Disease	564	..	..	..	..	7	40	112	168	237	201	363	53	1	34	3	116	109	1	..	3	23	59	611	..
29	Other Forms of Heart Disease	98	..	..	..	1	..	1	3	9	15	69	25	73	8	2	5	1	9	16	3	..	1	12	8	97
30	Cerebrovascular Disease	313	..	..	..	1	1	3	14	26	82	186	94	219	41	4	12	1	76	65	16	..	1	12	47	439
31	Influenza	2	..	..	..	..	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	1
32	Pneumonia	280	1	..	1	..	..	4	9	55	210	82	198	48	6	5	1	52	32	66	..	2	12	37	373	..
33	(1) Bronchitis and Emphysema	142	..	..	..	..	1	3	23	68	47	40	102	11	3	6	3	31	25	2	..	..	2	24	147	..
	(2) Asthma	7	..	..	..	1	2	1	1	2	..	1	6	1	..	..	..	2	1	..	..	..	..	..	..	9
34	Peptic Ulcer	24	..	..	..	..	1	1	3	9	10	7	17	2	..	1	..	9	5	..	..	..	..	3	30	..
35	Appendicitis ... ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
36	Intestinal Obstruction and Hernia	12	..	..	..	..	..	2	2	8	3	9	3	9	3	..	..	4	2	..	..	..	..	2	13	..
37	Cirrhosis of Liver	8	..	..	..	..	..	7	1	..	6	2	2	2	..	..	..	..	..	..	..	..	..	6	3	..
38	Nephritis and Nephrosis	20	..	..	..	1	..	4	7	8	8	12	..	5	2	..	3	6	..	..	..	..	..	4	26	..
39	Hyperplasia of Prostate	3	..	..	..	..	..	..	1	2	1	2	1	..	..	..	..	2	..	..	..	..	..	1	7	..
40	Abortion	2	..	..	..	..	2	..	..	..	..	..	..	2	..	..	..	2	..	..	..	..	..	..	2	..
41	Other complications of Pregnancy, Childbirth & Puerperium	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..
42	Congenital Anomalies	20	5	7	2	2	1	..	1	1	1	1	6	14	5	..	..	7	..	..	..	..	..	7	20	..
43	Birth Injury, Difficult labour, etc.	8	8	..	..	..	..	..	..	..	..	..	4	4	1	..	..	..	..	..	4	..	1	2	20	..
44	Other Causes of Perinatal Mortality	18	18	..	..	..	..	..	..	..	..	..	5	13	1	..	..	..	..	..	11	..	..	6	18	..
45	Symptoms and ill-defined conditions	10	..	2	1	1	1	..	5	3	7	2	3	5	..	
46	(1) Other Endocrine Diseases	7	1	1	1	1	2	..	1	2	5	1	..	2	1	3			



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