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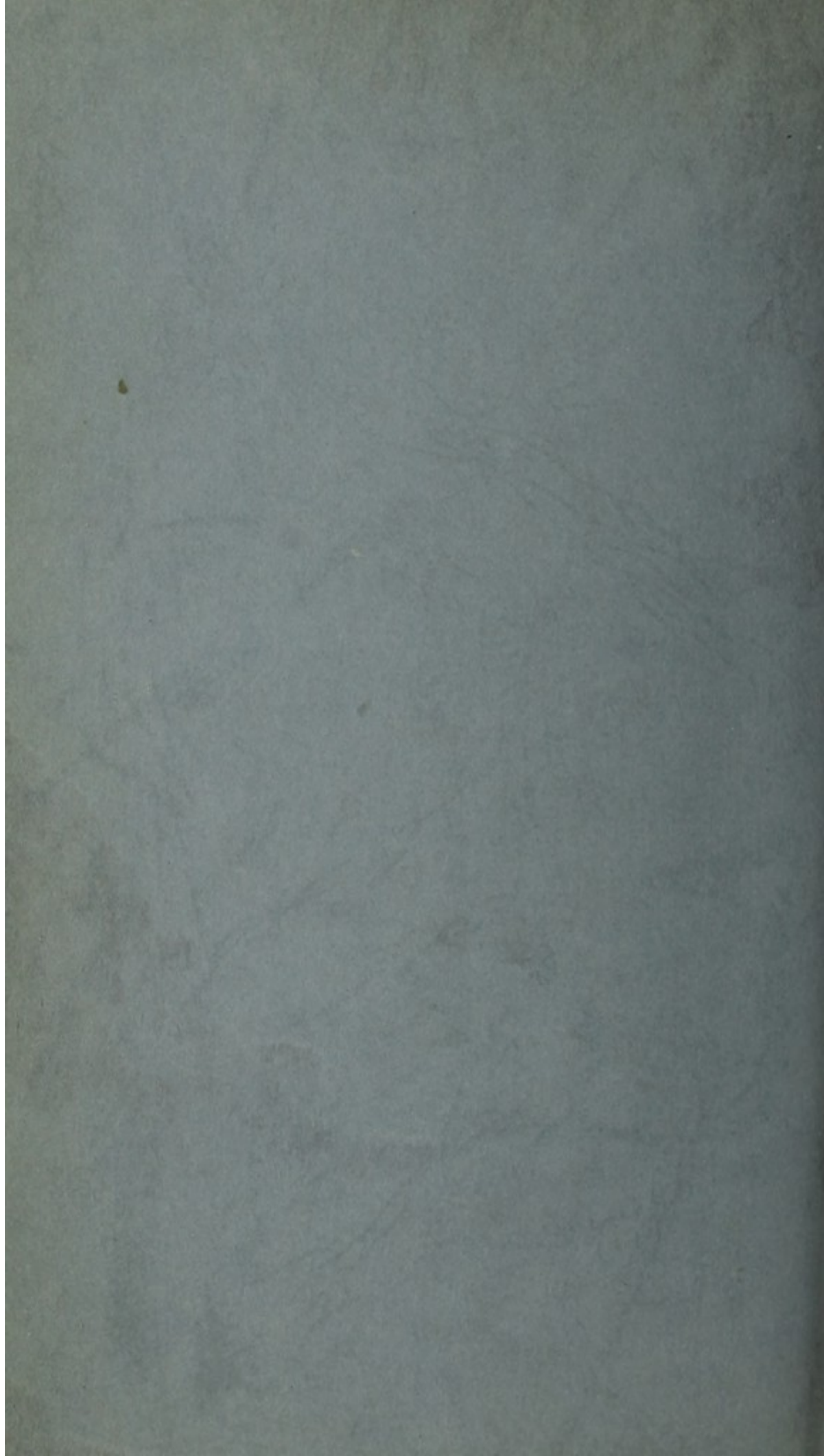


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THE
HEALTH OF BOLTON
1964

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH
ANNUAL REPORT OF PRINCIPAL SCHOOL MEDICAL OFFICER



COUNTY BOROUGH OF BOLTON



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR ENDED

31st December, 1964

A. I. ROSS, M.D., D.P.H.,
MEDICAL OFFICER OF HEALTH

HEALTH DEPARTMENT, CIVIC CENTRE, BOLTON

Telephone No. 22311

HEALTH COMMITTEE, 1964-65

The Mayor (Alderman H. Wood, J.P.)

Chairman:	Alderman J. A. Childs
Chairman: (From January, 1965)	Councillor W. Glynn
Vice Chairman:	Councillor W. Glynn (Until January, 1965)
Vice-Chairman:	Vacant (From January, 1965)

Alderman Mrs. E. A. Ashmore, J.P.
Alderman Mrs. N. Vickers
Alderman J. Vickers, J.P.
Alderman W. Walsh
Councillor H. Bleackley
Councillor J. Bullough
Councillor J. A. Foster
Councillor Dr. F. T. F. Keogh, J.P.
Councillor P. B. Kirk
Councillor H. Love
Councillor Mrs. F. Mitchell
Councillor Dr. J. R. Monks, G.M., J.P.
Councillor J. Rigby
Councillor Mrs. A. M. Sherry
Councillor J. Wilson

Co-opted Members:

Dr. B. Thornley
Mr. W. Crumblehulme
Mr. A. G. W. Smith

Sub-Committees

Personal Services
Baths and Ambulance
Insanitary Areas and Premises
Provision of Dustbins
Appointment of Staff
Smoke Control Areas - Financial Assistance
National Assistance Act, 1948. (Section 47)
Slum Clearance
Appointment of School Medical and Dental Staff
Compensation for Trade Disturbance

INTRODUCTION

In January, 1965, while addressing the Council on a Health Department subject, Alderman J. A. Childs, the Chairman of the Health Committee, was suddenly taken ill and died the next day. He had been a member of the Council since 1945 and Chairman of the Health Committee since 1958. Always most interested in health matters and enthusiastic about the work of the department, his passing is a very great loss and our sympathy is extended to his wife and children.

ATMOSPHERIC POLLUTION

Unfortunately, during 1964, it was not possible to bring any new smoke control areas before the Health Committee. So far, there are nineteen confirmed smoke control areas in the Borough covering 1,534 acres and 12,476 premises. The last areas introduced, affecting 8,633 houses, were unopposed. At no time since 1954 have any complaints from any source been received by the Health Department which could not, upon investigation, be resolved. It may be useful to consider the points raised by opponents of clean air.

Availability of smokeless fuels:

At one time it was thought that there might be insufficient smokeless fuel for the needs of future smoke control areas. The position today is that the North West Regional Joint Standing Committee for Clean Air have issued a public statement (The Journal, Friday, 21st May, 1965) giving a definite assurance that adequate supplies of solid smokeless fuel will be available to householders in all areas which may be created in the future. In Bolton it has always been, and still is, the practice before introducing any new smoke control area to obtain assurances of availability from the fuel interests and appliance manufacturers.

Price of solid smokeless fuel:

Because of the increased financial assistance given by the Government for the installation of approved appliances in future smoke control areas it can be said unreservedly that compared with normal solid fuel burning appliances, greatly improved efficiency with a higher degree of warmth will result at reduced cost. These appliances will be under-floor draught fire grates or stoves of higher efficiency than an open fire. They operate for longer periods with little attention and are of great convenience to the householder who wishes to return home in the evening to a room warmed to a degree almost equalling a centrally heated home.

Sometimes you may hear it said that old people cannot afford the cost of smoke control and that they are cold when living in smoke control areas. This is not the case, provided they take advantage of assistance which is readily forthcoming from the public health inspectors about the proper use of fuel and the means of obtaining additional warmth, if necessary, by financial assistance from the appropriate government sources.

Quality of solid smokeless fuel:

The type of coke used in the grates and stoves which will be used in new areas is not only readily available and comparatively cheap but is of consistently good quality. No complaint has ever been received about the quality of this fuel.

Aspects of air pollution:

(a) MEDICAL

The authoritative 1965 publication "Chronic Bronchitis" prepared for the Minister of Health states – "The other main environmental factor in the causation of chronic bronchitis is air pollution. There is no doubt about the effect of atmospheric pollution on the patient with chronic respiratory disease . . ." Health is also adversely affected by the reduction in sunlight.

(b) ECONOMIC EFFECTS

The best estimates prepared following a government Committee's assessment is that the direct cost of smoke is not less than £250,000,000 per year; in addition, there is the economic loss from the burning of coal in old-fashioned fire grates with wastage of unburned fuel in the form of smoke. Damage to curtains, fabrics, paintwork, metalwork, increased bills for artificial light, the interruption of transport by bad visibility all contribute to the loss incurred when air pollution is high.

(c) AMENITY:

A recent regional study (Department of Economic Affairs, 1965) stated: "Air pollution . . . is not only an unhealthy and unpleasant thing in itself, but it can also seriously affect the environment, make poor living conditions much worse, and generally discourage efforts to improve matters. In the North West it has undoubtedly had this effect and smoke control programmes have a vital part to play in the general rehabilitation of the older industrial areas . . . there is a marked correlation between the worst areas of pollution and areas of exceptionally high death rates."

(d) LEVEL OF AIR POLLUTION IN BOLTON:

The major source of air pollution in industrial towns, including Bolton, is the domestic coal fire which discharges black smoke at a low level to such an extent that scientists have recently estimated that 80 to 90 per cent of smoke pollution is derived from dwelling houses. Bolton is one of the so-called "black areas" for air pollution.

To compare the level of pollution over the years, nine measuring stations were installed at points in the borough to give a comprehensive picture, and since 1958 continuous day and night recordings of smoke, sulphur dioxide and potential cancer-forming substances in the air have been measured.

Between 1958 and 1964 smoke pollution in Bolton has been reduced by half and that of sulphur dioxide by nearly a quarter. Smoke pollution in Bolton in 1963 was about three times more than that in Oxford. The concentration of cancer producing chemicals in the air of Bolton has been found to be anything up to twenty times more than that of a Lancashire rural area.

(e) MEDICAL AND OTHER PUBLIC OPINION IN BOLTON:

The Health Committee has received letters urging the speedy re-introduction of smoke control in Bolton from the Bolton Local Medical Committee, representing general practitioners, the Number 8 (Bolton) Group Medical Advisory Committee representing consultants, and the Bolton and District Civic Trust.

* * *

In 1964 the Bolton Medical Society celebrated its centenary. I am greatly indebted to Mr. T. Neville Hart, President of the Society, for permission to include part of his presidential address in this report. The Society has played a

most important part in the post-graduate education of Bolton doctors, and although under Ministry of Health arrangements post-graduate medical education is being extended, the Society will continue to be a most important feature of the medical life of Bolton and District.

The Report covers fairly fully the work of the Health Department but I feel that I should refer specially to two important matters. The first is co-operation between the department and general practitioners. This has been fostered by the attachment of health visitors to general practitioners' practices, midwives seeing patients in practitioners' surgeries, and more lately, the attachment of district nurses on an experimental basis to two practices. These result in fuller co-operation, and although there are difficulties, for example, increased travelling, there is no doubt that the patients are given an improved service. This co-operation will also be improved by the proposed new Halliwell Health Centre, to be opened, it is hoped, in 1967, where five or six general practitioners will practise and local authority clinics will be held. The initial discussions on this Health Centre have gone very smoothly and augur well for the future.

The second important matter is the survey on the needs of old people in the town. In the opinion of those who arranged it, this shows that much more ground floor housing accommodation, Part III welfare accommodation, visiting by welfare officers and health visitors, and chiropody, is necessary for old people. It is not thought that the number of hospital beds need be increased.

My thanks are due to the staff of the department who have worked well during a year of repeated staff shortages and changes, and to the Health Committee for their continued interest and support of the department.

A. Ross.

Medical Officer of Health

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PRINCIPAL STAFF OF THE HEALTH DEPARTMENT

at 31st December, 1964

MEDICAL STAFF

Medical Officer of Health	A. I. Ross, M.D., D.P.H.
Deputy Medical Officer of Health ..	I. S. Macdonald, M.D., D.P.H., D.(Obst.)R.C.O.G. (Resigned 23.9.64)
Senior Assistant Medical Officer of Health	S. Caruana, B.Sc.(Malta), M.D.(Malta), D.T.M. & H. (Liverpool), D.P.H. (London) (Commenced 15.6.64)
Assistant Medical Officers of Health and School Medical Officers	Mavis J. Allanson, M.B., Ch.B., D.(Obst.)R.C.O.G. (Part-time) J. T. Carroll, M.B., B.Ch., L.M., D.(Obst.) R.C.O.G., F.R.C.S. (Resigned 30.6.64) Catherine O. L. Holt, M.B., Ch.B., D.(Obst.) R.C.O.G. (Resigned 1.3.64) Eve M. Mawdsley, M.B., Ch.B., D.C.H. L. M. Mayer-Jones, M.R.C.S., L.R.C.P. (London) (Commenced 1.8.64) Dorothy M. Paterson, M.B., B.Ch., B.A.O. (Cork) (Commenced 6.7.64) Sylvia J. A. Raymond, M.B., Ch.B., D.C.H. (Resigned 31.7.64) Audrey Seddon, M.B., Ch.B., D.(Obst.) R.C.O.G. (Part-time))

NURSING STAFF

Superintendent Nursing Officer ..	Miss E. M. Richardson, S.R.N., S.C.M., H.V. and Q.N. Certs., D.N., (Lond.)
Deputy Superintendent Health Visitor	Miss A. M. Fraser, S.R.N., S.C.M., H.V.Cert.

HOME NURSING

Superintendent	Miss C. M. Ratcliffe, S.R.N., S.C.M., H.V.Cert. (Died 21.5.64)
Deputy Superintendent	Miss M. Graham, S.R.N., S.C.M., H.V. and Q.N. Certs. (Resigned 10.12.64)
Superintendent	Mrs. E. Gallaher, S.R.N., S.C.M., H.V. and Q.N. Certs (Commenced 16.11.64)
Deputy Superintendent	Mrs. E. Hankin, S.R.N., Q.N.Cert. (Commenced 10.12.64)

MIDWIFERY

Non-Medical Supervisor	Miss C. M. Ratcliffe, S.R.N., S.C.M., H.V.Cert. (Died 21.5.64) Miss A. M. Fraser, S.R.N. S.C.M., H.V.Cert. (Commenced 1.11.64)
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DAY NURSERIES

Supervisor	Miss L. W. Booth, R.S.C.N., S.C.M., H.V.Cert.
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PUBLIC HEALTH INSPECTORS

Chief Public Health Inspector	T. Williams, F.R.S.H., M.R.Inst.P.H.H., M.A.P.H.I.
Deputy Chief Public Health Inspector	N. Ryce, M.R.S.H., M.A.P.H.I.

CLERICAL STAFF

Chief Administrative Assistant ..	W. Greenhalgh
Administrative Assistant	W. W. Markland

MENTAL HEALTH SERVICE

Chief Mental Health Officer R. A. Johnson, M.S.M.W.O.
Supervisor—Junior Training Centre Miss E. Dobbin, Dip.N.A.M.H.
Supervisor - Adult Training Centre Mrs. J. Cook, Dip. N.A.M.H. (Commenced 13.2.64)
Superintendent – Greenmount House P. J. Carroll, S.R.N., R.M.N.
Matron Mrs. A. Carroll, S.R.N., R.M.N.

HOME HELP SERVICE

Home Help Organiser Miss O. Brindle

AMBULANCE SERVICE

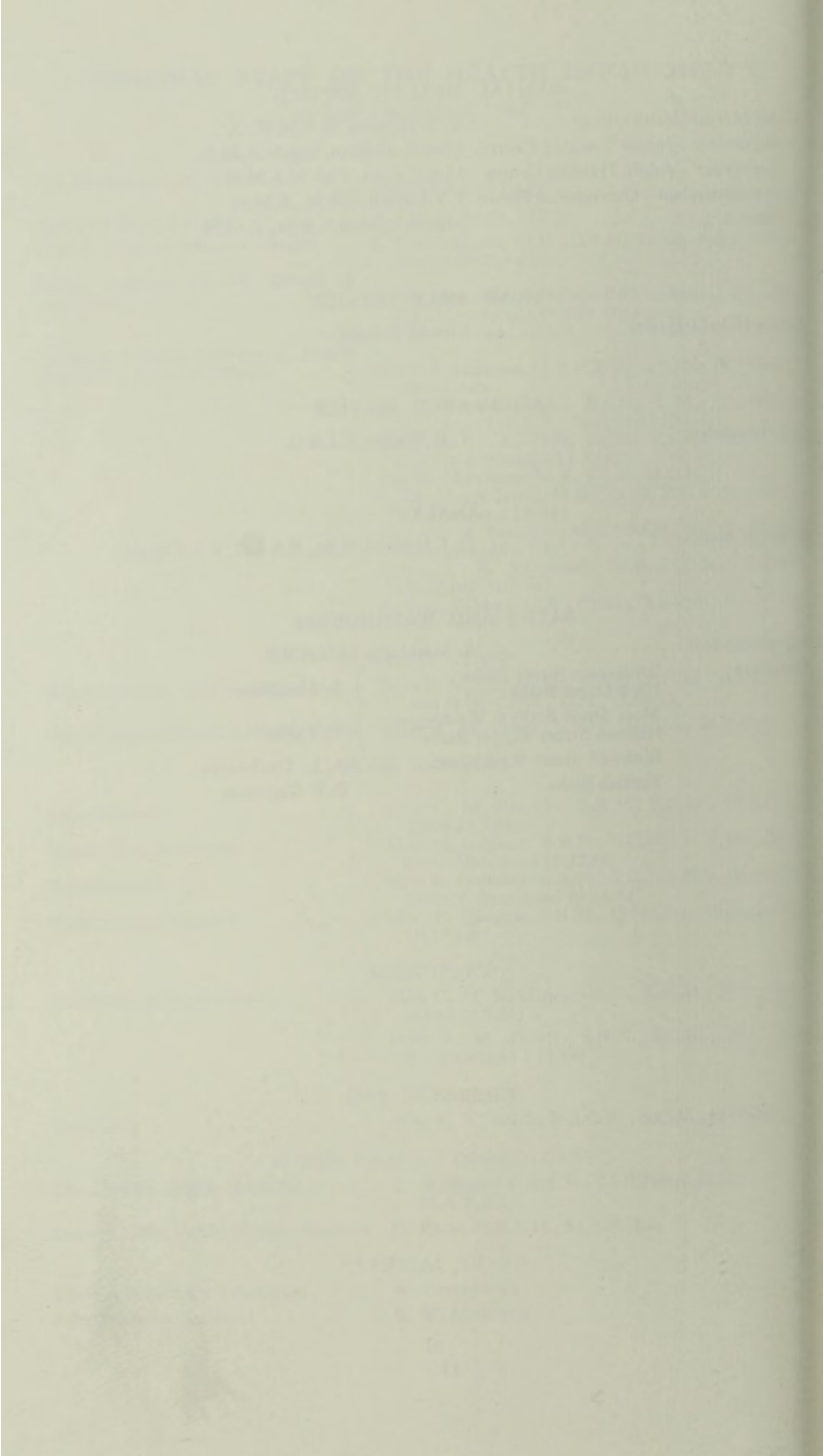
Superintendent T. R. Walton, F.I.A.O.

ANALYST

Borough Analyst G. J. Holland, B.Sc., F.R.I.C., P.A.I.W.E.

BATHS AND WASHHOUSES

Superintendent A. Markham, M.N.A.B.S.
Managers }
 Bridgeman Street Baths } A. Markham
 High Street Baths }
 Moss Street Baths & Washhouse . . } T. Taylor
 Hennon Street Slipper Baths . . }
 Rothwell Street Washhouse A. L. Duckworth
 Turkish Baths P. F. Casterton



PART I

STATISTICAL INFORMATION

Summary of Statistics

Births

Deaths

Deaths from Cancer

SUMMARY OF STATISTICS, 1964

COUNTY BOROUGH OF BOLTON

Position	... ..	Lat. 53° 35' N. Long. 2° 27' W.
Elevation above sea level	... ..	230 ft. to 1,450 ft.
Geological Formation	... ..	Boulder Clay and Sand over Coal Measures
Rainfall (Av. 1887-1964: 44.305")	... ..	44.53"
Area in Acres (Land and Inland Water)	... ..	15,279
Population (Census 1921)	... ..	178,683
„ (Census 1931)	... ..	177,250
„ (Census 1951)	... ..	167,162
„ (Census 1961)	... ..	160,740
„ (Estimated Civilian Population, 1964)	... ..	159,190
New permanent houses, including flats, certified	... ..	577
Existing buildings altered to provide dwelling accommodation	... ..	8
Estimated number of houses in the Borough	... ..	57,217
Rateable Value at 1st April, 1964	... ..	£5,389,902
Rate at 1d. in the £ estimated to produce (1964-65)	... ..	£20,950
Live Births	... ..	2,775
Live Birth rate per 1,000 population (Corrected)	... ..	18.82
Stillbirths	... ..	43
Stillbirth rate per 1,000 live and stillbirths	... ..	15.26
Total live and stillbirths	... ..	2,818
Infant Deaths	... ..	53
Infant mortality rate per 1,000 live births—total	... ..	19.10
Infant mortality rate per 1,000 live births—legitimate	... ..	18.40
Infant mortality rate per 1,000 live births—illegitimate	... ..	27.15
Neo-Natal mortality rate per 1,000 live births	... ..	10.81
Early Neo-Natal mortality rate (under one week)...	... ..	9.73
Illegitimate live births per cent of total live births	... ..	7.96
Maternal deaths (including abortion)	... ..	1
Maternal mortality rate per 1,000 live and stillbirths	... ..	0.35
Deaths	... ..	2,072
*Death Rate (Corrected)	... ..	13.93
*Average Death Rate (1955-1964)	... ..	14.43
*Heart and Circulation Death Rate	... ..	6.77
*Cancer Death Rate	... ..	2.48
*Death Rate from diseases of the Respiratory System	... ..	1.52
*Pulmonary Tuberculosis Death Rate	... ..	0.08
Diarrhoea Death Rate (Deaths under two years per 1,000 live births)	... ..	0.72
ENGLAND AND WALES:		
*Birth Rate	... ..	18.4
Stillbirth Rate (per 1,000 total births)	... ..	16.3
*Death Rate	... ..	11.3
Infant Mortality (Deaths under one year per 1,000 live births)	... ..	20.0
*Per thousand of population		

VITAL STATISTICS

Births:

There were 2,775 live births to Bolton residents, 1,450 males and 1,325 females. The live birth rate (corrected) per 1,000 of the population was 18.8.

There were 2,775 live births in 1964, compared with 2,701 in 1963. It is customary to apply a correction to the local crude birth rate to take account of the extent to which sex and age distribution of the population differs from the national distribution. In some areas which have a high proportion of elderly and retired people the crude birth rate will inevitably be low, while in the rapidly developing areas which attract young adults the crude birth rate will be high. It is only after correction that local birth rates can be compared with the national rate and with one another.

The area comparability factor which is used to make the necessary correction is based on the proportion of women between 15 and 44 years in the population, these being accepted as the limits of the child bearing period. The area comparability factor for some years prior to 1963 was based on the 1951 census and for Bolton it was 1.00, but the factor for 1964 was based on the 1961 census and for Bolton it was 1.08. The change is because of a fairly substantial alteration in the age distribution of the population in Bolton, the proportion of women of child bearing age having declined from 21.4 per cent in 1951 to 18.7 per cent in 1961. Because of this, the corrected birth rate for Bolton is now higher than the crude rate. The corrected birth rate, taking into account the population changes, increased from 18.3 per thousand in 1963 to 18.8 per thousand in 1964.

Of all the live births, approximately 82 per cent were born in institutions - 1,397 in Bolton District General Hospital, 312 in Haslam Maternity Home, 200 in Havercroft Maternity Home and 298 in Heaton Grange Maternity Home. Eighteen per cent (513) of the births occurred at home. The remaining births took place in institutions and homes outside Bolton. The high percentage of hospital and maternity home births is similar to the previous year, and is higher in Bolton than in many other industrial areas.

There were 205 premature live births.

Stillbirths:

The number of stillbirths was 43, giving a stillbirth rate of 15.3 per 1,000 live and stillbirths.

The causes of the 43 stillbirths are given below.

Cause of Death	Number M & F
Diabetes Mellitus	1
Haemorrhage without mention of placental condition ..	1
Toxaemia with convulsions during pregnancy or labour (Eclampsia)	2
Other toxaemias of pregnancy	6
Difficult labour with malposition of foetus	3
Placental and cord conditions	1
Placental infarct	1
Other abnormality of placenta and cord	6
Birth injury due to other or unspecified cause	1
Anencephalus	7
Hydrocephalus	2
Spina bifida	1
Other malformation of the central nervous system	1
Erythroblastosis	1
Maceration, cause not specified	2
Other ill-defined cause	5
Cause unspecified	2
TOTAL ..	43

Total Live and Stillbirths:

The total live and stillbirths was 2,818.

Deaths:

There were 2,072 deaths (1,056 males and 1,016 females), giving a corrected death rate of 13.9 per 1,000 of the population.

A total of 734 persons whose usual place of residence was in the county borough died outside the borough; of these, 625 died either in the Bolton District General Hospital or in Townleys Annexe.

Non-residents who died in the area numbered 232.

Summary of the Principal Causes of Death, 1964

Cause of Death	No. of Deaths	Males	Fe- males	0-	1-	5-	15-	25-	35-	45-	55-	65-	75-
Tuberculosis, Respiratory	12	9	3	-	-	-	-	-	2	5	-	3	2
" Other	2	1	1	-	-	-	-	-	-	1	-	-	1
Syphilitic disease	2	2	-	-	-	-	-	-	-	-	-	-	2
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infective and parasitic diseases	7	3	4	2	1	-	-	-	1	1	-	-	2
Malignant Neoplasm:													
Stomach	56	29	27	-	-	-	-	-	-	4	11	20	21
Lung and Bronchus	109	96	13	-	-	-	-	-	2	13	41	34	19
Breast	32	1	31	-	-	-	-	-	2	6	7	10	7
Uterus	20	-	20	-	-	-	-	1	2	5	3	3	6
Other malignant and lymphatic neoplasms	178	91	87	-	-	-	2	5	9	14	44	62	42
Leukaemia and Aleukaemia	6	4	2	-	-	1	1	-	-	-	2	2	-
Diabetes	7	3	4	-	-	1	-	-	-	-	1	2	3
Vascular lesions of nervous system	309	122	187	-	-	-	-	1	4	12	38	85	169
Coronary disease, angina	396	245	151	-	-	-	-	1	10	36	94	132	123
Hypertension with heart diseases	42	14	28	-	-	-	-	-	1	3	10	56	19
Other heart disease	223	75	148	-	-	-	-	4	3	8	32	56	120
Other circulatory diseases	107	39	68	-	-	-	-	1	2	2	11	13	78
Influenza	4	3	1	-	-	-	-	-	-	-	1	-	3
Pneumonia	90	33	57	11	4	1	-	-	1	1	10	21	41
Bronchitis	127	95	32	-	-	-	1	-	-	3	31	50	42
Other diseases of respiratory system	21	14	7	-	-	1	-	-	2	-	6	7	5
Ulcer of stomach and duodenum	19	11	8	-	-	-	-	-	-	-	5	5	9
Gastritis, enteritis and diarrhoea	10	5	5	2	1	1	-	-	1	-	2	2	1
Nephritis and Nephrosis	10	7	3	-	-	-	1	-	1	3	4	-	1
Hyperplasia of Prostate	7	7	-	-	-	-	-	-	-	-	-	1	6
Pregnancy, childbirth and abortion	1	-	1	-	-	-	-	-	-	-	-	-	-
Congenital malformations	12	8	4	8	1	2	1	-	-	-	-	-	-
Other defined and ill-defined diseases	150	68	82	29	3	-	1	1	6	4	15	24	67
Motor vehicle accidents	31	24	7	-	1	1	8	6	5	5	1	1	3
All other accidents	55	29	26	1	1	1	3	2	3	2	5	5	32
Suicide	25	16	9	-	-	-	-	1	3	6	6	5	4
Homicide and Operations of War	2	2	-	-	1	-	-	-	-	1	1	-	-
TOTALS	2,072	1,056	1,016	53	13	9	18	23	61	134	381	552	828

Deaths from Puerperal Causes:

There was one death from puerperal causes during the year, giving a maternal mortality rate of 0.35 per 1,000 live and stillbirths.

Infant Mortality:

There were 53 deaths of infants under one year, giving an infant mortality rate of 19.1 per 1,000 live births. The infant mortality rate per 1,000 legitimate live births was 18.4, and illegitimate 27.15. The primary causes of death are shown in the following table.

Cause of Death	Age at Death					Total for each cause
	Under 4 weeks	4 weeks to 3 mths	3 to 6 months	6 to 9 months	9 to 12 months	
Prematurity	15	—	—	—	—	15
Congenital malformations	3	2	3	1	—	9
Pneumonia	2	1	5	3	1	12
Post-natal asphyxia and Atelectasis	2	2	—	—	—	4
Birth Injury	3	—	—	—	—	3
Other Causes	5	4	1	—	—	10
TOTALS	30	9	9	4	1	53

Deaths under Four Weeks:

There were 30 deaths of infants under four weeks, giving a neonatal mortality rate of 10.81 per 1,000 live births. The rate for England and Wales was 13.8.

The early neo-natal mortality rate (under one week) was 9.73, the total number of deaths being 27.

The following table shows the ages at which death took place.

Cause of Death	0-7 days	8-14 days	15-21 days	22-28 days	Total
Prematurity	15	—	—	—	15
Congenital Malformations	2	—	—	1	3
Pneumonia	—	—	—	2	2
Post-natal Asphyxia and Atelectasis	2	—	—	—	2
Birth Injury	3	—	—	—	3
Other Causes	5	—	—	—	5
TOTALS	27	—	—	3	30

Seven of these babies were under 2½lbs. in weight at birth.

Perinatal Mortality:

The perinatal mortality rate is the number of stillbirths added to the number of infant deaths during the first week of life, expressed as a rate per thousand of total births, both live and still. In 1964 the perinatal mortality rate in Bolton was 24.8 per 1,000 total births.

The following table shows the infant mortality rate, neonatal mortality rate, stillbirth rate, perinatal death rate and the death rate of infants aged one week but under one year, for the last ten years.

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Infant Mortality Rate ..	25.7	23.9	25.6	27.4	29.0	27.0	19.4	24.2	32.6	19.1
Neo-natal Mortality Rate ..	14.2	15.9	16.7	20.7	17.2	20.0	11.6	18.1	19.6	10.8
Stillbirth Rate	24.7	26.7	21.8	21.0	16.9	19.6	17.6	19.1	16.4	15.3
Perinatal Death Rate	38.2	42.2	37.5	39.3	29.7	34.0	27.5	34.0	32.4	24.8
Deaths of infants aged 1 week but under 1 year per 1,000 total births	12.9	6.8	10.3	8.6	15.7	12.2	9.2	8.9	16.0	9.2

General Discussion - (Infant Mortality and Stillbirths)

There was a marked improvement in the infant mortality, neo-natal and stillbirth rates in 1964. The infant mortality rate was the lowest ever recorded in Bolton, 19.1 compared with an unusually high figure of 32.6 in the previous year. The neo-natal mortality rate fell to 10.8, a marked decline on 19.6 in 1963. The fall in the stillbirth rate to 15.3 was less dramatic but, nevertheless, was the lowest on record.

In the infant mortality figures, as in the previous year, the common causes of death were pneumonia (10) and congenital malformations (7). The enquiries into infant deaths were continued during 1964, with the co-operation of hospital staff and general practitioners. Careful study was made of the pneumonia and asphyxial deaths, and one was determined as a Cot death, the type in which there was no minor upper respiratory infection preceding sudden death, and two were Cot deaths of the type in which the sudden death was preceded by mild infection. The microscopic pathology in these cot deaths differed from the inflammatory, leucocytic picture of the typical bronchopneumonias.

In many of these respiratory deaths the illness was so short that there was little time for medical attention. Bolton's colder and wetter climate and poorer housing conditions compared with southern areas of England, associated with the increased incidence of deaths in the winter months, may be significant factors. The milder winter of 1963-64 compared with more severe winters of previous years may have helped towards a lower infant mortality figure.

In the congenital abnormalities, the commonest cause of death was due to malformations of the heart and great vessels; six babies died from this cause.

In the neonatal mortality period 15 of the 30 deaths were due to prematurity. All the babies were below 4lbs. in weight and five were under 2 lbs in weight. These premature babies died within the first hours to the first three days of life - their low birth weights did not help their chances of survival.

When considering the low figures for infant, neonatal and stillbirth and perinatal mortality rates we must not be over optimistic that these low rates can be maintained in the years ahead. It must be remembered that these figures are based on a small number, under 3,000 births, and a slight increase in the number of deaths would alter the pattern considerably. It is pleasing that the low infant mortality is associated with a low stillbirth rate. If the stillbirth rate had been high it could have been argued that had some of these babies been born alive to die in the infant period, then this would cause an increase in the infant mortality rate. The fifteen deaths from prematurity in the neonatal period might well have been stillbirths and thus greatly increased the stillbirth rate, but giving a lower neonatal mortality figure. Similarly, had the prematures been of heavier birth weight and survived beyond the first week of life to die later, this would have caused a still further improvement in the perinatal mortality rate.

Deaths from Cancer

Localisation of Disease, Number of Deaths and Rate Per Cent of Total Deaths annually for the past ten years

		1955		1956		1957		1958		1959		1960		1961		1962		1963		1964	
		No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Stomach	.. ..	55	2.57	59	2.66	52	2.30	76	3.59	60	2.84	62	3.02	67	2.96	73	3.30	72	3.23	56	2.70
Lung & Bronchus		60	2.81	78	3.51	85	3.77	82	3.87	82	3.88	69	3.37	71	3.13	98	4.43	90	4.04	109	5.26
Breast	.. ..	38	1.78	35	1.58	39	1.73	28	1.32	33	1.56	27	1.32	32	1.41	40	1.81	31	1.39	32	1.54
Uterus	.. ..	12	0.56	19	0.86	19	0.84	17	0.80	7	0.33	21	1.02	16	0.71	21	0.95	6	0.27	20	0.97
Other Sites	.. ..	171	7.99	184	8.29	178	7.89	183	8.64	177	8.38	161	7.85	173	7.63	172	7.77	167	7.50	178	8.59
TOTAL DEATHS FROM CANCER		336	15.71	375	16.90	373	16.53	386	18.22	359	16.99	340	16.58	359	15.84	404	18.26	366	16.43	395	19.06
TOTAL DEATHS: (All Causes) ..		2,138		2,220		2,256		2,119		2,113		2,051		2,267		2,212		2,227		2,072	

Deaths due to Lung Cancer:

The number of deaths due to lung cancer in 1964 was 109 (96 males and 13 females), an increase of 19 on the previous year. This represents an appalling loss of life. When this is studied in conjunction with the expectation of life tables published in the Statistical Review for 1962, it is found that 850 years is lost to men up to retiring age of 65 years inclusive, and approximately 95 years to women up to retiring age of 60 years inclusive.

The greatest number of deaths occurred in the 55-64 age group - 38 males and 3 females; in the 65-74 age group 31 males and 3 females died, but in the age group 45-54 13 males died and in a younger age group still, 35-44, there were two deaths from lung cancer, one male and one female.

Average number of deaths per annum, 1954-1958 ... 74

Average number of deaths per annum, 1959-1963 ... 82

Number of deaths in 1964 **109**

The public has not taken seriously the dangers of cigarette smoking and amongst smokers is still the philosophy that the link between smoking and lung cancer has not been established - addiction blinds the sufferer to the dangers.

Increased health education on the risks of smoking tobacco and on the need for reduction of atmospheric pollution by domestic smoke is essential in an industrial area like Bolton. Industrial smoke has been largely eliminated and if householders will also co-operate, the smoke-free zones can be extended.

Fatal Road Accidents:

I am indebted to the Chief Constable for the following information.

"During 1964, 2,084 accidents which occurred in the borough were reported to the Police.

The number of traffic accidents involving personal injury totalled 841; the number of persons injured in these accidents was 1,042.

Twenty-one persons were killed, this being a decrease of three on the previous year. Fourteen of these accidents occurred during the hours of darkness and seven during daylight hours. Fatal accidents during daylight involved four pedestrians, aged 2 years, 12 years, 44 years and 78 years; one car driver aged 18 years; one moped driver aged 26 years; and one passenger aged 75 years. Accidents during the hours of darkness were responsible for the deaths of seven pedestrians, aged 42 years, 46 years, 51 years, 55 years, 57 years, 73 years and 75 years; two car drivers, aged 19 years and 26 years; one van driver aged 24 years; one scooter driver aged 21 years; and three car passengers, aged 18 years, 33 years and 44 years".

Fatal Accidents in the Home:

There were thirty-seven fatal accidents in the home during 1964, a decrease of thirteen compared with 1963. Thirteen of the deaths followed fracture of the femur. Six of the people concerned were aged between 70 and 79 years and seven were aged 80 years or over.

Other falls in the home apart from those which caused fracture of the femur resulted in twelve deaths. Nine of these twelve deaths occurred amongst people aged 80 years or over.

Thus, a total of twenty-five people died after falls in the home, and of these twenty-five, sixteen were aged 80 years or over.

Carbon monoxide poisoning caused six deaths, and two deaths were due to burning.

The total of 37 accidents is an improvement on the previous year when fifty deaths occurred. However, there is still need for care in the home, particularly to prevent falls amongst the elderly.

The following table shows the distribution of deaths according to age and sex.

Cause of Death	Age Group						Total
	Under 70 years		70-79 years		80 and over		
	M.	F.	M.	F.	M.	F.	
Falls – fractured femur ..	–	–	3	3	2	5	13
– other	1	–	2	–	4	5	12
Carbon monoxide poisoning	3	1	–	–	1	1	6
Burns – clothing on fire ..	–	–	1	–	–	1	2
Chloral hydrate	1	–	–	–	–	–	1
Barbiturate and alcohol ..	1	–	–	–	–	–	1
Drowning	–	1	–	–	–	–	1
Falling in bath of hot water ..	1	–	–	–	–	–	1
TOTALS	7	2	6	3	7	12	37

Suicide:

Twenty-five deaths were due to suicide in 1964. This is almost double the number of deaths in the previous year when it was a low figure of 13, compared with higher figures of 22 in 1962 and 34 in 1961.

The following table shows the distribution of deaths according to age, sex and the method of suicide applied.

	Age Group					
	15-44		45-64		65 and over	
	Male	Female	Male	Female	Male	Female
Carbon monoxide poisoning	2	-	3	1	1	2
Barbiturate Poisoning	-	-	1	5	2	1
Self-inflicted violence	-	-	3	-	2	1
Nembutal and Alcohol	1	-	-	-	-	-
TOTALS	3	-	7	6	5	4

In one of the deaths, barbiturate poisoning in a young male, the lethal action of the barbiturate was accentuated by alcohol.

PART II

LOCAL HEALTH SERVICES

Care of Mothers and Young Children

Midwifery

Health Visiting

Home Nursing

Immunisation and Vaccination

Ambulance

Prevention of Illness, Care and After-Care

Home Help

Mental Health

(Bolton Medical Society Centenary Year, 1864-1964)

(Survey of Geriatric Services in Bolton)

CARE OF MOTHERS AND YOUNG CHILDREN

Ante-Natal Clinics:

The practice was continued whereby expectant mothers intending to be confined at home attended the ante-natal clinic held at the Civic Centre. Patients on their first visit were seen by the doctor on a Monday or a Wednesday morning. The midwives held their clinic on a Tuesday afternoon.

During the year there were 3,894 attendances at these clinics; of these 718 were first attendances. After consultation with, and with the agreement of their general practitioners, 9 patients were referred to the Bolton District General Hospital for hospital delivery. The reasons for the referrals were:

Multiparity	...	...	...	...	...	...	...	...	6
Disproportion	...	...	...	...	...	...	...	...	1
Hydramnics	...	...	...	...	...	...	...	...	1
Difficult obstetric history	...	...	...	...	...	...	...	...	1

All expectant mothers attending the ante-natal clinic are given a series of routine tests consisting of:

1. Blood examination for haemoglobin estimation, rhesus factor and Kahn reaction. Those where blood is found to be rhesus negative are further investigated for antibodies. A repeated haemoglobin estimation is done where it is considered necessary.
2. All new patients are invited to have their chest X-rayed on first attendance if they have not had an X-ray within the previous twelve months. During the year 357 women were X-rayed. No cases of active tuberculosis were found.

Besides these tests, expectant mothers are provided with maternity packs containing all the necessary sterile equipment for the confinement. 614 of these packs were issued during the year.

Other facilities in the clinic include:

IRON THERAPY:

Patients are supplied with ferrous fumarate tablets throughout the pregnancy.

PHYSIOTHERAPY:

Relaxation classes are held regularly during the week. These classes are very well attended.

WELFARE FOODS:

Welfare foods are available during all clinic sessions.

DENTAL ARRANGEMENTS:

Expectant mothers in need of dental treatment are encouraged to attend the dental clinic. Most patients prefer to make their own arrangements.

LIAISON:

There has been a very high degree of co-operation between hospitals, general practitioners and municipal clinics and this probably accounts for the popularity and the efficiency which these ante-natal clinics are attaining.

Child Welfare Centres:

Total attendances at child welfare centres rose by 3,009 although there was a slight decrease in attendance at two of the clinics where the unsatisfactory condition of the premises makes them unsuitable for the examination of very young children, particularly in winter months. Draughty church halls and inadequately heated rooms present a risk not only to the health of mothers and babies, but also to the staff and voluntary helpers who are obliged to work in them. It is regrettable that Bolton should fall behind other authorities in her clinic building programme.

Details of the centres and of the volume of work carried out are as follows:

CENTRE	DAY	NO. OF SESSIONS	TOTAL ATTENDANCES
Civic Centre	Monday afternoon	46	1,946
Daubhill	do.	46	1,733
Chalfont Street	do.	46	2,001
Deane	do.	46	1,675
Tonge Fold	do.	46	1,741
Astley Bridge	Tuesday afternoon	49	1,828
Halliwell	do.	50	3,750
Chorley Old Road	do.	50	2,577
Civic Centre	Wednesday afternoon	50	2,054
Rosehill	do.	50	2,061
Astley Bridge	Thursday afternoon	51	3,064
Civic Centre	do.	53	2,141
Daubhill	do.	49	2,762
Chorley Old Road	do.	49	1,006
Delph Hill	Friday afternoon	50	2,310
Tonge Moor	do.	49	3,291
The Withins	do.	49	3,574
Lever Edge Lane	Saturday Morning (fortnightly)	26	573
TOTALS:		855	40,087

Approximately 80 per cent of babies born to Bolton mothers were taken to child welfare centres during their first year of life. Details of attendances at different ages are shown in the following table.

Attendances at Child Welfare Centres

Age of Child	First Attendance	Subsequent Attendances	Seen by Doctor at Child Welfare Centre
Born 1964 ..	2,114	17,696	6,250
Born 1963 ..	966	14,884	4,975
Born 1959/62	306	4,121	1,270
TOTALS ..	3,386	36,701	12,495
TOTAL ATTENDANCES:		40,087	

The medical officers referred some of the children to consultants, always of course, with the family doctor's consent. The details of the 68 cases referred during the year are as follows:

Referred to	Ophthalmic Surgeon	5
„ „	Paediatrician	38
„ „	Orthopaedic Surgeon	6
„ „	General Surgeon	16
„ „	Ear, Nose and Throat Surgeon ...	3
	TOTAL:....	68

VACCINATION AGAINST POLIOMYELITIS:

NUMBER OF DOSES GIVEN AT CHILD WELFARE CENTRES

1ST DOSES	2ND DOSES	3RD DOSES
1,966	1,753	1,677

VOLUNTARY WORKERS:

Voluntary workers continued to attend child welfare centres to assist with record keeping, the sale of welfare and proprietary baby foods, and baby weighing. By their regular attendance, health visitors are able to devote more time to discussion with mothers about care and development of their children. In some of the busier clinics the responsibility of handling comparatively large sums of money from food sales is a source of anxiety to some of the voluntary helpers. It may be that consideration should be given in the near future to the employment of clinic clerks whilst retaining the voluntary workers for duties of a more social nature such as reception of new attenders, tea making and entertaining of toddlers whilst mothers consult with doctors and health visitors.

We are grateful to the Women's Voluntary Service for their willing and sustained help in providing workers at several clinics.

Children "At Risk" and Handicapped:

During the past year weekly clinics have been conducted by Dr. W. Dickson, Consultant Paediatrician, in the Civic Centre.

These clinics have been attended by Dr. Allanson and a health visitor.

"At risk" babies and handicapped children have been seen, and the whole problem of the care of these children has been examined with the parents, each member of the clinic contributing from his or her own expertise. The parents have appeared to appreciate and be grateful for the advice offered and even if they have been only able to come and ventilate their problems, this has helped them.

It is thought that in future the "at risk" babies, with the exception of the Rhesus babies, could be seen by a medical officer. Another advantage to the Consultant Paediatrician is that it enables him to know and have easy contact with the Medical Officer of Health's Department and many problems are discussed with members of staff on his visits.

No. of clinics held	...	...	...	...	...	35
No. of Children attending clinics	...	...	...	...	...	177
No. of attendances made by children	...	...	...	...	...	331
No. of children discharged from clinic	...	...	...	...	...	37

CATEGORIES OF CHILDREN ATTENDING CLINICS:

Mentally retarded	...	...	...	...	...	25 (2 children died)
Mental illness	...	...	...	...	...	1
Mentally retarded and epileptic	...	...	...	...	...	1
Delay in talking...	...	...	...	...	...	9 (1 ref. from "At Risk" clinic)
Dyslalia	...	...	...	...	...	4 (1 ref. from "At Risk" clinic)
Speech difficulty	...	...	...	...	...	3
Cleft palate	...	...	...	...	...	1
Partial hearing	...	...	...	...	...	10
Deformity of ears	...	...	...	...	...	1
Slow physical progress	...	...	...	...	...	18 (7 ref. from "At risk" clinic)
Hypotonia	...	...	...	...	...	20 (1 ref. from "At Risk" clinic)
Muscular dystrophy	...	...	...	...	...	2
Failure to thrive	...	...	...	...	...	1 (child died)
Difficulty in walking...	...	...	...	...	...	1
Knock knee	...	...	...	...	...	1 (ref. from "At Risk" clinic)
Spinal abnormality	...	...	...	...	...	1
Bow legs	...	...	...	...	...	2
Feeding problem	...	...	...	...	...	1
Behaviour problem	...	...	...	...	...	3
Open fontanelle	...	...	...	...	...	1
Cavernous haemangioma	...	...	...	...	...	3

Carried forward 109

Cyst on scalp	1
Asthma	3
Bronchiectasis	2
Bronchitis	3
Migraine	2
Abdominal migraine	1
Cretin	1
Primary pituitary dwarf	1
Idioglossia	7
Microcephalic	4
Hydrocephalic	2
Plagiocephaly	1
Gargoyle	2 (2 ref. from "At Risk" clinic)
Mongol	1 (child died)
Mongol (and congenital heart)... ..	1
Spastic	14
Right hemiplegia	2
Optic atrophy	1
Madelung's deformity of left hand	1
Werdnig Hoffman's disease	1 (child died)
Fanconi da Toni syndrome	1
Cardiac	4 (2 ref. from "At Risk" clinic)
Convulsions	4 (1 ref. from "At Risk" clinic)
Torticollis	1
Epileptic	3
Enuresis problem	3
Miscellaneous	1 (ref. from "At Risk" clinic)

TOTAL: 177

CHILDREN "AT RISK":

During the past decade the infant mortality rate and morbidity rate of early childhood have shown a steady decline. These have been accompanied by a rising survival rate of immature, malformed and birth-injured babies.

In order to understand the problem fully it was decided that children who were "at risk" should be carefully and frequently examined. Premature babies have constituted a large "at risk" group for many years and these have been followed up by the Paediatricians in hospital out-patients departments. Relationships have also been found between breech presentations and congenital dislocation of hip, toxæmia of pregnancy and increased incidence of myopia, keratitis and deafness, difficult delivery and cerebral palsy.

Large scale testing of all births provides little return for the large amount of work involved and in particular where large scale testing for deafness has been carried out the cases found would all have been in the "at risk" group. It has thus been considered far better to keep an "at risk" register and to follow up more closely these children in the pre-school period. The information for the register depends on close relationship with the hospitals, maternity homes and the domiciliary midwifery service. The accuracy of the register is dependent on correct information being received. It has been agreed upon in Bolton that this information should be collected by the Health Department.

The survey of the 1962 babies at risk at birth was completed during 1964. There were 451 babies born in 1962 who were "at risk". Of these 273 were examined. The remainder either did not attend, although given an appointment, or had left the area. An analysis of those examined showed the following:-

Forceps delivery	...	...	...	...	...	...	100
Premature babies	...	...	...	...	...	...	79
Breech delivery	...	...	...	...	...	...	40
Caesarean section	...	...	...	...	...	...	21
Rhesus negative	...	...	...	...	...	...	24
Pre-eclampsic toxæmia of mother	...	...	...	...	...	...	48

Of these there were:-

Hypotonia	· 14	(Caesarean section	...	...	1
		(Forceps delivery	...	...	3 (1 twin)
		(Breech delivery	...	...	8
		(Premature	...	...	4
Speech slow	· 6	(Rhesus negative	...	...	1
		(Breech delivery	...	...	1
		(Forceps delivery	...	...	1
		(Caesarean section	...	...	1
		(Premature	...	...	1
		(Unknown birth history	...	...	1
Dyslalia	· 4	(Forceps delivery	...	...	2
		(Pre-eclampsic toxæmia	...	...	2

There were 15 cases of foetal distress with no apparent damage.

The following conditions were noted at birth:-

Poor condition -7 (1 gargyle)
 Convulsions -7 (1 backward)
 Heart murmur -3 (all discharged)

MISCELLANEOUS

- 1 Erb's palsy (Forceps delivery)
- 1 Haemorrhagic disease (Twin; premature)
- 2 Slight jaundice (Premature)
- 2 Congenital dislocation of hip (Forceps delivery)
- 2 Bilateral talipes (1 Caesarean section; 1 premature)
- 1 Fractured clavicle (Forceps delivery)
- 1 Facial palsy and deformed ears (Normal delivery)

It will be seen that of the 273 babies examined, apart from some abnormal degree of muscle hypotonia in 14 cases – the majority of these being either premature or breech deliveries – no abnormality was discovered of which the parents were not well aware before attending the examination. It does seem that these examinations are well worth while.

The number of babies listed on the “At Risk” Register during 1964 was 673, an increase of 113 over the previous year.

There were 402 children on the handicapped register of pre-school children who are physically or mentally handicapped and who may require special medical or educational treatment. An analysis of these shows the following:-

DISEASE OR DEFECT	No. OF CASES
Asthma and eczema ...	14
Blood diseases ...	3
Cardiac ...	36
Cerebral palsy ...	10
Hypotonia ...	12
Werdnig Hoffman's disease	1
Cleft palate and hare lip	11
Pierre Robin's syndrome	3
Speech delay ...	17
Partial hearing ...	12
Alimentary system defect	28
Epilepsy and convulsions	50
Orthopaedic ...	95
(Congenital dislocation of the hip ...	20
(Talipes ...	21
(Rickets ...	1
(Meningocele and spina bifida ...	11
(Congenital abnormality of arms ...	3
(Miscellaneous ...	39
Retarded ...	32
Mongols ...	5
Cretins and dwarfs ...	4
Gargoyles ...	2
Vision defects ...	4
Tuberculous infection ...	2
Nephritis ...	2
Miscellaneous ...	59

During the year there were seven deaths:

- i. Bronchopneumonia
- ii. Two children died of congenital heart failure due to congenital heart disease
- iii. Heart failure due to congenital transposition of great vessels of the heart
- iv. A mentally retarded child who died of convulsions following bronchopneumonia
- v. A mentally retarded child who died of cerebral haemorrhage following bronchopneumonia
- vi. A child with Werdnig Hoffman's disease died following bronchopneumonia

Congenital Abnormalities

In accordance with the Ministry of Health scheme, the register of congenital abnormalities was continued. This information is obtained with the co-operation of the Paediatric Department of Bolton District General Hospital, the maternity homes and the general practitioners in the area. The information received during 1964 is as follows:-

CONGENITAL ABNORMALITIES NOTIFIED DURING 1964

Total notified - 36

	LIVE		Stillborn	
	M	F	M	F
Born in Bolton District General Hospital	5	9	3	3
„ „ Halsam Maternity Home	-	1	-	1
„ „ Havercroft Maternity Home	-	-	-	-
„ „ Heaton Grange Maternity Home	1	1	-	-
„ „ Withington Hospital, Manchester	-	-	-	1
„ „ St. Mary's Hospital, Manchester	-	1	-	-
Domiciliary births	6	4	-	-
	<u>12</u>	<u>16</u>	<u>3</u>	<u>5</u>

The congenital abnormalities notified fall into the following categories:-

Anencephalic	5
Hydrocephalic and meningocele	1
Cervical meningocele	2
Micrognathos and oesophageal atresia	1
Spina bifida and meningocele	1
Spina bifida	2
Pilonidal sinus	1
Anorectal atresia and bilateral talipes equinovarus	1
Imperforate anus	1
Cleft palate and hare lip	2
Hare lip	1
Cleft Palate	3
Bilateral cleft palate and small anal canal	1
Congenital dislocation of the hip	2
Talipes	3
Valgus right foot	1
Polydactylism	4
Absence of three ribs on left side	1
Mongolism	2
Cavernous haemangioma... ..	1

Ascertainment of Deafness in Young Children - Screening Tests of Hearing:

Ten full-time health visitors, two part-time health visitors and one school nurse are trained to use the tests specially devised by the Department of Audiology and Education of the Deaf of Manchester University to screen the hearing of babies and young children.

Babies and young children were selected to have their hearing tested if they were handicapped in any way, or considered to be "at risk", that is particularly liable to develop a defect such as hearing loss because of some factor in their own or their mother's history, or if they were referred by a doctor, nurse, teacher or parent who had any reason to suspect the child of being deaf.

The following table shows the various reasons why children were referred for hearing tests in 1964.

CATEGORIES OF SCREEN-TESTED CHILDREN

(a) CONDITIONS AFFECTING THE BABY (b) CONDITIONS AFFECTING THE MOTHER

Forceps and all difficult deliveries	Toxaemia of pregnancy
Delivery by Caesarian Section	Marked anaemia
Birth weight under 6 lbs	Rhesus negative
Pustular rashes in the neonatal period	Deafness
Breech delivery	Diabetes
Twins and triplets	Tuberculosis
Replacement transfusion	Heart disease
Foetal distress	Any abnormality of the puerperium
Neonatal illness	
Severe vomiting in the neonatal period	
Heart disease	
Twitching of limbs	
Marked weight loss	
Mongolism	

(c) CONDITIONS NECESSITATING THE OLDER CHILD BEING BROUGHT FORWARD

Delay in talking
Speech not clear
Otitis media
Catarrhal conditions
Convulsions
Slow development
Adopted children
Repeated tonsillitis
Recurrent bronchitis
Meningitis
Head banging
Parents' request

The nurses worked in pairs to screen the children's hearing. In each case, if necessary, the hearing was tested on three separate occasions before a child was considered to have failed to respond normally. Babies were not tested until they were eight months old, the earliest age at which they are usually sufficiently mature to respond to the tests.

Five children who had been referred for testing died before this was done; one mother with a baby under one year refused to allow her baby to be tested, and in two other cases of children under one year the tests were not completed because of lack of co-operation on the mother's part.

Results

	Under 1 year	%	1 to 2 years	%	2 to 5 years	%	Totals	%
Number tested ..	375	71.4	108	20.6	42	8.0	525	
Passed—								
1st Test ..	348	92.8	96	88.9	35	83.3	479	91.3
2nd Test ..	19	5.1	7	6.5	4	9.5	30	5.7
3rd Test ..	5	1.3	1	0.9	2	4.8	8	1.5
Failed 3 Tests ..	3	0.8	4	3.7	1	2.4	8	1.5
Diagnosed—								
Deaf	0	—	0	—	1	2.4	1	0.2
Not Deaf ..	1	0.3	1	0.9	0	—	2	0.4
Under consider- ation	2	0.5	3	2.8	0	—	5	1.0
Where tested—								
At home ..	234	62.4	60	55.6	29	69.0	323	61.5
At clinic ..	139	37.1	47	43.5	12	28.6	198	37.7
At nursery ..	2	0.5	1	0.9	1	2.4	4	0.8

Five hundred and twenty-five children were tested during the year. This figure is similar to 1963 when 531 children were tested, and in both years eight children failed all three tests. In 1964 three of these children were under the age of one year, and the details are as follows:-

1. In this case the child was tested again; on the second occasion he passed the test and was therefore not considered to be deaf.
2. This little girl was a mongol and possibly blind. In view of her multiple handicaps no further testing was undertaken at this stage.
3. This girl was backward. She was tested on the Griffiths Mental Development Scale and her general quotient was 41%. In view of this no further testing of hearing was done as at this stage she was not sufficiently mature to respond to the tests.

Four children who failed three tests were in the 1 to 2 year age group, and the details are as follows:-

4. This child was seen by the Consultant Paediatrician, Dr. W. Dickson, who considered the hearing to be within normal limits.

5. In this case the Consultant Paediatrician considered that the boy probably was deaf but he has been referred to the Department of Audiology in Manchester for their opinion.
6. This boy was referred for further testing to the Department of Audiology in December, 1964, and he has not yet been seen there.
7. This child was a slow developer. He failed a fourth screening test of hearing and he, too, is waiting for further investigation at the Department of Audiology, having been referred in December, 1964.

One child was in the 2 to 5 year age group, and the details are as follows:-

8. This boy was seen by the Consultant E.N.T. Surgeon, Mr. G. G. Mowat, who considered him to have variable deafness and advised that he have his adenoids removed.

Five children who had failed three tests in 1963 were investigated further in 1964 and the results were as follows:

1. This girl was investigated at the Department of Audiology where she was found to have a unilateral deafness.
2. This child's appointments at the Department of Audiology were not kept but, as she had other handicaps, no further action was taken regarding her hearing.
3. This girl was diagnosed as deaf by the Consultant E.N.T. Surgeon, Mr. G. G. Mowat, and she was admitted to the Thomasson Memorial Special School.
4. This backward boy with multiple handicaps was still unable to co-operate sufficiently for his hearing to be screened.
5. This girl was diagnosed as having profound bilateral hearing loss by the Department of Audiology and was recommended for admission to the Thomasson Memorial Special School.

The Psychological Testing of Children under Two:

One of the assistant medical officers of health has been trained to use the Griffiths Mental Development Scale, which is a series of tests devised by a child psychologist to assess the ability of children under two years of age.

In 1964 eleven children were tested. Two of these had been waiting for a test at the beginning of the year, having been referred in 1963; ten were referred during the year but one of these was to be tested in January, 1965.

The following are the reasons why the children were referred for testing in 1964:

Apparently backward	...	4
Late walking	... ..	2
Myotonia	... ..	2
Parents blind	... ..	1
Spina bifida	... ..	1

The children were referred by the Consultant Paediatrician, Dr. W. Dickson in eight cases, by an assistant medical officer of health in one case and by a health visitor in one case.

Routine Testing of Babies for Phenylketonuria

Health visitors continued to carry out the simple test of urine of babies of six weeks of age. The routine for carrying out this test is now well established and usually takes place when the health visitor pays a return visit to the baby a week or two after the primary visit. No cases of phenylketonuria were found.

Care of Unmarried Mothers:

Work with unmarried mothers was again carried out by the Bolton Moral Welfare Association for the Corporation.

In 1964 the Moral Welfare Worker dealt with 100 cases. Eleven of these cases were girls aged sixteen years and less.

	1964	1963	1962	1961
Total number of girls aged 16 years and under who gave birth to live babies	11	12	15	3
Ages of mothers at the date of birth of their babies::				
Age of mother at last birthday:				
16 years	5	10	5	2
15 years	4	1	8	1
14 years	2	1	2	—

An annual grant was paid to the Association by the Corporation and, in addition, any maintenance charges required for individual cases, where necessary, were met. Although there have been difficulties from time to time in obtaining places for girls in Mother and Baby Homes, it was possible to have admitted all those where this was necessary.

Mother and Baby Homes where girls were accommodated for an average period of nine to ten weeks were as follows:

Mother and Baby Home, Liverpool	2 cases
St. Agnes' Home, Manchester	2 cases
St. Anne's Maternity Home, Heywood... ..	12 cases
The Girls' Hostel, Lancaster	1 case
The Grange Maternity Home, Wilpshire ...	7 cases
The Methodist Maternity Home, Manchester	6 cases
Good Samaritan Home, Warrington	2 cases
St. Theresa's Home, Salford	3 cases
St. Monica's Home, Kendal	4 cases
St. Katherine's Home, Huddersfield	1 case
St. Bridget's Home, Chester	2 cases

All paid part of the cost of maintenance and the Local Authority paid the remaining part. The total number of cases dealt with was 42, an increase of 9 over the previous year.

Recuperative Training:

It was not found necessary to send any families to Brentwood Recuperative Centre during the year.

Family Planning

No change has taken place in the administration of the facilities for family planning advice in the County Borough.

This work is carried out by the Bolton Family Planning Association and two separate weekly clinics are held, one at the Health Department in the Civic Centre on Mondays from 6.30 to 7.30 p.m. and the other at the Friends' Meeting House, Tipping Street, on Fridays from 6.30 to 7.30 p.m.

The patients were all referred from medical sources. At the Civic Centre there were 1,571 patients who had previously attended and 325 new patients. The number of clinics held was 41. At Tipping Street there were 450 patients who had previously attended and 112 new patients. The number of clinics held was 47.

Distribution of Welfare Foods:

Welfare foods were on sale daily during office hours in the Health Department at the Civic Centre and also at twelve premises in various parts of the town where child welfare clinics were held. At these premises three clinics were held twice weekly, eight were held weekly, and one was held fortnightly.

The following table shows the total issue during the past three years :

COMMODITY	1962	1963	1964
National Dried Milk	20,839 tins	16,348 tins	15,230 tins
Cod Liver Oil	3,999 bottles	2,516 bottles	3,330 bottles
Orange Juice	32,214 bottles	35,850 bottles	36,998 bottles
Vitamin A and D Tablets	4,673 packets	4,186 packets	4,319 packets

Issues from the distributing centre at the Health Department continued to exceed the issues at all the child welfare clinics combined and, expressed as a percentage of the total issues, were as follows:-

National Dried Milk	69 percent
Cod Liver Oil	57 per cent
Orange Juice	54 per cent
Vitamin A and D Tablets	66 per cent

Welfare foods were issued from the Health Department to the following institutions; the figures are included in the above totals for the year:

NATIONAL HEALTH SERVICE INSTITUTIONS	National Dried Milk ...	143 tins
	Cod Liver Oil ...	Nil
	Orange Juice ...	318 bottles
DAY NURSERIES	National Dried Milk ...	5 tins
	Cod Liver Oil ...	108 bottles
	Orange Juice ...	384 bottles

The downward trend in the sales of National Dried Milk continued, probably because nationally advertised proprietary baby foods are also on sale at reduced prices at the child welfare clinics. It is pleasing to note, however, that the sales of Cod Liver Oil increased by 32 per cent over the previous year, and that there were slight increases in the sales of Orange Juice and Vitamin Tablets.

Day Nurseries:

Nursery	Accommodation		Average daily attendance	
	To 19.6.64	From 22.6.64	1963	1964
Park House (to 19.6.64)	50	43	41.58	48.00
Lowndes Street (from 22.6.64)				
Shaw Street	50	50	40.50	40.11
Merehall	47	47	42.92	39.73
Roxalina Street	50	50	43.67	38.47
TOTALS	197	190	168.67	166.31

The four day nurseries provide potential accommodation for 190 children.

During the year 498 children attended the nurseries of whom 223 were social cases in the following categories:-

Separated parents	62
Unmarried mothers	73
Desertion of father or mother	10
Confinement	16
Ill-health of father or mother	25
Widows	5
Unsuitable environment	3
Deceased mother	1
Divorced parents	2
Imprisonment of father	1
Doctors' recommendations	12
Health visitors' recommendations	13

223

Brought forward	...	...	...	...	...	...	223
OTHER REASONS							
Mother's profession (Nurse/Teacher)	...						21
Sponsored by Lancashire County Council							5
Financial	...	...	...	...	...	...	249
							275
TOTAL	...	...	...	...	...	...	498

LOWNDES STREET NURSERY:

The nursery was purchased by the Local Authority in 1963 from the Fine Spinners and Doublers Limited. It was one of the few industrial nurseries in the North of England to be approved as a training establishment for the practical training of nursery students who wished to obtain the National Nursery Examination Board Certificate.

The nursery officially provides accommodation for 43 children. This figure is based on the accepted standards of floor space per child as recommended by the Ministry of Health.

The children from Park House Nursery were transferred on June 22nd after the completion of certain constructional alterations.

The demand for attendance at this nursery has been very great due to the fact that it is sited in a densely populated area and within easy access of a very frequent bus service. This factor is of the utmost importance to the mother who, after leaving her children at the nursery, has to travel by bus to her place of employment.

CHARGE FOR DAY NURSERY ACCOMMODATION:

The Committee agreed that in 4 cases involving 8 children, no charge should be made. In all cases the mother or both parents were mentally handicapped.

Charge payable at end of year	No. of Cases	
	1963	1964
2/-d - 3/10d per day	63	34
4/1d - 6/- " "	41	77
6/6d " "	7	4
7/9d " "	5	3
9/3d " "	109	112
TOTALS " "	225	230

During the year, 5 appeals involving 6 children were considered by a special sub-committee of which 4 were successful.

VACCINATION AND IMMUNISATION:

In November a child aged two who had attended a day nursery was admitted to Hulton Hospital suffering from paralytic poliomyelitis. All contacts were given a dose of oral poliomyelitis vaccine followed by a full course if they had not already been vaccinated.

STAFF:

The staff at the 31st December was as follows:

Day Nursery Supervisor	1
Matrons	4
Deputy Matrons	3
Wardens	4
Nursery Nurses	13
Nursery Assistants	8
Students	8
TOTAL	<hr/> 41 <hr/>

TRAINING OF NURSERY NURSES:

Students of the Bolton Training Centre, 40 Chorley New Road, were awarded the Certificate of the National Nursery Examination Board.

It is gratifying to learn that a considerable number of married nursery nurses who qualified some years ago are employed in the children's wards and premature baby unit at Bolton District General Hospital several evenings per week to assist the trained staff.

Nurseries and Child Minders' Regulation Act, 1948:

Two industrial nurseries, which provided accommodation for 99 children, were visited by the Day Nursery Supervisor and found to be satisfactory.

CHILD MINDERS:

Two applications were received and approved for registration. In both cases the minders were of the opinion that there was a demand in their neighbourhood to meet the needs of the only child who had not the opportunity to mix with other children. The children only attend part-time (a maximum of 3½ hours daily), and are not accepted before the age of two years.

There are now 5 registered Child Minders in Bolton.

Dental Treatment:

I am indebted to Mr. A. E. Shaw, the Principal School Dental Officer, for the following information and comments.

After July, due to resignations, two of the six dental surgeries operated on a part-time basis. The resignation of another full-time officer to take effect in March, 1965 means that we shall have the equivalent of only 4 officers and underlines the country-wide shortage of dental manpower. However, dental treatment was given to all priority class patients seeking or referred for treatment. Patients from Cotton Street Training Centre received inspection and treatment at Robert Galloway Clinic.

Dental Arrangements

Number of dental treatment centres in use at end of year for services shown below	4
Number of dental officer sessions (i.e. equivalent complete half days) devoted to maternity and child welfare patients during the year	70

Analysis of Priority Dental Care

	Expectant and Nursing Mothers	Children under five
Examined	27	239
Commenced treatment	26	170
Courses of treatment completed	12	148
Scalings and Gum Treatment	12	2
Fillings	32	52
Silver Nitrate Treatment	—	4
Crowns and Inlays	—	—
Extractions	25	174
General Anaesthetics	3	78
Dentures provided: Complete	1	—
Partial	3	—
Radiographs	—	—

A dental health week was held in Bolton from the 16th to the 21st November, 1964. A dental health exhibition was arranged in the public library and a mobile exhibition cinema van stand on the market site. Dental features were published daily in the Bolton Evening News, much publicity being devoted to dental health matters and education, and 25,000 free samples of toothpaste were distributed, the organisation being done by the newspaper. This was a new venture in dental health education and proved very rewarding, some 5,000 people visiting the exhibition and showing great interest in the exhibits. Our sincere thanks are due to the Bolton Evening News for sponsoring the effort.

Physiotherapy:

During 1964 remedial exercises and massage were given to children from the child welfare centres. The work this year has included treatment for several handicapped children seen by Dr. Dickson at the Civic Centre.

Foot classes were held for school children and also classes to teach correct breathing and posture in addition to postural drainage.

Ultra-violet light sessions were held four times weekly, twice for infants and twice for school children, at the Civic Centre.

From September to March ultra-violet light sessions were held twice weekly at the Lostock Open Air School and from April to July postural drainage was supervised one afternoon per week. From September this year postural drainage supervision was carried out after one ultra-violet light session. Breathing exercises, which are done daily at the school, were supervised once each term.

Relaxation classes for expectant mothers were given each morning from 9.30 to 10.45 and also on Tuesday afternoons in conjunction with the Mothercraft Class. During the summer months one extra class was added on Monday afternoons.

Two afternoons each week exercises were given at the Cotton Street training centre to several partially spastic children.

The ultra-violet department was transferred at the beginning of October to the Robert Galloway Clinic to allow the Mass Radiography Unit to occupy the rooms in the Civic Centre. Ultra-violet sessions returned to the Civic Centre on 23rd November.

SUMMARY OF WORK

	MASSAGE AND EXERCISES	BREATHING AND POSTURAL EXERCISES
No. of Patients	90	71
No. of Treatments	536	380
No. of New Patients	75	40

	PRE-SCHOOL CHILDREN	ULTRA-VIOLET LIGHT SCHOOL CHILDREN	LOSTOCK OPEN AIR SCHOOL
No. of Patients	218	172	
No. of Treatments	2,107	1,991	2,008
No. of New Patients	169	142	
No. of Sessions	45	44	

EXPECTANT MOTHERS - RELAXATION CLASSES

	NO. OF PATIENTS	NO. OF NEW PATIENTS	NO. OF ATTENDANCES
Domiciliary Midwifery Service ...	90	71	501
Maternity Homes	343	283	1,482
Own Doctors	26	22	87
Bolton District General Hospital	52	44	194

COTTON STREET

No. of Patients	8
No. of Treatments	452

MIDWIFERY

Domiciliary Staff:

Establishment ... 10

In January there were nine midwives on the staff. During the year two midwives were appointed and three midwives resigned.

Following the tragic death of Miss C. M. Ratcliffe in May, it was decided to combine the post of Deputy Superintendent Health Visitor with that of Non-Medical Supervisor of Midwives.

During the year, to maintain the service more easily, the staff were divided into three groups, simultaneous reorganisation taking place in the district nursing and health visiting services. Three midwives work as a team in each group. Patients are booked to the midwives on a group basis. This has resulted in a reduction of travelling time and a more flexible arrangement of duties.

Distribution of Births:

There were 514 domiciliary births, a reduction of 16 and 87 respectively compared with the two years before.

The following table shows the distribution of births and comparison with previous years.

	1961	1962	1963	1964
Total Births	2,738	2,738	2,724	2,786
Domiciliary	575	617	530	514
Bolton District General Hospital	1,292	1,310	1,331	1,433
Maternity Homes	842	813	839	813

The number of babies born to Bolton mothers in maternity establishments outside Bolton, excluding Bolton District General Hospital, totalled 26.

Domiciliary Confinements:

Municipal midwives were in attendance at 506 confinements. Visits were made as follows:

Ante-natal visits	4,451
Nursing visits during the puerperium	8,549
Post-natal visits	54
	<hr/>
TOTAL:	13,054
	<hr/>

The midwives undertook the ante-natal care of 197 patients who had been booked for confinement at home but who were delivered in hospital because of possible complications, and discharged early in the puerperium - usually 48 hours after delivery - when they were looked after by municipal midwives. Forty-seven of the above patients were attended in their homes by midwives until emergency admission to Bolton District General Hospital.

Midwives attend weekly ante-natal clinics at three general practitioner surgeries.

The following figures show the number of mothers whose family doctors agreed to accept responsibility for their confinements in the home.

	DOCTORS ENGAGED				DOCTORS NOT ENGAGED			
1961	522		52	
1962	602		36	
1963	512		12	
1964	499		12	

ANALGESICS:

Trichloroethylene was administered in 417 cases

Pethidine was used for 183 cases

Nitrous Oxide was not administered during the year.

Notifications:

In accordance with the rules of the Central Midwives Board the following notifications were received from midwives:

					DOMICILIARY PRACTICE	MATERNITY HOMES
Notification of Stillbirth	...	...	...		1	2
Liable to be a source of infection...	...	...			1	-

Medical Aid:

Medical aid was sought by domiciliary midwives on 116 occasions from doctors for the following conditions:

RELATING TO THE MOTHER:								No. OF
ANTE-NATAL CONDITIONS:								CASES
Ante-partum haemorrhage	...	...	...	...	...	...	...	1
Placenta praevia	...	...	...	...	...	...	...	1
Multiple pregnancy	...	...	...	...	...	...	...	2
DURING LABOUR								
Abnormal presentation	...	...	...	...	...	...	...	2
Breech/footling with prolapsed cord	...	...	...	...	...	...	...	1
Brow presentation	...	...	...	...	...	...	...	1
Episiotomy	...	...	...	...	...	...	...	1
Foetal distress	...	...	...	...	...	...	...	9
Intra-partum and post-partum haemorrhage	...	...	...	...	...	...	...	1
Post-partum haemorrhage	...	...	...	...	...	...	...	10
Perineal tear	...	...	...	...	...	...	...	49
Premature labour	...	...	...	...	...	...	...	7
Prolonged labour	...	...	...	...	...	...	...	8
Retained placenta	...	...	...	...	...	...	...	4
Uterine inertia and post-partum haemorrhage	...	...	...	...	...	...	...	1
Vomiting	...	...	...	...	...	...	...	1
PUERPERIUM								
Puerperal pyrexia	...	...	...	...	...	...	...	4
Breast abscess	...	...	...	...	...	...	...	1
Suppression of lactation	...	...	...	...	...	...	...	1
RELATING TO THE CHILD								
Asphyxia blue	...	...	...	...	...	...	...	1
Chest infection	...	...	...	...	...	...	...	1
Convulsions	...	...	...	...	...	...	...	1
Hair lips	...	...	...	...	...	...	...	1
Sticky eyes	...	...	...	...	...	...	...	3
Stillbirth	...	...	...	...	...	...	...	1
Supernumerary digits	...	...	...	...	...	...	...	1
Unbooked cases	...	...	...	...	...	...	...	2
TOTAL								116

Maternal Mortality:

There was one maternal death in 1964.

Flying Squad:

The Flying Squad (Emergency Obstetric Team) from Bolton District General Hospital was called by domiciliary midwives as follows:

PATIENTS TREATED BY OBSTETRIC TEAM AND TRANSFERRED TO BOLTON DISTRICT GENERAL HOSPITAL:

Ante-partum haemorrhage	...	...	...	2
Post-partum haemorrhage	...	...	...	2
Retained placenta and post-partum haemorrhage	...	...	...	5

PATIENTS WHO WERE GIVEN BLOOD TRANSFUSIONS AND ALLOWED TO REMAIN AT HOME

Post-partum haemorrhage	...	...	...	5
Second post-partum haemorrhage	...	...	...	1

Testing for Congenital Dislocation of the Hip:

A simple test known as Barlow's Test was carried out by the midwife on every baby born at home. No case of congenital dislocation was detected during 1964.

Early Discharge of Maternity Patients from Hospital:

In December 1963 the Ministry of Health issued a letter on the Maternity Services enclosing a note which drew attention to the continuing rise in the numbers of births and to the strain that was likely to be put on the Maternity Services. It is emphasised that the solution to the problems raised could only be found locally. The circular was considered at the Local Maternity Liaison Committee consisting of representatives of obstetricians, hospital nursing and administrative staff, general practitioners, local health authority doctors and midwives. The Bolton District General Hospital is the only hospital in Bolton which can deal with abnormal midwifery, the general practitioner homes providing accommodation only for normal cases. The hospital serves a wide area and although it does not seem that the number of births in Bolton itself is likely to increase in the near future, those in the surrounding part of Lancashire probably would, thus making the situation at the hospital more difficult. It is likely to be at least several years before the new maternity accommodation planned at Bolton District General Hospital is provided.

The Committee agreed that the most suitable means of coping with the situation was that a limited number of selected maternity patients should be discharged home early from hospital forty-eight hours after delivery.

The system of selecting patients for early discharge began in Bolton at the end of June, 1964. Patients are selected at the time of booking usually the second, third or fourth month of pregnancy. If the patient is thought to be suitable on medical grounds and wishes to be discharged home early, a domiciliary midwife visits the patient's home to assess its suitability. If unsuitable the patient remains in hospital for the usual length of time.

The scheme has worked satisfactorily, there being close liaison between Hospital, Local Health Authority and the General Practitioners.

No. of investigations requested from Bolton	
District General Hospital	... .. 127
No. found to be suitable for early discharge	... .. 106

District Midwifery Training:

Eleven pupil midwives completed their Part II training. Ten were successful in the examination to become fully qualified midwives. One pupil midwife failed but intends to retake the examination in March, 1965.

An important aspect of a pupil midwife's training is experience gained on the district. It is desirable that each approved teacher be responsible for the training of only one pupil midwife throughout her three months' district training. At present there are three midwives approved as teachers by the Central Midwives' Board. Another is likely to be approved in the near future.

Refresher Courses:

One midwife attended a post-graduate course at Keele University.

HEALTH VISITING

Staff:

At the end of the year the staff comprised:

- Superintendent Nursing Officer
- Deputy Superintendent Health Visitor/School Nurse (Part-time)
- 3 Group Advisors
- 2 Health Visitors engaged almost solely with patients of group practices
- 2 Health Visitors engaged solely on work with problem families
- 1 Health Visitor engaged solely in work with elderly persons
- 16 District Health Visitor/School Nurses
- 3 Part-time Health Visitor/School Nurses
- 1 Tuberculosis Health Visitor
- 7 School Nurses
- 1 Clinic Nurse
- 2 Part-time Clinic Nurses
- 3 Part-time Health Assistants

TOTAL: 37½ plus 1½ administrative staff

ESTABLISHMENT: 40 plus 3 administrative staff

Included in the above were four health visitors who had completed their training during 1964 at the Institute of Technology, Bolton.

STAFF SHORTAGES:

As in previous years, recruitment of health visitors barely kept pace with wastage. In order to attract back to work trained health visitors with older families, part-time appointments were offered. Three such health visitors were recruited. This would seem to be the pattern of staffing in the future in order to keep going essential health visitor services. The policy of employing less highly qualified staff to relieve health visitors of routine duties was continued. As a result, the ratio of one health visitor to 4,500 population recommended in the Ministry of Health and Ministry of Education Joint Circular 26/59, 12/59 "Health Visiting Service" moved a little nearer to realisation.

	1961	1962	1963	1964
Ratio of health visitors to population	1 : 7,600	1 : 6,182	1 : 6,178	1 : 5,917

STUDENT HEALTH VISITORS:

As in the previous year, only four student health visitors were recruited for training despite frequent advertising. The difficulty of recruiting staff to industrial areas is common to most authorities. It may be that in the near future consideration should be given to the problem of attracting professional staff to these areas to prevent a crisis in the staffing of health authority departments.

GROUP ADVISERS:

The traditional pattern of health visiting has been to allocate a geographic district to each health visitor, within which area she carries out the full range of duties. Staff changes, holidays, and periods of sickness have at times led to districts being left unstaffed. In order to overcome this difficulty, reorganisation was carried out on a zoning basis. This coincided with simultaneous arrangements taking place in the Home Nursing and Midwifery Services.

The total staff, including all grades, were divided into three groups, each group being responsible for all duties in a third of the Authority's area. A group adviser was attached to each group to provide support to the general grade. She was given some administrative duties including the arrangements for relief duties and providing practical experience for student hospital nurses and others who visited the department, although she retained a small case-load of families herself. Specialist health visitors whose duties took them to all parts of the town were not included in the groups but remained centrally based and were available to act in an advisory capacity to district health visitors on matters relating to their speciality.

This reorganisation has made for flexibility whilst preserving continuity of home visiting within the team in each group. Group advisers are now carrying out their functions as recommended in the Joint Circular on "Health Visiting Service", except that they are still centrally based instead of working from clinic bases in different areas of the town.

STAFF TRAINING:

Health visitors attend courses at five yearly intervals to keep them up-to-date and informed of new developments in an expanding service. Two health visitors attended the summer school at Bangor, Wales, organised by the Central Council for Health Education. One group adviser attended a course on Principles and Practice of Education organised by the Queen's Institute of District Nursing. One health visitor attended a refresher course in London on Mental Health organised by the Royal College of Nursing.

STUDY DAYS:

Lectures for the staff were organised as in previous years. The programme consisted of the following:

LECTURER	SUBJECT
Mr. B. Staveley, Principal Lecturer, Bolton Training College	The School Child, age 7 to 11
Mr. B. Staveley, Principal Lecturer, Bolton Training College	Health Teaching, 7 to 11 year age group
Mr. T. N. Hart, Consultant Obstetrician and Gynaecologist	Cytological Screening for Cer- vical Cancer
Mr. T. W. Pickering, Housing Manager, Bolton	Housing for the Elderly

These lectures were well received by the staff. Health visitors from adjacent areas were invited to attend. We are grateful to the lecturers for their interesting and stimulating talks.

The Superintendent Nursing Officer and the Deputy Superintendent Health Visitor attended the refresher course organised for Manchester health visitors. The Deputy Superintendent Health Visitor attended the Annual Conference of the National Association for Maternal and Child Welfare in London.

Training of Student Nurses and Other Visitors:

The Medical Officer of Health and the Deputy Medical Officer of Health gave lectures to the student nurses at the Bolton School of Nursing in accordance with the requirements of the General Nursing Council's syllabus.

Twenty-four student health visitors attending the course at the Institute of Technology in Bolton received their introduction to public health by a visit to the Health Department at the beginning of the course. Six of these students were subsequently attached to the department for their training. In previous years health visitors have been allocated to train students on the basis of their availability, not necessarily because they have special interest or aptitude for practical teaching. In anticipation of the requirements of the new Council for the Training of Health Visitors which will come into force in 1965, it was decided that supervision of practical training for the six students should be in the hands of two experienced health visitors who expressed a special interest in the instruction of students. It was necessary to reduce the case-loads of both health visitors in order to allow them time to carry out their duties. It is envisaged that students will be placed every year with the two health visitors who will be designated "Field Work Instructors".

Practical training was also given to seven student health visitors from Manchester Technical College course who spent two days accompanying health visitors on their visits.

Fifty-eight student nurses in training at the Bolton School of Nursing visited the Health Department during their first year of training to observe the work of the ante-natal, mothercraft and child welfare sessions. During their second year of training, forty-seven student nurses spent a day accompanying the health visitors on a wide variety of visits. This practical experience was followed by a meeting of the student nurses and the Health Department staff when points of interest raised during the visits were discussed.

Other visitors to the department who wished to observe the work of the health visitors included five Social Study students, one Arts Degree student, a Trainee in Hospital Administration, and several student teachers.

Home Visits:

Home visiting was carried out on the lines discussed last year. There was a decrease in the total number of visits paid but health visitors spent more time in discussion with general practitioners and other workers on matters arising

out of visits to families with social problems. The number of ineffective visits to households increased. This has always been a time-wasting aspect of health visitors' work. The increase may be due in part to the unsettled way of life adopted by some young families who move from lodgings to lodgings whilst awaiting more permanent housing.

LOCAL AND NATIONAL SURVEYS:

By their ready contact with families, health visitors are ideally placed for the collection of data in connection with surveys and investigations. During the year, health visitors took part in several surveys including one concerned with leukaemia and an investigation into the complication of measles which was conducted by the Public Health Laboratory Service. This survey involved the health visitors in visits to 169 families and to the general practitioners with whom the families were registered in order to complete a questionnaire. Local surveys in which health visitors assisted included one into children "At Risk" conducted by the Paediatric Consultant, an investigation into post-neonatal infant deaths conducted jointly by the Health Department and Paediatric Department, and a survey to ascertain the medical and social needs of old people in Bolton and the surrounding county area. In the geriatric survey, health visitors completed a questionnaire on each of a random sample of one in twenty old people aged sixty-five and over. This involved visits to 1,000 persons. In order to complete the questionnaire as quickly as possible, two health visitors were withdrawn from their normal duties for a period of three months and concentrated on the survey.

Analysis of Home Visits

First visits to babies born 1964	...	...	...	...	...	...	...	2,695
Subsequent visits to babies born 1964	...	...	...	...	...	...	...	6,072
Visits to children born 1963	...	...	...	...	...	...	...	6,273
Visits to children born 1959/62	...	...	...	...	...	...	...	9,737
Infectious disease visits	...	...	...	...	...	...	...	56
After-care visits	...	...	...	...	...	...	...	214
Chronic sick visits	...	...	...	...	...	...	...	3,799
Visits in connection with priority rehousing on medico-social grounds								356
Ineffective visits to households	...	...	...	...	...	...	...	4,707
Miscellaneous visits	...	...	...	...	...	...	...	2,711
TOTAL	...	...	...	...	...	...	...	36,620

Tuberculosis Visiting:

One full-time health visitor carried out the duties of after-care of tuberculous patients. She was assisted in the Chest Clinic by a part-time clinic nurse.

There was an increase in the number of visits to patients from 697 in 1963 to 701 in 1964.

Number of visits to patients	...	...	...	...	...	...	701
No. of ineffective visits...	...	...	...	...	...	...	177

As in previous years, contact tracing of immigrant tuberculous patients involved the health visitor in many ineffective visits because of their frequent change of address. Difficulty still arises because of the language barrier.

Geriatrics:

Health visitors continued to visit the chronic sick and elderly persons. In many cases the first visit was made at the request of general practitioners. In cases of social need health visitors were able to initiate any services required thus saving valuable time for the doctor by channelling their requests through the health visitor.

The Geriatric Consultant paid domiciliary visits to all patients referred to him by general practitioners to assess the need for admission to hospital. As in previous years, he was accompanied by a health visitor. Her knowledge of the social background of the patient was a useful factor in the consultant's assessment of the case. In July this health visitor was appointed to work mainly with geriatric patients in close co-operation with the geriatric unit. An account of her first six months' work follows.

"My first contact with the patient is usually made in company with the geriatric consultant at a domiciliary visit. During this visit the medical and social conditions of the patient are assessed and any facts relevant to future care are noted. In many cases the patient may be nursed at home if suitable, local authority services being provided such as a district nurse, a home help, and nursing equipment. I initiate the provision of these services and then visit the patient regularly to assess progress and report back to the consultant.

I am informed of all discharges from the geriatric unit and visit selected cases regularly. My knowledge of the patient's previous medical and social background is of great value in estimating improvement. Relatives too, are often reassured by the knowledge that someone in close contact with the geriatric unit will visit the patient after their discharge. Close liaison with the geriatric unit is very important and this is maintained by a weekly visit to the almoner to discuss problems and to pass on and receive helpful information regarding the patient.

I have no fixed district and so can visit patients in all parts of Bolton. I also visit relatives who may live some distance from the patient to give them support and advice. Health education for the elderly and other interested groups is an important part of the health visitor's work. I have made some progress in this direction. I also act in an advisory capacity to the district health visitors on matters relating to geriatrics and keep them informed of recent trends and developments. Co-operation between the health department and the geriatric unit has always been excellent in Bolton and the appointment of a geriatric health visitor has strengthened this relationship and given increased service to the patient".

Assessing the social aspect of applications for rehousing on medical grounds involved the health visitors in 356 visits. The majority of cases were applications from elderly persons requesting rehousing to ground floor accommodation or transfer to accommodation in a more level area of the town. An increasing number of elderly applicants were living in large family houses which they could no longer maintain and occupying only the ground floor rooms.

No. of geriatric cases visited by health visitors	...	...	...	2,484
No. of visits to geriatric cases	...	...	...	3,799
No. of domiciliary visits, included in the above, paid by the Geriatric Consultant accompanied by health visitors	...			737

Paediatrics:

Liaison between the Paediatric Physician and health visitors was maintained during the year. Health visitors attended the paediatric out-patient clinic and the ward round for the mutual exchange of information between the clinicians and social workers. Health visitors undertook these duties on a rota basis so that all members of the staff benefited from contact with the hospital and were kept up to date with developments in paediatric diagnosis and treatment.

Health Education:

MOTHERCRAFT CLASS:

Two sessions are held weekly in conjunction with relaxation classes conducted by the physiotherapist. Attendances increased slightly during the year although classes were restricted in size to encourage expectant mothers to discuss their worries and fears in a friendly, informal atmosphere.

Talks and demonstrations were given by health visitors as in previous years. It is hoped that doctors and midwives will be able to take part in discussions and talks in the near future. Several expectant mothers have suggested that discussion groups be organised so that their husbands could attend. Plans are in hand to meet this request in the new year.

MOTHERS' CLUBS:

Three Mothers' Clubs are now well established. Organisation of the meetings is in the hands of the members who arrange for speakers and discussions. Health visitors are available for guidance and help. Attendances have varied between thirty and forty during the year. The possibility of establishing new clubs, if suitable premises can be found, is now being explored.

Programmes have included the following subjects:

- Preparing young children for starting school
- The early detection of cancer in women
- Choosing toys for young children
- A 'Brains Trust' on child care
- Taking young children on holiday

Requests for talks by health visitors about various aspects of their work continue to be made by organisations as varied as Mothers' Unions, Over-Sixties Clubs, Church Organisations, The Salvation Army, and school leavers taking the Introduction to Cotton Course.

Liaison with General Practitioners:

Increasing co-operation with general practitioners has been an encouraging aspect of the health visitors' work. The two health visitors attached to group practices are enthusiastic about the advantages of being members of the family doctor team and would be reluctant to return to their previous pattern of work. Opportunities for attachment of health visitors to further group practices did not arise during 1964 but some progress was made in health visitors attending weekly at combined baby and ante-natal clinics at three doctors' surgeries. At the end of the year, health visitors were attending weekly at twelve practices involving twenty-four general practitioners, in addition to the two health visitors attached to group practices.

The Prevention of Break-up of Families:

As in previous years, health visitors spent an increasing amount of time in supervision of families with multiple problems. One of the most difficult aspects of the work was maintaining contact with young families, and especially unmarried mothers with babies who adopt an unsettled way of life and drift from one unsuitable lodging to another.

Health visitors found it necessary to work in co-operation with a growing number of workers both in the local authority field and voluntary agencies.

The health visitor is the worker with opportunities for preventing many of the factors which predispose to the establishment of difficulties which, if not dealt with, lead to breakdown of family life. Her function is to teach health, and advise on normal health and development within the family unit, to recognise the symptoms of disintegration and to know how to deal with them either by her own efforts or by co-operation with, or referral to, other workers. In some cases the health visitor's most useful contribution is to act as interpreter and spokesman for families who have difficulty in communicating with officials.

In selective visiting, a responsibility rests on the health visitor to assess after all visits whether there is risk of the beginnings of family breakdown, and to take any action necessary to remedy the situation. It is important that she makes known to her families where she can be contacted for individual advice, and they should be encouraged to seek her out when they need help.

Two health visitors worked solely with problem families during the year, supervising an average of thirty families each. They also acted in an advisory capacity to district health visitors on matters relating to unsatisfactory families.

The Care of Problem Families by the N.S.P.C.C. Visitor:

Complementary to the work of the special health visitors on problem families, there is in Bolton a woman visitor on the staff of the local branch of the National Society for the Prevention of Cruelty to Children who works in close co-operation with the department and with the Co-ordinating Committee for the Care of Children.

During the year the visitor has had 30 cases under her supervision. Twenty-one of these were carried forward from the previous year. There were 9 new cases involving 34 children. Eight cases were closed as 'satisfactory' during the year and one case moved to another town. Twenty-one cases were still under supervision at the end of the year. All told, 406 visits of supervision and 254 miscellaneous visits to public officials, voluntary organisations, etc., were made.

HOME NURSING

Following the tragic death of the Superintendent, Miss C. M. Ratcliffe in May 1964, the service was administered by the Deputy Superintendent until November when a new Superintendent, Mrs. Gallaher, was appointed. The Deputy Superintendent resigned in November 1964 and the Senior Queen's Sister was appointed as her successor in December. There were thirteen resignations from the staff, two owing to ill-health, four to take up appointments in the south, two to take further hospital training, one to become a domiciliary mid-wife in Bolton, and three for family reasons. One student returned to Nigeria on completion of Queen's District Training. Fifteen appointments were made, six of whom took district training. Three others were appointed to work as State Registered Nurses prior to becoming students in January 1965.

Staff:

The staff at the 31st December was as follows:

	Superintendent
	Deputy Superintendent
	FULL-TIME
16	Queen's Nurses
5	State Registered Nurses
1	State Enrolled Nurse
	PART-TIME
4	Queen's Nurses
2	State Registered Nurses
1	State Enrolled Nurse
TOTAL NURSING	—
STAFF:	29 Equivalent in full-time staff to 25½
	—
	FULL-TIME
	2 Student District Nurses

At the end of November the staff was reorganised to improve the administration of the service and to facilitate a five-day week. Three Queen's Sisters, including one male, were upgraded to be Senior Nurses and the remainder of the staff were organised into three groups, each group being in charge of one of the senior nurses and responsible for patients in a third of the town.

Nursing staff are working on areas adjacent to their homes. They contact their senior nurse each morning and noon to collect new cases passed on from the Superintendent. Each group meets at the Health Department once a week for discussion with the Superintendent or her Deputy.

The nursing staff work five days a week, 8.30 a.m. to 6.0 p.m., the weekend being covered by a skeleton staff on a rota basis.

Statistics of Cases and Visits:

There is a very slight difference in totals between 1963 and 1964. The number of geriatric cases continues to increase.

	No. of patients being nursed at beginning of month in each year				New Cases				Nursing Visits			
	1961	1962	1963	1964	1961	1962	1963	1964	1961	1962	1963	1964
Jan.	948	994	960	961	300	267	210	217	10,193	10,671	9,858	9,428
Feb.	986	983	993	968	237	145	218	166	9,405	8,503	9,267	8,531
Mar.	966	948	1012	959	180	172	240	172	9,421	8,838	9,878	8,725
April	927	946	1051	931	183	169	179	207	9,022	8,915	9,489	8,937
May	938	950	994	958	188	171	151	170	9,794	9,676	9,437	8,715
June	921	947	958	941	172	163	132	162	8,721	8,933	8,087	8,619
July	914	932	939	946	164	158	129	156	8,448	8,208	7,146	8,101
Aug.	907	924	931	929	181	173	160	152	9,127	8,913	8,313	8,171
Sept.	925	930	928	936	161	145	136	157	8,467	7,969	7,436	7,940
Oct.	928	933	926	941	160	151	136	153	9,347	8,910	8,015	8,807
Nov.	923	923	901	941	165	141	180	153	9,102	7,647	7,974	8,765
Dec.	954	933	930	927	220	193	195	192	10,175	9,133	8,569	8,886
TOTALS:					2,311	2,048	2,066	2,057	111,221	106,316	103,469	103,625

		1964	1963
Patients being nursed on 1st January ...	...	961	960
New patients attended during the year ...	...	2,057	2,066
		<hr/>	<hr/>
TOTAL NURSED ...	...	3,018	3,026
		<hr/>	<hr/>
Patients remaining on the books at the 31st December ...	...	926	961

NURSING VISITS IN AGE GROUPS:

	1963		1964	
	CASES	VISITS	CASES	VISITS
Children under 5 years ...	75	835	69	569
5 - 64 years ...	1,045	31,148	1,023	30,695
65 years and over ...	1,906	71,486	1,926	72,361
	<hr/>	<hr/>	<hr/>	<hr/>
TOTALS ...	3,026	103,469	3,018	103,625

SUMMARY OF NURSING TREATMENTS:

		1963	1964
General Nursing ...	...	79,880	79,359
Injectons ...	...	31,864	26,448
		<hr/>	<hr/>
TOTALS ...	...	111,744	105,807

Laundry Service:

During the year, the service was given to 170 patients, an average number of 62 per month over the year. Twenty-five patients were assisted for two to seven days only; 19 patients from two to seven years, and of the latter 12 remained on the service at the end of the year.

Provision of Incontinence Pads:

The provision of disposable incontinence pads was commenced on a limited scale during 1963 in accordance with Section 28 of the National Health Service Act, 1946. The service was extended to cover all patients requiring it from April 1964.

The two types of incontinence pads at present in use have been found to be the most suitable.

TYPE 1 Large pads measuring 30" × 23" comprising a soft absorbent surface with a waterproof backing.

TYPE 2 Centre pads measuring 17" × 14" made of soft absorbent cellulose.

These incontinence pads are issued from the Health Department at the request of the district nurse or general practitioner. The district nurse advises the relatives how to use the pads to their best advantage and on the method of disposal. Where possible, soiled pads are burned. In smoke control areas or where no fire is available, an opaque plastic bag is supplied in which to deposit the soiled pads. These bags are collected weekly by the Cleansing Department during routine collection of refuse.

The use of incontinence pads has done much to alleviate the misery which must accompany any incontinence. The service has lightened the burden of the relatives, often enabling them to carry on nursing the patients in their own homes longer than would otherwise have been possible. The indications are that the service will need to be extended as the proportion of old people in the population increases.

NUMBER OF INCONTINENCE PADS SUPPLIED DURING 1964:

Large Pads	...	...	...	...	...	...	...	9,000
Centre Pads	...	...	...	...	...	...	...	4,032

NUMBER OF PATIENTS RECEIVING THE SERVICE DURING 1964

175

Nursing Equipment:

At the request of family doctors or district nurses, certain articles of nursing equipment are loaned to patients for which no charge is made. A detailed list of the equipment loaned to patients during the year is given on page 74.

Treatment Sessions in the Health Department:

Patients who attended at the Home Nursing section in the Civic Centre for injections totalled 51. Of these, 13 received treatment for tuberculosis, others for anaemia, allergies, etc. The clinic is open from 2.0 p.m. to 6.0 p.m. Monday to Friday for the benefit of ambulant patients or those who are working.

District Nurse Training:

Nine students completed the district nurse training course arranged by the Queen's Institute of District Nursing and all were successful in passing the examination. One State Enrolled Nurse took the training arranged for State Enrolled Nurses on the district and was successful in passing the assessment of the Queen's Institute of District Nursing.

Training of Hospital Student Nurses:

Fifty-eight pupil nurses from Townleys Branch and 32 student nurses from the Bolton School of Nursing have attended the department during the year. As part of their training they accompanied the district nurses on their rounds for a day thus gaining a brief insight into the domiciliary care available and the varied environment of the patients.

Refresher Courses:

Two Queen's Nursing Sisters attended a one-week refresher course held at Florence Nightingale Hall, University of Nottingham.

Transport:

Thirteen "essential user" allowances are approved for full-time staff and one "casual user" allowance to a part-time nurse.

IMMUNISATION AND VACCINATION

Immunisation:

The routine immunisation and vaccination of children in Bolton is carried out as follows:

PRIMARY IMMUNISATION (Diphtheria, Whooping Cough and Tetanus)	Three injections at monthly intervals, starting at four months of age.
POLIOMYELITIS VACCINATION ...	Three oral doses at monthly intervals, starting at seven months of age.
SMALLPOX VACCINATION	Sixteen months of age.
BOOSTER INJECTIONS AND DOSES...	(a) One injection for diphtheria, whooping cough and tetanus given during the second year of life. (b) One injection for diphtheria and tetanus and one oral dose of poliomye- litis vaccine given in school when five years of age. (c) Re-vaccination against smallpox.

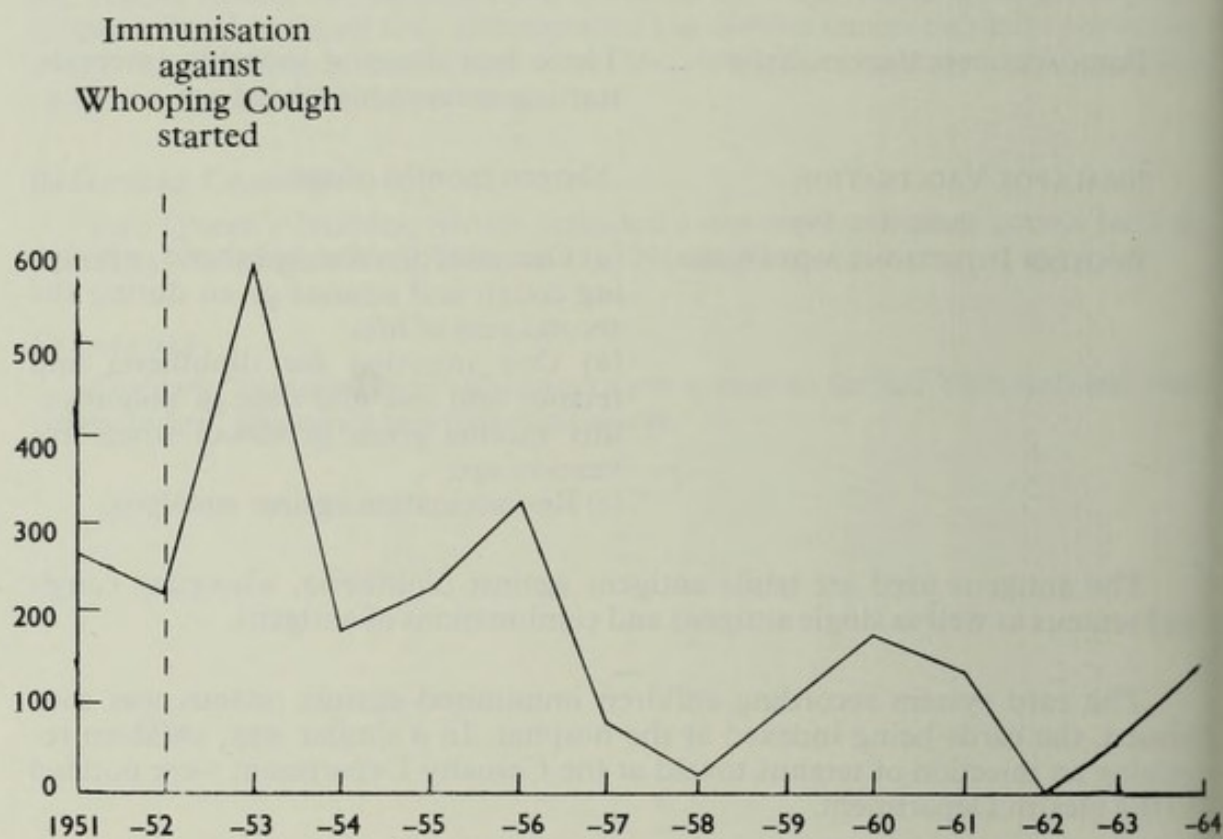
The antigens used are triple antigens against diphtheria, whooping cough and tetanus as well as single antigens and combinations of antigens.

The card system recording children immunised against tetanus was continued, the cards being indexed at the hospital. In a similar way, children receiving an injection of tetanus toxoid at the Casualty Department were notified to the Health Department.

Record cards are issued to every mother of a new baby. On these cards are recorded the ages at which babies are recommended to be immunised and vaccinated and the actual date when this is done is recorded on the card by the clinic nurse or doctor. It has been found that very few mothers (between 26 and 33 per cent) fail to attend for the re-inforcing doses in spite of the fact that a letter is sent to them when this is due.

Only slightly more than half the number of children who are immunised in infancy accept the re-inforcing dose normally recommended at the beginning of school age.

Incidence of Whooping Cough in Bolton, 1951 to 1964



Number of cases of Whooping Cough notified - 142

- 0 - 5 years - 120 cases notified (27 of these had been immunised)
- 6-10 „ - 19 cases notified (5 of these had been immunised)
- 10-15 „ - 3 cases notified (1 of these had been immunised)

Age at Immunisation

	Re-inforcing Injections						TOTALS
	Diphtheria only	Diphtheria and Tetanus	Combined Whooping Cough and Diphtheria	Triple Antigen	Tetanus	Whooping Cough only	
2-8 months	-	-	-	1,408	-	-	1,408
9-11 months	-	1	-	197	-	-	198
1-2 years	-	-	-	110	-	-	1,245
2-3 years	-	1	-	39	-	-	126
3-4 years	-	2	-	16	-	-	42
4-5 years	-	-	-	4	-	-	32
TOTAL 0-5 years	-	4	-	1,774	-	-	3,051
5-6 years	1	15	-	1	1	-	789
6-7 years	-	62	-	3	-	-	208
7-8 years	-	4	-	1	1	-	19
8-9 years	-	2	-	1	1	-	4
9-10 years	-	-	-	-	1	-	3
10-11 years	-	-	-	1	1	-	2
11-12 years	-	-	-	1	1	-	2
12-13 years	-	1	-	-	1	-	4
13-14 years	-	-	-	-	-	-	-
14-15 years	-	-	-	-	1	-	1
TOTAL 5-15 years	1	84	-	7	6	-	1,032
GRAND TOTAL	1	88	-	1,781	6	-	4,083

Source of Immunisation

	Diphtheria Immunisation only	Diphtheria and Tetanus	Combined Whooping Cough and Diphtheria	Triple Antigen	Tetanus	Whooping Cough only	Re-inforcing Injections		
							Diphtheria only and Whooping Cough and Diphtheria Combined	Triple Antigen	Diphtheria/ Tetanus and Tetanus only
No. of Children Immunised at Child Welfare Centres . .	1	88	-	1,542	4	-	-	1,127	246
No. of Children Immunised in Schools	-	-	-	-	-	-	3	-	664
No. of Children Immunised by General Practitioners and for whom a record card was received by the Health De- partment	-	-	-	239	1	-	-	166	2
TOTALS	1	88	-	1,781	5	-	3	1,293	912
GRAND TOTAL .				4,083					

Diphtheria Immunisation in relation to Child Population

Age Group	Percentage of mid-year Population completely immunised
Under 1 year	60.83
Aged 1-4 years	68.59
Aged 5-14 years	81.55
TOTAL UNDER 15 YEARS . .	76.19

Vaccination against Poliomyelitis:

Because of poor attendances the open sessions, which began in November 1958, and at which persons could attend for vaccination without prior registration, were discontinued in November, but people could still receive immunisation during the Wednesday afternoon sessions held at the Civic Centre.

Poliomyelitis vaccination was also given at child welfare centres and most children received their initial three doses there. The fourth dose is given in school as soon as possible after the child commences attendance. The vaccine used is the oral type.

The following table shows the number of people vaccinated in various groups since the scheme began in 1956:

By 31st December	Numbers who have received two injections/doses since scheme began					Numbers who have also received "booster" injection dose	
	Born in 1943/ 1962	Born in 1933/ 1942	Expectant Mothers	Others	Total	3rd	4th
1957	4,324	—	—	—	4,324	—	—
1958	22,340	4,504	982	568	28,394	4,076	—
1959	27,170	11,660	1,958	615	41,403	28,451	—
1960	29,276	12,102	2,295	3,682	47,355	40,990	—
1961	35,064	13,960	2,450	7,875	59,349	45,124	8,880
1962	37,710	14,361	2,564	8,475	63,110	55,089	9,399
1963	39,757	14,461	2,594	8,659	65,471	57,564	11,222
1964	41,625	14,490	2,643	8,699	67,457	59,628	12,396

Vaccination against Smallpox:

Mothers are still encouraged to have their babies vaccinated against smallpox at sixteen months of age. Some do although the number of children vaccinated is never as high as would be desirable.

An appreciable fall in the numbers of children vaccinated has occurred since the change of policy in December 1962 when babies were no longer vaccinated for smallpox at three months of age. It is possible that by the time a child reaches sixteen months of age, the mother thinks that the child has had enough vaccinations and immunisations.

NUMBER OF PRIMARY VACCINATIONS UNDER 5 YEARS OF AGE:

1952	...	...	...	639
1953	...	...	...	1,255 (local cases of smallpox)
1954	...	...	...	1,076
1955	...	...	...	1,098
1956	...	...	...	1,073
1957	...	...	...	1,248
1958	...	...	...	1,304
1959	...	...	...	1,358
1960	...	...	...	1,375
1961	...	...	...	1,462
1962	...	...	...	2,042
1963	...	...	...	124
1964	...	...	...	560

Number of primary vaccinations between 5 and 14 years of age	...	...	69
Number of primary vaccinations over 15 years of age	...	...	204
Number of re-vaccinations under 5 years of age	...	...	14
Number of re-vaccinations between 5 and 14 years of age	...	...	56
Number of re-vaccinations over 15 years of age	...	...	303

AMBULANCE

The Local Health Authority continued to provide full ambulance cover within its own area, and on an agency basis, full ambulance cover in the Turton Urban District on behalf of the Lancashire County Council. Ambulance services were also provided for the Steelworks of John Booth and Sons (Bolton) Limited, the Emergency Flying Squad situated at the Bolton District General Hospital, and for the National Coal Board until the 31st May when the last of its collieries within the county borough closed.

General Review:

It is pleasing once again to report that even with a considerable increase in the numbers of patients carried, there has been a further reduction in the total miles, and the average of 2.9 miles per patient carried is the lowest figure recorded.

Following the publication in August of Ministry of Health Hospital O. & M. Service Reports 8, joint meetings were held with representatives of the local hospitals and the Lancashire County Ambulance Service. Consideration was given to the following points in the Report – Authorisation of ambulance transport by hospital staffs, the role of a hospital transport officer, abortive ambulance journeys, and special conditions affecting physiotherapy departments. The meetings proved most useful in establishing closer co-operation between the hospitals and the ambulance services.

The year has proved most progressive in respect of the introduction of new equipment. Two new vehicles designed specially for patient comfort, and the installation of the new and modified radio telephone system giving an extended radio link within the service area, have proved most successful.

Close co-operation has been maintained throughout the year with local hospitals, doctors and neighbouring ambulance services.

The following table shows the total mileage and the total numbers of patients carried, together with the average miles per patient during the past fifteen years.

Year	Total Mileage			Total Number of Patients Carried			
	Ambulances	Sitting Case Vehicles	Totals	Ambulances	Sitting Case Vehicles	Totals	Average Mileage per Patient
1950	95,988	32,378	128,366	27,654	4,342	31,996	4.0
1951	98,296	61,845	160,141	28,630	8,596	37,226	4.3
1952	94,052	59,657	153,709	25,365	10,806	36,171	4.25
1953	79,592	72,928	152,520	19,749	17,353	37,102	4.1
1954	76,792	79,712	156,504	18,642	24,180	42,822	3.65
1955	75,138	87,612	162,750	18,874	31,622	50,496	3.22
1956	73,726	87,852	161,578	18,802	32,563	51,365	3.15
1957	64,464	93,806	158,270	15,930	33,653	49,583	3.19
1958	68,751	93,311	162,062	16,150	33,771	49,921	3.25
1959	75,689	86,853	162,542	17,399	32,227	49,626	3.27
1960	78,822	95,976	174,798	17,425	40,935	58,360	3.0
1961	78,057	95,514	173,571	15,851	40,465	56,316	3.08
1962	84,341	95,140	179,481	18,550	39,232	57,782	3.11
1963	82,168	83,422	165,590	18,445	35,762	54,207	3.05
1964	76,632	86,828	163,460	16,939	39,483	56,422	2.90

In 1964, there was an overall increase of 4.86 per cent in patients carried and a decrease of 1.29 per cent in mileage, the average being 2.9 miles per patient. Figures for patients and mileage within the county borough indicate a 4.6 per cent increase and .64 per cent decrease respectively, and within the Turton Urban District a decrease of 5.55 per cent and 5.56 per cent respectively. The increase in the number of Bolton patients conveyed, is due to the increasing demand on the emergency service and for the transport of geriatric, psychiatric, and occupational day-care patients. An average of 2.6 miles per patient in respect of patients conveyed within the county borough and 8 miles per patient for patients conveyed in the Turton Urban District under the agency of the Lancashire County Council is slightly less than the figures recorded in 1963 - 2.7 and 8.01 respectively.

Arrangements were made for the removal of forty-two patients by rail.

Eleven private ambulance journeys were undertaken during the year, a total of £60. 1s. 9d. being received by the Authority for this service.

Monthly Analysis of work done by the Ambulance Service: Bolton

Month	Patients carried by			Miles travelled by		
	Am- bulances	SittingCase Vehicles	Total	Am- bulances	SittingCase Vehicles	Total
January	1,639	2,821	4,460	6,009	5,680	11,689
February	1,351	2,870	4,221	5,329	5,508	10,837
March	1,333	3,190	4,523	5,445	6,218	11,663
April	1,397	3,182	4,579	5,605	5,861	11,467
May	1,387	3,083	4,470	5,830	5,963	11,793
June	1,251	3,085	4,336	5,459	6,407	11,866
July	1,145	3,146	4,291	5,022	6,928	11,950
August	1,263	3,202	4,461	5,787	6,876	12,663
September .. .	1,276	3,301	4,577	5,914	6,430	12,344
October	1,283	3,203	4,486	5,843	6,429	12,272
November .. .	1,224	3,329	4,553	5,048	6,582	11,630
December .. .	1,337	3,441	4,778	5,422	6,222	11,644
TOTALS ..	15,886	37,853	53,739	66,714	75,104	141,818

Agency Service for Lancashire County Council

IN AREA OF TURTON URBAN DISTRICT COUNCIL

Month	Patients carried by			Miles travelled by		
	Am- bulances	Sitting Case Vehicles	Total	Am- bulances	Sitting Case Vehicles	Total
January	97	135	232	967	1,137	2,104
February	71	177	248	690	1,136	1,826
March	88	149	237	740	957	1,697
April	100	183	283	879	1,304	2,183
May	79	138	217	754	914	1,668
June	89	163	252	720	1,071	1,791
July	80	110	190	797	815	1,612
August	100	79	179	967	609	1,576
September	73	119	192	689	931	1,620
October	77	119	196	708	919	1,627
November	80	125	205	758	819	1,577
December	74	98	172	758	826	1,584
TOTALS ..	1,008	1,595	2,603	9,427	11,438	20,865

Emergency Calls:

An increase of 7.87 per cent is recorded during the year on the demand for ambulance emergency services, noted increases being on calls to attend home and road accidents and general collapse cases. The response to emergency calls continues to be most satisfactory, an average of 4.3 minutes being the time taken to reach the scene of any emergency within the county borough. The introduction of the blue warning lights and audible signals on all emergency ambulance vehicles has proved a valuable asset in view of the increasing traffic congestion.

Bolton Emergencies and Special Journeys

Type of Case	Jan.	Feb	Mar	Apl.	May	June	July	Aug	Sept	Oct	Nov.	Dec	Total Patients
ACCIDENTS IN THE HOME													
Burns	7	1	3	1	7	—	4	—	—	2	3	3	31
Scalds	9	8	3	7	5	2	4	4	6	6	8	5	67
Falls	43	34	42	47	36	29	44	43	40	46	35	25	464
Gas & Electricity Mishaps	3	3	—	4	—	1	3	5	5	4	—	3	31
Poisonings	20	15	16	10	11	12	13	17	17	25	8	6	170
Collision with structures	—	3	1	1	1	2	3	6	2	1	1	6	27
Cuts (other than from falling)	5	7	3	7	9	8	21	17	8	14	6	3	108
Falling objects	2	1	—	1	1	2	1	5	2	3	1	1	20
Trapping of limbs	2	3	1	1	3	1	2	2	5	4	4	5	33
Swallowing foreign bodies (other than poisons)	2	—	1	2	3	1	2	3	1	2	2	—	19
TOTAL OF ALL ACCIDENTS IN THE HOME:	93	75	70	81	76	58	97	102	86	107	68	57	970
Road Accidents	66	52	47	62	85	47	54	76	52	57	68	85	751
Collapse	58	55	69	63	45	46	47	64	62	64	64	65	702
Industrial Accidents	13	13	12	20	16	16	12	18	15	21	19	19	194
Sudden Illness	23	15	18	19	19	30	28	32	32	21	23	28	288
Falls in the Street	19	21	23	28	19	18	18	24	25	21	29	44	289
Children injured at school or at play	21	34	15	33	59	57	39	57	42	32	30	14	433
Violence:													
Fights and Drunks	6	6	9	9	7	12	6	12	11	9	10	17	114
Assaults	4	1	—	1	—	6	1	—	—	—	2	1	16
Drowning	—	1	1	—	—	—	—	—	—	1	—	—	3
Railway Accidents	—	—	—	—	1	—	2	1	—	—	1	1	6
Sporting Accidents	7	5	9	10	3	5	1	3	5	2	5	1	56
Attacks by animals or insects	1	1	2	1	7	5	3	10	5	2	2	1	40
Fairground Accidents	2	—	—	—	—	2	4	—	—	—	—	—	8
Falls in shops or places of entertainment	1	4	7	3	2	1	2	6	7	5	5	6	49
Horseriding Accidents	—	—	—	1	—	—	—	—	—	—	1	—	2
Miscellaneous	10	6	3	10	3	5	7	15	4	9	6	6	84
TOTAL EMERGENCIES:	324	289	285	341	342	308	321	420	346	351	333	345	4005
MATERNITY CASES: ..	145	148	168	160	211	166	153	178	164	169	153	176	1991
LONG JOURNEYS: (60 miles or more)	3	1	1	2	—	2	3	1	2	2	1	—	18
TRANSPORT OF MIDWIVES AND GAS AND AIR APPARATUS: ..	24	17	46	28	21	21	20	17	18	23	15	8	258
TRANSPORT OF TRAINEES TO ADULT TRAINING CENTRE	40	36	34	32	38	14	2	—	—	—	—	—	196
TRANSPORT OF PATIENTS TO CHIROPODY CLINIC:	66	59	98	76	87	73	66	60	80	67	65	61	858

Turton District Emergency and Maternity Cases

Type of Case	Jan	Feb	Mar	Apl	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Patients
ACCIDENTS IN THE HOME:													
Scalds	-	-	-	-	-	-	-	-	2	-	-	-	2
Falls	1	3	1	2	-	2	2	1	-	6	3	6	27
Gas and Electricity Mishaps	-	-	1	-	-	-	-	-	-	-	-	1	2
Poisoning (other than gas)	2	-	1	-	-	1	2	-	-	-	1	-	7
Collision with structures	-	-	-	-	-	-	-	-	-	-	-	1	1
Cuts (other than from falling)	-	-	1	-	1	2	1	1	-	1	1	1	9
Swallowing foreign bodies (other than poisons)	-	-	-	-	-	-	-	-	-	-	1	-	1
Trapping of limbs	-	1	-	-	-	-	-	-	1	-	-	-	2
TOTAL OF ALL ACCIDENTS IN THE HOME	3	4	4	2	1	5	5	2	3	7	6	9	51
Road Accidents	4	6	6	2	4	13	3	5	8	5	5	4	65
Collapse	2	-	1	2	3	2	-	4	1	1	2	2	20
Industrial Accidents	1	1	1	2	1	-	4	-	1	1	2	2	16
Sudden Illness	1	-	1	1	-	2	2	-	4	2	1	-	14
Falls in the Street	1	1	1	2	-	-	1	2	4	1	-	-	13
Children injured at school or at play	1	-	-	2	4	2	1	2	3	3	3	-	21
Falls in shops or places of entertainment	-	-	-	-	1	-	-	1	-	-	-	-	2
Sporting Accidents	-	2	1	-	-	-	2	-	-	-	-	2	7
Attacks by animals or insects	-	-	-	-	-	-	1	1	-	-	-	1	3
Horseriding Accidents	-	-	-	-	-	1	-	-	-	-	-	-	1
Miscellaneous	-	-	-	-	-	-	-	1	-	2	-	-	3
TOTAL EMERGENCIES . .	13	14	15	13	14	25	19	18	24	22	19	20	216
MATERNITY CASES	18	14	20	21	8	13	19	14	12	8	16	10	173
LONG JOURNEYS (60 miles or more)	-	-	1	-	-	-	-	-	-	-	-	-	1

Vehicle Strength at 31st December, 1964:

Make	H.P.	Reg. No.	Purchase Date	Total Mileage
AMBULANCES:				
Austin	27	EWB 345	23. 8.51	111,548
Austin	16	JWH 660	9. 3.56	111,766
Austin	16	JWH 699	9. 3.56	117,518
Austin	16	MWH 100	29. 4.58	88,812
Austin	16	MWH 101	29. 4.58	92,970
Bedford	28	BWH 614B	2. 9.64	3,568
SITTING CASE AMBULANCES:				
Austin	16	VBW 376	4. 4.62	31,606
Morris	16	HWH 499	6. 4.55	107,061
Austin	16	PBN 30	24. 9.59	66,347
Austin	14	PWH 979	28. 3.60	97,765
Morris	15	XWH 750	1.10.63	24,042
DUAL PURPOSE AMBULANCE:				
Bedford	28	BWH 613B	2. 7.64	6,745
SITTING CASE CAR:				
Austin	Diesel	TWH 746	24. 4.61	47,811

During the year, two newly designed ambulance vehicles were introduced into service, one for the conveyance of emergency and accident patients, the other a dual-purpose vehicle for carrying both stretcher cases and sitting cases. The dual-purpose type of vehicle is proving most valuable in the economic running of the service and it is planned to replace one of the older sitting case vehicles with a dual-purpose one in the next financial year.

Accident and Insurance Claims:

Five accidents to ambulance vehicles were reported for insurance purposes during the year. It is pleasing to report that in none of these instances was the ambulance driver considered negligent.

Maintenance and Repair of Vehicles:

The maintenance and repair of all twenty-six Health Department vehicles continues in the ambulance workshops. This system is most valuable in ensuring the maximum availability of vehicles at all times.

Ambulance Control Room:

The ambulance control continues to provide the essential link for other emergency services outside normal working hours, e.g. Hospital Flying Squad, midwives, district nurses, emergency oxygen supplies, and the rota doctor system for general practitioners.

During the year, a complete modernisation and modification of the telephone and radio-telephone systems has been undertaken. With the increasing demands now being made on this control, consideration may have to be given to the employment of a telephonist during the peak day-time periods.

Civil Defence - Ambulance and First Aid Section:

The training of this section of volunteers of the Civil Defence Corps has continued satisfactorily throughout the year. The Senior Assistant Medical Officer of Health and an Assistant Medical Officer of Health lectured on alternate Mondays on First Aid. Three members of the Borough Ambulance Service including the Superintendent are qualified as Civil Defence instructors and each one regularly gave instruction at the Civil Defence Headquarters where classes were held weekly. The plan for the integration of the Civil Defence Ambulance and First Aid Section with the peace-time Ambulance Service has been agreed and premises selected for emergency ambulance depots. Three ambulances are held on loan from the Ministry of Health for Civil Defence training and a dual-purpose vehicle, i.e. personnel and equipment carrier, is to be allocated in the near future.

PREVENTION OF ILLNESS, CARE AND AFTER-CARE

Health Education:

The Senior Assistant Medical Officer of Health appointed in June was in charge of the co-ordinated Health Education programme to which each section of the department makes its contribution singly or in conjunction with others.

In 1964, the Cohen Report on Health Education was published. One of the recommendations in the Report is for a full-time health educator, and there is no doubt that there is unlimited scope for the activities of such an officer.

During 1964 the main bulk of health education duties has fallen, naturally, on the health visitors. These are the people who are constantly in contact with the public in general and, as such, they stand a better chance of influencing the individuals they meet in their everyday work. The great majority of mothers are visited by a health visitor a few days after their babies are born. This visit is a very informal one and the mother gets a chance of discussing any problems she may wish to bring up. During this initial visit the mother is also told how to get in touch with the health visitor later, if she should need to. She is given all the information about clinics and other medical facilities available. Many mothers avail themselves of this information and follow up the advice given by the health visitor. A few, however, seem to lack the will to do so, and these mothers may have to be visited more often with variable success.

A substantial part of the health visitors' contribution is carried out at the clinics. The mothers who visit these clinics regularly have the advantage of a leisurely talk with the health visitors and advice is given freely about feeding, child management, vaccinations, etc.

A useful contribution to health education is carried out in the schools. Until such time as there is a recognised general syllabus on health education in school, the amount of health education is left to the discretion of the head teacher and the availability or otherwise of staff capable of imparting the information. A few schools, grammar and secondary modern, have asked for talks on sex and venereal diseases to be given to the older pupils. The results have been very encouraging. Other schools have arranged for mothercraft classes for the older girls. This has also met with a considerable amount of success.

One of the most interesting experiments has been the initiating of Mothers' Clubs at Astley Bridge, The Withins and the Civic Centre. These Clubs are very well attended and the mothers seem to enjoy the activities immensely. These include talks by health visitors on general subjects, film shows, discussions and specialised talks by guest visitors.

Posters have played an important part in the health education programme. A special subject is chosen every month of the year and posters on this subject are exhibited in the health department, in the clinics and wherever space is available. Posters by themselves cannot achieve very much, but if they succeed in making people think about the subject they represent the objective has been reached, provided there are other measures available within easy access to the public.

There is still a very wide scope for health education in any public health programme. The limitations are those of time, finance and availability of staff.

Loan of Nursing Equipment:

Article	Number Available	No. issued during the year	No. in stock at 31st Dec. 1964
Bed Pans	155	206	9
Rubber Bed Pans	6	3	2
Air Rings	142	89	4
Tan Sad Invalid Chairs	54	24	7
Junior Invalid Chairs	7	5	1
Self-Propelled Chairs	2	—	1
Bed Rests	151	130	1
Bed Cradles	31	40	3
Single Beds	10	10	6
Iron Lifting Poles	6	3	7
" " " (with wheels)	2	1	—
Cot - Senior	2	—	2
Cot - Junior	1	—	—
Mattresses - Sectional, Dunlopillo	1	4	1
" - Hair & Interior Spring	7	6	3
" - Dunlopillo	15	10	2
Cushion - Float-on-Air	1	—	1
Biscuit Mattresses	2	—	—
Mattress Covers - Cotton	12	—	6
" " - Plastic	29	17	12
Pillows - Feather and Flock	15	1	11
" - Dunlopillo	1	—	—
Bedspreads	6	—	6
Blankets	19	1	13
Draw Sheets	1,250	704	296
Pillow Cases - Cotton	38	—	33
Pillow Cases - Plastic	8	3	4
Pyjama Jackets	112	22	8
Pyjama Trousers	3	—	3
Rubber and Plastic Sheets	510	305	55
Towels	5	5	—
Urinals	107	86	8
Fracture Boards	11	14	—
Chair Commodes	37	44	—
Sani-Chair - Self propelled	1	—	1
Crutches	22	4	18
Tripod Walking Sticks	13	8	1
Bonaped Walking Aid	1	—	—
Zimmer Frames	2	4	—
Pails (with lids)	66	101	5

Total number of articles issued in	1964	...	1,850
” ” ” ” ” ”	1963	...	2,179
” ” ” ” ” ”	1962	...	1,970
” ” ” ” ” ”	1961	...	2,043
” ” ” ” ” ”	1960	...	1,757
” ” ” ” ” ”	1954	...	899

Convalescent Home Accommodation:

During the year there were 31 applications for convalescence for adults, and 3 for children. All applicants were interviewed as to their suitability for convalescence by medical officers of the department.

All 34 applicants were accepted for periods of two weeks and of these, 20 were admitted to the Bolton and District Hospital Saturday Council's Homes at Blackpool and St. Annes-on-Sea. The remainder were sent to various other homes.

The Local Health Authority paid full fees for accommodation in all except 3 cases.

Chiropody:

Chiropody was provided for the elderly, the physically handicapped, and expectant mothers. The Old People's Welfare Council operate the service for old people and receive a grant from the Bolton Borough Council. The Health Committee provide free service for the physically handicapped, expectant mothers, and those on National Assistance. Other cases are charged 3s. 0d. per visit. A domiciliary service is available on their doctor's recommendation for those in the above classes who cannot travel to the clinic, and sitting case ambulance transport is available for those who cannot go by public transport. The number of cases treated at home has increased considerably since the service began.

The department is indebted to the very full co-operation given by the Old People's Welfare Council to whom I give my sincere thanks. The Welfare Committee and their Chief Officer, Mr. K. Davies, have also been most helpful in allowing the clinic to continue in the Welfare Department. My thanks are also due to Mrs. L. A. Crossley, the Honorary Secretary of the Bolton District Branch of the Society of Chiropodists for her very willing assistance.

Details of the numbers of treatments during 1964 are given below, together with the figures since the inception of the service.

Month	Number of treatments given at clinic					No. of treatments given at home	Total clinic and home treatments
	Free			Paying	Total		
	Aged	Handi-capped	Expectant Mothers	Aged			
January .. .	415	44	—	382	841	159	1,000
February .. .	354	31	—	352	737	166	903
March .. .	366	30	—	350	746	152	898
April .. .	419	30	—	385	834	156	990
May .. .	348	29	—	288	665	142	807
June .. .	338	16	—	301	655	155	810
July .. .	269	28	—	199	496	118	614
August .. .	404	29	—	315	748	172	920
September .. .	381	30	—	298	709	137	846
October .. .	411	30	—	315	756	155	911
November .. .	378	30	1	336	745	148	893
December .. .	402	29	1	336	768	102	870
TOTALS: .. .	4,485	356	2	3,857	8,700	1,762	10,462
1963 .. .	4,372	343	—	4,112	8,827	1,592	10,419
1962 .. .	3,969	338	1	4,147	8,455	1,279	9,734
1961 .. .	3,522	271	2	4,046	7,841	755	8,596
1960 (April - December) .. .	1,753	199	1	3,247	5,200	333	5,533

During the year 266 new patients were treated at the clinic and 135 were treated at home. At the end of the year there were 1,477 clinic patients and 220 domiciliary patients on the register. The average period between treatments is six to eight weeks.

HOME HELP

The number of households receiving assistance during the year totalled 1,462, approximately the same as the previous year. Nine hundred and thirty-three new applications were received and of these, 368 were not served. In some cases the patient preferred to find her own domestic help; in others relatives took them to their own homes; occasionally they were under the impression that anyone of pensionable age was entitled to the service even though quite well.

SOURCE OF APPLICATIONS: (Expressed in percentages)

General Practitioners ..	24.33
Self ..	15.32
Relatives ..	11.04
Health Visitors ..	14.26
Hospital Almoners ..	10.72
National Assistance Board ..	6.64
Visitors connected with Geriatric Survey ..	2.79
Welfare Officers ..	3.97
Friends ..	5.14
District Nurses ..	4.61
Children's Officer and Co-ordinating Committee ..	0.86
Mental Health Officers ..	0.32

It will be noticed that over 30 per cent of applications came direct from the patients, their relatives or friends.

The increasing number of elderly persons in the community and the increasing pressure on hospital beds makes the service busier.

Cases for whom help was provided during the last four years:

	1961	1962	1963	1964
Maternity	62	66	60	62
Tuberculosis	11	12	12	10
Chronic Sick, Aged and Infirm . .	1,293	1,292	1,305	1,305
Other cases	121	109	92	85
TOTALS . .	1,487	1,479	1,469	1,462

On an average a thousand patients are served each week some of them being visited six times a week. It can easily be appreciated from this the amount of travelling home helps have to do in all weathers which in turn leads to a higher sickness rate than is usual in most occupations.

Payment for Service:

During the year the maximum charge of the service was increased from 3s. 6d. to 4s. 0d. per hour. The Appeals Sub-Committee considered cases of special financial hardship and the charge was often greatly reduced.

Summary of Payment for Service

	Free	Part Cost	Full Cost
Maternity	7	18	37
Tuberculosis	8	1	1
Chronic Sick	1,120	63	122
Other Cases	54	6	25
TOTALS	1,189	88	185

Night Attendant Service:

Twenty-four dangerously ill patients received 59 nights of service.

Special Family Help Service for Problem Families:

Seventeen families received free service from specially trained home helps. Eight of these families received help throughout the year. It was necessary to continue this help as it is doubtful if they will ever adequately care for their children without help from outside agencies. In four cases help was given for home confinement or to care for the children whilst the mother was in hospital; two families had removed to another district; two felt they could now manage without help, and one mother deserted her husband taking the children with her. She now appears to have her affairs under control.

Staff:

The willingness of industry to employ women part-time had a most adverse effect on recruiting and delayed the usual winter-time staff increase until well into the new year.

Training Course:

The six months' training course for newly appointed home helps has continued each Wednesday afternoon at the Bolton Women's College of Domestic Arts and Crafts.

Lectures, demonstrations and practical work dealt with budgeting and selection of food, cleanliness and care in the use of kitchen and household equipment and the preparation of meals for invalids, elderly people and those on special diets. Lectures by senior officers of the Health Department stressed how a home help can show an example to her patients in their personal standards of health and hygiene and so assist in maintaining standards in the homes she serves. Visits were made to the Electricity and Gas Training Centres where the use and care of appliances were demonstrated and dangerous faults in equipment pointed out. Equipment specially designed for handicapped persons was inspected. The gas cooker with which it is impossible to gas oneself caused great interest as old people tend to lose their sense of smell and can be totally unaware of a high density of gas.

The Senior Assistant Medical Officer of Health gave a talk on the care and understanding of the mentally sick and later arranged a visit to the Training Centre in Cotton Street to show how the mentally handicapped are assisted. Lectures were also given by the Manager of the National Assistance Board concerning financial aid in sickness and distress.

The course finished with a lecture from the Medical Officer of Health concerning the Home Help Service and its relationship with other services.

MENTAL HEALTH

Progress continued in improving the standards of the Mental Health Service in Bolton and additional beds made available by the hospital authorities resulted in an increase of twenty-two per cent in the number of mentally ill persons who were able to enter hospital for treatment.

The number of persons referred to the service increased and although in the first half of the year, the mental welfare officers were able to provide a not altogether adequate service, the return of an officer from the training course and the provision of casual user car allowances for two officers brought about some improvement.

Greenmount House, the hostel for elderly mentally disordered persons was full throughout the year and on the 31st December, 1964, there were two men and eleven women awaiting admission. With the increasing demand for services for the elderly, consideration may have to be given to a further hostel for this group in the not too distant future.

Progress on the adaptation of Park House Nursery for use as a hostel for the mentally subnormal was disappointing and the work will not be complete until the spring of 1965. A pleasant site was secured for erecting a new junior training centre for the severely subnormal. Plans are well advanced and the children should be housed in their new building early in 1966.

Staff:

One mental welfare officer returned from a two-year course where he obtained the Certificate in Social Work. Under the conditions laid down for recognition of experience by the Council for Training in Social Work, only one mental welfare officer now remains unrecognised and he will need to take the two-year course to obtain the certificate.

There were no staff changes in the Junior Training Centre. A Supervisor with the National Association for Mental Health Diploma was appointed to the Adult Centre in February and an additional male instructor appointed later in the year.

The staff position at Greenmount House remained good and no major difficulties were encountered.

The staff of the Mental Health Service on the 31st December was:

1 Chief Mental Health Officer

SOCIAL WORKERS	{	1 Senior Mental Welfare Officer
		3 Mental Welfare Officers
		1 Welfare Assistant
JUNIOR TRAINING CENTRE	{	1 Supervisor
		4 Assistant Supervisors (3 qualified)
		1 Trainee Assistant Supervisor
		2 Part-time Guide Assistants
		2 Part-time Domestics

ADULT TRAINING CENTRE

- 1 Supervisor
- 5 Instructors
- 3 Guide Attendants
- 1 Cook
- 2 Part-time Domestics

GREENMOUNT HOUSE

- 1 Superintendent
- 1 Matron
- 1 Assistant Matron
- 7 Day Attendants
- Evening Attendants (6 Part-time)
- 5 Night Attendants (6 Part-time)
- 1 Chef
- 1 Assistant Chef
- 3 Part-time Domestics

Liaison:

Liaison between local authority and hospital staff remains good. Regular conferences are held at the Psychiatric Unit at the Bolton District General Hospital to discuss administrative problems and individual cases and the mental welfare officers periodically accompany the Consultant Psychiatrist, Dr. J. T. Leyberg, on visits to patients under community care.

Co-operation with Brockhall Hospital for the mentally subnormal is excellent and is fostered by the monthly clinic held in the Health Department by Dr. C. M. Brennan, Consultant Psychiatrist, and frequent informal meetings with the hospital social worker either at the hospital or on her visits to Bolton.

Co-operation with other statutory and voluntary services is carried out by the mental welfare officers in dealing with specific cases. This applies particularly to the general practitioners but is an area where further development could take place to the benefit of all, and preventive work in particular, if there were sufficient mental welfare officers with time to visit surgeries regularly.

Mental Illness**Hospital Admissions:****Total Number of Patients admitted to Psychiatric Hospitals**

Method of Admission	Under 65 years		65 years and over		Total
	Male	Female	Male	Female	
Mental Health Act, 1959					
Informal	85	116	17	65	283
Section 25	21	49	10	20	100
Section 26	—	5	—	—	5
Section 29	3	7	—	1	11
Section 60	2	—	—	—	2
TOTALS	111	177	27	86	401

After remaining fairly constant over the last few years the number of patients admitted to psychiatric hospitals increased by 22 per cent the increase being entirely female. This is undoubtedly due to the provision of additional beds for

female patients by the hospital authority and the filling of others by the transfer of long-stay patients to Greenmount House. The majority of this increase was in informal admissions which now comprise 71 per cent of the total. Ninety-five per cent of all admissions were to the Psychiatric Unit at Bolton District General Hospital. Two patients were admitted from Courts, and other compulsory admissions showed only a small increase from 108 to 116, and through rigid interpretation of the Act, only 11 cases were dealt with as acute emergencies.

Cases reported to Health Department for investigation:

	Under 65 years		65 years and over		Total
	Male	Female	Male	Female	
REPORTED BY—					
Medical Practitioners	35	60	15	43	153
Relatives	22	27	4	13	66
Police	5	10	—	3	18
Consultants and Hospitals	17	38	5	16	76
Others	16	35	4	25	80
TOTALS	95	170	28	100	393
DISPOSAL—					
ADMITTED TO HOSPITAL—					
Informally	22	30	5	20	77
Under Section 25 Mental Health Act ..	21	49	10	20	100
Under Section 26 Mental Health Act ..	—	5	—	—	5
Under Section 29 Mental Health Act ..	3	7	—	1	11
Under Section 60 Mental Health Act ..	2	—	—	—	2
Referred for Psychiatric Opinion	15	23	—	5	43
Placed under Community Care	8	24	5	29	66
Died	1	—	—	2	3
No further action required by Mental Health Service	23	32	8	23	86
TOTALS	95	170	28	100	393

As with the hospital admissions, the number of persons referred to the mental health service for investigation increased by 28.5 per cent after remaining fairly constant for some years. The increase again was in females, the majority in the sixty plus age group, and is attributed to the publicity attached to the opening of Greenmount House and an increased number of persons referred by health visitors attached to general practitioners. In spite of the increase in referrals, the number admitted to hospital through the local authority service showed only a small rise indicating that the bulk of the increase in admissions were direct referrals to the Consultant Psychiatrist. An increased number was dealt with by community care or by help and advice at the first visit to cases which were not truly mental health problems. This latter type of referral is not discouraged, however, as advice at this stage, or referral to the appropriate social agency, may be the means of preventing breakdown.

The return of one officer from a training course and the granting of car allowances to two officers enabled more casework to be carried out as shown by the increase in the number of visits paid, and this aspect of the service presents an area where valuable expansion could take place.

	1963	1964
Visits to investigate cases reported	381	447
Community care visits	1,718	2,272
TOTALS:	2,099	2,719

Psychiatric Social Club:

The club has now been meeting regularly each week, except during holiday weeks, for ten years and it is a tribute to its committee that the programme is sufficiently interesting to maintain an average attendance of forty people, and an indication that the existence of the club provides a valuable after-care service. The programme included speakers, films, and discussions, and a successful innovation was a theatre trip and a trip to a local bakery.

Greenmount House:

The first residents were admitted to Greenmount House on the 9th December, 1963, and the figures in the tables, therefore, cover the period of just over one year. There is no doubt that the hostel has provided a solution to a great need in the care of the elderly mentally disordered. The hostel is a part of the services provided for the care of old people. These include the domiciliary services – health visitors, district nurses, home helps, welfare assistance, general practitioners, residential hostels run by the Welfare Committee, and hospital accommodation both geriatric and psychiatric. Greenmount House must provide a stable home for its residents, yet it is necessary that each individual should be in the accommodation most suited to him. It is particularly desirable that, if possible, the patient should return home or go to a Part III hostel but a reasonable balance must be struck between patients moving to the most suitable accommodation and unduly frequent moves which disturb old people.

With few exceptions the general condition of the residents improved considerably, especially those who had previously been living alone. Two residents improved to a stage where they were considered suitable for an ordinary local authority old persons' home, but within a short period after transfer both had deteriorated again and application was made for re-admission. Similarly, had residents were taken home by relatives but both deteriorated rapidly and within a few weeks were admitted to geriatric hospital care. This would indicate that the majority of the residents will require the facilities of care and attention provided in the hostel for the remainder of their lives or until their condition calls for prolonged nursing care in hospital.

GREENMOUNT HOUSE

PERIOD 9.12.63 to 31.12.64

APPLICATIONS:

	Males	Females	Total
Admitted for permanent Care	12	50	62
Admitted for Short Term Care	-	8	8
Awaiting Admission	2	11	13
Unsuitable Applicants	12	23	35
Total Applications	26	92	118

ADMISSIONS:

Admitted from	Males	Females	Total
Mental Hospital	4	7	11
General Hospital - Psychiatric Unit	6	11	17
General Hospital - Geriatric Unit	1	4	5
Part III Accommodation	-	6	6
Own Home - Living alone	-	17	17
Relatives' Home	1	5	6
Total Admissions	12	50	62

ADMISSIONS BY MEDICAL DIAGNOSIS

Diagnosis	Males	Females	Total
Senile or Organic Dementia	5	24	29
Subnormality plus Depression	1	5	6
Manic Depression Psychosis (mainly Recurrent or Reactive Depression)	2	9	11
Paraphrenia	1	1	2
Schizophrenia	2	10	12
Obsessional Neurosis	-	1	1
Drug Addiction	1	-	1
Total	12	50	62

DISCHARGES:

Discharged to	Males	Females	Total
Part III Accommodation	-	2*	2
General Hospital - Psychiatric Unit	2†	3	5
General Hospital - Geriatric Unit	-	2‡	2
Relatives	2§	-	2
Died	-	1	1
Total Discharges	4	8	12

AGE ON ADMISSION

Oldest - 89 years

Youngest - 53 „

Average - 73 „

*Both awaiting re-admission to Greenmount

†One died, one awaiting re-admission to Greenmount

‡One died within a week

§Both admitted from home to Geriatric Units within a short period

Resident on 31.12.64 - 8 males, 42 females

Average age of residents - 73 years

It is the intention, however, to keep the situation under regular review by a team including Dr. J. T. Leyberg, Consultant Psychiatrist, to facilitate movement whenever possible. Some residents admitted at a stage where they need the special facilities of the hostel may become quite stable through proper medication and/or adequate nutrition, and provided the continuation of these factors can be ensured, may be equally well cared for by relatives or in an ordinary old persons' home.

The Superintendent and Matron are to be congratulated on establishing an efficient, well run home and at the same time creating a homely family atmosphere where both residents and staff are happy. Residents are encouraged to help with the domestic chores and all were encouraged to do some simple therapy - knitting, needlework, etc. Two female residents were able to maintain part-time domestic jobs outside the hostel and one man earned a little from odd job gardening at a large private house nearby during the season. The four-bedded rooms proved the most satisfactory by enabling the formation of small groups able to help each other. No restrictions are placed on visiting by friends and relatives and the hostel has been accepted very well in a good residential area. In addition to religious services held in the hostel by the various denominations, some residents were collected from time to time by parishioners and taken to the local church. One retired gentleman also visited the hostel and took an elderly male resident for walks with him. Scholars from Bolton School took an interest in the hostel, visiting frequently and assisting with the Christmas decorations, and scholars from the adjoining preparatory school and various other organisations provided entertainment. All annual events were celebrated in the appropriate manner including a bonfire and supper on the 5th November. The majority of the residents enjoyed a day's outing at Southport and a theatre trip.

The establishment of a shop open for one hour each day has proved a useful service for those residents who are unable to go out to buy their sweets and cigarettes, and many such residents are taken into town by the matron to purchase their own clothing, thus keeping them in touch as far as possible with the community.

The staffing enables two attendants to be on duty during the evening and two during the night, and the utilisation of the services of married women on a part-time basis for this duty has proved very satisfactory and there have been no major staff problems. Night care is a very essential feature of the care and attention required in such a hostel as considerable medication is required to maintain most of the residents and all night supervision is necessary.

Some residents have retained the services of their own general practitioner but the majority are on the list of Dr. J. B. Ryder, the general practitioner appointed to take special responsibility for medical care. His keen interest has brought about an improvement in physical health and his readiness at all times to visit and advise has been advantageous to staff and residents.

Mental Subnormality and Severe Subnormality

Community Care:

The number of cases referred during the year increased from 41 to 58, the bulk of this increase being a larger proportion of children leaving the special school for the educationally subnormal, but the majority of these school leavers soon found employment and further help was required in a few cases only.

The number of home visits remained constant at a ratio of three visits to every person on the list of those requiring community care, but as several cases involve considerably more than three visits a year, others are consequently receiving little or no support. The value of regular contact between parents of the

mentally handicapped and a social worker with some understanding of their problems may seem unproductive but instances have occurred where stress situations have only come to light after several visits, and when such visits have been on an annual basis, the case being apparently satisfactory, a lengthy period of suffering, and finally a costly family breakdown could have been alleviated.

Of the cases admitted to hospital for the subnormal, 1 was from the Courts and 2 were cases previously discharged by parents against medical advice. Three admissions were for prolonged assessment or treatment after being seen by Dr. C. M. Brennan, Consultant Psychiatrist from Brockhall Hospital, at the monthly clinic for subnormality held in the Health Department building. All three cases subsequently returned home. Two cases were admitted from the waiting list and with no additions the list decreased for the first time for several years.

A very good relationship exists between the local authority and Brockhall Hospital resulting in a first class advisory service for problems associated with subnormality, and frequent periods of short-term care were provided for the relief of relatives or for further observation. There is little improvement, however, in the availability of accommodation in hospital for the young severely subnormal patient and of the 10 cases awaiting hospital care, 6 are cot and chair cases and only 1 case is over the age of sixteen years.

Those living at home who were not in employment and not attending the training centre were visited by one of the medical officers and the total number of visits by mental welfare officers was:

	1963	1964
To those under community care	1,000	991
At the request of hospitals	178	171

Mental Health Act, 1959

Cases Referred to Health Department for Investigation

	MALE	FEMALE	TOTAL
NEW CASES REPORTED BY -			
Local Education Authority			
Section 57 Education Act, 1944	4	10	14
E.S.N. School Leavers	16	15	31
Others	3	3	6
CASES PREVIOUSLY REPORTED REQUIRING			
FURTHER ACTION	4	3	7
TOTALS ...	27	31	58
DISPOSAL OF ABOVE CASES -			
Admitted to Hospital			
Informally	2	2	4
Sec. 26 Mental Health Act, 1959	3	-	3
Sec. 60 Mental Health Act, 1959	-	1	1
	5	3	8
Admitted to Junior Training Centre ...	3	8	11
Admitted to Adult Training Centre ...	2	1	3
General Community Care	2	2	4
No further action required at present ...	15	15	30
Died or left area	-	2	2
TOTALS:	27	31	58

**Number of Subnormal and Severely Subnormal Persons receiving
care on the 31st December, 1964**

	MALE	FEMALE	TOTAL
In hospitals	92	96	188
Community care	157	139	296
TOTALS: ...	249	235	484

**Classification of Severely Subnormal Persons awaiting
Hospital Care on 31st December, 1964**

	Under 16 years		Over 16 years		Total
	Male	Female	Male	Female	
IN URGENT NEED:					
Cot and chair cases	-	1	-	-	1
Ambulant	1	1	-	-	2
NOT IN URGENT NEED:					
Cot and chair cases	1	4	-	-	5
Ambulant	1	-	-	1	2
TOTALS	3	6	-	1	10

Junior Training Centre:

On the 31st December there were 60 children on the register and average daily attendance throughout the year was satisfactory. With only four classrooms available, groups were often much larger than desirable but nevertheless a high standard of training was maintained. A trainee assistant supervisor was appointed during the year and it is hoped she will be accepted for training in 1965.

Several outings were arranged for the children during the year as part of their social training and a happy relationship exists between the centre and St. Thomas' Church, Halliwell, with the clergy paying frequent visits to the centre and the children visiting the church for special services. Harvest Festival, Nativity Play, and a Rose Queen Ceremony, were outstanding events for the children and parents.

Plans for the new centre are well advanced and it is hoped that its completion will not be long delayed. Space in which to provide movement and recreation is essential for training, and these facilities are now sadly lacking. Several local organisations, both large and small, are interested in the centre and donations are received from time to time for the welfare of the children. A special fund has been created so that money will be available for additional comforts when the new centre is ready.

Adult Training Centre:

The number of trainees attending the centre continues to rise and on the 31st December there were 58 on the register.

A Supervisor with the National Association for Mental Health Diploma was appointed during the year taking up her duties in February and since then the staff situation has been more settled. The centre took over an old ambulance vehicle and the availability of this vehicle during the day has proved of sterling value for collecting material, delivering goods, and ferrying working parties to other establishments. An additional instructor was appointed as driver of the vehicle and to take charge of working parties. This has enabled the centre to take over responsibility for maintaining the grounds at Greenmount House and Lowndes Street Nursery which is economical for the Department, but more important is the fact that it provides work for the trainees away from the sheltered environment of the centre.

Manufacture of bar-spacers for the reinforced concrete industry remains the only sub-contract, but a wide variety of products continue to be produced at the centre, many of them from scrap material or fents from local mills. Demand for the goods still exceeds supply, a true indication that satisfactory goods are being produced. Income from work done at the centre has now topped £2,000 a year and the necessary book-keeping and stock recording has reached a stage where consideration must be given to the provision of clerical assistance. This would free the supervisor to develop social training and with one instructor given status of seniority, would obviate the need for a deputy supervisor.

Although the major effort of the centre is on work training resulting in the placement of further trainees in industry, the establishment of a self-contained flat within the centre, fitted with domestic cleaning, washing and cooking facilities, has proved very successful particularly to the younger women who have learned a greater degree of independence and domestic skills which a busy mother cannot teach through lack of time. The flat has proved especially useful in helping two married subnormal young women to care for their families.

Regular periods are devoted to recreational activities and the monthly evening social club run in conjunction with the parents' association is popular with the trainees and an incentive for them to turn out clean and smartly dressed.

A new hotel at St. Annes-on-Sea was found for the week's holiday in April. The proprietors and staff had no previous knowledge or experience of subnormal people but agreed to give the holiday a trial. The group were soon accepted by the staff and proprietors who contributed considerably towards the enjoyment of the holiday and were very anxious to arrange a repeat for the following year. This venture proves that well socialised subnormal persons can readily be accepted into normal community life with benefit to themselves and enlightenment of the general public.

Special Care Unit:

The Special Care Unit, though situated in the Adult Training Centre, is now virtually a unit catering for severely subnormal children with accompanying severe physical disability. On the 31st December there were 3 children over the age of sixteen years (one a wheelchair case), and 11 children under sixteen years (9 wheelchair cases). The demand for day care for this type of case in such numbers has arisen over the last few years and is still rising. Whether this is a local authority responsibility or a regional hospital board responsibility for day hospital facilities is arguable but as the hospitals for the severely subnormal are too far from the town to permit day care, the need must be met locally. Provision has therefore been made for 21 places in a special care unit in planning the new junior centre.

Transport of the children in wheelchairs from all parts of the town is a problem and the vehicle used for the purpose is deteriorating. The parents of one child attending are themselves taking active steps to raise enough money to purchase a new vehicle, properly built for the purpose, and their efforts deserve every commendation and encouragement.

Care in the unit is mainly the provision of constant nursing care and physiotherapy, but every effort is made in the limited space available, to encourage movement by the use of large scale apparatus.

BOLTON MEDICAL SOCIETY, CENTENARY YEAR (1864-1964)

The Bolton Medical Society celebrated its centenary year in 1964. The Society was one of the first provincial medical societies founded, and the centenary was therefore a most noteworthy event.

I am very indebted to Dr. T. Neville Hart, Consultant Obstetrician and Gynaecologist, President of the Society for the year 1963/1964, for his permission to include in my Annual Report the following extractions from his Presidential Address.

"Our Society was founded in October 1864 and a report of the meeting may be found in the Bolton Chronicle dated 29th October, 1864 which reads as follows:

Medical. A meeting of the medical profession of this town and neighbourhood was held in the Infirmary on Thursday evening to take into consideration the propriety of forming a Society for the reading and discussing of papers on medical science, for the formation of a library and other matters connected with the profession. There were present - G. Mallett, Esq., in the Chair, S. N. Bancroft, Esq., and Fergus Ferguson, Esq., Drs. Carruthers, Robinson of Egerton, Livy, Settle, Ferguson and Mallett, B. Cawthorne, C. Rothwell, W. Pendlebury, H. Hatton, R. A. Clarke, J. Martin Smith, Gregory, Howarth, Holt and Whitgrave. Letters favourable to the objects of the meeting were received from J. B. Garstang, Esq., J. Dorian, Esq., and others. A President and Secretary were appointed and a Committee of eight were deputed to draw up a code of rules to be submitted to the next general meeting. The object of the meeting having been set forth by the Chairman, general conversation ensued which was characterised by the utmost cordiality. The meeting closed with a unanimous vote of thanks to the Chairman for his urbanity in the Chair.

The Receipt Book dated 14th December, 1864 shows that the subscription was one guinea a year and that there were 14 members. I think it reflects great credit on the officers of the Society, that a hundred years later there are 128 Members, we have approximately £580 to our credit and the subscription is still one guinea a year, - surely this must be a record.

Unfortunately the records are not complete, but the Society has continued for a hundred years with fluctuations in its activities, particularly during the wars. At no time does it seem to have been stronger than at present. We have a well established library and regular lectures and clinical meetings and flourishing social functions. I hope that those responsible for developing post graduate education throughout the country will remember and encourage Societies such as ours rather than forget and replace them by more "high powered" methods of learning.

At the end of the Eighteenth Century, the beauty of rural England was still unspoilt and Bolton lying in the foothills of the Pennines, with good trout fishing in its primrose-banked streams, still held the setting which explained its former reputation as a minor Spa. In the early part of the Nineteenth Century England led the world in the Industrial Revolution with its rapid financial returns accompanied by the unplanned industrial growth and life. With it came the change from a pleasant Bolton in a rural setting to a town of squalor and pestilence.

There were no laws to regulate the erection of new buildings and the town became a motley assemblage of badly constructed dwellings and unpaved, undrained streets. Most of the working class houses were built back to back, with one room on a floor, frequently in close proximity to pigsties and privy middens, which were almost universal. There were 1,500 cellars let as separate dwellings with 7,000 people inhabiting them.

In a cellar 14 ft. \times 15 ft. in a lodging house in Dawes Street there lived 25 human beings sleeping on the straw covered floor as opportunity offered. A house in King Street was let as ten furnished rooms to 50 persons, although each letting only contained one bed. There were 84 mendicant lodging houses in the town, but alcoholic drink was readily available, there being one place of sale or of public resort to every 136 inhabitants.

Bolton a hundred years ago was a town of thriving industrial activity, but it was also a town with gross sanitary defects, grave overcrowding, high death rates, and epidemic incidence of severe infectious diseases. For example, in 1873 there were 438 deaths from the following infectious diseases: smallpox, measles, scarlet fever, whooping cough, typhus and typhoid, epidemic diarrhoea and cholera. Typhoid fever caused about 100 deaths per annum.

James Black, M.D., of the Royal College of Physicians London, has given an excellent description of the medical profession in Bolton about 1837.

The town had a population of about 53,000 and there were 16 medical practitioners of all classes in the town, averaging one to about every 3,000 of the population, exclusive of the country which might add one thousand more to each practitioner.

It might be thought that this was a fair and ample field for a medical man but when the circumstances of the mass of the inhabitants is considered, the field for professional income by no means corresponded to the sphere of practice. If the number of people dealt with by a host of low empirics, irregulars and druggists is deducted it left only a few thousands out of the whole population as an available field of remunerating practice. Except the house surgeon at the Dispensary no medical gentleman received remuneration from the town or parish for attending the paupers in the limits of the Borough.

Interesting as it may be I am not going into detail about the main causes of death at this time. I do however wish to refer to the infant mortality and still birth rate. If the deaths and still births in Bolton over a five year period ending the 30th June, 1836 are analysed it will be found that half of all children born alive died within the age of three years and ten months. If the still born are included the half of all human animated beings succumbed before they reached three years and one month. It should be remembered that most statistics of this type were obtained from the Church registers. The still birth figure was undoubtedly higher than that given as many were taken to the Dissenting burying ground, where they were interred for a less fee and many were furtively dropped into an open grave and not registered. There were a number of reasons for these bad figures which were considerably worse than those for most of the rest of England.

Important influencing circumstances were early and improvident marriages, often contracted on the part of the female before she had attained her full development as an efficient reproductive being. Also important were the poor conditions and hard work during the period of gestation combined with general ignorance of personal hygiene during that time. Then there was the improper and pernicious way of nursing many infants. Many mothers in factories and other manufacturing establishments consigned their early offspring to the daily care of an old or frail woman in the neighbourhood for a few pence per week, if there was not an aged relative at home. These foster-mothers put the children entrusted to their care on the most easy and economical system for themselves and too often when the babes were noisy administered deleterious anodynes such as laudanum and gin.

This was the chief effect of the manufacturing system on health and longevity; for the ratio of mortality above the 5th or 7th year of life was not greater than in other smaller and non-manufacturing towns, and was equalled by that of many country parishes.

When reading about the Bolton of the past one cannot help but be struck by the magnificent work done by the Board of Guardians and the Sanitary Department, which later became the Public Health Department. By careful observation and determination and by instituting measures which were often unpopular, it is difficult to over estimate the value of their work."

SURVEY OF GERIATRIC SERVICES IN BOLTON

Towards the end of 1963, some of those dealing with old people in Bolton, namely the Consultant Psychiatrist, the Consultant Geriatrician, Bolton & District Hospital Management Committee Secretary, representatives of the Bolton Local Medical Committee, the Clerk of the Bolton Executive Council, the Chief Welfare Officer, the Housing Manager, and the Medical Officer of Health, agreed that the medical and social needs of old people in the town, and the provision and working of the services for them, should be investigated. The results would act as a guide for planning and development in the future.

The survey was undertaken in two ways – by assessing the need for particular services that individual old people were not receiving, and by health visitors completing questionnaires on each of a random sample of one in twenty persons aged sixty-five and over on April 1st, 1964. The Clerk to the Bolton Executive Council very kindly provided the names and addresses of these individuals. Using punched cards, the information was analysed in the Bolton Borough Treasurer's Department.

In looking at the results of the survey, the likely increase in the population of old people, as shown in the following table, should be borne in mind.

	1964	1969	1974
Population, all ages	160,500	160,000	161,700
Population, aged 65 and over	20,600	21,900	24,100

The following is a brief summary of the results which it is hoped will be published in full elsewhere.

The survey showed four outstanding needs. Firstly, a great increase of special ground floor housing for old people – 225 more dwellings with warden supervision, and 879 without supervision. Secondly, 123 additional welfare residential places. Thirdly, 1,308 more old people required regular visiting either by welfare officers or health visitors in addition to the 1,350 already being visited, and fourthly, substantially more chiropody provision, both at clinic and home is necessary. A striking finding was that there does not appear to be need for additional geriatric or psychiatric hospital beds in Bolton. It must be pointed out that shortly before the survey, the 50 place Health Department's "Greenmount House" hostel for old people had been opened, and also, additional beds had been provided at Townleys Hospital. But taking these into consideration, and also allowing for the increased population, it would seem that provided adequate ground floor housing accommodation and Part III welfare accommodation, and development of the health and welfare domiciliary services occurs to allow for the increase of old folk, no additional hospital beds are necessary. This does not take into account any substantial development that may take place outside the Borough, e.g. at Westhoughton.

PART III

CONTROL OF INFECTIOUS DISEASES

Notifiable Infectious Diseases

Tuberculosis

Venereal Disease

NOTIFIABLE INFECTIOUS DISEASES

Incidence:

The following summary gives the number of cases of notifiable infectious diseases, other than tuberculosis, which have been notified or otherwise ascertained.

Disease	Total Cases Notified	No. of Cases after Correction	Ascertained Cases
Anthrax	-	-	-
Diphtheria	-	-	-
Dysentery	97	94	-
Acute Encephalitis	-	-	-
Enteric Fever (including Paratyphoid)	-	-	-
Erysipelas	6	6	-
Malaria	-	-	-
Measles	920	973	-
Meningococcal Infection	-	-	-
Ophthalmia Neonatorum	-	-	-
Pneumonia—			
Acute Primary	36	37	-
Acute Influenzal	2	2	-
Acute Poliomyelitis—			
Paralytic	2	2	-
Non-Paralytic	-	-	-
Puerperal Pyrexia	3	3	-
Scarlet Fever	59	58	-
Smallpox	-	-	-
Whooping Cough	141	142	-
Food Poisoning	38	41	-

The following table gives the number of notifications of notifiable diseases, after correction of diagnosis, during each of the last ten years.

Disease	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
§Anthrax	-	-	-	-	-	-	-	-	-	-
Diphtheria	1	-	-	-	-	-	-	-	-	-
Dysentery	154	851	167	187	237	509	229	331	97	94
Acute Encephalitis	3	2	2	1	-	1	-	-	-	-
Enteric Fever (including Paratyphoid)	5	-	-	-	6	1	1	2	1	-
Erysipelas	30	32	22	21	19	7	10	3	10	6
Malaria	*1	1	-	-	1	1	1	1	1	-
Measles	2205	714	2793	111	1797	1058	2708	576	2193	973
Meningococcal Infection	1	3	7	1	2	4	1	-	-	-
Ophthalmia Neonatorum	2	3	4	2	-	-	-	1	1	-
Pneumonia										
Acute Primary	123	145	153	136	103	79	79	65	81	37
Acute Influenzal	20	13	151	19	74	4	63	30	16	2
Acute Poliomyelitis										
Paralytic	7	8	4	3	-	1	15	1	1	2
Non-Paralytic	2	6	12	3	3	-	10	-	1	-
Puerperal Pyrexia	5	5	6	4	3	2	1	2	1	3
Scarlet Fever	74	94	131	278	262	186	89	59	66	58
Smallpox	-	-	-	-	-	-	-	-	-	-
Whooping Cough	244	319	73	40	100	179	147	2	55	142
Food Poisoning	53	1129	215	150	181	59	57	66	62	41

§Notifiable from 1st December, 1960.

*Induced for therapeutic purposes.

Deaths from Infectious Diseases, 1955 - 1964 inclusive:

Disease	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Diphtheria	-	-	-	-	-	-	-	-	-	-
Dysentery	-	2	-	-	-	-	-	-	-	-
Diarrhoea and Enteritis under 2 years of age ..	-	1	-	-	-	1	1	1	3	2
Acute Encephalitis	4	-	-	-	-	-	-	-	-	-
Enteric Fever (including Paratyphoid)	-	-	-	-	-	-	-	-	-	-
Erysipelas	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-
Measles	1	1	-	-	2	-	-	-	-	-
Meningococcal Infection ..	1	1	-	-	-	-	1	1	-	-
Ophthalmia Neonatorum ..	-	-	-	-	-	-	-	-	-	-
All forms of Pneumonia ..	69	65	127	92	107	110	114	122	146	90
including—										
Acute Primary Pneumonia	20	16	27	25	12	18	14	23	19	11
Acute Influenzal „	3	1	17	2	7	6	31	15	5	3
Acute Poliomyelitis	2	-	-	-	-	-	-	-	-	-
Puerperal Pyrexia	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	-	-	-	-	-	-	-	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-
Food Poisoning	2	-	-	-	-	-	-	-	-	-

Diphtheria:

The last case in the borough occurred in 1955, and 1964 was the ninth successive year in which there has not been a case. However, small outbreaks of diphtheria have occurred in other parts of the country and we cannot afford to relax concerning the need for immunisation of infants and young children. An immunisation figure of 60.83% for children under one year is too low a figure for safety.

Dysentery:

The number of cases has remained low, as in the previous year; 94 in 1964, as against 97 in 1963. It is hoped that these low figures will continue in future years.

Enteric Fever:

No cases were notified.

Measles:

There were 973 cases of measles notified during the year, compared with 2,193 in the previous year. In 1964, 190 cases were notified in the first quarter, 25 in the second and 182 in the third quarter, while in the last quarter there were 576 notifications.

Whooping Cough:

One hundred and forty-two cases were notified in 1964, compared with 55 in 1963.

AGE GROUP	NO. OF NOTIFICATIONS	NO. WHO HAD BEEN IMMUNISED
0- 5 years	120	27
6-10 years	19	5
11-15 years	3	1

If the incidence of whooping cough is to be reduced it is important that there should be a higher rate of immunisation against this disease for, as with diphtheria, we cannot afford to be complacent.

Poliomyelitis:

Two cases occurred during the year; both were paralytic. Both had received a satisfactory course of oral poliomyelitis vaccine. Fortunately, in both cases the residual paralysis was slight. The last dose of vaccine was given over a year before in each case. The onset of the poliomyelitis was not linked with taking the oral vaccine.

Food Poisoning:

There were forty-one cases of food poisoning, compared with sixty-two in the previous year. The cases were mainly sporadic and single. There were no outbreaks of food poisoning associated with restaurants and canteens in the borough.

Scabies and Body Lice:

A study of the incidence of scabies and body lice over the past few years revealed that there was an appreciable increase in 1963 and a still greater incidence in 1964. In adults, both conditions are commoner in males than in females. This may be due to older men not being able to look after themselves so well as older women, and that the men congregate together in poorer houses in the town.

The preventative arrangements for these conditions are under close review, particularly in connection with common lodging houses and the treatment of bedding and clothing of infested inmates of such premises. It is hoped that with increased surveillance and improvement of the facilities at School Hill Cleansing Station control of these conditions will be maintained.

The following tables show the number of cases of scabies and body lice treated at School Hill Cleansing Station during the years 1959 to 1964 inclusive.

SCABIES:

Year	School Children		Children under 5 years		Adults	
	Males	Females	Males	Females	Males	Females
1959	17	21	1	3	6	16
1960	8	12	—	1	5	3
1961	4	15	—	2	2	3
1962	7	11	5	6	6	11
1963	52	59	10	13	30	35
1964	49	79	14	7	54	22

BODY LICE:

Year	School Children		Children under 5 years		Adults	
	Males	Females	Males	Females	Males	Females
1959	—	—	—	—	22	3
1960	—	—	—	—	40	—
1961	—	—	—	—	10	3
1962	—	—	—	—	26	1
1963	—	—	—	—	23	4
1964	—	—	—	—	90	2

General Administration of the Control of Infectious Diseases:

Public health inspectors carried out 204 visits, and health visitors 56 visits, to make enquiries concerning infectious diseases.

The number of pathological specimens sent for examination to the Department of Pathology at the Bolton Royal Infirmary was 1,595. The types of specimens examined, and the results obtained, are shown in the following table:

Type of Specimen	Pathogenic Organism Found	No. of Specimens
Faeces	Sh. Sonnei	27
	Salmonella typhimurium	27
	Other Salmonellae	10
	Negative results	1,521
	TOTAL	1,585
Ear, Nose and Throat Swabs	.. .. .	10
GRAND TOTAL ..		1,595

Notices under the Public Health (Infectious Diseases) Regulations, 1953 were served upon two persons who were proved to be Salmonella carriers and who were food handlers. They were required to do no further work in food premises until they were proved to be free from infection. Both submitted claims for compensation, and the total amount paid was £16 6s. 5d.

The following table shows the number of persons to whom special attention was directed in view of the fact that their occupation involved a higher risk of infection to others.

Category	Examinations for	
	Sonne Dysentery	Other Intestinal Infections
FOOD HANDLERS		
Positive	1	1
Negative	17	27
NURSERY STAFF		
Positive	1	—
Negative	5	2
NURSING AND HOSPITAL STAFF		
Positive	—	—
Negative	5	8
SCHOOL STAFF		
Positive	—	—
Negative	7	2
HOME HELPS		
Positive	—	—
Negative	—	18
TOTALS ..	36	58

Certificates were given in accordance with the authority given to the Medical Officer of Health under Ministry of Health Circular 115/48 for the purpose of claiming National Insurance sickness payments in respect of three carriers of infectious disease who, because of the nature of their employment, were in a position to spread infection.

I wish to thank the staff of the Pathological Laboratory at the Bolton Royal Infirmary for their help in examining specimens and in the interpretation of the findings.

TUBERCULOSIS

Dr. John Mitchell, Consultant Physician, has kindly supplied the following information.

Notifications:

AGE AND SEX DISTRIBUTION OF NOTIFIED CASES:

Respiratory Tuberculosis

Age Periods	0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Total (all ages)
Males	-	1	-	-	-	4	3	10	3	4	1	1	-	27
Females ..	-	-	-	-	-	1	3	5	4	2	3	-	1	19
TOTALS ..	-	1	-	-	-	5	6	15	7	6	4	1	1	46

Non-Respiratory Tuberculosis

Age Periods	0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Total (all ages)
Males	-	-	-	-	-	-	-	1	-	1	-	-	-	2
Females ..	-	-	1	-	-	-	-	1	1	-	-	1	-	4
TOTALS ..	-	-	1	-	-	-	-	2	1	1	-	1	-	6

The number of cases on the tuberculosis register at the end of the year was 243-

	MEN	WOMEN	CHILDREN	TOTAL
Respiratory Tuberculosis ...	126	84	7	217
Non-Respiratory Tuberculosis	13	7	6	26

Deaths:

Respiratory Tuberculosis

Age Periods	0-	1-	2-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Total (all ages)
Males	-	-	-	-	-	-	-	-	1	4	-	-	4	9
Females ..	-	-	-	-	-	-	-	-	-	1	-	-	1	2
TOTALS ..	-	-	-	-	-	-	-	-	1	5	-	-	5	11

Non-Respiratory Tuberculosis

There were 2 (male) non-pulmonary notifications after death.

Summary of the Work of the Chest Clinic:

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
No. of new cases notified.. . . .	87	87	90	101	89	63	60	82	62	57	52
No. of deaths	26	18	16	14	16	10	10	13	8	10	13
No. of attendances of new cases	1,127	1,217	1,624	1,722	1,682	1,395	1,223	1,082	1,126	1,262	1,175
No. of cases referred from Mass Miniature Radiography Units	49	463	20	18	30	235	119	105	176	242	208
B.C.G. Vaccinations..	94	84	125	96	129	151	179	129	121	145	127
Total attendances at clinic	7,354	6,901	6,510	5,674	5,078	4,328	3,679	3,302	3,404	3,552	3,337
No. of contacts examined ..	401	463	749	689	866	606	608	447	416	529	413

General Comment:

There were 52 new cases of tuberculosis notified during 1964 – 5 less than last year.

Thirteen patients died of tuberculosis during the year.

There are now only 2 patients (both males) with persistently positive sputa. Both patients have acquired resistant organisms.

During the year 127 B.C.G. vaccinations were carried out at the Chest Clinic.

Care and After-Care of Patients suffering from Tuberculosis:

Close co-operation between the Chest Clinic staff and Health Department staff continued.

AFTER-CARE PANEL

Six meetings of the After-Care Panel were held during the year mainly to consider applications for rehousing on the grounds of tuberculosis. Nine recommendations were made and fresh accommodation was provided during the year for nine cases. Some patients were referred for financial assistance to the National Assistance Board.

OTHER AFTER-CARE ACTIVITIES:

The Home Nursing Service undertook the care of 33 pulmonary cases and 2 non-pulmonary cases. Many of these required streptomycin injections daily and many others attended the Health Department for their injections, especially those who had returned to work, receiving their injections in the evenings. The total number of treatments given was 1,945. There were 13 patients on the books on the 1st January, 1964, and 9 on the 1st January, 1965.

The Home Help Section paid visits to, and attended to the needs of 9 patients during the year 1964.

During the year two children were admitted to nurseries whilst their parents underwent treatment in hospital.

HEALTH VISITOR:

There is one full-time health visitor who paid 648 visits to patients' homes during the year. In addition, clinic sessions were assisted by other health visitors and clinic nurses for most of the sessions as required. The health visitor supervises home conditions and advises on treatment.

Close contact was maintained between the Disablement Rehabilitation Officer and the Chest Physician for rehabilitating patients in suitable work.

B.C.G. Vaccination:

This protection against infection was offered to certain contacts, mostly children and especially babies. During the year there were 173 skin tests performed in the Chest Clinic in this connection and 109 vaccinations with B.C.G. were given to babies and older children.

Contact Clinics:

Special evening clinics are held monthly or two monthly if necessary at which contacts of known cases of tuberculosis come to the clinic for X-ray and examination by the doctor.

During the year 408 cases were examined and only 3 found to require treatment or close observation.

SCHOOL CHILDREN WITH POSITIVE TUBERCULIN TESTS:

Following the Ministry of Health circular of 18.2.60 recommending observation of school leavers found to have strongly positive tuberculin tests, a weekly session was continued. As these tests indicate an infection which may be recent and perhaps likely to develop, these children are examined and X-rayed and where possible their close contacts also.

No cases were found requiring treatment though many showed X-ray evidence of healed infection. Most of them were very well and some were known contacts of known cases. Most will be reviewed annually for two years or three years until the value of this follow-up has been determined in the light of experience.

During the year no school child developed active tuberculosis.

Tuberculosis among Pakistanis and Indians:

The increasing number of Pakistanis and Indians in the town raised special problems, particularly in regard to ensuring correct treatment in spite of language difficulties. There are probably several hundred in the town and 21 needed hospital treatment during the year.

B.C.G. Vaccination of School Children and Students:

B.C.G. vaccination was offered to children in school who were twelve years of age or older. The Heaf Gun multiple puncture method was used for skin testing. Freeze-dried vaccine was used for the vaccination. The total number of consents received was 1,264, of which 1,139 were skin tested. There were 125 absent for skin-testing and 67 absent for the reading of the skin test. Of the 1,139 tested, 899 were negative and these were vaccinated. There were 173 positive and of these 61 were strongly positive. The latter attended the Chest Clinic for X-ray and to be kept under observation.

Analysis of Positive Reactors by Age Groups

Age Group	Total Number of children	Number Positive	% Positive
12 years	12	1	8.33
13 years	518	90	17.37
14 years	434	68	15.66
15 years	103	13	12.62
16 years	2	—	—
17 years	3	1	33.33
TOTALS	1,072	173	16.13

The number of children tested in 1964 was considerably less than in previous years. This is due to the fact that for the greater part of 1964 only one medical officer was engaged in this work and consequently the total number of children to be tested was divided between 1964 and 1965.

The number of children showing a positive reaction to the Heaf Test is slightly above last year's. I do not think that this is of any particular significance. The general trend shows a gradual decline similar to the fall in the incidence of tuberculosis in the population as a whole.

The following is the percentage of positive responses since 1954:

YEAR	NUMBER SKIN TESTED	% POSITIVE
1954	836	34.9
1955	1,525	35.6
1956	1,118	31.2
1957	1,771	27.4
1958	1,858	29.7
1959	1,918	18.6
1960	2,548	15.0
1961	2,063	16.0
1962	1,527	16.7
1963	1,933	14.6
1964	1,072	16.1

Mass Miniature Radiography Survey in Bolton:

I am indebted to Mr. N. Hall, the Organising Secretary of the No. 4 Mass Miniature Radiography Unit, for sending me the results of the survey, which are shown in the following tables.

The Unit has continued to pay its regular yearly visit to Bolton. The total numbers examined are slightly less than last year. There has, however, been an increase in the number of patients referred by general practitioners, 1,082 compared to 867 in 1963.

The overall incidence of active pulmonary tuberculosis remains static but of the 12 cases discovered, 7 had positive sputum. It is noteworthy that 5 of the 12 were immigrants from Pakistan/India. Special efforts are being made to examine as many immigrants as possible. The figure for malignant new growth is again high and is similar to the peak figure of 1962.

Examinations carried out in Bolton during 1964

	MALE	FEMALE	BOTH SEXES
General Practitioner Referrals	597	485	1,082
General Public Volunteers	3,129	3,582	6,711
Factory/Offices	2,893	2,747	5,640
Others	32	66	98
TOTALS	<u>6,651</u>	<u>6,880</u>	<u>13,531</u>

The numbers compared with previous years are:

	1960	1961	1962	1963	1964
General Practitioner Referrals	304	507	536	867	1,082
General Public Volunteers ...	6,672	5,282	4,984	7,596	6,711
Factory/Offices	3,631	1,405	6,546	5,169	5,640
Others	183	4,393	—	747	98
TOTALS	<u>10,790</u>	<u>11,587</u>	<u>12,066</u>	<u>14,379</u>	<u>13,531</u>

Significant Abnormalities (Distribution by Age and Sex)

Abnormalities	Males										Females										Grand Total	
	Under 14	14-19	20-24	25-34	35-44	45-54	55-64	65 & over	Total	Rate per 1000	Under 14	14-19	20-24	25-34	35-44	45-54	55-64	65 & over	Total	Rate Per 1000	Cases	Rate per 1000
Tuberculosis requiring close clinic supervision or treatment.			1	5	1			1	8	1.20					2	1	1		4	0.58	12	0.89
Tuberculosis requiring only occasional out-patient supervision			1	2	2	3	6	3	20	3.01			2	1	5	4	2	1	15	2.18	35	2.59
Malignant Neoplasms.					1		3	5	15	2.26				1	1			2	4	0.58	19	1.40
Non-Malignant Neoplasms.															1	1	1		3		3	
Lymphadenopathies, (excluding Sarcoids)								1	1												1	
Sarcoids (including enlarged Hilar Glands).																						
Congenital Cardiac abnormalities and abnormalities of the Vascular System.																						
Acquired Cardiac abnormalities and abnormalities of the Vascular System.				2	2	6	4	3	21					1	4	5	8	4	30		51	
Pneumoconiosis without P.M.F.						2	1	1	4												4	
Pneumoconiosis with P.M								1	1												1	

Respiratory Tuberculosis Requiring Treatment
(Distribution by type of Examinee, Age and Sex)

Type of Examinee	Males										Females										Grand Total
	Under 14	14-19	20-24	25-34	35-44	45-54	55-59	60-64	65 & over	Total	Under 14	14-19	20-24	25-34	35-44	45-54	55-59	60-64	65 & over	Total	
General Practitioner Referrals				2	1					3								1		1	4
Factories/Offices			1						1	2					1					1	3
General Public Volunteers				3						3					1	1				2	5
Immigrants from India and Pakistan included in above groups			1	3	1					5										-	5
TOTALS:			1	5	1					8					2	1		1		4	12

Malignant Neoplasms

(Distribution by type of Examinee, Age and Sex)

Type of Examinee	Males										Females										Grand Total					
	Under 14	14		15-19		20-24		25-34		35-44		45-54		55-64		65 & over		Total								
General Practitioner Referrals										1						1							2	7		
General Public Volunteers . .																2	3	5					1	2	12	
Factories/Offices																								-	-	
TOTALS											1					3	5	6					1	1	4	19

Mass Miniature Radiography Surveys

	No. of Persons Examined			Active Tuberculosis			Malignant Neoplasms		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
	11,781	10,686	22,467	13	14	27	12	5	17
59 Rate per 1,000 examined				1.1	1.3	1.20	1.01	.46	.76
60 Rate per 1,000 examined	5,640	5,150	10,790	7	2	9	9	1	10
				1.24	.39	.83	1.60	.19	.93
61 Rate per 1,000 examined	6,530	5,057	11,587	15	10	25	9	2	11
				2.30	1.98	2.16	1.39	.39	.92
62 Rate per 1,000 examined	6,559	5,507	12,066	1	9	10	15	3	18
				.15	1.63	.83	2.29	.54	1.49
63 Rate per 1,000 examined	7,818	6,561	14,379	8	4	12	8	3	11
				1.03	.61	.83	1.03	.46	.76
64 Rate per 1,000 examined	6,651	6,880	13,531	8	4	12	15	4	19
				1.20	.58	.89	2.26	.58	1.40

VENEREAL DISEASE

Dr. Philip S. Silver has supplied the following information which relates to Bolton residents only in attendance at his clinic.

The number of new cases of syphilis attending the clinic from the Bolton area was 5 which is a decrease of 5 over the previous year.

The number of cases of gonorrhoea from Bolton was 64, showing an increase of 18 compared with the previous year. The percentage of new female cases under the age of 21 was lower than the year 1963.

There were 18 cases, resident in Bolton, referred by the Moral Welfare Worker and 4 from the ante-natal clinic. The clinic staff carried out 60 domiciliary visits for the purpose of ascertaining the cause of non-attendance.

The following table summarises the situation for the past twelve years:

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Syphilis	48	36	43	23	22	19	19	10	14	16	10	5
Gonorrhoea	50	60	75	58	55	57	58	74	123	72	46	64
Non-Venereal Disease	316	333	237	286	256	214	265	320	348	349	352	335
TOTALS:	414	429	355	365	333	290	342	404	485	437	408	404

NAME		ADDRESS		CITY		STATE	
1	Mr. J. H. Smith	123 Main St.	Chicago	Ill.	U.S.A.		
2	Mr. J. H. Smith	123 Main St.	Chicago	Ill.	U.S.A.		
3	Mr. J. H. Smith	123 Main St.	Chicago	Ill.	U.S.A.		
4	Mr. J. H. Smith	123 Main St.	Chicago	Ill.	U.S.A.		
5	Mr. J. H. Smith	123 Main St.	Chicago	Ill.	U.S.A.		
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16	Mr. J. H. Smith	123 Main St.	Chicago	Ill.	U.S.A.		
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THE UNIVERSITY OF CHICAGO

The University of Chicago is a private research university in Chicago, Illinois. It was founded in 1837 as the first American university to be organized on the German model, with a focus on research and scholarship. The university is known for its commitment to academic excellence and its diverse student body. It has a long history of producing world-class scholars and leaders in various fields of study. The university's campus is located in the Hyde Park neighborhood of Chicago, and it is home to some of the most famous buildings in the city. The University of Chicago is a member of the Association of American Universities and is ranked among the top universities in the world.

NAME		ADDRESS		CITY		STATE	
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PART IV

ENVIRONMENTAL HYGIENE

Work of the Chief Public Health Inspector

Slum Clearance

Clean Air

Inspection and Supervision of Food

General Sanitation

Disinfection and Disinfestation

Report of the Borough Analyst

WORK OF THE CHIEF PUBLIC HEALTH INSPECTOR

Shortage of qualified public health inspectors continued to present serious difficulties during 1964, and although the number of inspectors on the establishment was reduced during the year, there were at the end of 1964 vacancies for one senior specialist public health inspector and two district public health inspectors. During the year three technical assistants were appointed, but obviously it will be some time before they are able to make their maximum contribution to the work of the department, and they cannot of course, be used for many duties which can still only be carried out by qualified inspectors. The authorised meat officer and one of the technical assistants are studying for the public health inspectors examination, and consequently count against the department's entitlement for pupils, the number of which has been reduced in practice from six to four.

At the end of 1964 the staffing position was as follows:-

Chief Public Health Inspector

Deputy Chief Public Health Inspector

5 Senior Public Health Inspectors

8 Senior Specialist Public Health Inspectors (1 vacancy)

2 District Public Health Inspectors (2 vacancies)

4 Pupil Public Health Inspectors

3 Technical Assistants

SCHOOL HILL DISINFECTING STATION

Foreman

6 Rodent Operatives

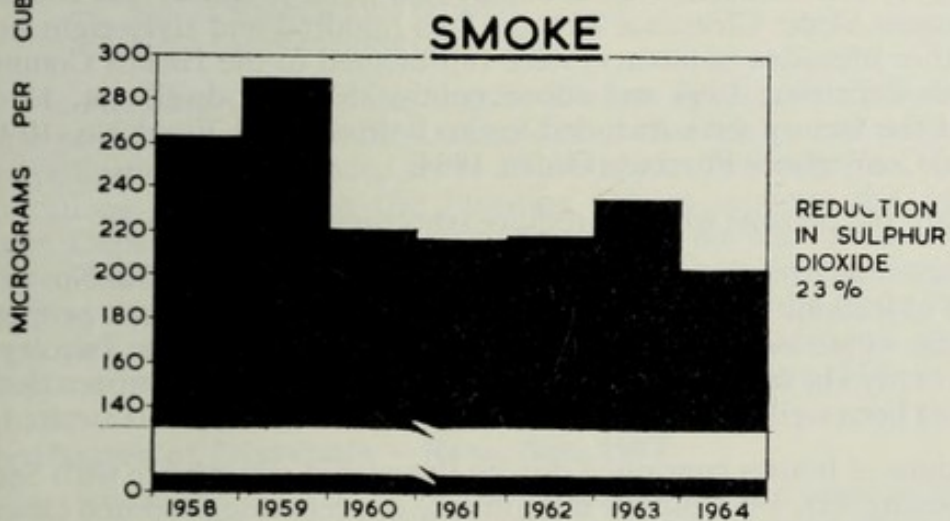
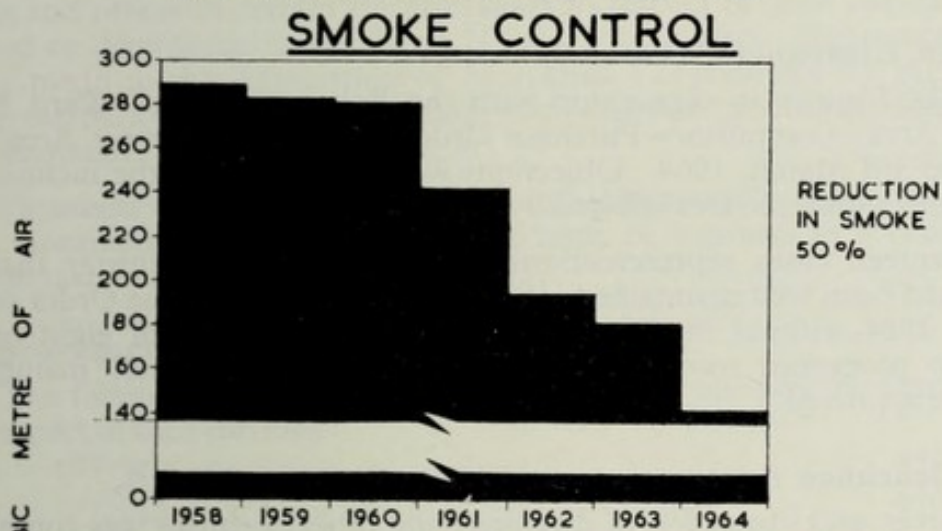
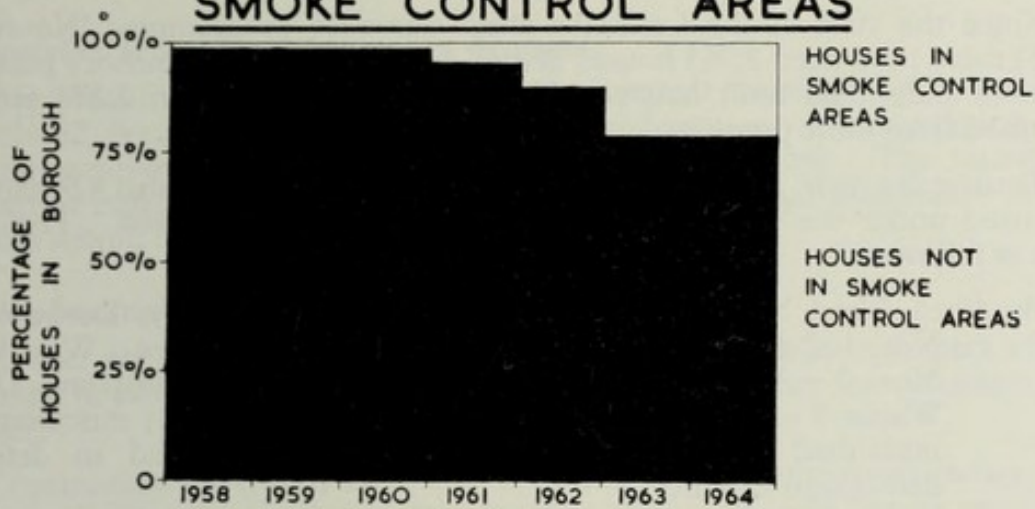
There seems little prospect of an early improvement in the staffing position, and it is interesting to note that at the time this report was being compiled one inspector was under notice to leave, having accepted a post with a much smaller neighbouring Authority who were prepared to allow several years acceleration of increments and an improved car allowance i.e. essential user as opposed to casual user.

Two main features emerge from the work of the public health inspectors during the year 1964. The first was the temporary halting of the smoke control programme early in the year. The histogram produced below, showing the progressive reduction in the smoke content of the atmosphere as more and more houses have been brought under smoke control, is considered to show that the case for an early resumption of smoke control is overwhelming, and it is to be hoped that the coming year will see a return to the Council's pioneering efforts in this field.

COUNTY BOROUGH OF BOLTON

REDUCTION IN AIR POLLUTION

WITH GROWTH OF SMOKE CONTROL AREAS



SULPHUR DIOXIDE

The second feature is in the field of slum clearance. Steps were taken during the year to accelerate the rate of slum clearance to a total of 800 houses per annum.

SLUM CLEARANCE

Clearance Areas and Compulsory Purchase Orders:

Since the start of the Council's slum clearance programmes (November 1955) there have been 2,963 houses demolished by way of compulsory purchase order or individual unfit house procedure. There have been 2,284 families rehoused from these premises.

During the year 1964 there were 752 houses demolished and 424 families rehoused under the provisions of the Housing Acts, 1936-1964. The areas were as follows:-

Bradford Ward No. 10 Clearance Area (Slaterfield Area); Derby Ward Nos. 1, 2 and 3 Clearance Areas (Lupton Street) Area; West Ward Nos. 2 - 9 Clearance Areas (Egyptian Street Area); and Derby Wards 9 - 11 Clearance Areas (Noble Street Area); miscellaneous individual unfit houses and unfit houses included in deferred demolition schemes.

Confirmed Clearance Area:

A Public Inquiry in connection with the Bolton (Halliwell Ward No. 1 Clearance Area) Compulsory Purchase Order 1963 (Arden Street Area) was held on the 3rd March, 1964. Objections were made against the inclusion of six properties within the area affected by the Order.

In seventeen cases representations were made to the Minister that the premises had been well maintained. The Minister confirmed the Order on the 9th June, 1964 without modification and claims in respect of eight out of twenty-two properties recommended by the Minister for well maintained grants were approved.

Future Clearance Areas:

The survey and inspection of dwellings and other premises was completed in the Ainscow Street Clearance Area. Two hundred and sixty-eight houses and one other premises (a factory) were represented to the Health Committee on the 19th February, 1964 and subsequently 257 unfit dwellings, 11 other houses and the factory were included in the Bolton (West Ward No. 10 Clearance Area) Compulsory Purchase Order, 1964.

There are 747 persons who will require rehousing from this area.

A Public Inquiry in connection with the area was held on the 17th November, 1964 when objections were made against the inclusion of eighteen properties. Two of these objections were later withdrawn before the Public Inquiry was held. In twenty six cases representations were made to the Minister that the premises had been well maintained. The decision of the Minister is awaited.

Inspections of houses continued during the year in accordance with Section 3 of the Housing Act, 1957 and for the purpose of preparing proposed clearance areas for consideration by the joint Slum Clearance Sub-Committee for inclusion in the Council's slum clearance programme. Several meetings were held in this connection and as a consequence houses in the Fylde Street area were inspected for clearance action.

A start was also made on inspection of houses in the Deane Road area (Commission Street Area) with a view to clearance area action as soon as possible in 1965. Later in the year the slum clearance programme for 1967/1968 was approved by the Council. Housing inspections were carried out; and plans and reports were prepared in co-operation with other departments of the Corporation and representatives of other bodies in respect of redevelopment schemes and other matters concerning slum clearance.

Enquiries from Purchasers of Houses:

Numerous enquiries at the Health Department continue to be made by interested persons. The inspectors gave information on the existing slum clearance programme to 2,100 enquirers during the year. The number of enquiries regarding land charges received from potential purchasers of properties within the borough was 3,480.

Compensation:

Under the Housing Act, 1957, payments may be made in respect of condemned houses which have been well maintained by either the occupier or the owner.

Temporary provisions have also been made for payments to owner-occupiers and others in certain circumstances in respect of unfit houses purchased, closed or demolished under Parts II or III of the Act. Representations have been made to the Association of Municipal Corporations by the Council to have the period of operation of these compensation provisions extended by the Government.

Payments may be made by a local authority towards removal expenses or loss sustained through disturbance of trade or business as a consequence of action taken under the Housing Act, 1957.

Improvement and Standard Grants:

The following information has been kindly supplied by the Planning Officer in respect of the year 1964:

No. of applications received	.. .. .	578
No. of applications approved by Council	.. .. .	610
No. of applications refused	.. .. .	—
No. of applications cancelled	.. .. .	16

The Planning Officer states that in all cases applicants are interviewed and where possible inspections are carried out so that advice can be given prior of the application being made, so as to avoid the necessity for the refusal to applications. In addition the Planning Officer requests the advice of the Health Department in all cases as to whether or not the houses concerned are likely to have a life of not less than fifteen years. Such information is, of course, merely in the nature of a provisional estimate based on the Chief Public Health Inspector's appreciation of the situation, as the Corporation's approved programme of slum clearance does not extend beyond the year 1968.

Certificates of Disrepair - Rent Act, 1957:

In view of the complexity of the procedure for the issue of various certificates under the Rent Act, 1957, all applications for certificates have continued to be dealt with by the Insanitary Areas and Premises Sub-Committee. No appeals to the Courts have been made against any of the Sub-Committee's decisions since the Act came into force.

The following table gives details of the types and numbers of certificates applied for, and the action taken by the Sub-Committee.

APPLICATIONS FOR CERTIFICATES OF DISREPAIR:

Number of applications for certificates	8
Number of decisions not to issue certificates	—
Number of decisions to issue certificates:	
(a) In respect of some but not all defects	7
(b) In respect of all defects	1
	— 8
Number of undertakings given by landlords under paragraph 5 of the First Schedule	7
Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule	—
Number of certificates issued	1

APPLICATIONS FOR CERTIFICATES AS TO THE REMEDYING OF DEFECTS:

Number of applications to tenants	—
Number of applications by landlords	—
Number of certificates issued	—

APPLICATIONS FOR CANCELLATION OF CERTIFICATES:

Applications by landlords to Local Authority for cancellation of certificates	1
Objections by tenants to cancellation of certificates	1
Decisions by Local Authority to cancel despite tenants' objections	1
Certificates cancelled by Local Authority	1

STATEMENT OF ACTION TAKEN UNDER RENT ACT, 1957 SINCE 6TH JULY, 1957, UP TO PRESENT DATE:

Number of applications for Certificates of Disrepair	560
Number of undertakings given by landlords	202
Number of Certificates of Disrepair issued	351
Number of Certificates of Disrepair cancelled by Local Authority	73

Housing Statistics:

HOUSES NOT INCLUDED IN CLEARANCE AREAS:

Action was taken under the appropriate enactments as follows:

NEW ACTION:

Houses represented under Section 16 of the Housing Act, 1957	76
Demolition Orders made	58
Closing Orders made	30
Undertakings not to re-let for human habitation	—

COMPLETED ACTION:

Houses demolished	78
Persons rehoused	178
Houses closed (including 155 awaiting sealing up)	184
Persons rehoused	55
Cases pending at close of the year	20

Housing Inspections:

INSPECTION OF DWELLING-HOUSES

1. Dwelling-houses inspected for housing defects (under Public Health Act or Housing Acts)	1,298
Inspections made for the purpose	5,973
2. Dwelling-houses (included under sub-head (1) above) which were inspected under the Housing Consolidated Regulations, 1925, as amended by the Housing Consolidated Amendment Regulations, 1932	406
Inspections made for the purpose	406

REPAIRS - INFORMAL ACTION

Unfit or defective houses rendered fit as a result of informal action by the Local Authority under the Public Health Act or Housing Acts.	261
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ACTION UNDER STATUTORY POWERS

PUBLIC HEALTH ACT, 1936:

Houses in which defects were remedied after service of formal notices:

By owners	144
By Local Authority in default of owners	13

HOUSING ACT, 1957:

No action was taken under sections 9 or 10.

CLEAN AIR

Measurement and Investigation of Air Pollution:

The measurement and study of air pollution continued during 1964 with the maintenance of the nine volumetric air sampling units, set up in 1957. A careful study of the results shows that the reduction in air pollution which has been evident now for some years has continued, and the diagram on page 00 shows clearly the close relationship between the percentage of premises included in smoke control areas and the percentage reduction in air pollution.

Industrial Furnaces:

PRIOR APPROVAL, CLEAN AIR ACT, 1956, SECTION 3 (2)

Six applications for approval of proposed furnace installations were dealt with under this section. In each case approval was given either to the proposal as originally submitted, or as modified after consultation with the Chief Public Health Inspector.

NOTIFICATION, CLEAN AIR ACT, 1956, SECTION 3 (3)

In addition to the six cases mentioned above, eleven installations were notified under this section.

Improvement and Replacement of Furnaces:

The main improvements to existing furnaces and boiler plants during 1964 were the installation of the following:-

Two three pass economic boilers, oil fired with full automatic control to replace three Lancashire boilers coal fired by sprinkler stokers.

Two three pass economic boilers, oil fired with full automatic control to replace five Lancashire boilers coal fired, three by chain grates and two by sprinkler stokers.

Two three pass economic boilers, oil fired with full automatic control to replace seven Lancashire boilers coal fired by sprinkler stokers.

One three pass economic boiler, oil fired with full automatic control to replace one Lancashire coal fired by hand.

One Cochran vertical boiler coal fired by underfeed stoker to replace one Lancashire boiler coal fired by hand.

One Cochran vertical boiler coal fired by underfeed stoker to replace one Lancashire boiler coal fired by sprinkler stoker.

The installation of one smoke detector and alarm to a wood waste burning boiler.

Industrial Fumes, dust, etc.

Considerable improvements have been effected in connection with emissions resulting from the establishment of new industries in existing buildings close to dwelling houses. These include a specially designed scrubber using an alkaline fluid; a specially designed furnace gas-heated and employing a large gas-heated after-burner; the installation of wet filters to individual production units; the isolation of a large production unit; and the provision of an extract ventilation system to an exhaust stack approximately 140 feet high.

Alkali, etc. Works Registration Act, 1906:

Six premises are registered under the Act, i.e. :

Electricity Generating Station	.. .. .	1
Gas Works	.. .. .	1
Iron and Steel Manufacture	.. .. .	2
Chemical Manufacture	.. .. .	2

Close collaboration is maintained with the local alkali inspector and advice and assistance have been given by him in a number of matters, outside his own province.

Smoke Control Areas

The following shows the position regarding smoke control areas at 31st December, 1964:-

**Table of Smoke Control Areas
under Bolton Corporation Act, 1949, and Clean Air Act, 1956**

		ORDER CONFIRMED	OPERATIVE
TOWN CENTRE SMOKELESS ZONE		3.4.54	1.11.54
Acreage	86		
Houses	225		
Factories	76		
Commercial Premises	661		
Miscellaneous	88		
EAST WARD SMOKE CONTROL AREA		14.11.57	1.6.58
Acreage	58.1		
Houses	252		
Factories	40		
Commercial Premises	9		
Miscellaneous	21		
CROOK STREET SMOKE CONTROL AREA		29.4.58	1.11.58
Acreage	2.1		
Houses (All Corporation)	81		
QUEENS PARK SMOKE CONTROL AREA		22.7.60	1.5.61
Acreage	140		
Houses	184		
Factories	25		
Commercial Premises	33		
Miscellaneous	15		

		ORDER CONFIRMED	OPERATIVE
SCHOOL HILL SMOKE CONTROL AREA		19.1.60	1.8.60
Acreage	8.745		
Houses (All Corporation)	301		
BEVERLEY ROAD SMOKE CONTROL AREA		19.1.60	1.8.60
Acreage	0.787		
Houses (All Corporation)	18		
DEANE SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	126.24		
Houses	802		
Factories	4		
Commercial Premises	9		
Miscellaneous	4		
BRIGHTMET ESTATE EXTENSION SMOKE CONTROL AREA ..		15.5.61	1.5.62
Acreage	68.88		
Houses (All Corporation)	142		
Miscellaneous	1		
CRUMPSALL STREET ESTATE EXTENSION SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	1.77		
Houses (All Corporation)	12		
LEONARD STREET ESTATE EXTENSION SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	1.27		
Houses (All Corporation)	32		
LEVER EDGE LANE ESTATE EXTENSION SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	1.21		
Houses (All Corporation)	20		
GREENLAND ROAD SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	3.32		
Houses	32		
RADCLIFFE ROAD SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	16.13		
Houses	102		
ASHWORTH LANE SMOKE CONTROL AREA		15.5.61	1.5.62
Acreage	35.36		
Houses	223		
MOSS FARM ESTATE SMOKE CONTROL AREA		Agreed in principle by Ministry 12.8.60	
Acreage	10.77		
Houses	123		
HULTON SMOKE CONTROL AREA		28.12.61	1.10.62
Acreage	63.98		
Houses	666		
RUMWORTH SMOKE CONTROL AREA		28.12.61	1.10.62
Acreage	95.22		
Houses	1543		
LEVER EDGE LANE (SOUTH) SMOKE CONTROL AREA		28.12.61	1.10.62
Acreage	102.8		
Houses	628		
HEATON SMOKE CONTROL AREA		21.5.62	1.7.63
Acreage	425.6		
Houses	3453		
MARKLAND HILL AND IVY ROAD SMOKE CONTROL AREA		30.5.63	1.12.63
Acreage	296.5		
Houses	2332		
Industrial Premises	6		
Commercial Premises	24		
Miscellaneous Premises	119		

The acreage, and numbers of premises of various kinds, covered by operative Smoke Control Orders at the end of 1964 are as follows:-

AREA: 1,534 acres

NUMBERS OF PREMISES:

Dwellings	11,110
Commercial premises	817
Industrial premises	177
Other premises	372
TOTAL	<u>12,476</u>

No further Smoke Control Orders were made during 1964 although the department was in a position to submit the Order in respect of the proposed Halliwell/Smithills Smoke Control Area early in 1964. However at the meeting of the Town Council on the 4th March, 1964, the following resolution was passed:-

“That no further smoke control areas be instituted in the County Borough of Bolton, until such time as the Council is satisfied that the supplies of smokeless fuels of suitable quality and price are available.”

Following the passing of the Council's resolution, enquiries were made through a number of organisations regarding heating costs using coal and solid smokeless fuels respectively. The results of these enquiries are summarised below, and it is interesting to note that although the various organisations approached their calculations from different points of view, the final results all show clearly the superiority of solid smokeless fuels over coal:-

(a) British Coal Utilisation Research Association

Stated that “cokes in general give about a third more radiant output per lb. of fuel compared with bituminous coal when burned on open grates . . . This difference in efficiency between coal and coke is due mainly to the high volatile matter content of the former, since a proportion of the heavy tarry gases given off are not completely burned. . . . The lower radiant efficiency of coal is also due in part to the lower fuel bed temperature, and this is often a characteristic of the more reactive fuels, including those in the smokeless category. Thus the more reactive fuels may tend to give lower radiant efficiencies, although their greater flexibility has advantages from the user's point of view. . . . The open fire is the least efficient appliance and there is much to be said for the use of free standing convector fires (with restricted throat) and stoves or room heaters, as these have very much higher efficiencies. The stoves or room heaters have particular advantages in that they can burn some of the less reactive cokes which are found to be unsatisfactory on the open fire.”

(b) Solid Smokeless Fuels Federation

The following comparative heating costs are based on the cost of providing five useful therms of heat sufficient to give full heating in a room of about 1,300 cubic feet, for about 73 hours a week, or an average of 10 hours a day for one

week and (so far as coal is concerned) coal of roughly 12,500 B.Th.U's per lb., the appliance being an approved open fire with the exception of "Sunbrite" (hard coke), in which case the calculation is based on the use of an inset room heater.

Fuel	Assumed Cost	Appliance	Weekly Cost
Coal Group 1	11/9 per cwt.	Approved open fire	16/8
Coal Group 2	11/3 per cwt.	Approved open fire	16/-
Coal Group 3	10/9 per cwt.	Approved open fire	15/4
Coal Group 4	10/3 per cwt.	Approved open fire	14/8
Coal Group 5	9/9 per cwt.	Approved open fire	14/-
Gas Coke	11/9 per cwt.	Approved open fire	12/-
Phimax ..	14/- per cwt.	Approved open fire	14/3
Sunbrite ..	11/10 per cwt.	Inset room heater	8/6

The Federation add that "the inset room heater, with its high efficiency, although a little more expensive to instal, is by far the cheapest type of appliance to run, and would meet all the objections anyone would make regarding fuel costs."

(c) **North Western Gas Board**

The Board supply the following table:-

Cost per Useful Therm

Fuel	Approved Open Fire	Openable Stove (without boiler)
House Coal (Special Grade)	40.5d.	28.9d.
House Coal (Grade 2)	35.9d.	25.6d.
House Coal (Grade 4)	34.0d.	24.3d.
Gas Coke	27.6d.	22.6d.
Phimax	31.6d.	not suitable
Sunbrite	27.6d.	22.6d.

The Board further stated that "on the question of loss of efficiency if people with approved coke grates were to revert to coal burning, there is no doubt whatsoever that this would occur, and the loss would be of the order shown . . i.e. from 37% to 25%. This would mean for example, that to produce a heat output of one useful therm about 32 lbs. of grade 4 coal would be required as against 22 lbs. of gas coke."

(d) The tables quoted in Cmnd. 2231 had been brought up to date for prices prevailing in Bolton at the end of December, 1964. These tables assumed that the appliances were used to provide about the same amount of room heat as

50 cwts. per year of coal burned in an old fashioned open fire. These calculations showed that the average fuel costs per week, excluding water heating would be as follows:-

SUMMER PRICES (July, 1964)

Coal burned on old fashioned stool bottom grate	..	12/3 per week
Open fire gas coke burned on improved open grate	..	7/10 per week
Hard coke burned in openable room heater	.. ..	5/5 per week

EXPECTED WINTER PRICES (1964)

Coal burned on old fashioned stool bottom grate	..	12/3 per week
Open fire gas coke burned on improved open grate	..	11/11 per week
Hard coke burned in openable room heater	.. ..	8/11 per week.

These enquiries clearly reveal the superiority, so far as costs are concerned, of hard coke burned in room heaters, as compared with coal or open fire gas cokes burned in open appliances. Hard coke is in plentiful supply and householders in future smoke control areas would have every expectation of reducing their fuel costs.

So far as the quality of solid smokeless fuel is concerned, no complaints have been made regarding the quality of hard coke, of which ample supplies are available. As householders in existing confirmed smoke control areas may continue to burn Phimax (up to now the most popular fuel), 46 samples of Phimax were obtained during the year, immediately following delivery to the consumer. Each sample was submitted to the Borough Analyst for the determination of the moisture content which ranged from 2.8% to 10.6% with an average moisture content of 7%; the British Standards Specification for open fire gas cokes requires the moisture content to be not more than 9% with a limit of 12% in any one sample. The sulphur content, as received, was 0.8% - 0.9% in the case of Phimax compared with 0.9% - 1.5% in the case of three different groups of coal sampled at the same time. It is interesting to note that when the officer who took the Phimax samples introduced the subject in conversation no householder offered any complaint regarding Phimax; on the contrary the majority of householders, of their own free will stated that they were quite satisfied with the quality of the fuel.

It will be remembered that in the 1963 annual report mention was made of the major change of national policy regarding smoke control areas i.e. the reliance in future upon hard coke, gas, and off peak electricity, rather than upon open fire gas cokes. A marked trend towards the installation of gas and electric appliances, coupled with increasing popularity of under floor draught fires and openable stoves, had already been noted in the existing smoke control areas and this trend coupled with the change of policy would obviously have produced a substantial change in the pattern of fuel usage. Consequently two postal surveys were carried out among the residents of the proposed Halliwell/Smithills Smoke Control Area inviting them to state their likely preference or preferences when the Order eventually became operative. The second postal survey was restricted to those householders who had indicated a preference for electricity, and was carried out after further information from the Ministry of Housing and Local Government had made it clear the grants might only be available in respect of electric storage heaters, and that there was a possibility that no grants might be

available for direct acting electric heaters such as bar electric heaters. The results of the two postal surveys are given below:

HOUSEHOLDERS FUEL PREFERENCE(S)	FIRST POSTAL SURVEY %	SECOND POSTAL SURVEY %
Single Fuels		
Coke only	41	42
Electricity only	19	17
Gas only	7	10
Oil only	negligible	negligible
Two Fuels		
Coke + electricity	22	17
Coke + gas	5	5
Electricity + gas	3	2
Three Fuels		
Coke + electricity + gas	1	2
Miscellaneous		
	2	5
	<hr/> 100 <hr/>	<hr/> 100 <hr/>

These figures show clearly that the expansion of smoke control programme would have greatly increased the number of houses using "piped" fuels with consequent increased convenience and cleanliness for the householders themselves, and marked reductions in air pollution.

That such a reduction in pollution would have occurred from the implementation of the smoke control programme is born out dramatically by the figures given below (illustrated in graphic form on page 111):-

	1958	1959	1960	1961	1962	1963	1964
Smoke pollution (micrograms per cubic metre of air)	289	282	281	243	196	181	143
Sulphur dioxide (micrograms per cubic metre of air)	263	289	221	218	219	239	203

Since 1958 smoke pollution in Bolton has been halved (from 289 units in 1958 to 143 units in 1964); during the same period, there has been a reduction of 23% in sulphur dioxide in the atmosphere (from 263 units in 1968 to 203 units in 1964).

Two visits were paid to Bolton by the mobile exhibition of the Solid Smokeless Fuels Federation. One for a fortnight in January/February and for a further week in September. During the earlier visit the exhibition was stationed at various sites in the Deane, Brightmet, Hulton, Rumworth, Heaton and Markland Hill and Ivy Road Smoke Control Areas, besides being stationed near wholesale market on market days and Saturdays. Special circulars were issued in the case of the Deane and Brightmet areas, where considerable building is taking place, to remind the occupiers of recently constructed houses, of the provisions of the Orders, and inviting their attendance at the exhibition. During the September visit the exhibition was stationed at points in the Heaton and Markland Hill and Ivy Road areas, and near the wholesale market on market days and the Saturday.

In October an "Ideal Home" exhibition was staged under the auspices of the Bolton Chamber of Trade in the Drill Hall, Bolton, and the Health Department took a stand at the exhibition, the subject being "Clean Air". Besides illustrating the human and economic consequences of air pollution the stand also showed examples of solid fuel, gas and electric appliances of the types likely to be included in any future smoke control areas, and information was given regarding costs and the grants likely to be available.

In November the Solid Smokeless Fuels Federation arranged a one day conference in Bolton town centre, to which elected members and officials from a wide area around Bolton were invited and approximately 200 persons attended. Representatives of the Federation and other fuel interests spoke to the delegates and an exhibition was staged of solid fuels and solid fuel appliances suitable to be used in future smoke control areas.

Solid smokeless fuel supplies were the subject of considerable public interest during the year. The first meeting of the newly formed Consumers Group was devoted to a forum on smokeless fuels, in which the Chief Public Health Inspector took part. Questions about solid smokeless fuels were asked in the House of Commons by the local M.P.s in January and March, 1964. Considerable press publicity was given to informal action taken by the department with a view to dissuading shopkeepers in smoke control areas from selling coal in small bags to householders living within the smoke control areas, and to action taken by the department in controlling fires on building sites, etc., (which are often productive of considerable nuisance).

The following table gives details of action taken during 1964 in the implementation of confirmed Smoke Control Orders.

SMOKE CONTROL PROGRAMME (1.1.64 to 31.12.64)

Applications:

No. of houses in respect of which applications for approval of proposed works were submitted	402
Estimated expenditure liable for grant	£4,940
Estimated amount of grant payable by Corporation (seven-tenths) ..	£3,188

Claims:

No. of houses in respect of which claims for payment of grants were received	1,253
Total amount paid by way of grant	£21,564
No. of 100% grants paid	55
Amount paid in 100% grants	£973
Additional cost of 100% grants	£292

During the year 59 warnings were issued to occupiers of premises in respect of contraventions of operative Smoke Control Orders.

INSPECTION AND SUPERVISION OF FOOD

Milk

MILK AND DAIRIES (GENERAL) REGULATIONS, 1959

No. of Dairies	.. .. .	14
No. of Milk Distributors (including retail shops and dairy rounds men)	.. .. .	542
No. of Dairy Vehicles	.. .. .	130

MILK (SPECIAL DESIGNATION) REGULATIONS, 1960 and 1963:

During the year 1964 the following licences, renewable in 1966, were granted.

Dealers' (Pre-packed Milk) Licences	42
-------------------------------------	---------	----

The Milk (Special Designation) Regulations, 1963, came into force during the year. The major change brought about by these Regulations was the replacement of the wording "tuberculin tested" by the designation "untreated". This change mainly affects producers, who are licensed by the Ministry of Agriculture, Fisheries and Food, although a number of other dairymen within the borough require to have their previous licences amended. Circulars were issued to all purveyors of milk known to handle raw milk, advising them of the effect of the Regulations.

Some resentment has been expressed by manufacturers of pasteurised and sterilised milks, as the new Regulations permit them to use only the words "pasteurised" or "sterilised" to describe their products, while the purveyors of raw milk are allowed to use the words "produced from cows which have passed the tuberculin test." Some manufacturers suggest that sales are being adversely affected as a result. It seems somewhat unfair that the purveyor of milk which has been rendered completely safe by heat treatment should be penalised as against the purveyor of raw untreated milk, and this is a suggestion which might be borne in mind when the Regulations next come up for review.

DAIRIES AND DAIRY VEHICLES:

	DAIRIES	DAIRY VEHICLES
No. of inspections	114	66
No. of notices served	6	7

Most of the dairy vehicles were of a good standard, but opportunity has been taken wherever possible to remind roundsmen of the need to display their names and addresses on their vehicles.

SAMPLING OF MILK FOR BACTERIOLOGICAL EXAMINATION:

Samples of milk were taken regularly from dairies, pasteurising establishments, milk shops, schools and vending machines, and during the course of delivery to consumers. Details of the examinations carried out are given on page 000. All the samples were reported satisfactory.

BIOLOGICAL SAMPLING OF MILK:

Sixty-four samples of raw milk from the dairy herds at three local farms were examined for *Br. abortus* and two cows from one farm were found to be excreting these organisms. Notice was served requiring the farmer to have the milk heat-treated until it was free from *Br. abortus* organisms.

SAMPLING OF MILK FOR CHEMICAL ANALYSIS:

Six hundred and sixty-five samples were taken, eight of which were reported as unsatisfactory (see page 161 for details). No action was taken as although three of the eight samples were reported to be deficient in non-fatty solids, this was not due to presence of extraneous water; the remaining five samples, although deficient in fat, were taken from consignments each consisting of a number of churns, the fat content of each consignment as a whole being satisfactory.

Bacteriological Examination of Ice Cream:

Seventy-nine samples of ice cream were taken from manufacturers and vendors. Twenty samples were reported as unsatisfactory according to provisional gradings of the Public Health Laboratory Service, while in addition seven of these samples were also reported to contain intestinal organisms; a further eight samples were reported as unsatisfactory by reason of the presence of intestinal organisms, although the provisional gradings of these were satisfactory. Details of the samples are given on page 162.

The high proportion of unsatisfactory samples is mainly due to the predominance of samples procured from ice cream vehicles, and the results show clearly the need for the strictest standards of hygiene, and particularly personal hygiene, in these vehicles. Appropriate advice has been given in respect of all unsatisfactory samples.

Twenty-five inspections were made of ice cream vehicles and warnings issued in five cases, for failing to provide a sufficient supply of hot water for hand-washing and in one instance for failing to provide a nail brush.

Inspection of Meat and Other Foods:

The inspection of a wide variety of food stuffs has been carried out at slaughterhouses, markets, and food shops. This has necessitated employing the meat inspectors outside normal office hours so that a full service could be maintained.

Meat Inspection:

The rate of slaughtering was as follows:-

	CATTLE	CALVES	SHEEP	PIGS	TOTAL
Average Weekly "Kill" . .	241	7	696	471	1,415
Maximum Weekly "Kill"	334	13	1,208	579	2,134

The following table shows the number of animals slaughtered and inspected, together with the evidence of diseases and other abnormalities in carcasses inspected at the private slaughterhouses and public abattoir:-

	Cattle ex- cluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	6,368	6,171	375	36,176	23,531
Number inspected	6,368	6,171	375	36,176	23,531
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS:					
Whole carcasses condemned	—	9	8	62	39
Carcasses of which some part or organ was condemned	1,763	2,326	3	1,852	2,855
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	27·6	37·6	2·9	5·3	11·8
TUBERCULOSIS ONLY:					
Whole carcasses condemned	—	—	—	—	—
Carcasses of which some part or organ was condemned	1	—	—	—	21
Percentage of the number inspected affected with tuberculosis	0·01	—	—	—	0·1
CYSTICERCOSIS:					
Carcasses of which some part or organ was condemned	30	7	—	—	—
Carcasses submitted to treatment by refrigeration	30	7	—	—	—
Generalised and totally condemned	—	—	—	—	—

THE MEAT INSPECTION REGULATIONS, 1963

All carcasses in the borough were inspected in accordance with the regulations and were stamped with the inspector's mark. This individual attention has entailed longer working hours at the abattoir but apart from this no great difficulty has been experienced in enforcing these regulations.

Analysis of Parts or Carcasses of Animals Condemned

This table gives the various diseases or other conditions found as percentages of the total number of animals affected. Some animals were found to be affected with two or more diseases or conditions.

NATURE OF DISEASE OR CONDITION	PERCENTAGE
Tuberculosis	0.3
Cysticercus bovis	0.4
Distomatosis (Liver Fluke)	23.3
Septicaemia and Pyaemia	3.9
Mastitis	5.9
Actinomycosis	0.2
Pneumonia, Pleurisy and Peritonitis ..	24.5
Others	41.5

As can be seen from the previous table, the emphasis as far as meat inspection is concerned has moved from tubercular conditions to the less spectacular parasitic diseases. These diseases or conditions such as liver fluke cause a great economic loss as far as offal is concerned, whilst not greatly affecting the value of carcase meat.

If attention were to be given to pasture land similar to the scheme for tuberculin attestation, there would be a reduction in the incidence of these parasitic conditions.

The number of animals slaughtered during the year is shown in the following table.

	1962	1963	1964
Cattle excluding cows	8,130	7,346	6,368
Cows	8,859	6,576	6,171
Calves	1,466	826	375
Sheep and Lambs	38,884	34,912	36,176
Pigs	20,675	21,550	23,531

One hundred percent inspection of meat was again maintained despite staff changes and shortage of qualified men.

Foodstuffs Condemned

	TONS	CWTS.	QRS.
Meat (Fresh)	29	8	2
Meat (Tinned)	9	11	2
Boiled Ham (Tinned)	—	17	0
Tongue (Tinned)	—	4	2
Fish (Fresh)	—	2	3
Fish (Tinned)	—	3	3
Milk (Tinned)	—	3	3
Poultry and Rabbits	—	8	1
Fruit and Vegetables (Fresh) ..	6	16	—
Fruit and Vegetables (Tinned)	2	16	3
Provisions (Miscellaneous) ..	1	7	3
TOTAL	52	—	2

Disposal of Condemned Meat:

Facilities were given for the collection of certain offals and glands for pharmaceutical purposes, and apart from the latter, all other condemned meat was collected according to regulations and converted into fertiliser or animals feeding stuffs, where appropriate.

Slaughterhouses:

During the year agreement was reached with the local meat trade representatives, regarding the building of a new abattoir. It has been agreed that the interested sections of the meat trade would form a Company and build the abattoir as a private venture, with financial assistance from the Corporation. It is understood that the plans are now well advanced, the tenders having been accepted and the contracts made.

The appointed day for the enforcement of the Slaughterhouse (Hygiene) Regulations, 1958 to become fully operative has been deferred until July 1st 1966, to allow time for the construction of the new abattoir.

Slaughter of Animals Acts, 1933 - 1958:

During the year forty-five licences were issued to slaughtermen. No contraventions of the Acts or Regulations were reported.

Diseases of Animals Acts:

ANTHRAX ORDER, 1938:

Fifteen cases of suspected anthrax were investigated during the year (11 pigs, 2 cows, 1 sheep and 1 horse). The disease was not confirmed in any of the cases.

FOWL PEST:

Restrictions on the movement of live poultry imposed in October, 1963 were not lifted until June, 1964. The number of licences issued during the period covered by this report was 438, authorising the movement of 232,216 birds, all these birds being slaughtered at poultry package stations situated in the borough.

Six poultry farms were the subject of individual orders under the Regulations, all these being lifted before the general release from restriction in June.

TUBERCULOSIS (ENGLAND AND WALES ATTESTED AREA) ORDER, 1960:

Only one case was discovered in a bovine, this being an imported Irish bullock. The Ministry of Agriculture, Fisheries and Food were notified.

SWINE FEVER ORDER, 1938:

The restrictions on movement imposed in December, 1962 were lifted on the 2nd January, 1964.

Restrictions were again imposed on the 26th September, 1964, and remained in force until 17th October, 1964. During this period 52 licences authorising the movement of 540 pigs were issued.

Only one individual piggery was placed under restriction during the year, the owner having purchased pigs from a market where a contact pig had been sold; the disease was not confirmed and restrictions were lifted within a few days.

Food and Drugs Sampling for Chemical Examination:

The following samples of food and drugs were obtained by the public health inspectors for chemical analysis:

	GENUINE	UNSATISFACTORY	TOTAL
Food Samples:			
Formal	79	11	90
Informal	255	34	289
Drug Samples:			
Formal	40	5	45
Informal	30	7	37
Milk Samples:			
Formal	273	8	281
Informal	384	—	384
TOTALS:	1,061	65	1,126

Legal proceedings were instituted in respect of one unsatisfactory sample, but this was discontinued due to a legal technicality; in the case of the remaining unsatisfactory samples action was taken by way of warnings to the vendor or manufacturers of the products concerned, or by surrender and destruction of the goods.

Other Foods and Drugs:

In all cases of unsatisfactory samples, action was taken by way of warnings to the vendors or manufacturers of the products concerned, or by the surrender and destruction of the goods.

Food Hygiene:

Details of the visits made, etc. in connection with the enforcement of the Food Hygiene (General Regulations), 1960, are given in Table 3 on page 139. As a result of this work the following improvements were effected in the town's food premises.

Structural improvements:

Floors	35
Walls, ceilings	85
Doors, windows	27
Decorations	37
Lighting	23
Ventilation	11
Drainage	6
Fittings, equipment, etc.:	
Sinks, etc.	6
Wash hand basins, etc.:	16
Water supplies - cold	10
Water supplies - hot	10
Shop fittings, equipment, etc.	68
Miscellaneous improvements	50

As in previous years, special inspections were made of all school meals kitchens and hospital kitchens, and detailed reports and recommendations were sent to the Chief Education Officer and the Bolton and District Hospital Management Committee respectively.

Where necessary night visits or weekend visits have been paid to premises, notably in connection with licensed premises.

Bacteriological Examination of Food Stuffs:

During the year 59 samples of various foods and drinks were submitted to the pathological laboratory at the Bolton Royal Infirmary for bacteriological examination. Five were reported positive, but not for organisms of a type which would cause food poisoning. The samples included 20 samples of cooked meats obtained in June, 1964, i.e. the time of the Aberdeen typhoid epidemic; all these samples were reported negative.

Bacteriological Examination of Beer Glasses and Butchers' Equipment:

Fifty-six licensed premises were visited in connection with the bacteriological examination of beer glasses. In 16 cases unsatisfactory reports were received, the contaminating organisms being as follows:-

All organisms of faecal origin	10
Streptococcus viridans	1
Staphylococcus aureus (coagulase positive)	5

A total of 112 visits were paid in connection with the above examinations.

During June, 1964 i.e. at the time of the Aberdeen typhoid outbreak bacteriological swabbing of utensils and equipment of cooked meat shops, etc., was carried out. Tests were made at 84 premises and 20 samples of cooked meats were taken for bacteriological examination. In no cases, however, were any organisms likely to cause food poisoning isolated.

Food Complaints

There was a sharp increase in the number of complaints made by the public about food during 1964, i.e. 127 complaints compared with 73 in 1963. Many of the complaints were made following the Aberdeen typhoid outbreak in May, several unjustified complaints being made. Not unnaturally many complaints were made regarding corned beef, none of which was justified.

The table below gives a summary of the complaints and the number of cases in which legal proceedings were taken. Of the 66 complaints referring to the presence of foreign matter 22 were in respect of various types of insects found in food, both home produced and imported. Legal proceedings were taken in 12 cases details being given on page 136.

The increasing number of complaints made by the public is felt to be a reflection of their confidence in the department taking appropriate and effective action. Many complaints were made merely to bring the matter to the department's notice so that appropriate action could be taken, and the complainants were satisfied that this would be done, and therefore did not wish any legal action to be taken. All complaints were thoroughly investigated and in three instances the investigations resulted in food being seized as unfit at the shop premises. Warning letters were sent where appropriate to the vendors or manufacturers concerned.

Type of Food	Nature of Complaint				Total	Legal Action
	Mouldy	Foreign Matter	Unsatisfactory Appearance Taste or Smell	suspected of Causing Food Poisoning		
Bread	4	12	—	—	16	3
Confectionery, pies, pasties and cooked meats	7	21	15	2	45	5
Uncooked meats . .	1	3	2	—	6	2
Canned meat	2	5	6	1	14	—
Cheese and milk . .	2	8	6	2	18	1
Canned food	—	11	4	—	15	—
Other foods	1	6	4	2	13	—
	17	66	37	7	127	12

Infestation in Food:

Twenty-eight samples of cereals, dried fruits and other similar foods were submitted for examination for mites, insects and rodent excreta; one of these samples was reported to contain a few mites.

Legal Proceedings - Food Inspection:

Two butchers were prosecuted in August for smoking whilst handling meat, one being fined £5 and the other £10, the latter being a second offence.

Two slaughtermen were prosecuted under the Slaughterhouses (Hygiene) Regulations, 1959, for using unclean equipment and clothing, one being fined £18 and the other was fined £20.

In four cases it was found necessary to seize food under the Food and Drugs Act, 1955, and have it condemned by a Magistrate. Subsequent legal proceedings in three cases resulted in the owners of the food being fined £5, £25 and £10 respectively, and the third case is awaiting hearing in the Magistrates' Court.

Prosecutions were instituted in four cases concerning the Food Hygiene (General) Regulations, 1960, and were successful in each case resulting in the defendants being fined £70, £70, £50, and £20 respectively.

Legal Proceedings - Food Hygiene:

In January, the proprietor of a local hamburger sales company was fined £25 on each of four summonses, in respect of the unsatisfactory condition of his premises.

The proprietors of a town centre restaurant were fined a total of £70 on four summonses covering dirty equipment; dirty walls and floors; an inefficient sink; and absence of soap and nailbrush.

On two separate occasions during 1964 the proprietor of a combined meat and grocer's shop was prosecuted in respect of the unsatisfactory condition of his premises. In April he was fined £50, and in September, £70.

In June, 1964, the two proprietors of a continental food shop were each fined £80, for various offences at their premises. In September, an appeal was heard, when it was agreed by the court that one of the partners was not an equal participant in the running of the business, and his fine was reduced to £37 10s. The other partner's fine was reduced to £75.

The proprietors of four food shops were prosecuted for unsatisfactory conditions at their premises, and were fined £30, £42 5s., £50 and £20 respectively.

A bar man and a waiter were each fined £1 for smoking whilst serving in a public house. The waiter was also fined £3 for failing to wash his hands after visiting the conveniences.

Legal Proceedings - Food Complaints:

Proceedings were taken as a result of complaints by members of the public in the following cases.

Five instances of loaves containing insects or other foreign matter resulted in the bakeries concerned being fined £15, £5, £10, £20 and £5 respectively.

The various manufacturers of jam containing a snail; sweets which contained wire and a splinter of wood; and two mouldy Christmas puddings were fined £5 in the first two cases, and £5 on each of two charges in the latter case.

A dairy which sells "orange drink" was fined £10 in respect of four dirty bottles; and a grocer was fined £5 for selling a malt loaf in a mouldy condition.

A baker and confectioner who sold a meat and potato pie containing a splinter of wood was fined £10 in respect of this offence, and was also prosecuted under the Food Hygiene (General) Regulations, 1960.

GENERAL SANITATION

Conversion of Waste Water Closets:

During the year a sum of £4,000 was allocated in the estimates for the conversion of waste water closets to fresh water closets. The amount of the grant at present is a maximum sum of £15, the grant having been raised to this figure during 1963. The average cost of conversions at the present time is from £30 to £35. During the year 180 grants were paid.

Provision of Dustbins:

Where dustbins are required (including replacements) relevant information is obtained verbally from the tenants concerned, and opportunities are given to their landlords to submit their own written observations. Where any such observations are given by the landlord, the decision as to whether the tenant or the landlord shall be required to supply the bin is made by a special Sub-Committee of the Health Committee. During 1964 it was necessary for the Sub-Committee to meet on only one occasion. During the year 17 cases where dustbins were required, were dealt with.

Public Water Supplies:

All employees of the Waterworks Undertaking who are directly concerned with the water supply are required to submit one specimen of faeces annually for bacteriological examination; new employees are required to submit faecal specimens on three successive days, and a specimen of blood is also taken for a Widal test.

Mr. H. R. Davenport, Waterworks Engineer and Manager, has supplied the following information regarding the water supply to the borough, although the Undertaking's area of direct supply includes adjoining authorities.

"The water supplied to the County Borough of Bolton by this Undertaking was satisfactory both as regards quality and quantity.

Normally, samples of both raw and filtered water are regularly subjected to full bacteriological examination and chemical analysis. Special examinations and analyses are made as circumstances require.

During 1964, 538 samples of raw water were subjected to bacteriological examination and partial analysis and 24 to full chemical analysis in the statutory area of supply. In addition, 1,723 samples of filtered and treated water received bacteriological examination and partial chemical analysis and 38 full chemical analysis. Results shows that the filtered and treated water was of a satisfactory quality. Of all the samples tested 3% were found to be unsatisfactory and these were due mostly to abnormal heavy rainfall and flooding in the latter part of the year.

No special action was required to be taken in respect of any form of contamination. From tests made the water was shown to have no significant plumbo-solvency action.

The public water mains afforded a direct supply to a population of approximately 159,190 and 56,666 dwellinghouses in the borough. No supply was afforded to dwellinghouses by standpipe.

In 1964, an additional 708 yards of 2", 2,412 yards of 3", 673 yards of 4" and 344 yards of 6" diameter water main were laid within the borough."

Sewage Disposal:

The following information has been supplied by Mr. F. W. Allen, Manager, Bolton and District Joint Sewerage Board:

"For many years the sewage draining from the area of the County Borough of Bolton was treated at the Hacken Sewage Works, which was

originally constructed and operated by Bolton Corporation. In 1954 this works was taken over by the Bolton and District Joint Sewerage Board who continued to operate it until the 13th January, 1964, when it was closed down. Since the 14th January, 1964, the sewage from the Bolton area has been treated by the Joint Sewerage Board at their new regional treatment works at Ringley Fold which was brought into operation on that date. After one week's operation the new works was producing a well-clarified stable effluent.

Sewage from Bolton, Turton, Kearsley and Worsley is being treated at the Ringley Fold Works and during 1964, 5,300 million gallons of sewage were given full treatment before being discharged into the river Irwell. This represents an average of 15 million gallons per day.

The Bolton and District Joint Sewerage Board have, during 1964, approved terms and conditions regulating the nature and quantity of trade effluents discharged from 9 premises into the Bolton sewers."

Factories Act, 1961:

There are 967 factories within the borough which were the subject of 127 inspections, resulting in 19 cases in the service of written notices on the occupiers. Full details of the work carried out under the Factories Act, 1961 are contained in Tables 7 to 10 on pages 142 and 143. The trend towards the conversion of large cotton mills for multiple occupation by several different occupiers has continued.

Shops Act, 1950:

There are 1,155 shops within the borough subject to the provisions of this legislation. The sanitary provisions of the Act relating to heating, ventilation lighting, sanitary accommodation, washing facilities, facilities for taking meals and seats for female shop assistants, are administered by the public health inspectors. During the year 151 routine visits were made and three verbal or written notices issued. Twenty-three improvements were effected as a result. Many premises e.g. food establishments, etc. are, of course, shops within the meaning of the Act, and the provisions of the Shops Act are born in mind during routine inspections of such premises. The health and welfare provisions of the Shops Act, 1950 will cease to have effect on the 1st August, 1964, when they will be replaced by the Offices, Shops and Railway Premises Act, 1963.

Offices, Shops and Railway Premises Act, 1963:

This Act came into operation on the 1st August, 1964. In addition to the Act itself, special regulations have been issued covering such matters as sanitary conveniences, washing facilities, first aid, dangerous machinery, etc.

Up to the end of 1964 1,376 premises had been registered with the Local Authority in accordance with the Act. In 117 cases applications which had been forwarded to the Local Authority in error, were redirected to the Factory Inspector (offices associated with factories within the meaning of the Factories Acts being the responsibility of H.M. Factory Inspectorate).

Details of registrations, inspections, action taken, accidents etc., are given in Table 11 (page 144).

In view of the large number of inspections required under this Act, particularly in the town centre, the department was asked to assist the town planning consultants (Graeme Shankland Associates), who were preparing a town centre redevelopment plan, by obtaining additional data for the planning consultants at the same time as the inspections were carried out. To enable the

survey to proceed uninterruptedly special arrangements have been made at various times to recruit additional assistance for the inspectors, and by the end of 1964 a high proportion of the town centre had been inspected and the necessary data supplied to the planning consultants. It is hoped that this particular survey will be completed by early February, 1965.

Apart from the physical difficulty of carrying out the inspections which are of a highly detailed character, at a time of staff shortages, no serious difficulties have so far been encountered and generally speaking good co-operation has been received from those occupiers upon whom notices have had to be served. The administration of the Act is shared by the Public Health Inspectors and H.M. Factory Inspectorate, and it is pleasing to record that a friendly spirit of co-operation has already become well established.

One anomaly has emerged which might well be considered when the Sanitary Conveniences Regulations, 1964, come up for re-consideration. When calculating the number of conveniences required, employers have to be disregarded, the calculation being based only upon the number of persons being employed. It has been found in some cases, particularly in multiple-occupied buildings that it has not been possible to require the provision of separate sanitary accommodation for males and females, although the number of persons using the accommodation has been such that, had they all been employees, separate conveniences would have been required. (These regulations, together with the Washing Facilities Regulations, 1964 do not come into operation until the 1st January, 1966, but as inspections proceed occupiers are, of course, being advised as to the liabilities which will arise on that date).

Houses-in-Multiple-Occupation

The Housing Act, 1961 contains important provisions relating to houses-let-in-lodgings or occupied by members of more than one family. These provisions were extended by the Housing Act, 1964. One important provision in the 1964 Act enables a search warrant to be applied for, if necessary, even (where the giving of notice would defeat the object of the inspection) without prior notice being given; the Council have authorised the Chief Public Health Inspector and his Deputy to make application for such warrants should the need arise.

During the year 162 visits and inspections were made to houses-in-multiple occupation and 4 informal notices were served.

During the year one Management Order was made, but the premises became vacant very soon afterwards and have not since been re-occupied.

Although Bolton does not have a serious problem in relation to these houses as obtains in some other towns, there are, nevertheless thought to be about 200 to 300 premises requiring improvement under the 1961 Act. Inspections and enforcement have however been made difficult by staff shortages, by new and increased commitments, by language difficulties, and because repeated visits (often in the evening) have to be made before any particular house can be fully inspected or re-inspected.

Common Lodging Houses:

There are two common lodging houses in the town, in St. George's Road and Crompton Street respectively; the former premises are both owned and managed by the Salvation Army, while the latter are owned by the Corporation, and leased to and managed by the Salvation Army. Improvements were carried out at both premises during 1964.

Offensive Trades:

There were three offensive trades within the borough, i.e.

- 1 Fellmonger
- 1 Gut-scraper
- 1 Fellmonger and gut-scraper

There are no local byelaws affecting these trades, but the comparatively small number of premises involved, and the satisfactory standards of cleanliness and maintenance do not justify the making of special byelaws.

Hairdressing Establishments:

There were 364 hairdressing premises registered in accordance with the Bolton Corporation Act, 1949, section 48. Thirty inspections were made and 12 improvements effected. Bacteriological examination of equipment at one hairdressing establishment was carried out, with negative results.

Pharmacy and Poisons Act, 1933; The Poisons Rules, 1964:

The names of 196 persons are included in the local authority's list of persons entitled to sell poisons in Part II of the Poisons List. The attention of shop keepers was drawn, verbally or in writing, as necessary, to any infringement of the Act or Rules. One sample (luminous paint) was taken and was reported as satisfactory.

Pet Animals Act, 1951:

Twelve premises were licensed and 14 inspections made. In general, establishments have been satisfactorily conducted, but where necessary, verbal or written notices were issued. One complaint was made regarding the health of the pets at one establishment, but this complaint was not confirmed by veterinary examination of the pets in stock.

Animal Boarding Establishments Act, 1963:

Two premises have been licensed under the Act. Suitable conditions have been attached to the licences, based upon the general recommendations of the R.S.P.C.A. and the particular recommendations of the Chief Fire Officer, in respect of each establishment.

Rag Flock and Other Filling Materials Act, 1961:

This legislation prescribes standards of cleanliness for filling materials used in upholstered articles, stuffed toys, etc., and the local authority are required to register or licence premises where the relevant operations are carried out. There are 19 premises in the Borough registered under the Act.

Nuisance from Noise:

During the year a further 28 new complaints were received and could be classified as follows:-

COMPLAINT OF NOISE FROM NON-DOMESTIC PREMISES										NUMBER
Extractor fans	...	...	...	...	...	...	...	...	...	3
Machinery	...	...	...	...	...	...	...	...	...	7
Steam exhaust	...	...	...	...	...	...	...	...	...	1
Hammering steel	...	...	...	...	...	...	...	...	...	2
Temperance bar	...	...	...	...	...	...	...	...	...	1
Animals, etc.	...	...	...	...	...	...	...	...	...	1
										—
										15
										—
COMPLAINT OF NOISE FROM DOMESTIC PREMISES										
Radio	...	...	...	...	...	...	...	...	...	2
Animals, birds	...	...	...	...	...	...	...	...	...	4
Machinery, hammering	...	...	...	...	...	...	...	...	...	7
										—
										13
										—
										28
										—

Complaints were also received regarding alleged noise nuisance from cars and motor cycles departing from club premises, revving up of engines, etc.; these complaints were referred to the Police for action.

Noise nuisance from dance bands playing in clubs proved difficult to deal with, due to the intermittent nature of this type of entertainment necessitating numerous visits (including nights and week-ends) by public health inspectors.

Fertilisers and Feeding Stuffs Act, 1926:

Twenty-four samples of fertilisers and feeding stuffs were obtained, and six were reported as unsatisfactory. The attention of manufacturers or vendors was drawn to the unsatisfactory reports and their observations invited.

Merchandise Marks Act, 1926:

Five samples of week killers were obtained and reported as satisfactory. In one instance the label advised the use of a dessert-spoon as a measure, but gave no warning that the spoon should be thoroughly cleansed before being used again. The manufacturer's attention was drawn to this, and an assurance was given that the directions would be amended.

DISINFECTION AND DISINFESTATION

Disinfection:

Routine terminal disinfection of premises after cases of illness is carried out in special cases only. No charge is made where such work is carried out in the interests of public health. Details are given in Table 12 on page 145.

A special stock of equipment, together with a supply of formaldehyde, and a mixture of carbolic soap, water and white cyllin, is retained at School Hill in readiness for immediate use in the event of small pox occurring. Facilities exist for the disinfection of vehicles and special containers are available for enclosing infected mattresses and bed linen.

Disinfestation:

An increasing number of occupiers of food or other business premises subject to special infestation risks continue to enter into annual agreements with the Corporation for regular treatment of their premises, with a view to preventing insect infestation; in many cases the agreements also provide for preventive measures against rodent infestation. There are now 142 agreements in force, and the annual income from pest destruction is now almost £4,000. Table 13 on page 145 summarises the work carried out.

Regular destruction treatments to control the rat population in the sewers are carried out by the Borough Engineer's Department in collaboration with the Health Department. Warfarin is the poison in general use, but zinc phosphide and arsenious oxide are used on occasions, paranitrophenol being incorporated to inhibit mould growth. In selected areas fluoroacetamide is used under strict supervision.

The schools and school meals kitchens in the borough are surveyed at least once every two months to detect any rodent or insect infestation. Any necessary treatment is carried out immediately.

Control of the rodent population on the Corporation's controlled tipping sites is maintained by regular surveys and treatments. River banks are also subject to regular surveys and any infestation dealt with.

The Curator of Museums has supplied the following information:

"This year we have had the usual series of pests brought in and with the rather wet summer in the area, there has been a notable increase in the small types of larvae and beetles which feed on damp fungoid matter.

Among the interesting things brought in for identification, were a series of small striped snails with the Latin name of *Helix viragata*, Da Costa, one of the exceedingly variable species found in the British Isles. In certain parts of the country, especially on limestone, these snails are so common that they have been recorded as the source of the flavour peculiar to the mutton of the South Down sheep.

The other interesting items consisted of a series of insects from one source, which included the larder beetle, spiders, and *Ptinus tectus*."

Mortuary:

The mortuary forms part of the premises at School Hill used as a Disinfection and Disinfestation Depot. An attendant is employed in combined mortuary duties and disinfestation.

Nine bodies were received at the mortuary during the year. Post mortem examinations were carried out on eight, all of them being coroner's cases. Refrigeration facilities are provided for the storage of the bodies.

Municipal Medical Baths:

The Medical baths are situated in an annexe to the School Hill Depot. The cleansing of verminous persons is carried out by a part-time female worker and the foreman of the Depot.

A summary of the cases dealt with is given below:

	School children		Children under five		Adults	
	Males	Females	Males	Females	Males	Females
Head infestations	28	48	2	1	—	2
Scabies	29	79	14	4	44	23
Body Lice	—	—	—	—	90	2
TOTALS	57	127	16	5	134	27

Complaints:**TABLE 1**

The following complaints were received and investigated.

Housing defects	483
Choked and defective drains	279
Accumulations of offensive matter	187
Relative to unsound food	138
Verminous premises:—	
(a) Bed bugs	41
(b) Rat and mouse infestations	1491
(c) Cockroaches and other insect pests	548
Keeping of animals and poultry	18
Smoke	100
Noise	35
Offensive odours	75
Miscellaneous	366
TOTAL	3,761

Standing Commitments: TABLE 2**Premises Subject to Routine Inspection**

TYPE OF ESTABLISHMENT	NO. OF PREMISES
Common lodging houses	2
Houses-let-in-lodgings	258
Movable dwellings	49
Bakehouses	244
Basement bakehouses	4
Fish friers	127
Registered premises, Sec. 16 Food and Drugs Act, 1955...	511
Industrial canteens	81
Other catering establishments	146
Miscellaneous food preparing premises	77
Ice cream premises—manufacture	6
" " —sale only	442
Meat shops	207
Slaughterhouses	4
Dairies	14
Milk distributors	542
Food shops	1,571
Licensed premises (On-)	247
" " (Off-)	115
Food stalls	105
Vehicles—Meat	15
" —Milk	130
Factories (Mechanical)	848
" (Non-mechanical)	119
Workplaces	216
Offices	349
Retail shops	761
Wholesale shops, warehouses	67
Catering establishments open to the public, canteens	198
Fuel storage depots	1
Outworkers' premises	77
Factory chimneys	202

TYPE OF ESTABLISHMENT	NO. OF PREMISES
Hairdressers' premises	364
Places of entertainment	73
Clubs	40
Offensive trades	3
Registered premises, Rag Flock and Other Filling Materials Regulations, 1951 and 1954	19
Pet shops (Pet Animals Act, 1951)	12
Animal boarding establishments	3

TABLE 3

Detection of Sanitary Defects:

Summary of Visits and Inspections

NATURE OF VISIT	NO. OF VISITS
Dwelling-houses for housing defects under Public Health Act:-	
After complaint	483
Subsequent visits	1,253
Dwelling-houses under Housing Acts:-	
Detailed inspections	815
Re-inspections, re-visits	3,412
Certificates of Disrepair	10
Infected dwelling-houses:-	
After notified infectious disease (other than tuberculosis)	176
Contacts	28
Schools and church halls	4
Swimming baths	-
Water sampling:-	
Swimming baths	-
Dwelling-houses	6
Business premises	43
Cinemas, dance halls, billiards halls	5
Offensive trade premises	15
Stables, piggeries, keeping of animals	14
Houses in multiple occupation	162
Factories Acts, 1961:-	
Factories with mechanical power	121
Factories without mechanical power	6
Outworkers' premises	-
Common lodging houses	4
Underground rooms	-
Hairdressing premises	30
Tents, vans, sheds	19
Smoke abatement:-	
Boiler house surveys... ..	21
re Prior Approval applications	16
re Smokeless Zones and Smoke Control Areas	3,883
Smoke observations	183
Smoke investigations	12
Re-visits	593
Combustion readings	-
Volumetric stations	693
Noise abatement	198
Fairgrounds	30

NATURE OF VISIT	NO. OF VISITS
Drainage:-	
Conversion from waste water to water carriage system...	240
Miscellaneous tests and inspections	151
Public sewers	12
Watercourses and ditches	16
Land and tips	65
Septic tanks and cesspools	25
Sanitary conveniences - including public houses	107
Miscellaneous visits	2,763
Visits not inspections	314
Verminous premises:-	
Rats and mice:- After complaint or from survey	2,491
Subsequent and survey visits	10,477
Bug infestations:- No. of premises visited	43
No. of premises where definite in-	
festation existed	41
Cockroaches	382
Other vermin	166
Inspections for supervision of food:-	
Unfit foodstuffs other than meat	594
Slaughterhouses and cold stores	2,647
Butchers' shops (Food Hygiene (General) Regulations, 1960)	298
Food Hygiene (General) Regulations, 1960:-	
Bakehouses	96
Fish shops, grocers and greengrocers	945
Factory canteens	11
Restaurant kitchens, fish friers, etc.	166
Hotel and beerhouse bars and cellars:-	
Day inspections	198
Night inspections	24
Food and Drugs Act, 1955 - Section 16:-	
Ice cream premises (Heat Treatment Regs. 1959-1963)	37
Sausage manufacturers	36
Preserved meat preparation premises	76
Preserved fish preparation premises	6
Milk and Dairies Regulations, 1959: Food and Drugs Act, 1955 - Section 91:-	
Milk sampling for bacteriological examination	112
Contraventions of Milk and Dairies Regulations	3
Dairies	155
Shops Act, 1950 - Section 38	151
National Assistance Act, 1948 - Section 47	-
Diseases of Animals Acts and Orders	55
Offices, Shops and Railway Premises Act, 1963:-	
General inspections	566
Other visits	147

TABLE 4**Notices Served**

Action to secure abatement of nuisances and to enforce the appropriate statutory enactments was taken as follows:-

Nature of Notice	Public Health Act 1936	Food Hygiene (General) Regulations 1960	Factories Act 1961	Offices, Shops and Railway Premises Act 1963	Byelaws: Hairdressers and Miscellaneous Premises
No. of informal notices served	377	109	19	210	9
No. of informal notices complied with without recourse to statutory action	261	37	9	-	-
No. of statutory notices served	219	-	-	-	-
No. of premises concerned . .	119	-	-	-	-
No. of statutory notices complied with	195	-	-	-	-
No. of premises concerned . .	144	-	-	-	-
No. of cautionary letters sent by Town Clerk	46	-	-	-	-

Outstanding notices from previous year are included.

TABLE 5**Housing Defects and Legal Proceedings:**

A summary of general housing defects or disrepair of property where it was necessary to take legal proceedings, and the results of such proceedings is given below:-

CASE No.	STATUTE	DETAILS OF CONTRAVENTION	RESULT
1	Public Health Act 1936 - Section 95.	Failure to comply with nuisance order in respect of accumulation.	Fine of £5 imposed.
2	Public Health Act, 1936 - Section 93.	Failure to comply with abatement notice in respect of defective roof and defective rear house wall.	Nuisance Order made against owner.
3	Public Health Act, 1936 - Section 93.	Failure to comply with two abatement notices in respect of general defects.	Two Nuisance Orders made and costs awarded to the Corporation.
4	Public Health Act, 1936 - Section 93.	Failure to comply with abatement notice in respect of defective wallplaster, roof and window.	Nuisance Order made against owner and costs of 9/6 imposed.
5	Public Health Act, 1936 - Section 93.	Failure to comply with abatement notice in respect of defective chimney, causing dampness at next house.	Nuisance Order made against owner occupier, and costs of 8/6 imposed.
6	Public Health Act, 1936 - Section 39.	Failure to comply with statutory notice in respect of defective eavesgutter.	Fine of £2 imposed.
7	Public Health Act, 1936 - Section 93.	Failure to comply with abatement notice in respect of general defects.	Nuisance Order made against owner, and costs of 8/6 imposed.

TABLE 6

Sanitary Improvements Effected:

Action was taken under either the Public Health Act or the Housing Acts.

NATURE OF IMPROVEMENT	No. OF IMPROVEMENTS
Floors repaired	27
Internal walls repaired	282
Ceilings repaired	115
Doors and windows repaired	207
Stairs repaired	14
Roofs repaired	111
Chimneys and flues repaired	71
Eavesgutters repaired	79
Rainwater pipes repaired	55
Soil and waste pipes repaired... ..	46
External walls repaired	42
Yards, paths, etc., repaired	13
Sanitary conveniences repaired	184
"Tippler" closet conversions	1
Refuse accommodation	79
Drains repaired	131
Fire-ranges repaired	18
Sinks, water supplies, wash boilers, etc., repaired	92
Miscellaneous	270

TABLE 7
Factories Act, 1961
Places of Employment
Defects Found

Particulars	Number of cases in which defects were found				No. of cases in which prosecutions were instituted
	Found	Remedied	Referred		
			to H.M. Inspector	by H.M. Inspector	
Want of Cleanliness (S.1)	25	25	-	1	-
Overcrowding (S.2)	-	-	-	-	-
Unreasonable temperature (S.3) ..	-	-	-	1	-
Inadequate ventilation (S.4)	13	13	-	-	-
Ineffective drainage of floors (S.6) ..	-	1	-	-	-
Sanitary Conveniences (S.7):—					
(a) Insufficient	39	39	-	4	-
(b) Unsuitable or defective	75	71	-	11	-
(c) Not separate for sexes	-	-	-	2	-
Other offences against the Act (not including offences relating to Outwork)	30	28	-	4	-
TOTALS	182	177	-	23	-

TABLE 8
Factories Act, 1961
Outwork (Sections 133 and 134)

Nature of Work	Section 133			Section 134		
	No. of Outworkers in Aug. list required by Sec. 133 (1) (c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing (Making etc.) apparel ..	6	-	-	-	-	-
Furniture and Upholstery ..	12	-	-	-	-	-
Brush making ..	4	-	-	-	-	-
Stuffed Toys ..	-	-	-	-	-	-
Making paper fancy goods ..	55	-	-	-	-	-
TOTALS ..	77	-	-	-	-	-

TABLE 9**Factories Act, 1961****Places of Employment - Improvements Secured**

Cleanliness improved	25
Temperature improved	—
Sanitary Accommodation:-	
Additional accommodation provided	29
Accommodation improved	71
Accommodation reconstructed	10
Ventilation improvements	13
Drainage improvements	1
Miscellaneous improvements	28

TABLE 10**Factories Act, 1961****Places of Employment****Inspection for Purposes of Provisions as to Health**

Premises	Number on Register	Number of		Occupiers Prosecuted
		Inspec- tions	Written Notices	
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	119	6	1	-
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	848	121	18	-
(iii) Other premises in which Section 7 is enforced by the Local Authority * (excluding outworkers' premises) ..	36	10	1	-
TOTALS	1,003	137	20	-

*Electrical Stations, Institutions, Building Operations and Works of Engineering Construction.

TABLE 11

Offices, Shops and Railway Premises Act, 1963 - Annual Report

Table A - Registrations and General Inspections

Class of Premises	Number of Premises Registered during the Year	Total Number of Registered Premises at End of Year	Number of Registered Premises Receiving a General Inspection During the Year
Offices	349	349	203
Retail Shops	761	761	297
Wholesale Shops, Warehouses	67	67	7
Catering Establishments Open to the Public, Canteens	198	198	57
Fuel Storage Depots	1	1	2

Table B

No. of Visits of all kinds by Inspectors to
Registered Premises 713

Table C - Analysis of Persons Employed in Registered Premises by Workplace

Class of Workplace	Number of Persons Employed
Offices	4,967
Retail Shops	4,140
Wholesale Departments, Warehouses	936
Catering Establishments Open to the Public	1,613
Canteens	113
Fuel Storage Depot	12
TOTAL	11,781
TOTAL MALES	4,548
TOTAL FEMALES	7,233

Table D - Exemptions. Table E - Prosecutions. "Nil" in each case.**Table F - Inspectors.**

No. of inspectors appointed under Section 52(1)
or (5) of the Act 15

No. of other staff employed for most of their
time on work in connection with the Act ... 3*

*i.e. 2 Temporary assistants engaged for special survey of town centre office accommodation, plus one clerk.

TABLE 12**Disinfection**

	Free of Charge	On Payment of Charge	Total
Premises visited for Disinfection	3	-	3
Beds	42	7	49
Rooms	4	-	4
Articles	201	520	721
Articles Destroyed	33	-	33

The 3 premises disinfected free of charge were for the following reasons :-

Tuberculosis	2
Cancer	1

TABLE 13**Disinfestation**

Infestation by	Number of Premises Disinfested				Total
	Domestic Premises	Business & Industrial	Hospitals	Schools	
Bed Bugs.. .. .	39	-	2	-	41
Cockroaches	227	125	25	2	379
Fleas	10	2	-	1	13
Golden Spider Beetles	4	1	-	-	5
Wasps	33	1	-	-	34
Wood Lice	-	-	-	-	-
Body Lice	10	1	-	1	12
Silver Fish	12	1	1	5	19
House Fly	9	9	-	-	18
General Disinfestation	34	-	-	-	34
Others	17	6	-	2	25

TABLE 14
Destruction of Rats and Mice
Prevention of Damage by Pests Act, 1949

	TYPE OF PROPERTY				
	Local Authority	Dwelling Houses	Agricultural	All other (including Business and Industrial)	Total
I. Total number of properties in Local Authority's district	129	57,190	102	7,072	64,493
II. Number of properties inspected by the Local Authority as a result of (a) notification or (b) otherwise	(a) 71	764	—	656	1,491
	(b) 308	2,242	81	8,355	10,986
III. Number of properties (under II) found to be infested with rats	Major —	—	—	2	2
	Minor 29	536	—	352	917
IV. Number of properties (under II) found to be infested with mice	Major 1	—	—	1	2
	Minor 92	301	—	241	634
V. Number of infested properties (under III and IV) treated by Local Authority	122	837	—	596	1,555
VI. Number of notices served under Section 4:— (1) Treatment (2) Structural Works (i.e. proofing)	Nil				
	Enforced under Public Health Act, 1936				
VII. Number of cases in which default action was taken by Local Authority following issue of notice under Section 4	Nil				
VIII. Legal Proceedings	Nil				
IX. Systematic control of blocks of buildings	6				

REPORT OF THE BOROUGH ANALYST

In recent years the number of samples examined in the Borough Laboratories has increased and again, in 1964, this trend has continued. The two main features which largely accounted for this latest increase were additional samples examined with reference to certain aspects of local atmospheric pollution and the increased volume of work now carried out for the Waterworks Department.

Quality control analytical work on the water supplied to the 460,000 people now supplied with water by the Bolton Local Authority involved the examination of large numbers of samples from reservoirs, treatment works, and the distribution system. This was implemented with investigational work on methods of water treatment to be used at new waterworks in the course of development. An important aspect of this work was the laboratory development of a new scheme of water treatment, which results in very efficient removal of dissolved aluminium, iron and manganese from impounded acid moorland water.

The long-term survey work regularly carried out on the amount of pollutive material in the atmosphere was of course continued, and the annual averaging out of results showed a significant drop in the level of smoke pollution and an accompanying reduction in the level of sulphur dioxide. Detailed investigation of localised air pollution in the vicinity of certain industrial premises was carried out, and a special study was made of the method employed for the determination of certain polynuclear hydrocarbons in smoke. Work of this character has been carried out in Bolton since 1958; the investigation was directed towards ascertaining reasons for certain apparently anomalous findings in the accumulated results. The outcome of this work is dealt with in the section of this report dealing with air pollution.

The number of samples examined under the Food and Drugs Act, 1955, was very similar to the number examined during the previous year. For the second year this work included a number of samples of fresh fruit and vegetables which were examined specifically for the presence of pesticide residues. The range of drug samples examined was wide and included modern synthetic drugs, vitamins, hormone and antibiotic preparations and common household medicaments such as cough mixtures, laxatives etc.

Regular checks were made on the quality of the water from the Public Swimming Baths and from swimming pools at local schools.

Ice cream samples were checked for their hygienic quality by bacteriological analyses.

A variety of samples were examined for other departments of the Bolton Local Authority and for a number of neighbouring local authorities; these samples were not numerous but quite varied in type, ranging from parts of the carcase of a cow which had been poisoned, to soft drinks and such items as material found to be blocking sewers.

As usual a large number of samples were submitted to the Health Department by the general public. These were invariably the result of dissatisfaction with locally purchased foods and are dealt with in the report under the heading of Miscellaneous Samples.

A number of analyses were carried out for private firms and individuals where the work necessitated the payment of a fee to the Corporation. Such samples mainly comprised various food and medical products. An example was the case of a lady who was being treated privately by a doctor in a neighbouring town. The treatment consisted of a regular bottle of medicine which apparently worked wonders. The death of the doctor preceded that of the patient and the latter was presented with the situation that no records were available to show what was contained in the mixture prescribed. Analysis of a very small amount of the liquid remaining in a medicine bottle enabled the formulation to be checked. The information was made available to the lady's new medical adviser.

In my last annual report I made reference to the success of Mr. V. Matthews an assistant analyst in this department who, after qualifying as a chemist in 1963, proceeded to do full time research with a view to obtaining a Doctor of Philosophy degree in Chemistry. Once again I have pleasure in reporting a similar progression. In the summer of 1964 Mr. A. N. Ainscough, Assistant Analyst, successfully passed the Part II examination for Graduate Membership of The Royal Institute of Chemistry. In October, 1964, he too embarked upon a full time three year period of research, again with a view to obtaining a Doctor of Philosophy degree in Chemistry.

Mr. Terence Bucknall, a junior trainee in the department also made noteworthy progress with his academic studies. On results he obtained in his S2 year course of part-time studies he was awarded a prize by the Union of Lancashire and Cheshire Institutes.

The result of the year's work in the Borough Laboratories, which are briefly summarised in the following pages, are preceded by a brief account of legislative and other changes which have a bearing on the work of the Borough Laboratories.

This is my third Annual Report to the Chairman and members of the Health Committee.

In presenting this report I have pleasure in recording my gratitude for the loyal service of the members of the laboratory staff. The report would be incomplete without the due acknowledgement to personnel of the Water Undertaking, the Public Health Inspectorate and the secretarial staff of the Health Department for their assistance and co-operation.

My thanks are also expressed to the Medical Officer of Health for his encouragement, support and interest in the work of the laboratories.

The Meat (Treatment) Regulations, 1964:

These regulations came into operation in January, 1964. They prohibit the addition to raw and unprocessed meat intended for sale for human consumption of any of the following substances:

Ascorbic Acid
Erythorbic Acid
Nicotinic Acid
Nicotinamide
and any salt or any other derivative of these substances.

The regulations prohibit the sale of any such meat so treated.

The Weights and Measures (Equivalents for dealings with drugs) Regulations, 1964:

These regulations came into operation in January 1964. They prescribe, for the purpose of any dealings with drugs, equivalences between the milligramme and grain and their multiples and fractions. The regulations also require, in the case of manufacturers or wholesale dealers with effect from 1st August, 1965, and in the case of retail dealers with effect from 1st February, 1966, that any sale or supply of certain drugs pursuant to an order expressed in grains shall be carried out in terms of the equivalent metric quantity. The drugs concerned are those for which a monograph exists in the 1963 edition of the British Pharmacopoeia or the British Pharmaceutical Codex and which are sold or supplied in the form of cachets, capsules, injections, lozenges, suppositories or tablets.

The Poisons (Fluoroacetamide and Fluoroacetanilide) Rules, 1964:

Occasionally certain materials are made available to the general public which engender a potential serious hazard. To correct one such hazard the above rules came into operation in February, 1964.

Under these rules restrictions are now placed on the sale and supply of fluoroacetamide and fluoroacetanilide. In particular, retail sales to purchasers in the United Kingdom are prohibited except for certain purposes of research or analysis or on the production of a duly completed certificate in a prescribed form, for use as rodenticides.

The Soft Drinks Regulations, 1964:

These regulations were made in May, 1964 and in part came into operation in June, 1964. Part of these regulations do not become operative until June, 1965.

The regulations revoke earlier regulations and effect a number of changes in requirements. The principle changes are:

Standards of composition have been introduced for semi-sweet and low calorie soft drinks and labelling provisions for these drinks are laid down.

The use of cyclamic acid and its sodium and calcium salts is permitted as artificial sweeteners in soft drinks in place of or in conjunction with saccharin.

The description of soft drinks sold from vending machines is included and where appropriate a declaration of the artificial sweetener content must appear on such machines.

The Dried Milk Regulations, 1964:

These were made in June, 1964 and are due to come into operation in March, 1965. These regulations re-enact certain earlier regulations and effect a number of changes of which the principal ones are:

Minimum and maximum percentages (calculated by weight) are prescribed for the milk fat content of dried three-quarter cream milk, dried half cream milk, dried quarter cream milk and dried partly skimmed milk.

The upper limit for the milk fat content of dried skimmed milk has been reduced and the description "dried low-fat skimmed milk" is permitted as an alternative description.

A maximum moisture content is prescribed for all descriptions of dried milk.

Containers of dried skimmed milk are required and containers of any other dried milk are permitted to carry a declaration as to the milk fat content. Certain exemptions are given to which the regulations do not apply.

The Mineral Hydrocarbons in Food Regulations, 1964:

Although these regulations are now in operation certain technical difficulties indicate that it may not be practicable to implement the regulations in their entirety.

The regulations re-enact with amendments earlier Mineral Oil in Food Orders and Regulations and incorporate the following principal amendments which:

- (a) lay down specifications of purity for all mineral hydrocarbons used in food.
- (b) permit the use of mineral hydrocarbons to seal eggs.
- (c) permit the use of mineral hydrocarbons on the rind of whole pressed cheeses.
- (d) permit the use of mineral hydrocarbons as polishing or glazing agents in sugar confectionery, up to 0.2% by weight of the food.
- (e) increased to 60% by weight the amount of paraffin or microcrystalline wax permitted in a chewing compound provided it meets the specifications of purity and an analytical test laid down.

The Fertilisers and Feeding Stuffs (Amendment) Regulations, 1964:

These regulations were made in January, 1964 and came into operation in March, 1964. The new regulations amend the Fertilisers and Feeding Stuffs Regulations, 1960 by clarifying the definitions of certain fertilisers and feeding stuffs, bringing under control nitrogenous gas liquor, revising certain of the methods of analysis and varying the particulars to be given on a sale of sulphate of ammonia.

The Therapeutic Substances (Preservation of Raw Fish), Regulations, 1964:

These came into operation on 1st July, 1964. These regulations exempt under certain conditions the restrictions which previously applied to the sale of certain antibiotics for use in connection with the preservation of raw fish.

Circulars issued by the Ministry of Agriculture, Fisheries and Food

Some of the circulars issued by the Ministry in 1964 were of direct interest to the laboratory.

It was announced in January that a Sub-Committee of the Food Standards Committee had been asked to examine the question of the leaching of chemicals from food containers, packaging materials and printing inks to food.

In February an official statement was made that the use of injections of papain to cattle prior to slaughter, and for the purpose of tenderising the meat, is unobjectionable; and that when the Labelling of Food Order is revised provisions will be made for meat from cattle so treated to be appropriately labelled.

In March Proposals for Regulations for Canned Meat and Pies were issued. These followed in the main the recommendation of the Food Standards Committee's reports on Canned Meat and Meat Pies and proposed certain compositional and labelling requirements for these products.

During the year under review these proposals were not implemented by the issue of appropriate regulations.

Because of the great importance of food additives and food contaminants, the Minister has decided to make the present Food Additives and Contaminants Sub-Committee a Committee in its own right instead of as at present a subsidiary body of the Food Standards Committee. This change, announced in June, 1964, reflects the rapidly increasing importance of this aspect of the quality control of foodstuffs.

Later in the year it was announced that the new Food Additives and Contaminants Committee are to review the Preservatives in Food Regulations, 1962.

In August, 1964 the Ministry issued a circular dealing with Antibiotics in Milk. This included information on sampling and testing relevant to Food and Drugs Authorities.

Review of The Colouring Matter in Food Regulations, 1957:

In July the Food Standards Committee issued a report which reviews the current regulations relating to the addition of colouring matter to food.

Of special interest is the recommendation of the Committee that six of the present permitted colours should be withdrawn, and that provisionally one new colour should be added. It is also recommended that the colouring of citrus fruit should be prohibited.

Review of Food Labelling:

The Food Standards Committee issued in September, 1964 a very comprehensive report on recommendations regarding revised regulations relating to the labelling of food.

The report contains a list of 72 conclusions or recommendations which cover a wide range of inadequacies and anomalies that apply to the current regulations. The particularly important changes which are recommended are:

- (1) That there should be specific provisions prescribing the size and location of the information to be printed on food labels.
- (2) That there should be much stricter requirements for the declaration of chemical additives in food.

- (3) That there should be a large reduction in the exemptions from the present provisions which require the food label to declare the common or usual name of the food, a full list of its ingredients and the name and address of the packer or labeller.

Standard for Drugs:

In December, 1964, an addendum was issued to supplement the 1963 edition of The British Pharmacopoeia. This reflects the rapid changes which take place in medicine and the pharmaceutical industry.

The new addendum is officially brought into operation as from 1st June, 1965.

Total Number of Samples examined:

The number of samples examined during the year was 8,058. This was 1,130 more samples than the corresponding figure for 1963. This significant increase in number is largely accounted for by increased numbers of water samples, and the large number of dust and grit samples examined in connection with emissions from industrial premises.

The samples examined are classified as follows:

FOR THE HEALTH COMMITTEE:

Food and Drugs	1,126
Designated Milks	373
Ice Creams etc. (bacteriological examination) ...	79
Water from domestic premises	74
Swimming Bath Waters	158
Fertilisers and Feeding Stuffs	24
Atmospheric Pollution:	
Smoke and Sulphur Dioxide concentrations-	
Samples from Local Authority Testing	
Stations	2,947
Samples from domestic premises	78
Boiler-house samples	14
Polycyclic Hydrocarbons	60
Deposit Gauge samples	4
Samples of dusts and grit	326
Fuel samples	56
Miscellaneous samples	140
FOR THE WATERWORKS COMMITTEE	2,508
FOR OTHER DEPARTMENTS, OTHER AUTHORITIES AND PRIVATE	
SAMPLES	91
TOTAL	8,058

Food and Drug Samples:

The number of foods and drugs submitted by the Sampling Officers during the year was 1,126 which is equivalent to a sampling rate of 7.04 per 1,000 of the population.

65 samples were reported as adulterated or otherwise unsatisfactory, a proportion of 5.8 per cent. This percentage of unsatisfactory samples is lower than that of the previous year (6.7 per cent in 1963).

The range of drug samples included preparations which have been on sale for four generations and some of the latest products of the pharmaceutical industry.

The foods examined during the year included 57 samples of fresh fruit and vegetables which were examined for the presence of pesticide residues. None of the samples contained a significant level of residual insecticide, but in five instances biological tests indicated the presence of minute traces of insecticidal material. Organic phosphorus type insecticides were not detected in any of the samples. Where a positive indication of insecticidal material was shown to be present, the trace of active material derived from the group of chlorinated pesticides.

The amount and variety of imported food that is available shows signs of increase. Canned goods from such unlikely places as Hungary and China take their place in the local shops along with imported goods from the countries of the Western World.

Details of all the samples submitted under the Food and Drugs Act, during 1964, and of the unsatisfactory samples, are given in the following tables.

TABLE A
Samples Examined under the Food and Drugs Act

Article	Number Examined			Number Adulterated or otherwise giving rise to irregularity		
	Formal	Informal	Total	Formal	Informal	Total
Milks	281	384	665	8	—	8
Almonds, Ground	—	8	8	—	1	1
Baking Powder	2	—	2	—	—	—
Barley	—	3	3	—	2	2
Beef Curry	—	1	1	—	—	—
Beef, Potted	—	3	3	—	—	—
Beef Steak and Vegetables (canned)	—	1	1	—	1	1
Biscuits, Cheese	—	1	1	—	—	—
Biscuits, Chocolate	—	7	7	—	—	—
Black Puddings	1	1	2	—	—	—
Blackcurrants (canned)	—	2	2	—	1	1
Bread Crumbs	—	8	8	—	1	1
Bread Mix	—	1	1	—	—	—
Brussel Sprouts	—	4	4	—	—	—
Cabbage	—	7	7	—	—	—
Cake, Chocolate	—	8	8	—	2	2
Cake Decorations, edible	6	1	7	1	—	1
Cake Mixture	3	5	8	—	—	—
Carrots	—	12	12	—	—	—
Cauliflower	—	7	7	—	—	—
Celery	—	9	9	—	—	—
Cheese Spread	—	6	6	—	—	—
Chestnut Spread	—	1	1	—	—	—
Chicken Curry	—	1	1	—	—	—
Chicken in Jelly	—	1	1	—	—	—
Chicken, Minced	—	1	1	—	—	—
Chocolate Liqueur	1	—	1	—	—	—
Coconut, Desiccated,	—	1	1	—	—	—
Corned Beef	—	2	2	—	—	—
Cream	—	5	5	—	1	1
Cucumber	—	6	6	—	—	—
Currants	—	4	4	—	—	—
Dairy Topping	—	1	1	—	—	—
Flour, Self Raising	4	5	9	—	—	—
Food Flavouring	—	4	4	—	—	—
Fresh Fruit	—	7	7	—	—	—
Fruit and Nut Block	1	—	1	—	—	—
Fruit, Canned	—	15	15	—	—	—
Fruit Curd & Fruit Flavour Curd	—	6	6	—	1	1
Fruit, Dehydrated	—	1	1	—	—	—
Fruit Juice	—	2	2	—	—	—
Fruit Juice, Canned	—	11	11	—	—	—
Fruit, Mixed, Dried	—	1	1	—	1	1
Fruit Salad, Canned	—	1	1	—	—	—
Gelatine, Powdered	2	2	4	—	2	2
Gin	6	—	6	—	—	—
Golden Raising Powder	1	1	2	—	—	—
Ice Cream	3	—	3	—	—	—
Irish Stew, Canned	—	1	1	—	—	—
Jam	—	9	9	—	2	2
Lambs curry with vegetables, Canned	—	1	1	—	—	—
Lard	4	6	10	—	—	—
Margarine	9	—	9	—	—	—
Meat Paste	—	4	4	—	—	—
Mixed Grill, Canned	—	4	4	—	—	—

Article	Number Examined			Number Adulterated or otherwise giving rise to irregularity		
	Formal	Informal	Total	Formal	Informal	Total
Noodles, Canned	-	1	1	-	-	-
Oranges, Canned	-	3	3	-	-	-
Pancake and Batter Mixture ..	5	-	5	1	-	1
Paté with Mushrooms	-	1	1	-	-	-
Peaches and Pears, Canned ..	-	1	1	-	-	-
Pearl Barley	1	1	2	-	1	1
Peas, Canned	-	1	1	-	-	-
Peas, Dried	-	1	1	-	-	-
Peas, Processed, Canned ..	1	-	1	-	-	-
Peppers, Sweet, Red, Canned	-	1	1	-	-	-
Pickles	-	14	14	-	4	4
Pickles, etc.	2	-	2	2	-	2
Pie Filling	2	2	4	-	-	-
Pork Luncheon Meat	-	2	2	-	-	-
Potatoes, Flaked	-	1	1	-	-	-
Potatoes, Peeled	-	1	1	-	1	1
Prunes, Dried	-	1	1	-	-	-
Pudding, Christmas	-	1	1	-	1	1
Rice	-	6	6	-	2	2
Sago	-	3	3	-	1	1
Salad Cream and Mayonnaise	-	5	5	-	-	-
Salami	2	-	2	-	-	-
Sauces	-	3	3	-	1	1
Sauerkraut	-	1	1	-	-	-
Sausage	14	1	15	8	1	9
Soda Water	-	6	6	-	1	1
Soup, Canned	-	1	1	-	1	1
Soup, Dehydrated	-	5	5	-	-	-
Soup Mix, Dehydrated	-	1	1	-	-	-
Spices	-	4	4	-	2	2
Spinach	-	1	1	-	-	-
Steak Casserole	-	1	1	-	-	-
Steak and Kidney Pie	-	1	1	-	-	-
Steak Pie	-	1	1	-	-	-
Sugar Confectionery	1	-	1	-	-	-
Tapioca	-	2	2	-	-	-
Tomatoes	-	11	11	-	-	-
Vegetables, Canned	-	2	2	-	1	1
Vegetables, Fresh, Mixed ..	-	1	1	-	-	-
Vitamin C Drink	-	1	1	-	1	1
Vodka	12	-	12	-	-	-
Wines	3	4	7	-	-	-
Youghurt	1	-	1	-	-	-
Aminophylline Suppositories ..	-	-	1	-	-	-
Aminophylline Tablets	1	3	4	-	-	-
Bisacodyl Suppositories	-	1	1	-	-	-
Bismuth Subgallate Suppositories	-	1	1	-	-	-
Bismuth Subgallate compound Suppositories	-	2	2	-	1	1
Boric Acid Compound Ointment	1	-	1	1	-	1
Butobarbitone, Phenacetin and Codeine Tablets	1	-	1	-	-	-
Butobarbitone Tablets	1	-	1	-	-	-
Cetrimide Cream	-	2	2	-	-	-
Cetrimide, Dybenal and Allantoin Cream	-	1	1	-	-	-
Chlorpropamide Tablets	2	-	2	-	-	-
Cinchocaine Suppositories ..	1	-	1	-	-	-
Cough Mixture	4	-	4	-	-	-
Dimenhydrinate Tablets	1	-	1	-	-	-

Article	Number Examined			Number Adulterated or otherwise giving rise to irregularity		
	Formal	Informal	Total	Formal	Informal	Total
Dyspepsia Mixture	1	-	1	1	-	1
Ethoheptazine citrate and Acetylsalicylic Acid Tablets	1	-	1	-	-	-
Febrifuge Mixture	1	-	1	-	-	-
Ferrous Carbonate and Ascorbic Acid Tablets	-	1	1	-	-	-
Ferrous Fumarate Tablets ..	-	1	1	-	-	-
Ferrous Gluconate Tablets ..	-	1	1	-	-	-
Ferrous Succinate Tablets ..	-	1	1	-	-	-
Ferrous Sulphate Vitamin C and Vitamin B 1 Tablets	-	1	1	-	-	-
Framycetin Eye and Ear Drops	1	-	1	-	-	-
Framycetin Eye Ointment ..	1	-	1	-	-	-
Framycetin Sulphate and Gramicidin Ampoules ..	-	1	1	-	-	-
Glycerine Suppositories	-	4	4	-	-	-
Haemoglobin Mixture	1	-	1	1	-	1
Hamamelis and Zinc Oxide Suppositories	-	1	1	-	1	1
Health Salts	1	-	1	-	-	-
Herbal Tonic	1	-	1	-	-	-
Inositol Hexanicotinate Tablets	1	-	1	-	-	-
Infants Mixture	1	-	1	1	-	1
Iron and Vitamin Pills	1	-	1	-	-	-
Isopropamide and Phenylpropanolamine Hydrochloride Capsules ..	-	1	1	-	-	-
Morphine Suppositories	1	-	1	-	-	-
N - γ - Dimethylaminopropyl-iminobenzyl Hydrochloride Tablets	1	-	1	-	-	-
Paracetamol Tablets	4	-	4	-	-	-
Phenometrazine Tablets ..	1	-	1	-	-	-
Pills, Proprietary	3	-	3	-	-	-
Riboflavine Tablets	-	4	4	-	-	-
Seidlitz Powders	-	5	5	-	-	3
Tablets, Proprietary	2	2	4	1	-	2
Thyroid Tablets	7	-	7	-	1	-
Tolbutamide Tablets	1	-	1	-	-	-
Tonic Mixture	1	-	1	-	3	-
Vitamin Tablets	-	2	2	-	-	1
Yeast Tablets	1	-	1	-	1	-
TOTAL	413	713	1,126	25	40	65

Total No. of Samples analysed during the year = 1,126

Total No. of Samples adulterated — 65 = 5.8%

TABLE B
Unsatisfactory samples of Foods and Drugs

(1) UNSATISFACTORY FOODS

(a) MILK: Eight samples were reported as unsatisfactory. Five of the eight samples contained less than 3 per cent of fat; the deficiency varied between 2.3 and 7.0 per cent. Although the individual samples were deficient in fat, the consignment of which they formed a part had in each case a fat content which exceeded 3 per cent.

Three samples contained less than 8.5 per cent non-fat milk solids. In each instance freezing point determinations showed that the milk did not contain extraneous water; these samples were of sub-standard quality. In instances where a producer's milk is of this type, both the producer and the Ministry's technical adviser are notified so that steps can be taken to improve the quality of the milk.

(b) PRESERVATIVES IN FOOD:

RAW PEELED CHIPPED POTATOES: This example of one of the newer type of so called "convenience foods" (prepacked) contained excess sulphite preservative. A maximum of 50 parts per million is permitted by The Preservatives in Food Regulations; this sample contained 245 p.p.m. The manufacturer was cautioned.

HOT DOG RELISH: This contained 52 p.p.m. of alum, a chemical not permitted in The Preservatives in Food Regulations. This was an imported product in which the alum had been used as a hardener for the cucumber which was a major ingredient. The small amount of alum present would not be expected to engender hazard.

(c) COLOURING IN FOOD:

None of the samples examined contained prohibited dyes, although certain anomalies were found.

YORKSHIRE PUDDING AND PANCAKE MIXTURE: Mixed as directed this produced a deep yellow coloured mixture. Although the dyes present were shown to be permitted dyes, the list of ingredients on the packet failed to indicate the presence of added colouring. Manufacturer communicated with re required label amendment.

BREAD CRUMBS: This was another article in which a significant amount of colouring had been used without appropriate declaration on the label of the package. Manufacturer communicated with.

CANNED BLACK-CURRENTS: The manufacturer of this product had clearly indicated on the label that this contained artificial colouring, but the only colouring present was natural colour. Communications with the manufacturer indicated that the permitted food colour, Ponceau MX had been added. It appeared that chemical breakdown of the dye had occurred on storage.

(d) TOXIC METALS: Of the many samples that were examined for toxic metals, maximum permitted levels were only exceeded in four instances. In each of these four cases insignificant levels of arsenic and copper were present, but the amount of lead exceeded that permitted by the regulations.

POWDERED GELATINE: Contained 9.0 p.p.m. of lead (not more than 5.0 p.p.m. permitted).

POWDERED GELATINE: Contained 7.5 p.p.m. of lead; this sample yielded 3.37 per cent of ash, the regulations require that the ash yielded should not exceed 3.25 per cent.

CURRY POWDER: Contained 21 p.p.m. of lead (not more than 20 p.p.m. permitted).

CURRY POWDER: Contained 29 p.p.m. of lead.

The manufacturers of these products were informed of the distribution of unsatisfactory foods; a series of subsequent samples of these products yielded results for lead content within the prescribed limits.

(e) INCORRECT DESCRIPTION AND LABELLING OF FOOD

- TOMATO PICKLE:** The number of "rare" spices used in these was prominently displayed on the label, although the individual spices were not of course named as it is in order for a manufacturer to use the generic term "spices" in an ingredients list. All of the spices detected were of the common variety a housewife would use and could by no stretch of the imagination be regarded as rare.
- CUCUMBER PICKLE:**
- MIXED PICKLES:** In these three cases the vegetables were not present in the amount indicated by the ingredients list included on the label. One of the samples of mixed pickles had a pictorial label which included two varieties of vegetable, neither of which were present in the article sold. The picallili label was vague and listed among the ingredients "puree", which as a generic term could mean one of many things, and this label was equally non-specific in listing one ingredient as "Sugar or Saccharin". Manufacturers informed of labelling amendments required.
- PICCALLILI:**
- MIXED PICKLES:**
- DRIED MIXED FRUIT:** Composition of sample such that declared list of ingredients incorrectly described contents.
- CANNED PEACHES AND PEARS:** Fruit content not in accord with labelling description; ingredients listed in reverse order of that which would correctly indicate the amounts of each present.
- RICE (2 Samples)** These were pre-packed articles devoid of labelling description. In these times, when Super-market sales account for a large proportion of grocery sales, it is important that all pre-packed goods are appropriately labelled. Even packets with cellophane "window" walls, or even with transparent wraps do not make it easy for purchaser to distinguish between certain types of foods, e.g. tapioca and sago, and between various pulses.
- BARLEY:**
- SAGO:**
- HORSE RADISH AND BEETROOT SAUCE:** This had a label printed with an ingredients list in minute print. The capital letters were only 1/32nd of an inch high; the remainder of the letters were only 1/50th of an inch high. The manufacturers also printed this label so that the list could only be read if the container was turned on its side. The list in question:-
"Horseradish, beetroot, sugar, salt, tartaric acid, acetic acid, gum tragacanth, vegetable oil, colouring matter and saccharin". Manufacturer requested to amend label.
- CANNED CARROTS:** A Belgian product labelled for the European market. The overprinting in English did not meet the requirements of The Labelling of Food Order, also the declared weights were incorrect.
- CHRISTMAS PUDDING:** This list of ingredients did not correctly describe the contents.
- SODA WATER** This complied with the compositional requirements specified for this drink but the label was regarded as unsatisfactory. Exception was taken to the claim prominently displayed on the label that the product is "Highly Beneficial to Health".

In these instances of shortcomings in labelling requirements the manufacturers or packers were asked to arrange for amendments, and in the majority of cases appropriate action resulted.

(f) COMPOSITIONAL DEFICIENCIES:

- CHOCOLATE CAKE (2 samples):** Both samples, from different sources, were entirely devoid of cocoa solids, and failed to comply with the agreed Code of Practice which provides for a minimum of 3 per cent dry non-fat cocoa solids in the moist crumb.
- LEMON CURD:** Contained only 3.02 per cent of fat. Deficient in fat to the extent of 24.5 per cent. Contravention of the requirements of the Food Standards Preserves Order.

**BEEF STEAKS AND
VEGETABLES WITH
GRAVY (CANNED
PRODUCT):**

Meat content slightly low. Ingredients not declared in correct order on label.

**BLACKCURRANT JAM:
(2 samples):**

One had a slight deficiency in fruit content. These jams both contained mixtures of permitted synthetic dyes. The declaration of added dyes on the label is not compulsory, but it is my opinion that their presence should be made known to a purchaser. It is interesting to find that where jams are free from added synthetic colouring, the manufacturers usually prominently indicate this on the label. The Food Standards Committee Report on The Labelling of Food recommends that the presence of adding colouring in jam should be declared.

**BLACKCURRANT
HEALTH DRINK:**

This was a coloured flavoured sugar syrup containing synthetic Vitamin C (38.7 per cent in excess of the amount of Vitamin C indicated on the label). The sample was devoid of fruit content. The label included a pictorial representation of blackcurrant fruits. A formal sample subsequently examined contained fruit juice.

**CREAM OF CHICKEN
SOUP**

Contained 0.3 per cent butter fat and total fat content of 2.9 per cent. The lean meat content calculated as chicken was 1.3 per cent. Not only was this article compositionally unsatisfactory but the label was very misleading. The pictorial label showed eight different varieties of vegetable, none of which was included in the soup. Although chicken was listed in second place in the ingredients list, and followed by flour and margarine, there was appreciably more flour and margarine in the mixture than chicken.

SAUSAGES:

Two samples of pork sausage and seven samples of beef sausage were reported to be unsatisfactory. The commonly accepted standard for food sold as pork sausage is that it should contain not less than 65 per cent of meat, and that beef sausage should contain not less than 50 per cent of meat. In neither case should the lean meat content be less than half the required minimum total meat content.

PORK SAUSAGES:

One of these contained very slightly more meat (66 per cent) than the required minimum, the other slightly less (63 per cent). Both however contained a disproportionate amount of fat and were $9\frac{1}{2}$ per cent and 10 per cent deficient in lean meat.

BEEF SAUSAGES:

One of the samples contained 51 per cent of meat, slightly more than the minimum acceptable but this product was a pre-packed article described as "Extra Beef Sausage", a description quite unjustified. This sample was also unsatisfactory in that it contained sulphite preservative without appropriate indication on the container.

The failure to disclose preservative addition was partly the reason for another sample to receive an adverse report. It was also 2 per cent deficient in meat content.

The amount of sulphite preservative was not excessive in either case.

Another beef sausage contained 52 per cent of meat and was satisfactory on this basis, but the greater portion of the meat was fat; the lean meat deficiency amounted to 11 per cent.

Four other beef sausages had deficiencies in total meat content ranging from 2 per cent to 21 per cent. In two instances where the deficiencies amounted to 12 per cent and 21 per cent prosecutions resulted. One prosecution did not result in conviction as the summons was not served within the specified statutory period. In the other case a fine of £5 was imposed.

(g) INFESTATION:
PEARL BARLEY

This pre-packed article, devoid of labelling, was heavily infested with mites. The food was unfit for human consumption; the remaining stock was destroyed by incineration.

(h) MISCELLANEOUS:
DOUBLE CREAM:

A double cream should contain not less than 48 per cent of butter fat. This contained no less than 83.8 per cent of butter fat and resembled non-homogeneous butter.

CAKE DECORATIONS:

These were sugar flowers one of which, as manufactured, contained unintended additional decoration in the form of an embedded human hair.

GROUND ALMONDS:

This sample contained satisfactory amounts of oil and protein, but the sample had a very pronounced bitter, unpleasant taste. The sample had undergone spoilage due to particularly high lipase activity resulting in partial degradation of the oil present. The sample was unfit for human consumption. Investigation showed that this sample was the last packet from old stock.

(2) UNSATISFACTORY DRUGS

ASCORBIC ACID
TABLETS:

These synthetic Vitamin C tablets were described as 200 mgm tablets. They contained 178mg. of Ascorbic Acid per tablet. The B.P. requires that tablets of this strength should contain not less than 185 mg. per tablet. The remaining stock was withdrawn from sale.

BISMUTH SUBGALLATE
SUPPOSITORIES B.P.C.:

The sample contained 27 per cent excess Bismuth Subgallate. 47 per cent excess Zinc Oxide and 33 per cent excess of water soluble phenols (as Resorcinol). Supplier and manufacturer contacted (same manufacturer as for Hamamelis and Zinc Oxide Suppositories (below).

BORIC ACID COMPOUND
OINTMENT:

The content of boric acid was 93 times the amount stated to be present. Other ingredients were present in amounts 100 times the quantities stated on the label. The ointment contained 15.5 per cent of boric acid. This was regarded as a potentially hazardous amount of boric acid. The manufacturer agreed to reduce the boric acid content to that of the boric acid ointment of the B.P.C. (1 per cent), and to suitably amend his labels.

DYSPEPSIA MIXTURE:

This contained double the amount of sodium bicarbonate indicated on the label. It also contained 1 per cent of sodium carbonate indicating that the amount of impure sodium bicarbonate added to the mixture was 3 times the amount declared on the label. The amounts of clove oil and peppermint oil present were both less than the amount stated to be present.

HAEMOGLOBIN
MIXTURE:

Claims were made on the label of this preparation relating to its use for Rickets, Scrofula, Cardiac Weakness etc. These claims were grossly excessive and for some of the ailments listed, the preparation would have been of no value at all. This was from old stock. It was found that the manufacturers had some time previously deleted all such claims from their product's label.

HAMAMELIS AND ZINC
OXIDE SUPPOSITORIES
B.P.C.

The sample contained 694 mgms. of Zinc Oxide and 62 mgms. of Hamamelis Dry Extract per suppository. The B.P.C. requires that each shall contain 600 mgms of Zinc Oxide and 200 mgms of Hamamelis Dry Extract.

These suppositories were made by the same manufacturer as the Bismuth Subgallate Suppositories which were found to be compositionally unsatisfactory. The manufacturers were communicated with and cautioned.

NATURAL HERB TABLETS:	Abbreviations used in the formula on the label were incorrect.
INFANT'S MIXTURE:	A "bill of directions" given with this medicine included directions for its use for children with rickets and whooping cough. In my opinion the medical advice given should not have been supplied with this preparation.
TABLETS FOR TREATMENT OF OBESITY:	These contained two laxatives but no specific for the treatment of obesity. It is unusual for a tablet excipient to be included in the formula on the label as it is only necessary for the active ingredients and their amounts to be disclosed. In this case the excipient calcium carbonate (chalk) was included. The amount of this present was 23 per cent less than the amount declared on the label.
SEIDLITZ POWDERS: (3 samples)	Three Seidlitz Powder samples failed to comply with the prescribed limits of weight variation specified in the British Pharmaceutical Codex. One sample was additionally unsatisfactory in composition in that the active ingredients were not present in amounts within the specified limits of the B.P.C.

Milk Samples

665 samples of milk were analysed during 1964; 281 of these were taken as formal samples and the other 384 were informal samples. Eight of the samples were classified as unsatisfactory and details of these are given in the list of unsatisfactory samples of Food and Drugs.

The proportion of adulterated or otherwise unsatisfactory milk samples was 1.2 per cent which was a lower figure than reported for the 1963 milk samples (1.8 per cent).

The following table shows the average composition of the milks examined during each quarter, and the yearly average (excluding samples of Channel Island Milk).

	No. of Samples	Fat%	Solids-not-fat %	Water %
1st Quarter, 1964 ..	201	3.63	8.74	87.63
2nd " " ..	166	3.65	8.84	87.51
3rd " " ..	165	3.81	8.88	87.31
4th " " ..	130	3.80	8.74	87.46
For the year 1964 ..	662	3.72	8.80	87.48
For the year 1963 ..	595	3.68	8.81	87.51
For the year 1962 ..	556	3.74	8.81	87.45

Designated Milks:

In addition to chemical analysis, designated milks are subject to tests which are specified in The Milk (Special Designation) Regulations.

These tests include the Methylene Blue Test which is a measure of the keeping quality of the milk; the Phosphatase Test which is a check on the efficiency of the pasteurisation process and the Turbidity Test which functions as a check on the heat treatment given to sterilised milk.

Examination of Designated Milks

Designation	No. Examined	Satisfactory	Failed Meth. Blue Test	Failed Phos. Test	Failed Turbidity Test	Test Void
Pasteurised	218	218	0	0	—	—
Sterilised	166	166	—	—	0	—
T.T.Farm Bottled ..	—	—	—	—	—	—
TOTALS ..	384	384	0	0	0	—

The above samples included 102 samples of pasteurised milk taken from the supplies to local schools.

The results obtained are entirely satisfactory.

Antibiotics in Milk:

Twenty-six of the milk samples, all untreated milk as delivered from farms, were tested for the presence of antibiotic substances. In each case the results were negative.

Ice-Cream Samples:

These samples are collected in sterile containers, special precautions being taken to preclude contamination occurring during sampling; they are then subjected to a Methylene Blue Test in order to assess their relative hygienic qualities. Under the conditions of the test, samples which decolourise the Methylene Blue solution in $4\frac{1}{2}$ hours or more are classified as Grade 1; those which decolourise the solution in $2\frac{1}{2}$ to 4 hours as Grade 2; in $\frac{1}{2}$ to 2 hours as Grade 3; and those decolourising the solution instantly (0 hours) as Grade 4.

Samples categorised as Grade 3 or 4 are classified as of an unsatisfactory standard.

The samples are also examined for organisms of intestinal origin, the presence of which is regarded as evidence of undesirable contamination.

Methylene Blue Test for Ice-Creams

	No. of Samples	Satisfactory	Unsatisfactory	Methylene Blue Grading			
				1	2	3	4
Sampled at Manufacturers' Premises	16	9	7*	7	5	4	0
Sold Wrapped	10	10	0	7	3	0	0
Sold Loose	53	32	21*	21	16	5	11
TOTALS ..	79	51	28	35	24	9	11

*Three of the samples collected at Manufacturers' premises which had satisfactory Methylene Blue grading, were unsatisfactory in that they contained coliform bacteria of intestinal origin. Five of the ice-creams sold loose were similarly categorised.

The tabulated figures show that the hygienic quality of a significant number of the ice-creams sold loose leaves much room for improvement.

As in previous years, the results obtained show very clearly the superior hygienic quality of the ice-cream sold in wrappers.

Domestic Water Supplies:

Samples of water from private houses have been collected from the town and district during the year. The results obtained from bacteriological analyses show that a safe and satisfactory quality standard has been maintained throughout.

Samples were similarly collected from domestic premises in the Bury, Rawtenstall, Bacup and surrounding districts. Reports on the examination of these were issued to the Waterworks Engineer.

Swimming Bath Waters:

The efficiency of the water treatment process at each of the public swimming baths was regularly assessed by means of bacteriological analyses supplemented with chemical tests. Where abnormalities were detected recommendations were made and further tests conducted to ascertain that conditions were restored to the high quality standard typically maintained. Similar analyses were carried out on samples of water from the swimming baths at local schools. The results obtained show that suitable treatment conditions and satisfactory water quality, have been maintained.

Fertilisers and Feeding Stuffs:

12 Fertilisers and 12 Feeding Stuffs have been analysed.

The following samples were shown by analyses not to agree with the particulars on the Statutory Statements:

FERTILISERS:	Three unsatisfactory samples.
SPRING FERTILISER:	The content of phosphoric acid (insoluble in water) and phosphoric acid (soluble in water) not in accord with the Statutory limits of variation prescribed. The total phosphoric acid content was satisfactory.
SOLUBLE BLOOD MANURE:	The sample contained nitrogen in excess of the Statutory prescribed limit of variation (not to the detriment of purchaser).
FISH MEAL:	This was a much better fertiliser than the accompanying Statement implied. It did not comply with the Statutory Statement in that it contained nitrogen, phosphoric acid and potash in excess of the prescribed limit of variation (not to the detriment of purchaser).
FEEDING STUFFS:	Four unsatisfactory samples.
POULTRY FOOD: BREEDERS MASH:	This contained almost double the amount of oil declared on the Statutory Statement (93.3% excess). Protein and Fibre content satisfactory.

HIGH RECORDER CATTLE FOOD: This contained 62.8% excess oil, but was deficient in protein to the extent of 21.6%. Fibre content satisfactory.

BABY CHICK MASH: This contained 66.7% excess oil. Protein and fibre contents satisfactory.

HIGH STARCH DAIRY CAKE: This contained 40.7% excess oil. Protein and fibre contents satisfactory.

Atmospheric Pollution:

This annual review covers a year during which time there was a significant reduction in the amount of smoke in the County Borough area and an accompanying reduction in the amount of atmospheric sulphur dioxide.

In part this is due to the absence during the year of protracted periods of very cold weather or fog during which times the level of atmospheric pollution always shows very significant increases. The bad weather of 1963 was clearly reflected in the annual average figures which showed an increase in sulphur dioxide over the previous year and only a small reduction in the rate of abatement of smoke pollution. The improved results for 1964 are of course to some extent a reflection of the changing patterns of local industrial life, the decreasing numbers of chimneys emitting smoke from factories and mills and on the domestic side, the increased public interest in central heating systems using refined power – electricity and gas. These features are clearly augmenting the improvements which arise from the established smokeless zones.

Tabulated data and histograms showing the levels of smoke and sulphur dioxide clearly indicate the improvement in the local atmosphere.

The smoke histogram shows the very real progress obtained from 1961 onwards. The separation of the data for the April to September period from the remainder of the year shows how markedly different conditions are at different seasons. Taking extreme values shown on the histogram it can be seen that the smoke pollution level during the colder months of 1959 was approximately six times as high as in the summer of 1964.

More important is perhaps the clear indication that the overall yearly average of smoke pollution has been halved if one compares the results for 1964 with the conditions that obtained during the years 1958 – 1960.

The clear distinctive steps in the smoke histogram show the steps forward that have been made in recent years in local smoke abatement.

Although one cannot expect such consistently well defined reduction in the amount of atmospheric sulphur dioxide, the histogram indicates a satisfactory trend.

If the annual average value of atmospheric sulphur dioxide for 1964 is compared with the levels obtaining during the years 1958 – 1960 then there is a reduction amounting to slightly more than one fifth.

The general satisfactory trend in gradual reduction of local atmospheric sulphur dioxide is perhaps more evident from the part of the histograms showing the values for the warmer months (April to September), where the gradual fall in sulphur dioxide is clearly evident. The corresponding pattern on the histogram for the colder months (January to March and October to November) clearly reflects the winters in which more onerous conditions obtained. 1963 and more particularly 1959, both stand out as years when the sulphur dioxide rose to higher than usual levels.

The measurement of certain polynuclear hydrocarbons in smoke continued throughout the year.

A critical examination of the method employed since 1958 for the isolation and measurement of polynuclear hydrocarbons showed that modification of the analytical procedure employed was necessary. Commencing with the August smoke samples the revised analytical procedure was brought into operation. The improved technique results in more efficient recovery of hydrocarbons from the smoke samples. The tabulated data shows what appears to be a significant increase in the levels of pyrene and 3:4 benzpyrene from August to December when the results are compared with the comparable periods of the immediately preceding years. This is of interest particularly in that the earlier results have indicated rather less of the carcinogenic polynuclear hydrocarbon - 3:4 benzpyrene, than was in fact present. The earlier figures will be re-appraised when a full year's result using the revised procedure are available.

Miscellaneous Examinations:

A large variety of samples of miscellaneous character and origin are submitted to the laboratories during the course of a year. Many of these originated as complaint samples of food brought in by the general public via the public health inspectors. This miscellany of samples included the following:

MOULDY FOOD:

The following articles of food were all contaminated to varying degrees with mould growths:

Pre-packed cheese, pork luncheon meat, canned beans, pre-packed skinless sausages (£6 fine, £5 10s. costs), smoked cheese, brown bread, corned beef, ice lolly mixture, and very aged Christmas pudding (£5 fine, £2 2s. costs).

INSECTS, ETC. IN FOOD:

Bacon beetles (*Dermestes lardarius*) were found in milk powder and in cheese biscuits, a house-fly (*Musca domestica*) in canned strawberries, a common earwig (*Forficula auricularia*), was present in marmalade, and a similar specimen in fried fish. A dried fruit beetle (*Carpophilus hemipterus*) was present in canned pineapple, and a strange find indeed was a specimen of a carnivorous nocturnal insect related to the bed bug (*Reduvius personatus*) in canned peaches. An insect's leg was present in crust from a meat pie, and many insect eggs were present in fly-blown bacon (£50 fine, £7 6s. costs). A midge was present in a

sponge flan case, insect webbing, mites and mould growth were present in rice, and a beetle (*Tenebrio obscuris*) was found in canned peas. A smaller house fly (*Fannia canicularis*) was present in canned beans. Snails (*Helix rufescens*) were present in frozen peas, in blackcurrant jam and in a jam sandwich made with blackcurrant jam.

MISCELLANEOUS CONTAMINATION:

A number of bread samples contained "foreign" inclusions most of which contained oil and grease from bakehouse machinery. In one instance the grease was accompanied by dirty cotton fibres. One loaf contained fibrous material from sacks (£5 fine, £3 3s. costs), a fly (*Musca domestica*) had been baked in a loaf (£10 fine, £3 3s. costs), and another loaf from the same bakery had a wasp baked in it (£20, fine £5 5s. costs).

A wide variety of "foreign" matter was found in other articles of food. Charred wood was present in butter, fragments of dried fruit were present in an ordinary brown loaf, crushed bilberry stem tissue was present in bilberries and a piece of coke was present in a pork pie. A meat and potato pie contained string, small lumps of chalk were present in cherry cake and lima beans contained earthy siliceous matter. Corrosion products derived from the cannisters were present in Chinese orange juice and canned pears.

Orange drinks contained dirt and traces of mould growth showing inadequate cleansing of bottles (£10 fine, £3 3s. costs), and a milk bottle contained fragments of metallic iron and particles of iron oxide (£10 fine, £6 6s. costs). Boiled sweets contained fragments of wood and wire (£5 fine, £6 9s. costs), a metal stopper had been baked in a cake (£5 fine, £3 10s. 6d. costs), and a sharp splinter of wood had been baked in a meat and potato pie (£10 fine, £1 1s. costs.)

Complaint samples which were free from "foreign" matter but which were unsatisfactory for other reasons included meat and potato pasties which were excessively salty, potatoes which had suffered frost damage and a cheese pie which had been made with tough, virtually indigestible pastry. A regular recurring complaint was one of canned salmon, thought to contain glass. The salmon contained crystals of struvite which are harmless, naturally occurring crystals found in certain canned meat and fish foods. Mint balls (sugar confectionery), contained traces of burned sugar and the doubtful object in an éclair was a currant. A sample of cooked fish was stale and showed signs of incipient putrefaction, pork luncheon meat contained a large excess of seasoning, and conversely a canned casserole steak contained no seasoning and was almost tasteless. Another canned casserole steak contained an appreciable amount of blood vessels and connective tissue but was free from prohibited offal. A bacon sample had slightly discoloured fat, a breakfast cereal contained charred pieces of wholewheat and a can of carrots had discoloured contents.

A complaint sample of steak and kidney pie contained only 10% meat, a subsequent official sample taken under the Food and Drugs Act contained 30% meat. A birthday cake which had an unpleasant bitter taste was examined together with samples of almond paste and ground almonds. The bitter taste was due to the quality of the ground almonds used in the making of the cake. The ground almonds were not rancid but the high lipase activity of the particular sample had brought about chemical changes which resulted in abnormal bitter taste. The ground almonds were purchased from old stock.

By no means all of the complaint samples submitted to the laboratory were justified as such, although the majority necessitated careful investigation to elucidate alleged shortcomings. The following were found to be satisfactory: three samples of Channel Island Milk, cabbage, tea, evaporated milk, sausage, frozen strawberries, currant cake, lard, flour, scones, canned strawberries, corned beef, stewed steak, chocolate drops, homogenised milk, meat pasty, burgundy and Chinese tea leaves.

Variants on the more usual type of complaint were two cans of peas which when opened contained no peas at all. Each was filled with canning liquor only – a solution of sugar, salt and two artificial dyes. A similar fault derived from a milk cannery; a can of evaporated milk, when opened contained rusty water.

Additional Miscellaneous Examinations

A series of 326 samples of atmospheric grit dust were examined with reference to emissions from industrial premises; 14 samples were examined with reference to atmospheric conditions inside a boiler house, and 78 samples with reference to conditions inside and outside domestic premises. Four deposit gauge samples were examined. Water samples were examined with reference to the quality of private supplies, quality of lake water and for identification of seepages in sub-floor areas of dwellings. A sample of luminous paint was examined and a small number of detergent samples which had been the subject of complaint.

Absorbent pads and other materials were examined with reference to factory discharges of vapour containing traces of phenyl acetic acid.

56 samples of fuel (mostly smokeless fuels) were examined for quality.

A series of 10 samples of plastic toys were examined for lead content. In two instances significant traces of lead were present but in both cases the type of toy was such that it would be most unlikely if it was purchased for an infant or very young child. One toy of which all the component parts contained significant amounts of lead was a joke plastic flower with water squirting arrangements. The toys submitted which would have been appropriate for the age groups 1½ to 5 years were shown not to engender a possible lead poisoning hazard. In some parts of the country instances have been found where plastic toys which might have been chewed or sucked by infants have contained up to 2,600 parts per million (0.26 per cent) of lead.

Contract Samples

With reference to Local Authority contract purchases, a total of 70 manufacturers' samples were examined. These were evaluated on a price/quality basis. The samples comprised soap powder, liquid detergent, bactericidal detergent, disinfectant and liquid toilet soap.

Samples examined for other departments, other Local Authorities and private samples are listed below.

FOR THE EDUCATION DEPARTMENT

AND BOLTON SCHOOL:

TOWN CLERK'S DEPARTMENT:

BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT:

HIGHWAYS DEPARTMENT:

BOROUGH ARCHITECT'S DEPARTMENT:

ART GALLERY & MUSEUMS DEPARTMENT:

BOROUGH OF FARNWORTH:

HORWICH URBAN DISTRICT COUNCIL:

PRIVATE SOURCES:

43 Swimming Bath Waters.

1 Detergent.

5 Water Samples.

1 Sample of Tar.

5 Samples of material blocking
sewer.

2 Water samples.

1 Piece of porcelain.

13 Mineral waters.

4 Meat specimens.

2 Water samples.

7 Water samples.

1 Sludge.

2 Samples of tablets.

1 Sample of peeled potatoes.

1 Medicine for identification.

1 Sample of olive oil.

1 Sample of boiled ham.

Waterworks Committee:

The number of water samples examined in the Borough Laboratories for the Waterworks Committee during 1964 was 2,582. This was an increase of 860 samples compared with the number examined in 1963 (1722).

The increase represents the increased volume of work resulting from the first full year of samples from the extending Statutory Area of Supply of the Bolton Water Undertaking.

The samples examined included regular weekly bacteriological analyses of all sources of supply with supplementary check analyses for pH value, residual chlorine, colour, iron and aluminium etc. Analyses were carried out on raw, untreated waters to assess the performance of filtration plants and applied chemical treatment. Periodic samples from the same sources were subjected to full chemical analysis.

Throughout the year samples were regularly collected from consumers' premises for bacteriological tests and chemical tests.

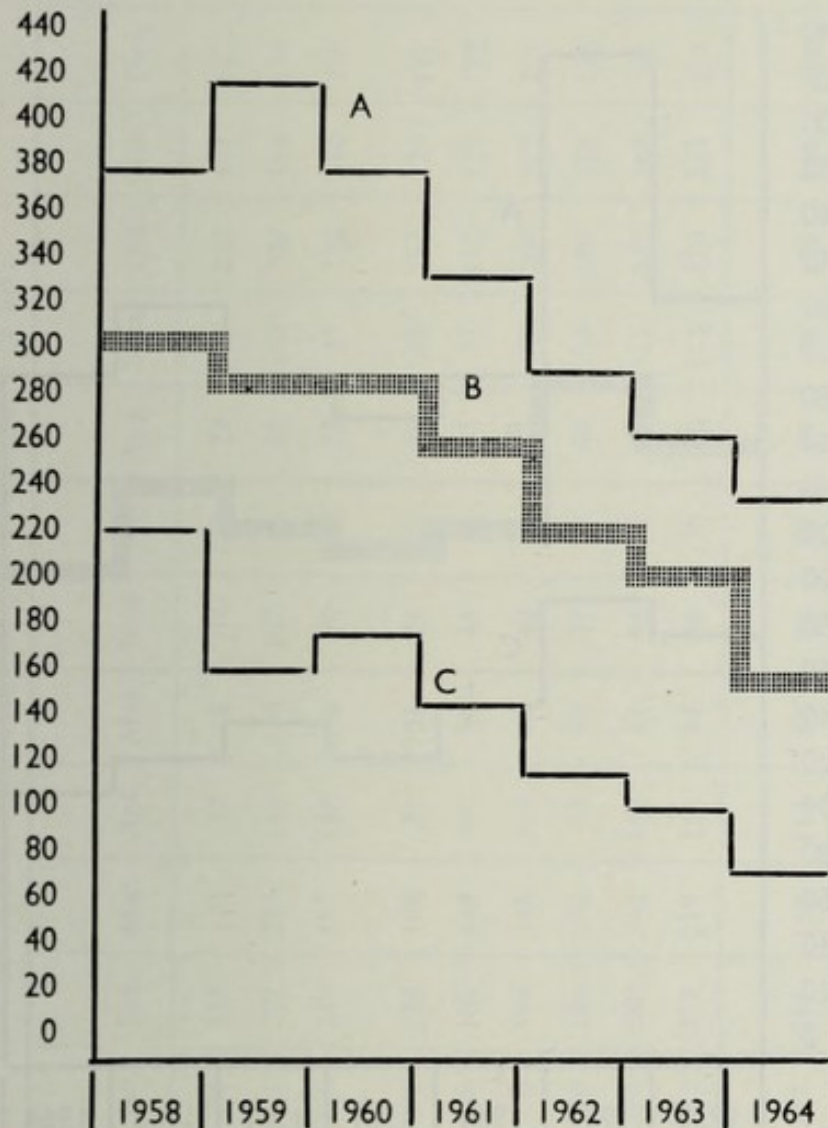
During 1964 a commencement was made on the routine monitoring of the local water supply by the regular examination of samples for total beta radio-activity.

Special investigations were conducted during the year to investigate methods of water treatment appropriate to the acid moorland water of the Clough Bottom Reservoir. This impounded water contains appreciable amounts of dissolved aluminium, iron and manganese and a new scheme of treatment was devised which provides for the simultaneous efficient removal of these metallic impurities in a single stage coagulation process. Details of the new process were published in "Chemistry and Industry" in December, 1964.

COUNTY BOROUGH OF BOLTON

ATMOSPHERIC SMOKE

Micrograms per cubic metre of air



A Jan. - Mar. and Oct. - Nov.

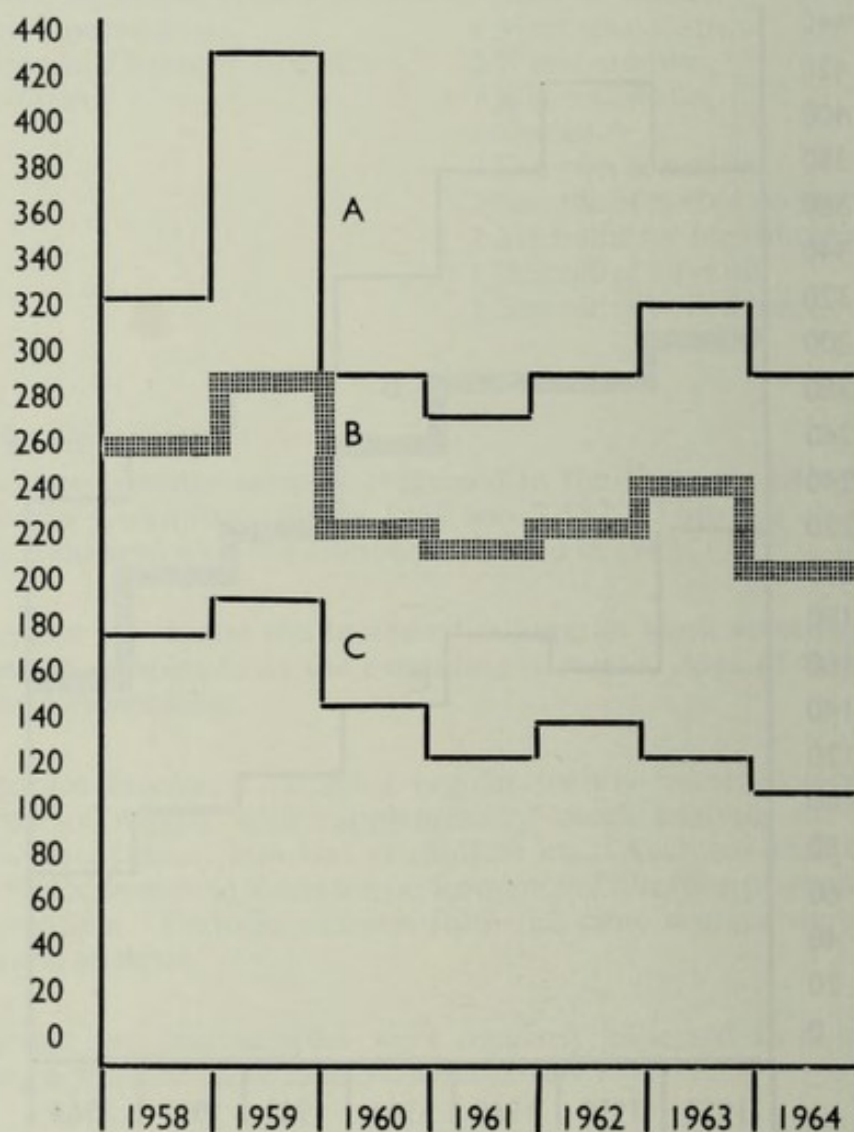
B Whole year

C April to September

COUNTY BOROUGH OF BOLTON

ATMOSPHERIC SULPHUR DIOXIDE

Micrograms per cubic metre of air



- A Jan. - Mar. and Oct. - Nov.
- B Whole year
- C April to September

TABLE C
Atmospheric Pollution
Smoke—Daily Averages
(Micrograms per cubic metre of air)

Site	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Daily average of each site for			
													1964	1963	1962	1961
1 Boot Lane	203	134	135	55	28	34	21	28	49	122	141	142	91	133	152	187
2 Astley Street	421	287	283	193	110	107	65	82	118	209	194	158	186	257	290	344
3 Tonge Moor	378	249	177	156	96	90	20	25	41	250	240	278	167	198	180	237
4 Lostock Open Air School	201	126	108	52	31	24	21	28	48	112	123	137	84	106	127	158
5 Central Police Office	269	162	148	87	50	48	33	43	71	161	171	182	119	155	183	206
6 Withins Clinic ..	310	194	148	115	66	62	48	57	89	204	213	207	143	167	185	241
7 Lock Lane	296	186	176	75	57	37	29	40	74	180	195	196	128	160	173	234
8 Grecian Mill	394	288	245	144	81	86	51	71	112	235	244	269	185	252	263	323
9 Darcy Lever	382	275	218	156	91	88	55	66	112	220	243	279	182	197	209	254
Daily average (each month) of all sites, 1964 ..	317	211	182	115	68	64	38	49	79	188	196	205	143			
" 1963 ..	359	291	216	159	91	59	72	75	127	165	236	316		181		
" 1962 ..	384	196	290	149	115	80	69	87	144	229	300	307			196	
" 1961 ..	448	316	277	236	149	97	77	88	154	247	327	498				243

TABLE D
Atmospheric Pollution
Sulphur Dioxide—Daily Averages
(Micrograms per cubic metre of air)

Site	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Daily average of each site for			
													1964	1963	1962	1961
1 Boot Lane	301	210	225	120	80	69	55	83	143	224	251	262	169	198	186	181
2 Astley Street	460	312	318	232	162	142	116	143	227	359	386	441	275	284	287	279
3 Tongue Moor	360	205	203	183	135	112	70	60	99	280	303	334	195	219	150	169
4 Lostock Open Air School	287	187	176	118	83	66	57	69	118	200	237	252	154	185	182	177
5 Central Police Office	382	302	259	222	148	117	104	123	200	350	378	434	252	268	271	279
6 Withins Clinic	349	202	184	168	126	107	113	122	178	283	278	311	202	227	206	204
7 Lock Lane	290	177	217	114	98	66	68	86	133	234	255	271	167	209	195	201
8 Grecian Mill	362	270	261	172	137	100	81	110	159	267	299	269	207	290	279	268
9 Darcy Lever	294	225	201	192	144	123	114	123	183	286	277	322	207	243	217	207
Daily average (each month) of all sites, 1964 ..	343	232	227	169	124	100	86	102	160	276	296	322	203			
" 1963	481	393	277	186	135	111	121	112	160	189	274	392		236		
" 1962	343	195	320	173	164	142	120	108	157	241	308	359			219	
" 1961	322	246	224	214	157	110	92	103	136	187	287	542				218

TABLE E

Atmospheric Pollution

3 : 4 Benzpyrene—Monthly Averages
 (Micrograms per 100 cubic metres of air)

Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average of each site for			
													1964	1963	1962	1961
2 Astley Street . . .	16.0	9.1	5.6	1.0	1.8	1.0	0	3.4	4.7	14.3	11.2	8.6	6.4	6.2	3.4	3.9
4 Lostock Open Air School . . .	8.6	2.3	2.1	1.1	0	0	0.5	1.1	2.2	4.9	6.5	7.8	3.1	2.1	2.0	1.9
5 Central Police Office	8.1	2.2	2.9	0	0	0	0	1.0	2.0	8.8	10.8	9.4	3.8	3.5	2.4	2.1
6 Withins Clinic . .	9.9	4.5	3.4	1.7	0	0.5	0	1.0	4.0	9.9	12.3	12.1	4.9	3.5	1.9	2.4
8 Grecian Mill . . .	14.6	8.7	4.4	2.1	0	0	0	1.9	4.4	12.0	14.9	17.4	6.7	5.7	3.0	3.8
Monthly average of all (5) sites 1964 . .	11.4	5.4	3.7	1.2	0.4	0.3	0.1	1.7	3.5	10.0	11.1	11.1	5.0			
" 1963 . .	10.8	8.2	4.4	2.7	2.0	0.8	0.3	0.7	0.7	2.5	7.4	9.8		4.2		
" 1962 . .	9.3	2.3	2.4	1.3	0.4	0.1	0.2	0.2	1.0	0.8	5.0	7.4			2.5	
" 1961 . .	7.2	4.0	2.9	2.4	1.1	0.3	0	0.1	0.1	0.4	3.9	11.4				2.8

TABLE F
Atmospheric Pollution

1 : 12 Benzperylene—Monthly Averages
(Micrograms per 100 cubic metres of air)

Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average of each site for		
													1964	1963	1962 1961
2 Astley Street	8.8	5.6	6.5	4.6	0.8	2.5	2.1	1.1	3.1	3.0	7.6	7.7	4.5	6.6	7.7 8.9
4 Lostock Open Air School	2.9	1.8	2.1	0.3	0.4	0.6	0	0	0.5	1.8	4.0	2.6	1.4	2.0	2.5 2.6
5 Central Police Office	7.5	5.6	2.9	3.8	1.4	1.0	0.8	0.5	0.9	2.2	4.6	8.4	3.3	2.0	4.7 4.6
6 Withins Clinic ..	10.6	6.9	4.0	2.4	1.7	1.5	0.2	1.0	0.8	3.8	6.9	9.0	4.1	3.9	3.1 5.3
8 Grecian Mill	11.6	5.4	7.6	1.7	0.8	1.8	1.3	0.8	0.8	4.3	9.2	10.4	4.6	5.0	6.2 5.7
Monthly average of all (5) sites 1964 ..	8.3	5.1	4.6	2.6	1.0	1.5	0.9	0.7	1.2	3.0	6.5	7.6	3.6		
„ 1963 ..	8.0	6.8	4.5	3.8	1.8	0.6	1.7	0.4	1.8	4.5	3.6	9.2		3.9	
„ 1962 ..	11.4	6.8	7.7	3.7	2.6	1.7	1.0	1.7	4.6	2.3	8.8	5.6			4.8
„ 1961 ..	9.0	7.4	7.2	4.7	2.8	1.1	1.3	0.9	2.7	5.7	9.0	13.1			5.4

TABLE G

Atmospheric Pollution

Pyrene—Monthly Averages

(Micrograms per 100 cubic metres of air)

Site	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average of each site for			
													1964	1963	1962	1961
2 Astley Street . . .	7.2	2.8	2.1	1.7	0.2	0.6	0.1	0.9	1.1	3.6	4.6	5.0	2.5	3.2	2.6	2.7
4 Lostock Open Air School . .	2.3	0.5	1.4	0.6	0.1	0.2	0.2	0.6	1.2	1.5	2.3	3.1	1.2	1.3	1.6	1.2
5 Central Police Office	2.2	1.3	1.4	0.3	0.3	0.1	0.2	0.6	0.7	2.2	3.1	4.3	1.4	1.6	1.6	1.5
6 Withins Clinic . .	6.0	1.7	1.1	0.4	0.1	0.1	0	0.6	0.9	3.1	5.5	6.0	2.1	1.8	1.6	1.8
8 Grecian Mill . . .	10.4	4.8	1.6	0.7	0.3	0.1	0.6	0.8	0.8	5.0	8.6	9.8	3.6	3.2	2.5	2.3
Monthly average of all (5) sites 1964 . .	5.6	2.2	1.5	0.7	0.2	0.2	0.2	0.7	0.9	3.1	4.8	5.6	2.2			
" 1963 . .	8.6	4.0	1.9	1.1	0.4	0.3	0.2	0.2	0.2	1.0	3.0	5.8		2.2		
" 1962 . .	8.3	2.5	2.5	1.0	0.3	0.1	0.1	0.1	0.1	0.6	4.2	4.2			2.0	
" 1961 . .	5.8	2.3	2.1	0.4	0.4	0.1	0.1	0.06	0.15	0.5	2.2	8.6				1.9

TABLE H

Atmospheric Pollution

3 : 4 Benzpyrene—Monthly Averages

(Concentration expressed as parts per million of the smoke)

Site	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average of each site for		
													1964	1963	1962 1961
2 Astley Street . . .	379	317	199	50	165	94	0	411	305	686	574	542	318	183	96 78
4 Lostock Open Air School . . .	427	179	196	210	0	0	256	373	461	441	523	567	303	167	94 85
5 Central Police Office	303	137	195	0	0	0	0	240	273	546	631	513	237	196	91 60
6 Withins Clinic . .	319	229	231	150	0	78	0	171	455	485	579	583	273	175	77 73
8 Grecian Mill . . .	370	301	177	144	0	0	0	264	397	511	610	644	285	185	79 90
Monthly average of all (5) sites 1964 . .	360	233	200	111	33	34	51	292	396	534	583	570	283		
" 1963 . .	261	267	189	160	219	156	53	68	54	147	312	290		181	
" 1962 . .	208	107	80	78	34	8	18	17	65	39	154	238			87
" 1961 . .	155	116	91	100	66	22	0	20	6	18	110	221			77

TABLE I

Atmospheric Pollution

1 : 12 Benzperylene—Monthly Averages

(Concentration expressed as parts per million of the smoke)

Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average of each site for			
													1964	1963	1962	1961
2 Astley Street	210	195	231	238	70	234	330	139	263	142	391	487	244	251	269	228
4 Lostock Open Air School	142	145	196	51	128	246	0	0	112	163	323	192	142	157	165	151
5 Central Police Office	279	342	195	434	274	205	253	105	117	133	271	461	256	102	198	195
6 Withins Clinic ..	343	357	273	205	257	238	39	171	90	186	322	434	243	208	178	192
8 Grecian Mill	294	186	309	116	93	211	248	113	73	182	378	387	216	180	232	166
Monthly average of all (5) sites 1964 ..	254	245	241	209	164	227	174	106	131	161	337	392	220			
„ 1963 ..	215	202	195	244	162	78	186	61	137	276	131	268		180		
„ 1962 ..	277	312	261	199	188	180	113	177	286	89	271	152			209	
„ 1961 ..	187	215	250	186	156	109	151	88	173	206	270	249				187

TABLE J

Atmospheric Pollution

Pyrene—Monthly Averages

(Concentration expressed as parts per million of the smoke)

Site	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average of each site for			
													1964	1963	1962	1961
2 Astley Street . . .	171	96	74	89	20	53	21	110	92	174	237	315	121	90	67	55
4 Lostock Open Air School . . .	116	43	133	119	45	85	83	199	257	137	183	229	136	106	88	57
5 Central Police Office	83	77	98	31	64	28	52	136	101	133	183	238	102	68	62	43
6 Withins Clinic . .	193	85	77	31	20	15	0	96	106	153	260	290	111	75	62	57
8 Grecian Mill . . .	263	167	66	47	40	14	107	115	71	213	353	364	152	93	64	47
Monthly average of all (5) sites 1964 . .	165	94	90	63	38	39	53	131	125	162	243	287	124			
" 1963 . .	215	132	84	66	44	55	41	37	22	56	119	165		86		
" 1962 . .	196	119	91	60	22	13	21	13	10	21	130	128			69	
" 1961 . .	125	76	71	18	24	9	35	7	12	19	66	158				52

PART V

ADDITIONAL INFORMATION

Medical Examination of Corporation Employees

**National Assistance Act, 1948 - Section 47
Persons in need of Care and Attention**

The Incidence of Blindness, Epilepsy and Cerebral Palsy

Work done on behalf of the Children's Committee

Co-ordinating Committee - Problem Families

Nursing Homes

Cremation

Rehousing on General Medical Grounds

Baths and Wash-houses

Meteorological Summary

MEDICAL EXAMINATION OF CORPORATION EMPLOYEES

During the year 1,755 examinations were carried out involving 1,739 persons. A summary of these is shown in the following table.

Examination for—	No. of persons examined		No. of persons found unfit	
	Males	Females	Males	Females
Entry into Superannuation Scheme	421	200	11	1
Entry into Sickness Payment Scheme	98	356	4	18
Other medicals, e.g., Fitness to resume employment, etc	24	8	—	—
Retirement on medical grounds	16	—	—	—
Independent medical opinion	36	5	—	—
Fitness to be employed as a teacher	71	74	—	—
Fitness for admission to a Training College	46	104	—	—
Fitness to teach after leaving the Bolton Training College	222	42	—	—
Medical examinations carried out at the request of other Local Authorities	12	4	—	—
TOTALS	946	793	15	19

Of the above, there were twenty incomplete examinations, i.e. where it was found that a decision had to be deferred and the persons concerned were requested to attend for a further medical examination. Twelve persons resigned before a further examination was carried out.

Three hundred and eighty-nine persons were sent to mass radiography units and five to the Bolton Royal Infirmary for chest X-ray when a mass radiography unit was not available. All persons leaving Bolton Training College were sent to the mass radiography unit, and this accounts for two hundred and sixty-four referrals. One hundred and two persons were sent because their employment involved work with children — thirteen who were appointed to posts on the nursing staff and the remainder at the request of the examining medical officer. All students examined in connection with their fitness for admission to training colleges were advised to attend for a chest X-ray and information regarding available mass radiography units was supplied. X-rays were arranged at the request of the London County Council and the City of Birmingham.

Seven persons were referred to consultants for a further opinion.

Two hundred and six actual and potential public service vehicle drivers were examined during the year.

Seven drivers attended for medical examination regarding fitness to resume driving after a period of sick leave. Three were considered to be unfit.

An analysis of the conditions which caused persons examined for entry into the Superannuation and Sickness Payment Schemes to be found unfit is shown in the following table:

	Superannuation Scheme		Sickness Payment Scheme	
	Males	Females	Males	Females
Cardiovascular disease (including hypertension)	7	—	2	6
Respiratory System	1	—	—	2
Nervous System	—	—	—	1
Varicose Veins	—	—	—	5
Other conditions	3	1	2	4
TOTALS	11	1	4	18

Comparisons of the totals for the previous year show that there has been an increase in the numbers of candidates failed for the Superannuation and Sickness Payment schemes, the largest increase being due to cardiac and vascular disease.

A study of the ages of candidates failing the medical examination shows the greatest proportion in the 40 to 50 age group.

It is interesting that several candidates who did not pass for the scheme were unaware that they were suffering severe ill health.

NATIONAL ASSISTANCE ACT, 1948 - SECTION 47

PERSONS IN NEED OF CARE AND ATTENTION

Powers exist under Section 47 of the National Assistance Act, 1948 (as amended) for the compulsory removal of persons in need of care and attention to a hospital or to accommodation provided under Part III of the National Assistance Act. Such action is only taken as a last resort when a person is in an advanced state of neglect, or suffering from grave chronic disease and in great need of institutional care, but is unwilling to go voluntarily.

It was not necessary to use these powers during 1964.

Elderly people who are unwilling to leave their homes, and whose home conditions are unsatisfactory, are kept under close supervision by officers of the department. It is usually possible, in time, to take appropriate action without using compulsory powers.

THE INCIDENCE OF BLINDNESS, EPILEPSY AND CEREBRAL PALSY

Blindness

The Register of Blind Persons contained the names of 196 men and 250 women at the end of the year.

Thirty-one men and seventy-seven women were registered as partially sighted.

The ophthalmic surgeons completed a total of nine Forms B.D.8 during the year (3 males ; 6 females).

Epilepsy

The Chief Welfare Officer states that the Register of Handicapped Persons contained the names of twelve males and thirteen females suffering from epilepsy. Of these, seven men and four women were in colonies for the epileptic, one man and four women were in hostels and four men and five women were in their own homes.

The Local Education Authority knew of sixty-three boys and thirty-five girls attending ordinary schools who were epileptic, and maintained two girls and two boys in special schools for epileptic pupils. In addition, eight boys and three girls were attending other special schools.

Cerebral Palsy

Twelve males and eleven females suffering from cerebral palsy were on the Register of Handicapped Persons maintained by the Chief Welfare Officer.

The Local Authority were aware of thirty-eight children with this handicap. Eleven of these children were attending Birtenshaw Hall Special School and four were awaiting admission to Birtenshaw Hall. Two children were attending other special schools, fifteen were attending ordinary schools and six were pre-school children.

Of the sub-normal and severely sub-normal persons known to the authority, eleven males and seventeen females were suffering from cerebral palsy in addition to the mental handicap.

Facilities available for Handicapped Persons:

The welfare of handicapped persons over school age is the responsibility of the Welfare Department, and from the age of two years up to school leaving age it is the responsibility of the Education Authority.

The facilities provided by the Welfare Department remained substantially the same as in 1963, but more handicapped persons attended the Social Centre.

WORK DONE ON BEHALF OF THE CHILDREN'S COMMITTEE

Routine medical supervision of children in care of the Local Authority has been carried out by a medical officer of the Health Department throughout the year and all the children have been examined at intervals as laid down by the Home Office Boarding-out Regulations. These examinations were carried out at the larger group homes, Braxmere and Crompton House, and the family group homes.

A monthly visit has been made by the medical officer to the Elizabeth Ashmore Nursery to examine the children and carry out routine immunisations and vaccinations.

All children for admission to or discharge from a home or nursery have been examined and certified free from infection.

A special quarterly report to the Children's Committee was issued by the Medical Officer of Health and a medical officer attended the meeting to answer any queries raised.

Medical Examinations:

No. of examinations on admission to Homes	...	...	238
No. of examinations on discharge from Homes	...	...	185
No. of examinations for boarding out purposes	...	...	30
No. of routine examinations: 0 - 1 year	...	...	62
1 - 5 years	...	...	131
over 5 years	...	...	179
TOTAL	...	...	825

Nutritional Status:

The nutritional status of all children examined at routine medical examinations was satisfactory.

Classification of Defects needing Treatment found at Routine Medical Examinations:

No. of defects of Eyes	...	...	...	...	...	30
" " " " Chest	...	...	...	...	...	1
" " " " Teeth	...	...	...	...	...	17
" " " " Abdomen	...	...	...	...	...	1
" " " " Ear, Nose and Throat	...	...	...	...	...	13
" " " " Nervous System	...	...	...	...	...	4
" " " " Skin	...	...	...	...	...	14
" " Medical defects	...	...	...	...	...	4
" " Psychological defects	...	...	...	...	...	10
" " Orthopaedic defects	...	...	...	...	...	6
Incidence of Speech defects	...	...	...	...	...	5
" " Anaemia	...	...	...	...	...	1
" " Enuresis	...	...	...	...	...	11
TOTAL NUMBER OF DEFECTS ASCERTAINED:	...	...	...	...	...	117

No. of children referred for specialist opinion	...	4
No. of children referred to general practitioner	...	1

CO-ORDINATING COMMITTEE - PROBLEM FAMILIES

Quarterly meetings of this Committee have continued to be held under the chairmanship of the Medical Officer of Health. They are attended by senior officers of each of the departments of the Corporation concerned with the health and welfare of children in their own homes, by the Area Officers of the National Assistance Board, and by representatives of voluntary organisations in the town who are concerned with this problem. These quarterly meetings consider the co-ordination of the services and review the work of the monthly Case Conference.

I am grateful to Mr. P. E. Varey, Children's Officer, for supplying the following information:

The Case Conferences are held under the chairmanship of the Children's Officer and are attended by officers of Corporation departments, statutory bodies and voluntary organisations most intimately connected with the neglect of children in the town. Wherever it is thought necessary, discussion takes place aimed at safeguarding the interests of the children and individual members are asked to make their own contribution to the needs of the case.

During the year the Co-ordinating Committee considered a total of 77 families involving 339 children of which 26 families involving 116 children were newly reported cases.

Of the total of 77 families:

11 families (47 children) were considered to have improved or their needs met to such an extent as to justify their deletion from the register.

4 families (16 children) were deleted from the register, the children having been received into the care of the Local Authority and there being no likelihood of early rehabilitation.

3 families (6 children) left the town.

59 families remained on the register; of these 22 families (106 children) were under active consideration and of these at least 7 families (35 children) were showing encouraging progress. The remaining 37 families (164 children) were still under the supervision of a caseworker: in the main these families' problems are of a chronic nature and guidance and assistance are likely to be required over a long period.

In the case of 12 families included in the above figures, where there were serious rent arrears, the National Assistance Board, following on discussions in the Co-ordinating Committee, made arrangements for the payment of rent to the Corporation thus avoiding the possibility of eviction. In the majority of these cases the assistance of the Women's Voluntary Service in acting as agents was given.

NURSING HOMES

The three nursing homes in the borough, which are registered under Section 187 of the Public Health Act, 1936, continued satisfactorily. One home has 34 beds, one 27 beds, and the third 11 beds.

All the homes were visited by officers of the Health Department during the year.

CREMATION

The "Overdale" Crematorium has now completed ten full years of operation. The details are as follows :

Year	Number of Bolton Residents cremated	Cremations of persons from other areas	Total Cremations	Approx. percentage of deceased Bolton Residents who were cremated
1955	659	774	1,433	28%
1956	745	1,041	1,786	34%
1957	807	1,028	1,835	36%
1958	861	1,071	1,932	40%
1959	938	1,223	2,161	44%
1960	948	1,324	2,272	46%
1961	1,074	1,501	2,575	47%
1962	1,174	1,575	2,748	53%
1963	1,139	1,657	2,796	51%
1964	1,150	1,673	2,823	55%

REHOUSING ON GENERAL MEDICAL GROUNDS

The Housing Committee agreed to allocate fifty houses for persons recommended for rehousing on medical grounds.

The total number of applications received during the year was 377.

Fifty recommendations for rehousing were made, the reasons being :

Tuberculosis	...	...	...	...	...	...	...	5
Respiratory diseases	...	...	...	...	...	...	...	8
Heart and circulatory diseases	...	...	...	...	...	...	...	19
Arthritis	...	...	...	...	...	...	...	6
Diseases of the nervous system	...	...	...	...	...	...	...	6
Abdominal diseases	...	...	...	...	...	...	...	3
Blind person	...	...	...	...	...	...	...	1
Miscellaneous	...	...	...	...	...	...	...	5

In some cases the medical condition of more than one member of the household was taken into consideration.

Rehousing in ground floor accommodation was recommended in 31 cases.

Ninety-eight applicants already living in Corporation property were recommended for transfer to more suitable accommodation. In 71 of these cases the recommendation was for transfer to ground floor accommodation.

In 26 cases the applicants were living in accommodation in clearance areas and they will be rehoused when the property is dealt with under the slum clearance scheme.

In eight cases the houses were dealt with as individual unfit houses and the applicants rehoused.

Action was taken in some cases through the Chief Public Health Inspector's Department to have repairs carried out.

In twenty cases where there was no medical reason for recommending rehousing the circumstances were reported to the Housing Manager for consideration of the application on social grounds.

Thirty-three persons were rehoused on medical grounds in 1964.

BATHS AND WASH-HOUSES

There was no change in the pattern of administration of the Baths Service. The various establishments offered the following facilities:

BATHS:

High Street	1 Plunge 9 Slipper Baths
Bridgeman Street	2 Plunges 25 Slipper baths
Moss Street	2 Plunges 18 Slipper Baths
Hennon Street	23 Slipper Baths 1 Shower Bath
Rothwell Street	15 Slipper Baths
Great Moor Street	Turkish Baths

WASH-HOUSES:

Moss Street	8 Electric rotary washing machines 6 Hand-washing stalls 1 Coin-slot ironing machine
Rothwell Street	12 Electric rotary washing machines 18 Hand-washing stalls 1 Coin-slot ironing machine

Below are attendances during the past three years. Under 'Washhouses' (H) denotes hand stalls, (M) machines, and (T) total

Establishment	Swimming Baths			Slipper Baths			Wash-houses		
	1962	1963	1964	1962	1963	1964	1962	1963	1964
High St. Baths	40,371	63,937	67,655	15,884	16,745	17,800			
Bridgeman St. Baths. ..	116,591	129,043	147,482	45,185	45,958	47,304			
Moss St. Baths and Wash-houses ..	120,697	114,068	123,751	41,564	41,487	40,153	(M) 15,375 (H) 5,300 (T) 20,675	(M) 18,430 (H) 5,399 (T) 23,829	(M) 17,490 (H) 4,250 (T) 21,740
Hennon St. Baths ..				20,877	19,579	19,249	(M) 23,955 (H) 11,361 (T) 35,316	(M) 21,837 (H) 7,810 (T) 29,647	(M) 20,761 (H) 6,762 (T) 27,523
Rothwell St. Wash-houses				17,324	15,035	14,416	(M) 39,330 (H) 16,661 (T) 55,991	(M) 40,267 (H) 13,209 (T) 53,476	(M) 38,251 (H) 11,012 (T) 49,263
TOTALS ..	277,659	307,048	338,888	140,834	138,804	138,922			

TURKISH BATHS:

YEAR	ATTENDANCES
1956	6,991
1957	7,693
1958	7,711
1959	7,498
1960	8,494
1961	11,205
1962	12,389
1963	12,248
1964	11,984

Attendances:

The attendances at the swimming baths were the highest ever recorded since the figures first appeared in the Annual Report in 1949, in fact, the attendances were fifty per cent higher than they were in that year.

Attendances of schoolchildren in organized parties for swimming instruction were:

	BOLTON EDUCATION AUTHORITY	LANCASHIRE COUNTY COUNCIL
1962	45,042	4,791
1963	54,829	8,471
1964	58,276	8,122

In accordance with their policy of encouraging young children to learn to swim the Health Committee award each year 150 passes, which entitle the holders to a year's free swimming, to schoolchildren who pass the tests of the Bolton Scholarship Scheme for the Encouragement of Swimming. In addition citizens of Bolton who pass the examination for the bronze medallion of the Royal Life Saving Society are also awarded passes which entitle the holders to a year's free swimming. The number of passes awarded was 173 compared with 243 in 1963 and 207 in 1962.

Seventeen swimming clubs took advantage of the facilities for swimming after public hours. In addition to the Bolton Swimming Club and the Bolton Bridgeman Swimming Club, the baths were used by clubs from local industries, youth organisations, a club which specialises in under-water swimming, and two which give swimming instruction to adults.

Because of slum clearance and re-housing it would seem reasonable to expect a decrease in the number of attendances at the slipper baths. In fact, only once in the period from 1949 have attendances been higher than they were in 1964. Many of those who attend are students from Commonwealth countries who have taken advantage of the bathing facilities since coming to reside temporarily in Bolton. The attendances at Bridgeman Street Baths, which are situated close to the Technical College, were again a record.

Although there was again a slight decrease in attendances at the Turkish Baths, the higher attendances, compared with the years prior to 1961, have been maintained. The higher attendances in recent years are attributed to increased dressing accommodation, continuous service throughout the day, improvement in colour scheme decorations and efficient service.

There was a further decrease in attendances at the wash-houses. The decrease is inevitable as the slum clearance programme continues and families are moved to estates at some distance from the wash-houses. A recent survey has shown that the majority of women who attend live within a quarter of a mile of the wash-house. Some travel by public transport but find their washing difficult to carry. The general opinion seemed to be that, because of the excellent facilities, a complete family wash, i.e. washing, ironing and drying can be completed in two hours, much more quickly than at home where drying facilities are generally inadequate. Some people living in bed-sitting rooms have no facilities at all. There is still a need for the two public wash-houses in Bolton but, if attendances continue to dwindle, consideration will have to be given to closing one of them and a close watch is being kept on the attendance figures.

Repairs and Maintenance:

No major works were carried out at the baths during the year but the usual programme of painting and decorating continued.

At Rothwell Street Wash-house two new end loading washing machines and two new hydro-extractors fitted with safety locking and time limit devices were installed to replace worn out equipment. By the end of 1965 all the equipment at Rothwell Street and Moss Street Wash-houses will be of an up-to-date type.

Staff:

The staff employed at the baths, and particularly the attendants, have been encouraged to qualify for life saving awards. During the year three members of the staff qualified for the Bronze Medallion and there is now a total of eighteen employees who have life saving qualifications.

Plunge Water:

The plunge water in all the public baths is supplied from the town's water mains. The holding capacity of all plunges totals 243,072 gallons and details are shown below:

	LARGE PLUNGE		HOLDING CAPACITY (GALLONS)	SMALL PLUNGE		HOLDING CAPACITY (GALLONS)
Bridgeman Street	75'	× 25'	46,875	46'	× 19'	22,444
High Street	75'	× 26'	61,936			
Moss Street	75'	× 30'	75,337	60'	× 21'	36,480

The treatment of the water in each establishment is by the process of continuous filtration with a four-hour turnover, combined with controlled chlorination, sulphate of alumina, and sodium carbonate. Daily tests of the water are made to ensure that the chlorine content of 0.5 to 1.0 parts per million and pH value of 7.0 to 7.5 is maintained.

Visits to the baths at least once a month, at unspecified times, are made by the staff of the Borough Analyst for the purpose of taking samples of the water for chemical and bacteriological analysis. The water in each of the plunges is examined for pH value, free and total residual chlorine content; also from a bacteriological aspect, the examination includes the number of organisms present in the water and tests for the presence and types of coliform organisms.

The results have shown that all the waters are consistently of the same standard of purity as the town's water from which the baths are supplied.

New Public Baths:

The Council have agreed, when considering proposals for the re-development of the town centre, to reserve land for a new public baths.

METEOROLOGICAL SUMMARY, 1964

Compiled at Hall i'th'Wood Observatory by Vincent C. Smith, Esq., Director and Meteorologist

1964	Humid- ity %	Avge of Max. & Min. Temp. °F	Absolute Extremes of Temperature				Sunshine			Monthly Rainfall Inches	Wet Days	Fog Days	Wind		
			Highest °F	Date	Lowest °F	Date	Monthly Total Hours	Most in one day Hours	Date				Mthly Mileage	Highest Gust in one day m.p.h.	Date
January	86	38	50	31	23	18	40.0	5.9	6	2.44	16	8	3862	Out of	Order
February	83	39	55	27	22	21	57.8	7.5	5	1.62	13	1	4568	do.	
March	81	38	53	20	29	8	44.3	9.7	26	3.72	15	2	4305	do.	
April	81	47	67	27	32	2,3,5,6	68.4	5.3	26	3.39	19	-	5301	do.	
May	72	56	74	17, 27	42	6	176.4	12.9	19, 26	3.95	15	-	5435	do.	
June	73	54	74	26	35	20	120.5	11.3	26	2.56	18	-	4411	do.	
July	80	57	74	17	43	11	142.9	13.5	13	6.98	16	-	4864	do.	
August	80	58	76	25	38	20	173.1	12.6	26	3.37	12	-	4029	do.	
September	82	55	72	4	34	21	141.4	11.7	1	2.30	14	3	4351	do.	
October	83	47	63	1, 4, 20	30	24	98.3	8.6	3	3.93	13	10	3032	do.	
November	86	44	66	23	22	10	50.7	6.7	7	3.62	15	4	4011	do.	
December	87	35	54	12	19	28	36.0	6.6	4	6.65	20	3	4009	do.	
TOTALS							1149.8			44.53	186	31	52178		
Monthly Averages	79	47					95.8			3.71			4348		

Rainfall: Average 1887 to 1964: 44.305 inches
Sunshine: Average 1887 to 1964: 1097.0 hours

COUNTY BOROUGH OF BOLTON
EDUCATION COMMITTEE



ANNUAL REPORT

OF THE

Principal School
Medical Officer

FOR THE YEAR 1964

A. I. ROSS, M.D., D.P.H.

Principal School Medical Officer

SCHOOLS SUB-COMMITTEE

Municipal Year 1964-1965

HIS WORSHIP THE MAYOR

(Alderman H. Wood, J.P.)

COUNCILLOR G. HASLAM (Chairman)

ALDERMAN C. H. LUCAS (Vice-Chairman)

ALDERMAN W. H. BATESON

ALDERMAN MRS. N. VICKERS

COUNCILLOR A. D. HAMER

COUNCILLOR R. L. HOWARTH, M.P.

COUNCILLOR MRS. E. M. RYLEY

COUNCILLOR MRS. A. M. SHERRY

COUNCILLOR S. HARRISON

REV. R. BROWN (Co-opted Member)

REV. N. W. FORD " "

REV. M. GORDON, B.Sc. " "

MR. G. L. HUMPHREY " "

MR. T. WILLIAMS " "

Health Department,
Civic Centre,
Bolton.

August, 1965

*To the Chairman and Members of the Schools Sub-Committee
of the Bolton Education Committee*

The physical health and general condition of the school children in Bolton remained good during 1964 and there were no outbreaks of infectious disease. There were two cases of paralytic poliomyelitis, and more cases of scabies occurred than in the last two years. A determined effort is being made to deal with this problem by visiting family contacts and persuading them to have treatment which is very effective.

During the first part of the year we were without the services of a consultant child psychiatrist. Unfortunately, Dr. Dunn, who commenced duty in the area in April, was able to devote only one and a half sessions a week to Bolton and the waiting list which had accumulated during the early part of the year increased. This was most unsatisfactory. It is to be hoped that the Manchester Regional Hospital Board who provides the psychiatrist for Bolton, will soon be able to increase the number of sessions that can be provided to the town. A child psychiatrist needs hospital beds to which some of the children he is dealing with can be admitted. Unfortunately, the Regional Board's plans to provide beds for this purpose fall very short of the Ministry of Health recommendations. With the increased awareness of psychiatric problems in children, an adequate child psychiatric service is essential.

Unfortunately, we remain short of dentists and at the end of the year the Authority employed the full-time equivalent of four dental officers against an establishment of eight. Due to the amount of money allocated for the purpose, only slow progress has been made in modernizing equipment and this may well have had an effect on recruiting new officers. It is most disappointing that the structural defects of Charles Street Clinic prevented a third surgery being adapted there. From the point of view of the dental health of future school children in the town, it is sad that the Authority has not yet been able to introduce fluoridation of the town's water supply. Consideration of this has had to await the outcome of the Watford legal case. It is hoped when this has been resolved that the Health Committee will be able to recommend to the Town Council that the Water Committee should add fluoride to the town's water supply.

A fairly full account is given of the health education undertaken in the schools. Although the school medical department helps in this work to an increasing extent, it would seem that more could be done.

My thanks are due to the Schools Sub-Committee for their continued interest and enthusiasm for the work of the school medical department and to the Chief Education Officer for his continued co-operation.



Principal School Medical Officer.

STAFF OF THE SCHOOL HEALTH SERVICE

Principal School Medical Officer . . .	Dr. A. I. Ross	
Deputy Principal School Medical Officer	Dr. I. S. Macdonald	(Resigned 23.9.64)
Senior Assistant Medical Officer . .	Dr. S. Caruana	(Commenced 15.6.64)
School Medical Officers	Dr. Eve M. Mawdsley	
	Dr. Audrey Seddon	(Part-time)
	Dr. Mavis J. Allanson	(Part-time)
	Dr. Sylvia J. A. Raymond	(Resigned 31.7.64)
	Dr. James T. Carroll	(Resigned 30.6.64)
	Dr. C. O. Lois Holt	(Resigned 1.3.64)
	Dr. Dorothy M. Paterson	(Commenced 6.7.64)
	Dr. L. M. Mayer-Jones	(Commenced 4.8.64)

School Medical Officers worked part-time in both the Maternity and Child Welfare and School Health Services, and were appointed as Assistant Medical Officers of Health and School Medical Officers.

Ophthalmic Surgeons	Dr. T. Chadderton	(Part-time)
	Dr. T. Shannon	(Part-time)
Ear, Nose and Throat Surgeon	Mr. G. G. Mowat	(Part-time)
Principal School Dental Officer	Mr. A. E. Shaw	
School Dental Officers	Mr. S. J. Bray	
	Mr. M. R. Annis	(Part-time)
	Mr. I. G. Black	(Part-time)
	Miss Glenys Haworth	
	Mr. W. J. Abbott	
	Mrs. Mary R. McKenna	(Part-time)
	Mr. S. M. Aalen	(Part-time)
	Mr. J. P. H. Donovan	(Resigned 9.8.64)
Dental Anaesthetist	Dr. Elizabeth Mitchell	(Part-time)
	Mr. T. H. Wignall	(Part-time)
Psychiatrist	Dr. J. F. Dunn	(Commenced 1.4.64)
Educational Psychologist	Mrs. M. A. Spencer	
Clinical Psychologist	Mrs. P. Bunn	(Part-time)
Speech Therapists	Mrs. B. P. Pannell	
	Miss H. E. Philips	(Commenced 22.9.64)
Chiropodist	Miss Anne C. Drury	(Part-time)
Superintendent Nursing Officer . . .	Miss E. M. Richardson	
Deputy Superintendent Health Visitor and School Nurse	Miss A. M. Fraser	

NURSING STAFF

On the 31st December there were 10 full-time School Nurses, and 29 Health Visitors working part-time on School Health and part-time on Maternity and Child Welfare work—the equivalent of 12·36 full-time School Nurses.

The Superintendent Nursing Officer supervised the work of the staff and was assisted by the Deputy Superintendent Health Visitor and School Nurse.

DENTAL SURGERY ASSISTANTS

There were 8 dental surgery assistants employed on the 31st December.

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GENERAL INFORMATION

No. of pupils on registers of maintained schools 25,631

Children attending:

Nursery Schools	...	...	...	...	179
Primary Schools	...	...	...	...	14,923
Secondary Modern Schools	...	...	...	...	5,403
Secondary Technical Schools	...	...	...	...	1,449
Secondary Grammar Schools	...	...	...	...	1,845
Special Schools	...	...	...	...	378
Direct Grant Schools	...	...	...	...	1,419
Non-maintained and Independent Schools	...	...	...	...	35
(under arrangements made by Local Authority)					

The number of children attending primary schools included 910 children at 31 nursery classes held in 26 of the primary schools.

No. of schools maintained by the Authority... .. 90

Nursery Schools	...	...	...	...	2
Primary Schools	...	...	...	...	62
Secondary Schools	...	...	...	...	22
Special Schools	...	...	...	...	4

ARRANGEMENTS FOR TREATMENT AND SPECIAL EXAMINATIONS

Minor Ailments:

Consultation and Treatment Sessions—Doctor in Attendance

SCHOOL CLINIC	DAY AND TIME OF COMMENCEMENT	NO. OF SESSIONS WEEKLY
Robert Galloway Clinic, Ward Street	Tuesday and Thursday, 9.30 a.m.	2
	Wednesday and Friday, 2.0 p.m. (From May, 1964)	2
Charles Street Clinic, off Folds Road	Wednesday and Friday, 2.0 p.m. (Until May, 1964)	2
The Withins School Clinic, Withins Lane, Breightmet	Wednesday, 9.30 a.m.	1
Astley Bridge School Clinic, Moss Bank Way	Tuesday, 9.30 a.m.	1

Minor Ailment Treatment Sessions—Nurse only in Attendance

SCHOOL CLINIC	DAY AND TIME OF COMMENCEMENT	NO. OF SESSIONS WEEKLY
Robert Galloway Clinic, Ward Street	Monday to Friday, 9.30 a.m.	5
Charles Street Clinic, off Folds Road	Monday to Friday, 2.0 p.m. (Until May, 1964)	5
The Withins School Clinic, Withins Lane, Breightmet	Monday, Wednesday and Friday, 9.30 a.m.	3
Astley Bridge School Clinic, Moss Bank Way	Tuesday and Thursday, 9.30 a.m.	2

Treatment Centres with only a school nurse in attendance were conducted at the following schools:—

Brownlow Fold	...	...	...	Thursday morning
Gaskell Street	...	...	...	Wednesday afternoon
Whitecroft	...	...	...	Wednesday morning
Hayward	...	...	...	Monday, Wednesday and Friday morning

Dental Surgeries:

Six dental surgeries were in operation as follows:—

ROBERT GALLOWAY CLINIC	...	...	...	...	2 Surgeries
Monday to Friday, 9.30 a.m. and 2.0 p.m.					
CHARLES STREET CLINIC	...	...	...	...	2 Surgeries
Monday to Friday, 9.30 a.m. and 2.0 p.m.					
ASTLEY BRIDGE SCHOOL CLINIC	...	...	...	...	1 Surgery
Monday to Friday, 9.30 a.m. and 2.0 p.m.					
THE WITHINS SCHOOL CLINIC	...	...	...	...	1 Surgery
Monday to Friday, 9.30 a.m. and 2.0 p.m.					

Aural Clinics:

The Consultant Aural Surgeon attended fortnightly, until May, at both the Charles Street School Clinic and the Robert Galloway Clinic to see by appointment school children who were referred by the school medical officers. From May until the end of the year the clinics were held weekly at the Robert Galloway Clinic.

Ophthalmic Clinics:

The Consultant Ophthalmic Surgeons attended at Charles Street Clinic and the Robert Galloway Clinic to examine by appointment children referred by school medical officers.

The clinics were held as follows:—

CHARLES STREET SCHOOL CLINIC

Wednesday morning	1 session fortnightly (Until May, 1964)
-------------------	--

ROBERT GALLOWAY CLINIC

Monday afternoon	} 3 sessions weekly.
Thursday afternoon	
Saturday morning	
Wednesday morning (from May, 1964)	1 session fortnightly.

Morning sessions commenced at 9.30 a.m. and afternoon sessions at 2.0 p.m.

Child Guidance:

During the early part of 1964, because no Consultant Psychiatrist had been appointed, a few urgent cases were seen by Dr. Leyberg at Bolton District General Hospital or by a child psychiatrist at Manchester. This situation continued until April, 1964 when Dr. Dunn took up duty as Consultant Psychiatrist in place of Dr. Gage. Unfortunately, Dr. Dunn has to serve three other areas in addition to Bolton, and he has only been able to give one and a half sessions a week, every Tuesday morning and alternate Friday afternoons, for work in the county borough. Thus it has not been possible to clear the backlog of cases, let alone keep up with the new problems in child guidance.

More consultant child psychiatric sessions will be needed if the School Health Service is to cope adequately with the maladjusted children. More hospital beds for severely emotionally disturbed children are very necessary if the child psychiatrist is to be able to give proper therapy and help to those children who are too maladjusted to be placed in a suitable special school. The number of school places for maladjusted children, particularly girls, is still inadequate, and we look forward to the establishment of a local school for maladjusted children. Those few places that are available at present are in distant parts of the country, and the child psychiatrist and members of his team find it almost impossible to check the progress of emotionally disturbed children.

Speech Therapy:

At the beginning of 1964 one full-time speech therapist was employed. Another full-time speech therapist took up duty on the 22nd September. The Speech Therapy Service has thus been limited by shortage of staff during the greater part of the year.

Audiometry:

Routine audiometric testing continued to be carried out in schools on the same basis as in previous years. Routine testing is carried out as soon as possible after school entry and at the age of twelve years. In addition to the routine testing, full examination is carried out on children who have speech defects, who may be backward or who are specially referred for any reason.

Enuresis Clinic:

The Enuresis Clinic has continued weekly at the Robert Galloway Clinic on the same lines as before. Priority has been given to older children, particularly to those over the age of ten years, and attendance is by appointment only. Treatment has been mainly by the use of alarm units.

Children have been referred to the clinic by the Consultant Paediatrician, general practitioners, school medical officers, health visitors and head teachers.

Nocturnal enuresis is a very disturbing complaint and is more common among school children than is often realised. It is helpful to parents to be able to discuss this problem freely at school medical inspections and to be referred to a special clinic where staff are interested and anxious to help.

During the year 110 children have attended the clinic. Of these children, 79 have been new patients. On initial attendance at the clinic a full history was taken and urine examination carried out. Of the 79 new patients, 51 were cured and 16 have been greatly improved. Of the remaining children, 39 are still under treatment. Twelve children have not initially improved by this method of treatment, but as some of these children were rather young they will be kept under review and given a further course of treatment if required.

The results obtained from the work of this clinic are very encouraging and an excellent example of positive and valuable work being carried out within the School Health Service.

Ultra Violet Light Treatment:

Ultra violet light therapy was available in the Health Department on the same basis as in previous years. Children may receive this treatment on the recommendation of school medical officers.

Breathing Exercises:

The physiotherapist in the Health Department continued to give instruction in breathing exercises for children recommended by school medical officers, chest physicians and the aural surgeon. She also attended at Lostock Open Air School to give instruction in breathing exercises to children at the school.

MEDICAL INSPECTION OF SCHOOL CHILDREN

The routine medical inspection of children continued on the same lines as in previous years. Three inspections are carried out during the school life of each child – one on entry to school, one in the last year at primary school and one in the last year of attendance at secondary school. Children attending special schools are inspected annually.

In previous reports the possibility of substituting a selective medical examination of primary school leavers was discussed. This idea is still under consideration—the introduction has been delayed mainly because of changes of medical staff. It is hoped that the selective procedure can be introduced during the coming year.

Periodic Medical Inspections

The total number of periodic medical inspections carried out in 1964 was 7,256, an increase on the number carried out in 1963, namely 6,658.

Number of children inspected:

Entrants	...	...	...	...	...	...	2,657
Primary School Leavers...	...	...	...	...	...	...	2,059
Senior Leavers	...	...	...	...	...	...	2,030
TOTAL							6,746
Additional periodic inspections (including Special Schools)							510
GRAND TOTAL							7,256

Other Examinations

Special examinations	...	...	...	...	...	8,846
Re-inspections	...	...	...	...	...	6,849
TOTAL						15,695

RESULT OF INSPECTIONS

Periodic Inspections

The number of defects requiring treatment found at periodic inspections was 2,511, compared with 2,518 in 1963. The number of cases requiring observation increased from 2,270 in 1963 to 2,843 in 1964, an increase of 573.

Defect or Disease	Periodic Inspections						TOTAL	
	Entrants		Leavers		Others— Primary School Leavers Additional periodic inspections and Special Schools			
	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation
Skin	47	53	74	54	67	42	188	149
Eyes:								
a. Vision . .	154	139	393	63	455	147	1,002	349
b. Squint . .	60	12	8	3	56	11	124	26
c. Other . . .	11	8	8	9	6	3	25	20
Ears:								
a. Hearing . .	62	73	16	28	54	136	132	237
b. Otitis Media	23	60	6	12	11	44	40	116
c. Other . . .	11	9	8	3	10	7	29	19
Nose and Throat	192	269	39	42	62	130	293	441
Speech	22	77	4	7	23	136	49	220
Lymphatic Glands	10	108	—	9	1	44	11	161
Heart	20	29	7	9	7	15	34	53
Lungs	46	60	11	18	38	52	95	130
Developmental:								
a. Hernia . .	9	17	—	1	1	5	10	23
b. Other . . .	66	77	6	19	27	88	99	184
Orthopaedic:								
a. Posture . .	4	23	1	15	6	15	11	53
b. Feet	43	43	4	26	26	36	73	105
c. Other . . .	35	28	26	53	18	25	79	106
Nervous System:								
a. Epilepsy . .	9	2	5	1	14	7	28	10
b. Other . . .	8	11	8	3	8	9	24	23
Psychological:								
a. Development	6	28	1	2	9	193	16	223
b. Stability . .	6	30	2	19	15	30	23	79
Abdomen	11	15	5	4	9	17	25	36
Other	26	23	34	22	41	35	101	80
TOTALS	881	1,194	666	422	964	1,227	2,511	2,843

Summary of Pupils found to require Treatment

Age Group Inspected (By year of birth)	For defective vision (excluding squint)	For any of the other conditions recorded in previous table	Total individual pupils
1960 and later	12	100	115
1959	66	221	264
1958	78	304	351
1957	17	30	42
1956	14	16	22
1955	16	18	27
1954	244	216	407
1953	125	122	215
1952	8	15	19
1951	13	10	16
1950	177	147	284
1949 and earlier	232	124	325
TOTALS	1,002	1,323	2,087

Special Inspections

The following table shows the number of defects found at special inspections.

Defect or Disease	Special Inspections	
	Requiring Treatment	Requiring to be kept under observation
Skin	307	55
Eyes:		
a. Vision	9	2
b. Squint	2	-
c. Other	16	12
Ears:		
a. Hearing	171	124
b. Otitis Media	18	4
c. Other	34	9
Nose and Throat	120	46
Speech	24	7
Lymphatic Glands	2	4
Heart	-	6
Lungs	21	11
Developmental:		
a. Hernia	2	1
b. Other	25	7
Orthopaedic:		
a. Posture	-	-
b. Feet	10	3
c. Other	39	8
Nervous System:		
a. Epilepsy	1	1
b. Other	18	6
Psychological:		
a. Development	12	10
b. Stability	21	11
Abdomen	9	5
Other	76	27
TOTALS	937	359

Presence of Parents at Periodic Medical Inspections:

Age Group Inspected	No. of pupils inspected	No. with parent present
Entrants	2,657	2,028
Primary School Leavers	2,059	1,368
Senior Leavers	2,030	150
Additional periodic inspections (including Special Schools)	510	227
TOTALS	7,256	3,773

Visits to the homes of children by school nurses:

The number of home visits paid by school nurses was 603, compared with 445 in 1963. These visits continued to be made for the same reasons as in the past; some were in connection with the cleansing of children who were found to be infested with vermin, and others were in connection with examinations made under Section 34 or Section 57 of the Education Act, 1944. Some visits were also made in connection with failure to attend clinics held either by the local authority or at the hospital.

MINOR AILMENTS

The number of individual children attending school clinics and treatment centres was 2,571, a decrease on the previous year when the total number was 2,853. The total number of attendances also decreased from 9,498 in 1963 to 8,213 in 1964.

It will be necessary during the coming year to reduce the time spent on minor ailments. Much of this work can be done by the school nurse, leaving the doctor to concentrate at the school clinics on children who have more serious physical and mental problems. More school visiting by nurses and doctors and discussion of the children's problems with head teachers may prevent serious maladjustments in some young people. It is more important to study the child in the school environment than at a clinic.

Clinic or Centre	No. of individual children who attended	Children seen by medical officer on first visit	No. of subsequent visits to medical officer	Children seen by nurse on first visit	No. of subsequent visits to nurse	Total No. of Attendances
Robert Galloway	971	605	295	777	1,864	3,541
Charles Street . .	522	271	39	427	1,122	1,859
The Withins . .	324	217	57	248	587	1,109
Astley Bridge . .	177	127	16	96	175	414
Treatment Centres	577	—	—	577	713	1,290
TOTALS . .	2,571	1,220	407	2,125	4,461	8,213

The number of visits by school children to the treatment centres in schools was as follows:

Whitecroft	...	...	...	...	...	15
Gaskell Street	...	...	...	...	...	17
Brownlow Fold...	...	...	...	...	...	190
Hayward	...	...	...	...	...	1,068
TOTAL...						1,290

NOTES ON SPECIFIC DEFECTS

Diseases of the Skin:

One hundred and twelve cases of scabies were treated during the year, compared with forty-six in 1963, and twenty-six in 1962. The incidence of scabies is increasing and this matter is receiving close attention. This rising incidence is linked with an increase of the condition in adults; these include the parents of affected children. Although this increase would suggest poor hygiene in a few families one might expect also a rising incidence in other skin conditions, such as impetigo, but this is not borne out by the low figures for this disease as shown in the following table.

Once again, no cases of ringworm of the scalp were discovered during the year.

Disease	Number of cases treated or under treatment by the Authority
Ringworm:	
(i) Scalp	—
(ii) Body	1
Scabies	112
Impetigo	17
Other skin diseases	239
TOTAL	369

Impetigo treated in School Clinics:

The number of cases of impetigo treated in school clinics was seventeen in 1964, compared with sixteen in 1963. The table below gives the figures for the past ten years.

Year	No. of Cases	Year	No. of Cases
1955	76	1960	63
1956	43	1961	34
1957	32	1962	33
1958	39	1963	16
1959	74	1964	17

Defects of the Ear, Nose and Throat:

A total of 681 children had their tonsils and adenoids removed during the year; eighteen had operations for diseases of the ear and seventeen for other nose and throat conditions. Two hundred and forty-two of these children were seen by the aural surgeon at the school clinics and referred to hospital for treatment, and 474 children were referred direct to the hospital for treatment.

Treatment

	Number of cases known to have been dealt with
Received operative treatment—	
for diseases of the ear	18
for adenoids and chronic tonsillitis . .	681
for other nose and throat conditions . .	17
Received other forms of treatment	119
TOTAL	835

Mr. G. Gordon Mowat, the Consultant Aural Surgeon, reports:

“Aural Clinics have continued at weekly intervals for the past twelve months, and many cases of slight hearing loss assessed for diagnosis and treatment.

There is still a need for a soundproof room for more accurate audiometry.

I would like to take this opportunity of thanking the nursing and administrative staffs of the clinics for their help and co-operation.”

Ear, Nose and Throat Clinics

No. of visits by patients	686
No. of patients attending	432
No. of new patients	341
No. of children referred from periodic inspections	133
No. of children referred from school clinics . . .	299
No. of children referred from other sources . . .	—

Children attending the clinics for the first time were seen for the following conditions, which may have been multiple in any particular child:

Disease or Defect	Referred from—			TOTAL
	Periodic Inspection	School Clinics	Other Sources	
Deafness	20	131	—	151
Otitis Media	3	8	—	11
Tonsil and adenoid abnormalities	97	141	—	238
Catarrhal conditions	2	4	—	6
Sinusitis	6	2	—	8
Speech difficulties	—	1	—	1
Other conditions	5	13	—	18
TOTALS	133	300	—	433

Four partially hearing children were recommended for special educational treatment. Three of these were admitted to the Thomasson Memorial School during the year and one was awaiting admission at the end of 1964.

Six children were recommended for attendance at the lip reading class.

The aural surgeon completed prescriptions for hearing aids in respect of fourteen children.

Pure Tone Audiometric Testing:

Pure tone audiometry was used for the routine examination of hearing in school children. A sweep test is carried out as a method of selecting those children who may have defective hearing. The sweep test is carried out twice in a child's school life, the first test being shortly after entry and the second at about the age of twelve years. Children who fail the sweep test are invited to the clinic for a full examination.

The early ascertainment of deafness in children is extremely important and the health visitors carry out screening tests for the ascertainment of deafness in pre-school children as part of the work undertaken by the Health Department.

The following table shows the numbers of children in various age groups tested at schools and tested at clinics.

Sweep Testing in Schools

Sources of Children tested	Tested			Failed Test		
	Boys	Girls	Total	Boys	Girls	Total
Ordinary Schools	1,388	1,279	2,667	141	125	266
Secondary Modern, Technical and Grammar	867	730	1,597	50	49	99
Remedial Classes	66	19	85	8	1	9
Special Schools	189	118	307	39	33	72
TOTALS ..	2,510	2,146	4,656	238	208	446

Full Testing at the Clinics

Source of Reference	No. of children referred for test	Awaiting app't for test 1964	App't net kept for test	Result of Audiogram		Unsatisfactory Audiograms and Recommendations				
				Satisfactory	Unsatisfactory	Change of position in class	For observation	Repeat audiogram	Treatment at the clinic	To Aural Surgeon
Failed sweep test in school ..	446	-	85	60	301	10	141	79	11	60
School Medical Officers ..	145	1	14	30	100	5	39	20	-	36
School Medical Officers on account of speech defect	72	4	7	44	17	-	11	1	-	5
On account of backwardness	26	2	5	11	8	-	7	1	-	-
Others:										
Aural Surgeon	36	1	5	5	25	1	14	4	6	-
Headmaster	6	-	1	-	5	-	1	4	-	-
Parent ..	14	-	3	2	9	-	5	1	-	3
Family Doctor	16	2	1	3	10	-	6	3	-	1
Health Visitors	12	-	-	3	9	1	4	2	-	2
Paediatrician	4	-	-	-	4	-	1	3	-	-
Educational Psychologist	1	-	-	-	1	-	1	-	-	-
Repeat Audiograms	347	5	46	53	243	8	112	61	3	59
TOTALS ..	1,125	15	167	211	732	25	342	179	20	166

Diseases of the Eye:

Altogether 1,944 children are known to have been dealt with for errors of refraction. Of these, 1,778 were refracted by the ophthalmic surgeons at the school clinics. The total attendances at the clinics numbered 3,690, of which 3,664 were for refraction, repairs to glasses and re-examinations, and 26 for diseases of the eye.

Two children were referred to the Bolton Royal Infirmary.

In 250 cases spectacles were repaired or replaced.

Thirty-four children were referred to the ophthalmic clinic at the Bolton Royal Infirmary for treatment for squint.

Dr. T. Shannon, Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports:

"I am pleased to report that the work of the Robert Galloway Ophthalmic Clinics has been carried out during the past twelve months with its usual smoothness, thanks to the nursing and clerical staffs.

It has been possible to cope with the waiting list and children are reviewed without any appreciable delay. Parents continue to co-operate in occluding their children's eyes, when advised, with good results.

It is pleasing to note that over the years inflammation of the eyes continues to decrease. The cases of ocular abnormalities, which are rare, are referred to the Hospital Services."

Dr. T. Chadderton, Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports:

"I have to report that the Eye Clinics held by me at the Robert Galloway School Clinic continue to run extremely smoothly.

The number of children with refractive errors shows no increase on previous years, and there is co-operation from the parents.

The staff continues with its usual excellent efficiency."

Cases of eye disease, defective vision or squint for which treatment was initiated by the school medical officers, may be analysed as follows:

	Number of cases known to have been dealt with
External and other conditions excluding errors of refraction and squint. . . .	35
Errors of refraction (including squint) . .	1,944
TOTAL	1,979
Number of pupils for whom spectacles were prescribed	1,210

The following were found at periodic medical inspection to require attention for defects of the eye.

Defect	Age Groups Inspected				Totals
	Entrants	Primary School Leavers	Senior School Leavers	Additional Periodic Inspections and Special Schools	
Defective Vision	154	353	393	102	1,002
Squint	60	30	8	26	124
Blepharitis	3	2	1	2	8
Conjunctivitis . .	1	—	—	—	1
Other	7	2	7	—	16

Orthoptics:

Children requiring treatment by an orthoptist continued to be referred to the orthoptic clinic at the Bolton Royal Infirmary as it has not been possible to recruit an orthoptist to do this work in the school clinics.

Defective Colour Vision:

As in previous years, the colour vision of secondary school leavers has been tested using the Ishihara method. In 1964, thirty-eight children were found to have defective colour vision, compared with thirty-five in 1963. Thirty-six of these thirty-eight children were, of course, boys.

Orthopaedic Defects:

Two hundred and twelve children were found to have orthopaedic defects. One hundred and sixty-three of these were found on periodic medical inspection and the remaining forty-nine at school clinics. Twenty-one children were referred to consultant orthopaedic surgeons at the Bolton Royal Infirmary for advice and treatment.

Chiropody:

The number of sessions held by the chiropodist at the Robert Galloway Clinic remained at two until September, when an additional session was provided.

Miss Anne C. Drury, the Chiropodist, reports:

"During 1964 the Chiropody Clinic was well attended. By July the waiting list had increased to such an extent that an extra session was found to be necessary. This additional session was commenced in September, and reduced the waiting list considerably. At the present time an appointment can usually be given within a week."

The number of children attending, and a summary of the defects treated are given below:

	BOYS	GIRLS
No. of new patients who attended the clinic	116	232
Defects treated:		
Plantar Warts (verrucae pedis)	95	205
Chilblains	5	8
Hallux Valgus	-	6
Onychocryptosis (ingrowing nails)	3	5
Athlete's Foot (Tinea pedis)	5	2
Pronatiai	1	1
Onychogryphosis (thickened nails)	1	2
General chiropody advice, etc.	18	50
Total number of treatments given	1,771	

Cleanliness of School Children:

The percentage of children with infested heads in 1964 was 7.8, compared with 5.7 in 1963. This is somewhere near the high figure of 7.9 in 1961. In 1964, the school population had risen by over 1,000 children. This increase in numbers has given the hygienists extra work and in the schools where infestation is known to be higher than average an extra person was appointed to carry out more inspections than once a term.

Apart from the rising school population, another factor is probably the increasing length and thickness of hair both in girls and now, more commonly, in boys. As yet, the girls with infested hair outnumber the boys by two to one, namely, 1,326 girls to 696 boys. Both boys and girls must remember that long hair needs very careful cleansing and attention. The responsibility of the young person with untrimmed hair is to keep it clean—this is necessary if he is not to pass his infestation on to his friends. The hygienists who visit the schools will be defeated in their efforts unless all consider this problem seriously.

An increasing effort will be made by the hygienists and nursing staff in the coming year to cope with this problem.

During the year 90 children—25 boys and 65 girls—attended the Municipal Medical Baths at School Hill for vermin disinfection and bodily cleansing.

Notices to Cleanse were issued under Section 54(2) of the Education Act in 50 cases, compared with 54 in 1963.

	1960	1961	1962	1963	1964
School population	25,311	25,271	24,571	24,484	25,631
No. of head inspections	54,720	49,318	53,167	50,962	54,234
No. of children with nits or vermin	1,775	2,021	1,456	1,398	2,022
Expressed as a percentage of school population	7.01	7.9	5.9	5.7	7.8

THE GENERAL CONDITION OF SCHOOL CHILDREN

Result of Routine Medical Inspection:

At the routine medical inspections, the school medical officer concludes his medical report with a statement on the child's general condition, whether satisfactory or unsatisfactory. This classification, which was adopted nationally from the 1st January, 1956, has the merits of simplicity and practicability.

Of the 7,256 children examined at periodic inspections, 7,229 (99.63%) were satisfactory and only 27 (0.37%) were unsatisfactory, a very small percentage indeed. Details are given in the following table.

Age Groups Inspected (By year of birth) (1)	No. of Pupils inspected (2)	Physical Condition of Pupils Inspected	
		Satisfactory (3)	Unsatisfactory (4)
1960 and later	464	463	1
1959	930	921	9
1958	1,279	1,272	7
1957	143	143	—
1956	88	88	—
1955	49	49	—
1954	1,386	1,379	7
1953	720	717	3
1952	56	56	—
1951	45	45	—
1950	1,072	1,072	—
1949 and earlier	1,024	1,024	—
TOTALS:	7,256	7,229	27
Col. (3) total as a percentage of Col. (2) total		99.63	0.37
Col. (4) total as a percentage of Col. (2) total			

The School Meals and Milk in Schools Scheme:

The percentage of school children during 1964 taking school milk under the above schemes	89.11
No. of dinners produced in the school kitchens during 1964	2,945,999
Average number of children taking meals daily	13,591
Percentage of school children taking dinner s in school during 1964:	
Expressed as percentage of average attendances	61.79
No. of central kitchens	2
No. of kitchen/dining rooms	41
No. of children on free meals listed at 31st December	1,550

IMMUNISATION

Immunisation against diphtheria, tetanus and poliomyelitis continued on the same lines as in 1963.

Children who have already been immunised against diphtheria, tetanus and poliomyelitis in infancy receive one booster injection against diphtheria and tetanus combined with one dose of oral Sabin vaccine at the age of five years. Where a child has not been adequately immunised against diphtheria or tetanus or poliomyelitis in infancy, a suitable course of immunisation is arranged.

DENTAL HYGIENE

Report of the Principal School Dental Officer

Staff:

It is with regret that staff resignations have to be reported. We have lost the services of two full-time and one part-time officer and by March 1965 the full-time equivalent will have dropped to 4 against an establishment of 8.

Clinics:

Two surgeries at the Robert Galloway Clinic and one at Astley Bridge Clinic operated throughout the year. The Withins Clinic operated on a full-time basis until August and on a half-time basis subsequently.

Both surgeries at Charles Street Clinic were open throughout the year but just as a third surgery was about to be equipped it was found that dry rot had attacked this part of the building and the project has had to be abandoned. This is a blow to the dental service, and the premises once again were condemned as unsuitable and out of date by the Inspecting Dental Officer from the Department of Education and Science. It is hoped that new premises will be made available in the near future to replace this obsolete clinic.

Dental Inspections:

14,412 children out of a school population of 25,631 received a routine dental inspection, as against 14,288 in 1963. Special inspections totalled 2,705, compared with 2,967 in the previous year, continuing the downward trend shown over the last six years. Children attending the special schools were dentally inspected as usual.

Treatment:

5,835 children received dental treatment and were made dentally fit, the fitness being maintained by a six-monthly recall system. 4,509 permanent and 1,978 temporary fillings were inserted, and the ratio of conservation of permanent teeth to the extraction of permanent teeth was 4,037 : 2,461, a ratio of 1.64 compared with 1.52 in 1963, again continuing the trend for the better.

Forty-two patients were fitted with artificial dentures and four crowns were fitted.

One hundred and sixty-three children received orthodontic treatment by means of appliances. Ninety-two of these were new cases, and one hundred and sixteen removable and two fixed appliances were fitted.

General anaesthesia was administered in 2,901 cases and 209 cases received a radiological examination and 317 X-ray films were taken.

9,171 other forms of treatment included scaling and gum treatments, treatment of oral ulcerations, dressings for the relief of pain, impressions, topical applications of stannous fluoride and adjustments to orthodontic appliances.

One notes that the new statistics required by the Department of Education and Science do not include information on many of the other operations listed above. In fact, no statistics of other operations will be required in future. However, all the work listed here is essential and time consuming, for which credit is due.

General Remarks:

Unfortunately, due to inadequate allocation of money, no progress was made in modernising equipment. The phased programme of modernisation referred to in last year's report has not yet been approved, and it was most disappointing that structural defects at Charles Street Clinic precluded the equipping of a third surgery. This was very unfortunate and made much needed expansion of the service impossible at present. An opportunity was missed which may not occur again for a long time.

Dental Health Education:

It is pleasing to report that Bolton is in the forefront in the county in this field. Two full weeks were devoted to dental health exhibitions, the first being the fourth Annual Dental Health Exhibition held as usual at the Bolton Technical College in July and attended by some 1,200 children. This followed the lines of the three previous exhibitions which have been fully described in previous reports, and which again proved successful. The second week was held in November and differed in some respects from the July project in that it was sponsored by the Bolton Evening News, who deserve great praise for devoting a generous amount of space each night for articles and features on various aspects of dental surgery and dental health education. These articles created great interest and this venture in dental health education was of proportions not previously undertaken by any provincial newspaper. The newspaper organised 25,000 free samples of toothpaste which were made available and distributed to school children in Bolton through the Education Department, the head teachers and their staffs, to whom our best thanks are due for all the hard work that this entailed. Their efforts are much appreciated by the Dental Department. Our own part in this excellent dental health project was to staff an exhibition stand in the Central Library and a mobile cinema van which was loaned by the Oral Hygiene Service and stationed near the Moor Lane Bus Station. These exhibits were visited by some 5,000 people during the week, giving an indication of the interest created by this project.

In conclusion, may I once again record appreciation of the help given by the Chairman and Members of the Schools Sub-Committee, the Chief Education Officer and Principal School Medical Officer and their staffs, and also Head Teachers and their staffs whose friendly co-operation is greatly appreciated by the Dental Department.

Dental Inspection and Treatment:

No. of pupils on the registers of maintained primary and secondary schools (including nursery and special schools) in January, 1965 25,631

(a) DENTAL AND ORTHODONTIC WORK

I	Number of pupils inspected by the Authority's Dental Officers:				
	i At Periodic Inspections	...	...	14,412...	
	ii As Specials	...	...	2,705...	Total (I) ... 17,117
II	Number found to require treatment	...	...	...	12,203
III	Number offered treatment	...	...	...	10,175
IV	Number actually treated	...	...	...	5,835

(b) DENTAL WORK (other than Orthodontics)

I	Number of attendances made by pupils for treatment, excluding those recorded at (c) i below...	...	...	...	15,280
II	Half days devoted to:				
	i Periodic (School) Inspections	89...			
	ii Treatment	...	...	2,313...	Total II ... 2,402
III	Fillings:				
	i Permanent Teeth	...	...	4,509...	
	ii Temporary Teeth	...	...	1,978	Total III ... 6,487
IV	Number of Teeth Filled:				
	i Permanent Teeth	...	...	4,037...	
	ii Temporary Teeth	...	...	1,778...	Total IV ... 5,815
V	Extractions:				
	i Permanent Teeth	...	...	2,461...	
	ii Temporary Teeth	...	...	5,688...	Total v ... 8,149
VI	i Number of general anaesthetics given for extractions	...			2,901
	ii Number of half days devoted to the administration of general anaesthetics by:				
	A. Dentists	...	...	202...	
	B. Medical Practitioners	...	...	45...	Total VI ... 247
VII	Number of pupils supplied with artificial teeth...	...	...		42
VIII	Other operations:				
	i Crowns	...	...	4...	
	ii Inlays	...	...	-...
	iii Other Treatment	...	...	9,171...	Total VIII 9,175

(c) Orthodontics

i	Number of attendances made by pupils for orthodontic treatment	...	...	...	760
ii	Half days devoted to orthodontic treatment	...	...		76
iii	Cases commenced during the year	...	...		92
iv	Cases brought forward from previous year	...	...		71
v	Cases completed during the year	...	...		51
vi	Cases discontinued during the year	...	...		25
vii	Number of pupils treated by means of appliances...	...			163
viii	Number of removable appliances fitted	...	...		116
ix	Number of fixed appliances fitted	...	...		2
x	Cases referred to and treated by Hospital Orthodontists				6

INFECTIOUS DISEASES IN CHILDREN

Measles continued to be the infectious disease with the greatest incidence among school children, although the total number of cases in 1964 was 884, a marked reduction on the number of cases notified in 1963 which was 2,182.

There were two cases of poliomyelitis during the year among children; both were paralytic.

The number of cases of dysentery was slightly greater than in 1963.

Incidence of Infection:

The number of cases of infectious diseases each month was as follows:

Disease	Number of Cases												Total
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	
Scarlet Fever	7	6	1	7	8	3	5	5	2	4	2	5	55
Measles	96	55	37	3	5	19	34	97	47	54	117	320	884
Whooping Cough ..	12	10	18	17	34	21	9	9	8	2	1	1	142
Pneumonia	1	1	-	3	-	-	-	-	1	-	-	1	7
Poliomyelitis													
Paralytic	-	-	-	-	-	-	-	-	-	-	1	1	2
Non-Paralytic ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever													
(Paratyphoid B) ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	5	4	8	1	10	6	2	6	2	5	3	2	54
Food Poisoning .. .	-	-	-	-	5	-	-	-	-	-	1	-	6
Erysipelas	1	-	-	-	-	-	-	-	-	-	-	-	1
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal Infection	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Encephalitis ..	-	-	-	-	-	-	-	-	-	-	-	-	-

Age at Infection:

The age of the children at infection is shown below:—

Disease	Age																Total
	Un- der 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Scarlet Fever	—	1	3	7	9	6	14	5	3	—	1	2	1	1	1	1	55
Measles	36	130	147	162	142	156	77	20	6	2	4	1	—	—	1	—	884
Whooping Cough ..	14	22	30	17	17	19	8	10	1	1	1	—	—	—	—	2	142
Pneumonia	3	—	1	—	—	1	—	—	—	2	—	—	—	—	—	—	7
Poliomyelitis																	
Paralytic	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Non-Paralytic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever																	
(Paratyphoid B) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	1	9	4	6	2	7	1	3	2	2	2	3	4	3	3	2	54
Food Poisoning .. .	—	3	—	1	1	—	—	—	—	—	—	—	—	—	—	1	6
Erysipelas	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal																	
Infection	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Encephalitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

REPORT ON PHYSICAL EDUCATION

1964 has proved to be a very good year in the field of physical education, and both teachers and pupils have shown great keenness and enthusiasm in every branch of this subject. It is felt that a very high standard has been achieved in indoor work. The Annual Demonstrations of Physical Education were again held at Smithills School and the very large numbers attending were proof of the great interest shown in this subject.

Swimming grows in popularity and the excellent results have been most gratifying. In the Annual Swimming Competition for the awards offered by the Humane Society for the Hundred of Salford, a Bolton boy was second and a Bolton girl third. The Captain Webb Shield for Girls, awarded by the Manchester and District Branch of the Royal Life Saving Society was won by Whitecroft County Secondary School, with Wolfenden County Secondary School second, and in the Boys' Section Whitecroft County Secondary School was second.

For the first time children were entered for the new Personal Survival Test of the Royal Life Saving Society, with excellent results.

Courses were organised in Games Coaching and Physical Education for junior children and were well attended.

THE WORK OF THE CHILD GUIDANCE CENTRE

Mrs. M. A. Spencer, the Educational Psychologist at the Child Guidance Centre, reports:

Staffing:

While the main plan of clinic services was little changed in the year under consideration, some staff changes were made. Most notable of these was the appointment of Dr. Dunn who joined us in April as the Consultant Psychiatrist.

Mrs. Bunn, part-time psychologist, increased her number of sessions from three to five each week so that we were able to decrease the waiting time for diagnostic appointments with psychologists even further. At the beginning of the Autumn term we had no waiting list at all though the number of referrals to the school psychological service had not decreased significantly. In spite of the usual increase in referrals from schools towards the end of the first term of the school year, by the beginning of 1965 the waiting list for a first appointment was not more than three to four weeks.

Remedial Teaching Service:

The February Survey of the Reading Ability of the 7-8 year age group was again carried out using the same battery of tests as in the previous two years. This year, 436 children were singled out for further testing as a result of the head teachers' tests. Of these 436 children, 101 were judged to be in need of remedial teaching. Thirty children were placed in junior remedial classes and twenty-five are being given remedial teaching in groups in their own schools.

A new venture started this year is group remedial teaching in the Child Guidance Clinic. Two remedial teachers take small groups of children twice each week. These children are mostly from the smaller or geographically more isolated schools and are brought to the clinic by parents. This is part

of a research project on comparative teaching environments now being carried out. This scheme has been only partly successful, the main difficulty being one of attendance. The children are too young to attend the clinic unaccompanied.

Twenty-three parents whose children were offered places in remedial classes or groups were unable or unwilling to have them attend. Two children in need of remedial teaching left the area. All but a very small number of children are now having their needs catered for and it seems likely that when it is possible to appoint the one further member of teaching staff for which provision is made the needs of the junior schools will be fully covered.

One new remedial class has been opened during the year at Holy Trinity primary school. When this school closes it should be possible to move the class elsewhere. There were thirteen children in the class at the beginning of its second term in operation and the number is quickly building up to the maximum twenty.

It may, at this stage, be worthwhile to note the continued decrease in the numbers of children, both in primary and secondary schools, in need of remedial teaching. This is probably attributed partly to a greater awareness of the problem by the ordinary teacher and partly to increase in the knowledge and use of modern techniques.

School Psychological Service:

During the year, 186 children were referred to the clinic—111 by head and other teachers, 34 by school medical officers and 17 by parents. The total number of referrals is slightly lower than in the previous year; a factor which may account for this is the very high number of possible special school children picked up in the 1963 junior remedial testing. The 1964 figures were only half of those of the previous year. These findings are almost certainly chance results; selection procedure and population in both cases were identical.

The chief reasons for referral to the clinic remained unchanged, with inability to respond to the normal school curriculum as the main problem, accounting for one-third of the children referred. Behaviour problems of all sorts were prominent. Details of these are given in Tables 1 and 2 below. It is encouraging to see that the larger number of referrals by parents noted in 1963 has been maintained.

Two hundred and five children were seen in the first diagnostic session by the psychologist-social worker team. Details of recommendations made are given below. Thirty-six children who had been seen some time previously were fully reviewed in the clinic. There were 636 attendances for group-therapy during the year.

Child Guidance Service:

The main difficulty in the smooth and efficient maintenance of this service is the inadequacy of psychiatric help. Dr. Dunn is with us for a very limited time indeed so that the waiting list for his services is both long and growing. Clinic policy throughout the year has been to maintain an efficient school psychological service so that the pressure on the child guidance service is relieved.

Observation Class:

The class is now up to its maximum size and is fully operative. Two children were discharged during the year, one to the Junior Training Centre and one to Woodside School. After a spell in this class the psychologists were able to make educational recommendations on the children with confidence, and the parents were better able to accept the children's limitations.

Three children joined the class during the year; one was admitted because of doubts about her educability and two because of problems of behaviour and adjustment.

One problem the class is meeting at the moment is that it is hardly possible to find suitable educational placement for children whose emotional adjustment is still unsatisfactory. The difficulty in finding residential school placement has meant that some children have had to stay in the class beyond the age range for which it should cater. This, of course, prevents other children in need from taking up places.

Certain local authorities in membership of the Associated Education Authorities of Lancashire and Cheshire are currently engaged jointly in the planning of three new boarding schools for maladjusted pupils – two for 50 boys each and one for 50 girls. Similar arrangements are also being made for the establishment of three new boarding schools for educationally sub-normal children—two for 80/100 boys each and one for 80/100 girls, and a boarding school for about 50 E.S.N./Maladjusted Boys. All these schools would be available for use by all local authorities in Lancashire and Cheshire.

Evening Class Report for 1963-64:

This year the classes reverted back to the system used up to July, 1962. That is, both classes catered for all ranges of ability. A very small number of pupils attended the two classes. The reversion took place because the Thursday class in the session 1962-63 steadily declined; this was due to having too many students together of very low ability, with a consequent decrease in motivation. In 1963-64 there were eighteen on the roll in the Tuesday class and sixteen in the Thursday class. The average attendance for the year for both classes was sixteen. The year was the best for attendance and work since the beginning of the classes twelve years ago. This steady increase over the year, except for last year's setback in one class, has been most encouraging and proof that the classes are filling an educational and social need.

All students who completed the course showed a good improvement in reading, spelling and general English. As previously reported, there was an increase in the amount of written work being done and an even better response to homework than last year. Three students during the year studied some arithmetic as well, attending both evenings.

As an aid to student needs Mr. Battersby undertook a survey of the actual usage of writing and reading in life situations. Both teachers have used his findings as an aid to their teaching.

TABLE 1

Children referred to Child Guidance Clinic

Reasons for Referral	No. of Cases
Backwardness in school	64
Behaviour problems mainly at home	31
Behaviour problems mainly at school	30
Behaviour problems at home and school	17
School refusal	7
Backwardness and associated emotional symptoms	2
Stress symptoms	8
General assessment of capabilities	27
TOTAL	186

TABLE 2

Symptoms leading to referral to Child Guidance Clinic of 68 children in categories 2, 3 and T4 of Table 1.

Symptoms	No. of Times mentioned
Lying	13
Stealing	19
Truancy	5
Enuresis	7
Encopresis	3
Temper tantrums	5
Aggressive behaviour	9
Wandering from home or school	8
Withdrawn behaviour	15
Others	9

TABLE 3

Sources of Referrals

Sources	No. of Cases
Head Teachers	111
School Medical Officers	34
Speech Therapist	2
Children's Department	4
Parents	17
Consultant Paediatrician	11
Consultant Psychiatrist	2*
Others	7
TOTAL:	188

* Not included in Table 1 above.

TABLE 4

Recommendations made for 205 children attending for diagnostic interview

Recommendation	No. of Cases
Referral to Psychiatrist	17
Examination by other medical specialist	7
Special residential school!	13
Special day school	31
Special Observation Class	3
School exclusion and for junior training centre	2
Individual remedial teaching	4
Placement in remedial class	11
Placement in remedial groups	14
Group therapy in child guidance clinic	27
Transferred to speech therapy department	1
Parent guidance	37
Immediate advice to parents	23
Advice to head teacher and other teachers	22
Advice to other education officers	14
Advice to Children's Department	6
Other recommendations	15
No further action	7

HANDICAPPED PUPILS

One of the most important duties of the School Health Service is to advise the authority on the ascertainment of handicapped pupils. These are pupils who, because of some physical or mental disability, require special educational treatment if they are to obtain the maximum possible advantage from education. Correct ascertainment and placement is of considerable importance to individual pupils.

As far as possible, children are retained in ordinary schools unless their handicap is so severe that this would not give the child the best possible education.

The education of children who are ascertained as educationally sub-normal is carried out by medical officers who have attended a prescribed course in this work and have fulfilled regulations laid down in The Medical Examination (Sub-normal Children) Regulations 1959. At the beginning of the year two full-time medical officers and two part-time medical officers, having fulfilled the requirements of the regulations, were able to undertake this work.

Ascertainment in 1964:

The following children were ascertained as in need of special educational treatment as handicapped pupils during the year:

Blind	-
Partially Sighted	-
Deaf	-
Partially Hearing	10
Educationally Sub-normal	20
Epileptic	1
Maladjusted	6
Physically Handicapped	6
Pupils suffering from Speech Defects	61
Delicate	48
TOTAL	152

Children in Special Schools

At the end of the year there were 346 handicapped pupils receiving special educational treatment in special schools. Details are given in the following table.

HANDICAPP	SPECIAL SCHOOLS	NO. OF PUPILS	
		BOARDERS	DAY
BLIND	Liverpool School for the Blind	1	—
	Conover Hall, Shrewsbury	1	—
PARTIALLY SIGHTED	St. Vincent's, Liverpool	2	—
	Corporation Park School, Blackburn	—	12
DEAF	Thomasson Memorial School, Bolton	—	9
	St. John's, Boston Spa	1	—
PARTIALLY HEARING	Thomasson Memorial School, Bolton	3	15
DELICATE	Lostock Open Air School	90	—
PHYSICALLY HANDICAPPED	Birtenshaw Hall School, Bromley Cross	—	11
	St. Rose's School, Stroud, Glos.	1	—
	Bleasdale House School, Silverdale	1	—
	Children's Convalescent Home, West Kirby	2	—
	The Thomas Delarue, Tonbridge	1	—
	The Bradstock Lockett, Southport	1	—
EDUCATIONALLY SUB-NORMAL	Woodside School, Bolton	—	175
	Stone Cross, Ulverston	1	—
	Crowthorn, Edgworth	1	—
	Thingwall School, Liverpool	1	—
	Eden Grove, Appleby	1	—
	Thornbury House, Bristol	1	—
MALADJUSTED	Blue Coat School, Liverpool	1	—
	St. Thomas More's School, Devon	3	—
	Drayton Manor	1	—
	St. Laurence's, St. Leonard's-on-Sea	1	—
	Breckenbrough, Thirsk	2	—
	Chaigeley, Thelwall	1	—
	Marymount, Manchester	1	—
EPILEPTIC	Colthurst House School, Alderley Edge	1	—
	Soss Moss School, Chelford	3	—
SPEECH	Moor House, Oxted	1	—
TOTALS		124	222
TOTAL		346	

Children awaiting placement in Special Schools:

The following pupils were ascertained as in need of special educational treatment, but at the end of the year arrangements for accommodation had not been completed:

Partially Hearing	...	...	...	...	...	...	1
Physically Handicapped	...	...	...	...	...	...	4
Educationally Sub-normal	...	...	...	...	...	...	1
Epileptic	...	...	...	...	...	...	2
Maladjusted	...	...	...	...	...	...	13
							—
TOTAL	...	...	...	...	...	...	21
							—

Total number receiving or needing special school accommodation ... 367

Special Schools in Bolton:

WOODSIDE DAY SPECIAL SCHOOLS FOR EDUCATIONALLY SUB-NORMAL CHILDREN:

The numbers of children on the rolls, and those admitted and discharged, were as follows:

WOODSIDE SENIOR SCHOOL:

From the Bolton Area:

	BOYS	GIRLS
No. of children on the roll, December, 1964	57	32
No. of children admitted during 1964	15	8
No. of children who left during 1964	19	18

From Outside Areas:

No. of children on the roll, December, 1964	4	8
No. of children admitted during 1964	2	2
No. of children who left during 1964	1	—

WOODSIDE JUNIOR SCHOOL:

From the Bolton Area:

No. of children on the roll, December, 1964	52	34
No. of children admitted during 1964	16	9
No. of children who left during 1964	19	9

From Outside Areas:

No. of children on the roll, December, 1964	3	1
No. of children admitted during 1964	2	1
No. of children who left during 1964	1	—

One of the medical officers who is approved for the purposes of ascertaining educationally sub-normal children attends these schools regularly.

Children leaving Woodside Senior School at the age of 16 years who are thought to require further supervision are reported informally to the local health authority.

THOMASSON MEMORIAL DAY AND RESIDENTIAL SPECIAL SCHOOL FOR DEAF AND PARTIALLY HEARING CHILDREN

Pupils were admitted from our own and other authorities' areas. With a few exceptions the children who lived in Bolton or nearby attended as day scholars; the remainder were resident.

The Consultant Aural Surgeon pays regular visits to the school. A school medical officer also paid regular visits.

The numbers of children were:

From Bolton Area:	BOYS	GIRLS
No. of children on the roll, December, 1964 ...	15	12
No. of children admitted during 1964	—	3
No. of children who left during 1964	3	3

From Outside Areas:

No. of children on the roll, December, 1964 ...	47	30
No. of children admitted during 1964	1	3
No. of children who left during 1964	9	3

LOSTOCK RESIDENTIAL OPEN AIR SCHOOL FOR DELICATE CHILDREN:

The open air school continued on the same lines as in previous years. During 1964, 137 children in the school were from the Bolton area and 54 from outside areas, principally Lancashire County. This compared with 118 children from Bolton and 55 from outside areas in 1963.

The school continues to be useful for children suffering from a variety of conditions and, apart from general debility, asthma is the principal single entity concerned.

A school medical officer visits the school each week, and the children are cared for by a local general practitioner when they are ill.

The following table gives details of the number of children in attendance, admitted and discharged during the year.

From the Bolton Area:	BOYS	GIRLS
No. of children on the roll, December, 1964 ...	44	46
No. of children admitted during 1964	23	27
No. of children discharged during 1964	25	22

From Outside Areas:

No. of children on the roll, December, 1964 ...	21	4
No. of children admitted during 1964	19	6
No. of children who left during 1964	22	7

An analysis of the medical conditions of the children who were in residence during the year is given below:

MEDICAL CONDITION	NO. OF CHILDREN	
	BOLTON	OUTSIDE AREAS
Asthma	27	21
Bronchitis	22	13
Bronchiectasis	7	4
Poor nutritional status	2	2
General debility	56	1
Other conditions... ..	23	13
	<hr/>	<hr/>
TOTALS ...	137	54
	<hr/>	<hr/>

Children in other Special Schools:

A number of Bolton children who are handicapped and who cannot be suitably educated in the special schools provided in Bolton attend residential schools in other parts of the country. These children are examined by the authority's medical officers during the school holidays when they return to Bolton so that progress can be assessed, and if there is any change in the child's disability an appropriate recommendation can be made.

Children suffering from Cerebral Palsy:

As far as possible, spastic children whose physical disability is slight and whose intelligence level is adequate are encouraged to attend an ordinary school. The majority of spastic children from Bolton whose physical disability makes them unfit for ordinary school attend Birtenshaw Hall Special School for Spastic Children. The admission and discharge of these children is the responsibility of the Medical Advisory Panel, which meets from time to time to consider applications.

Altogether, there were thirty-eight children known to the School Health Service to be suffering from cerebral palsy. The situation at the end of the year was as follows:

	BOYS	GIRLS
Attending Birtenshaw Hall Special School ...	4	7
Awaiting admission to Birtenshaw Hall Special School	3	1
Attending special school for partially sighted children	1	—
Attending special school for educationally sub-normal children	—	1
Attending residential grammar school	—	1
Attending grammar school	1	1
Attending ordinary schools	8	4
Not at school—pre-school children	5	1
	<hr/>	<hr/>
TOTALS ...	22	16
	<hr/>	<hr/>

Children unable to attend school because of Physical Disabilities:

The service of home teachers was needed for 31 children. The conditions necessitating this service were as follows:

	BOYS	GIRLS
Rheumatic disease	2	1
Asthma	1	1
Congenital abnormalities	3	2
Heart conditions	1	2
Epilepsy	1	—
Perthe's disease	1	1
Muscular dystrophy	1	—
Chorea	—	1
Scoliosis	1	3
Fractured leg	1	1
Other conditions... ..	2	5
	<hr/>	<hr/>
TOTALS ...	14	17
	<hr/>	<hr/>

Nine boys and twelve girls who had suffered from the conditions mentioned below were taken off the peripatetic teachers' list.

RESUMED ATTENDANCE AT ORDINARY SCHOOL:	BOYS	GIRLS
Rheumatic diseases	2	—
Congenital abnormalities	1	1
Heart condition	—	1
Perthe's disease	1	1
Muscular dystrophy	1	—
Scoliosis	1	2
Fractured leg	—	1
Other conditions	1	3
	<hr/>	<hr/>
ADMITTED TO SPECIAL SCHOOL:		
Congenital abnormalities	1	—
Asthma	1	—
	<hr/>	<hr/>
OVER SCHOOL AGE:		
Rheumatic disease	—	1
Other conditions	—	2
	<hr/>	<hr/>
TOTALS ...	9	12
	<hr/>	<hr/>

Co-operation with the Youth Employment Service:

Handicapped pupils may encounter difficulties in obtaining or keeping employment after they leave school and to assist the Youth Employment Officers in placing these children school medical officers provide advice on Forms Y.9 or Y.10 which are sent to the Youth Employment Officer.

FORM Y.9

This form was completed in respect of eighty-three children and was used for children who had relatively minor defects and who were not likely to need registration under the Disabled Persons (Employment) Act, 1944. The conditions for which the form was used are given in the following table:

						BOYS	GIRLS
Defective colour vision	...	...	...	...	...	36	2
Defective hearing	...	...	...	...	...	4	6
Epilepsy	...	...	...	...	...	2	4
Heart condition	...	...	...	...	...	1	1
Respiratory conditions	...	...	...	...	...	4	10
Deformities	...	...	...	...	...	3	1
Skin conditions	...	...	...	...	...	3	1
Other conditions	...	...	...	...	...	4	1
						—	—
				TOTALS	...	57	26
						—	—

FORM Y.10

This form is used where children are sufficiently severely handicapped to make a registration under the Disabled Persons (Employment) Act, 1944, a possibility. In 1964 this form was issued in respect of five children, compared with six in 1963. Four of the children were, however, attending a day special school.

This form is not completed unless the parent is willing to sign a declaration stating that the nature of the disability may be revealed to the Youth Employment Officer. Generally speaking, it is to the advantage of the child that the handicap should be declared at this stage as failure to do so may lead to unsuitable employment and, eventually, to unemployment.

Leavers from—	Form Y.9 completed for—			Form Y.10 completed for—		
	Boys	Girls	Total	Boys	Girls	Total
Secondary Modern Schools ..	35	16	51	—	1	1
Art School	—	1	1	—	—	—
Technical Schools	7	1	8	—	—	—
Grammar Schools	4	1	5	—	—	—
Special Schools	7	1	8	2	2	4
Residential Schools	4	6	10	—	—	—
TOTALS	57	26	83	2	3	5

Speech Therapy:

Mrs. B. P. Pannell, the Speech Therapist, reports:

"Speech therapy was provided at the Robert Galloway Clinic throughout 1964.

During the course of the year the waiting list of children requiring speech therapy increased at a rate considerably greater than that at which children could be seen and admitted for treatment, and it still proved impossible to provide a service for those children at special schools.

In September a second full-time speech therapist, Miss H. E. Phillips, was appointed and consequently the number of children able to attend weekly was doubled. By December the number of children on the waiting list had been reduced to 29, most of these being recent referrals.

We have found that a number of children referred for speech therapy on entering school have quite mild defects which we prefer to call "immaturities of speech" and these children often make considerable spontaneous improvements after some weeks in school. For the most part, we prefer not to admit these cases for weekly treatment but place them on a five to six-monthly supervision. This enables us to reserve weekly appointments for the more severely handicapped children. Nevertheless, these young children should continue to be referred so that an early assessment may be made and speech therapy commenced as soon as possible, if required, as there is a more favourable prognosis if treatment is begun at an early age.

As usual, children were referred in 1964 by head teachers, school medical officers, consultants, etc.

A school medical officer has attended the clinic at monthly intervals—for the first part of the year Dr. James Carroll and for the second part Dr. Audrey Seddon—and we thank them both for their help and co-operation."

	Speech Defect				Total
	Dyslalia	Stammer	Physical Handicaps	Voice Disorders	
Number attending regularly	49	26	3	2	80
Number on supervision	28	11	8	2	49
Number of cases interviewed	81	18	3	1	103
Number of cases admitted	52	16	3	—	71
Number on present waiting list . .	25	2	2	—	29
Number of cases discharged	30	2	2	2	36

Total No. of attendances at speech therapy clinic	1209
No. of children referred to Child Guidance Clinic	2
No. of children referred to Consultants	1

Lip-Reading Classes:

One Lip-Reading Class was held each week at the Education Sub-Office, Mawdsley Street. One qualified teacher of the deaf was in charge of the Centre and ten partially hearing children attended. These children were ascertained as partially hearing and needing special educational treatment.

EXAMINATIONS UNDER SECTIONS 34 AND 57 OF THE EDUCATION ACT, 1944

Approved medical officers of the authority carried out examinations under the above sections of the Education Act, 1944, of children who were not making satisfactory progress at school. In twenty cases it was recommended that the children be ascertained as educationally sub-normal and that special educational treatment should be provided. In fifteen cases the children were found to be unsuitable for education at school.

One parent exercised the right of appealing to the Department of Education and Science in respect of a child ascertained under Section 57, but the appeal was disallowed.

Four parents whose children had been ascertained as educationally sub-normal also appealed to the Department of Education and Science but the Authority's decision was upheld and the children were subsequently admitted to Woodside School.

ADDITIONAL REPORTS

Physiotherapy:

ULTRA-VIOLET LIGHT TREATMENT:

Ultra-violet light treatment was continued at the Health Department throughout the year. The number of children attending in 1964 was 51, compared with 81 in 1963.

The conditions for which medical officers recommended children for treatment are shown in the following table:

Nasal catarrh...	...	...	...	...	6
Frequent colds	...	...	...	...	12
Recurrent bronchitis	...	...	...	...	8
General debility	...	...	...	...	3
Frequent coughs	...	...	...	...	10
General conditions	...	...	...	...	12
TOTAL					51

The treatment was given by a qualified physiotherapist.

Breathing Exercises:

The physiotherapist in the Health Department undertook the treatment of fifteen boys and four girls recommended by school medical officers and the consultant aural surgeon for breathing exercises.

She attended twice a week at Lostock Open Air School to give ultra-violet treatment, and also once a week instructed the children in breathing exercises and arranged the postural drainage and percussion treatment of the children with bronchiectasis.

Twenty children—fourteen boys and six girls—were recommended by the school medical officers for physiotherapy for the following conditions:

	BOYS	GIRLS
Genu valgum	1	1
Flat feet	6	—
Posture	—	1
Lumbago	—	1
Pain R. shoulder and arm	—	1
Postural drainage (Children from Lostock Open Air School)	7	2
	<hr/> 14	<hr/> 6
	<hr/>	<hr/>

Mortality in School Children:

Ten children of school age died during the year.

Eight of the deaths were due to natural causes and two were due to accidents. One child died as the result of an accident at school.

Health Education:

In order that a health education programme may be successful it must be directed principally to the younger generation. It is only by instilling the right principles to the younger people that we can ever hope to develop a generation with good sound ideas about health and conscious of its obligations to itself and to others. It is just possible that any efforts at preventing development of bad habits in adolescence may be reaching these adolescents too late, and it might be worth while reviewing our ideas and seeing whether it would be possible to make more information available to them at a much earlier age. For this purpose it would be necessary to draw up a graduated programme which would start at primary school level, to become progressively more embracing as the children approach school leaving age.

Many of the subjects to be taught in the primary schools are within easy reach of the average teacher without any special preparation. The subjects in the secondary school level, on the other hand, would be more specialised ones and could be dealt with by members of the health department. The latter might include subjects such as personal hygiene, puberty, adolescence, smoking, venereal diseases, personal relationships, marriage, etc.

A satisfactory health education programme for the schools can only be achieved through the combined efforts of the heads of the departments of education and health. The advice of a child psychologist on the best way of approaching a problem would, in my opinion, be most useful.

Great stress is laid on health education in schools in the Cohen Report published in 1964. Amongst other things it states, "Failure to find a place for systematic health education in the curricula of schools of all levels is failure to recognise priorities. Academic success is of reduced value unless achieved by children healthy in mind and body."

Parentcraft and Child Care

During the year school health visitors have undertaken regular teaching of parentcraft and child care within the domestic science syllabus of the school curriculum at three secondary modern schools. At one of these schools the syllabus of the National Association for Maternal and Child Welfare is followed, leading to the examination in Child Care for schools and colleges. School health visitors have undertaken the teaching and examination in the practical and oral tests at this school for the past ten years.

In March a school health visitor was invited to take part in a Mothercraft Course and Child Minding Session as part of the Community Service Programme being initiated at a secondary modern school. The aim of the programme was to widen the education of fourth year girls in an effort to refute the criticism that young people to-day are often accused of being selfish, and for taking without giving anything in return. It was arranged that the girls would hold a "baby-sitting" session once a week, when mothers living near the school could take their babies to the school to be minded whilst they were freed to spend the afternoon shopping. One girl would be responsible for one baby. The creche was planned as a link with the mothercraft lessons being taken by the girls as part of their curriculum. It was visualised that each girl would compile a comprehensive study of the child she was looking after. Projects such as the building of equipment and toys would be carried out in woodwork lessons by the boys as group work. The scheme was also planned to link with English, Domestic Science, Needlework and Cookery lessons.

Regular mothercraft classes were started at a third secondary modern school in 1963 and are now well established. At a fourth bi-lateral school, health visitors conduct classes in first aid and home nursing as part of the school's House Activities.

School health visitors find that close contact with teaching staff involved in the initiation and planning of child care courses is helpful in fostering good relationships with the schools, and would welcome opportunities for expansion in this field, particularly in Parent-Teacher Association activities.

Smoking

A letter explaining the dangers of smoking and its relation to lung cancer is sent to parents of children in secondary schools. This letter does not seem to have achieved any startling results so far, probably because at this stage smoking is indulged in without the parents' knowledge and consent. The result might be better if this subject were dealt with more directly with the school children in a series of talks at an earlier age. The possibility of developing lung cancer should not be the only deterrent. Lung cancer in late middle age is far too remote for children to appreciate it, but there should also be mention of the other effects of smoking—decreased efficiency in sport, bad appetite, bad teeth, impaired memory. A clear financial appreciation of the smoking habits should not be left out. Anti-smoking clubs are worthy of encouragement, and other incentives against smoking during school life are worth serious thought.

Venereal Disease

The same principles apply very broadly to this most important subject. It seems logical to suppose that all the information about V.D. should be imparted *pari passu* with sex education. As in the past, medical officers from the department have been asked by various schools to give talks to whole classes about sex education and V.D. After the talks, questions were invited from the pupils. Some of these questions were very illuminating and demonstrated very clearly the need for these talks, but they also showed very distinctly that it is a serious mistake to classify all children of an age as being in an identical stage of development. The doctors' observations have also revealed that there are vast differences between a group of school children in a grammar school and a similar group of the same age in a secondary modern school. Perhaps it might be possible, in future, to organise these talks on a selective basis, the selections being made on the personal recommendations of the teachers, parents' requests and observation of the children themselves.

THE CARE OF CHILDREN ATTENDING NURSERY SCHOOLS, NURSERY CLASSES AND SPECIAL SCHOOLS

Nursery Schools:

School medical officers visited nursery schools and classes throughout the year and the school nurse made monthly visits to the nursery schools.

The following are the relevant statistics:

KAY STREET NURSERY SCHOOL:

No. of children on the roll, December 1964	86
No. of children admitted during 1964	... 47
No. of children transferred to primary schools	41
No. of children removed by parents -

PIKES LANE NURSERY SCHOOL:

No. of children on the roll, December 1964	96
No. of children admitted during 1964	... 53
No. of children transferred to primary schools	47
No. of children removed by parents	... 6

Nursery Classes:

Medical examinations were carried out at the 31 nursery classes at which 910 children were in attendance.

Special Schools:

Monthly visits were paid by school medical officers to Woodside School, and weekly visits to Lostock Open Air School. The Consultant Aural Surgeon visits Thomasson Memorial School periodically throughout the year.

Results of Periodic Medical Inspection at Special Schools:

Defect or Disease	Special Schools			
	WOODSIDE (E.S.N.)		THOMASSON MEMORIAL (Deaf & Partially Hearing)	
	Requiring treatment	Requiring observation	Requiring treatment	Requiring observation
SKIN	10	1	3	—
EYES:				
Defective vision	51	34	24	7
Squint	12	1	10	1
Other	—	1	1	—
EARS:				
Defective hearing	8	19	1	104
Otitis media	2	3	1	9
Other	3	1	—	—
NOSE AND THROAT:				
Nasal catarrh	2	10	1	2
Tonsil and adenoid abnormalities ..	5	17	3	1
SPEECH ABNORMALITIES	7	20	—	94
LYMPHATIC GLANDS	1	8	—	—
HEART	1	1	—	2
LUNGS	2	6	10	1
DEVELOPMENTAL:				
Hernia	—	—	—	—
Other	6	7	1	3
ORTHOPAEDIC:				
Posture	2	3	1	1
Flat Feet	—	—	3	—
Other	3	8	2	—
NERVOUS SYSTEM:				
Epilepsy	8	2	—	—
Other	1	1	2	4
PSYCHOLOGICAL:				
Development	—	168	—	4
Stability	6	10	—	—
OTHER DEFECTS OR DISEASES	3	8	1	2
TOTALS	133	329	64	235

EMPLOYMENT OF CHILDREN

Five hundred and nine children were examined for employment outside school hours, including seven children who applied for Juvenile Performers' Licences under the Employment of Children in Entertainment Rules. The type of employment was as follows:

	NO. OF CHILDREN
Newspaper delivery	481
Shop or Store Assistants	15
Milk Delivery	4
Butchers' Assistants	2
Entertainments	7
TOTAL	509

One child was found to be unfit to undertake employment.

MEDICAL INSPECTION OF PUPILS ATTENDING DIRECT GRANT AND INDEPENDENT GRAMMAR SCHOOLS

School medical officers carry out routine medical inspection of pupils attending one direct grant grammar school and one independent grammar school in the borough. The following table shows the number of pupils inspected and the number found to require treatment.

Age Groups Inspected (by year of birth)	Number of pupils inspected	Pupils found to require treatment		Total individual pupils with defects
		for defective vision (excluding squint)	for other conditions	
1959 and later	3	2	1	2
1958	8	—	4	4
1957	3	—	—	—
1956	2	—	—	—
1955	—	—	—	—
1954	—	—	—	—
1953	1	1	—	1
1952	10	1	—	1
1951	3	3	3	3
1950	—	—	—	—
1949 and earlier	93	26	7	31
TOTALS ..	123	33	15	42

COUNTY BOROUGH OF BOLTON



ANNUAL REPORT

OF THE

Principal School
Medical Officer

FOR

1964



COUNTY BOROUGH OF BOLTON
EDUCATION COMMITTEE



ANNUAL REPORT

OF THE

Principal School
Medical Officer

FOR THE YEAR 1964

A. I. ROSS, M.D., D.P.H.

Principal School Medical Officer

SCHOOLS SUB-COMMITTEE

Municipal Year 1964-1965

HIS WORSHIP THE MAYOR

(Alderman H. Wood, J.P.)

COUNCILLOR G. HASLAM (Chairman)

ALDERMAN C. H. LUCAS (Vice-Chairman)

ALDERMAN W. H. BATESON

ALDERMAN MRS. N. VICKERS

COUNCILLOR A. D. HAMER

COUNCILLOR R. L. HOWARTH, M.P.

COUNCILLOR MRS. E. M. RYLEY

COUNCILLOR MRS. A. M. SHERRY

COUNCILLOR S. HARRISON

REV. R. BROWN (*Co-opted Member*)

REV. N. W. FORD „ „

REV. M. GORDON, B.Sc. „ „

MR. G. L. HUMPHREY „ „

MR. T. WILLIAMS „ „

Health Department,
Civic Centre,
Bolton.

August, 1965

*To the Chairman and Members of the Schools Sub-Committee
of the Bolton Education Committee*

The physical health and general condition of the school children in Bolton remained good during 1964 and there were no outbreaks of infectious disease. There were two cases of paralytic poliomyelitis, and more cases of scabies occurred than in the last two years. A determined effort is being made to deal with this problem by visiting family contacts and persuading them to have treatment which is very effective.

During the first part of the year we were without the services of a consultant child psychiatrist. Unfortunately, Dr. Dunn, who commenced duty in the area in April, was able to devote only one and a half sessions a week to Bolton and the waiting list which had accumulated during the early part of the year increased. This was most unsatisfactory. It is to be hoped that the Manchester Regional Hospital Board who provides the psychiatrist for Bolton, will soon be able to increase the number of sessions that can be provided to the town. A child psychiatrist needs hospital beds to which some of the children he is dealing with can be admitted. Unfortunately, the Regional Board's plans to provide beds for this purpose fall very short of the Ministry of Health recommendations. With the increased awareness of psychiatric problems in children, an adequate child psychiatric service is essential.

Unfortunately, we remain short of dentists and at the end of the year the Authority employed the full-time equivalent of four dental officers against an establishment of eight. Due to the amount of money allocated for the purpose, only slow progress has been made in modernizing equipment and this may well have had an effect on recruiting new officers. It is most disappointing that the structural defects of Charles Street Clinic prevented a third surgery being adapted there. From the point of view of the dental health of future school children in the town, it is sad that the Authority has not yet been able to introduce fluoridation of the town's water supply. Consideration of this has had to await the outcome of the Watford legal case. It is hoped when this has been resolved that the Health Committee will be able to recommend to the Town Council that the Water Committee should add fluoride to the town's water supply.

A fairly full account is given of the health education undertaken in the schools. Although the school medical department helps in this work to an increasing extent, it would seem that more could be done.

My thanks are due to the Schools Sub-Committee for their continued interest and enthusiasm for the work of the school medical department and to the Chief Education Officer for his continued co-operation.



Principal School Medical Officer.

STAFF OF THE SCHOOL HEALTH SERVICE

Principal School Medical Officer . . .	Dr. A. I. Ross	
Deputy Principal School Medical Officer	Dr. I. S. Macdonald	(Resigned 23.9.64)
Senior Assistant Medical Officer . .	Dr. S. Caruana	(Commenced 15.6.64)
School Medical Officers	Dr. Eve M. Mawdsley	
	Dr. Audrey Seddon	(Part-time)
	Dr. Mavis J. Allanson	(Part-time)
	Dr. Sylvia J. A. Raymond	(Resigned 31.7.64)
	Dr. James T. Carroll	(Resigned 30.6.64)
	Dr. C. O. Lois Holt	(Resigned 1.3.64)
	Dr. Dorothy M. Paterson	(Commenced 6.7.64)
	Dr. L. M. Mayer-Jones	(Commenced 4.8.64)

School Medical Officers worked part-time in both the Maternity and Child Welfare and School Health Services, and were appointed as Assistant Medical Officers of Health and School Medical Officers.

Ophthalmic Surgeons	Dr. T. Chadderton	(Part-time)
	Dr. T. Shannon	(Part-time)
Ear, Nose and Throat Surgeon	Mr. G. G. Mowat	(Part-time)
Principal School Dental Officer	Mr. A. E. Shaw	
School Dental Officers	Mr. S. J. Bray	
	Mr. M. R. Annis	(Part-time)
	Mr. I. G. Black	(Part-time)
	Miss Glenys Haworth	
	Mr. W. J. Abbott	
	Mrs. Mary R. McKenna	(Part-time)
	Mr. S. M. Aalen	(Part-time)
	Mr. J. P. H. Donovan	(Resigned 9.8.64)
Dental Anaesthetist	Dr. Elizabeth Mitchell	(Part-time)
	Mr. T. H. Wignall	(Part-time)
Psychiatrist	Dr. J. F. Dunn	(Commenced 1.4.64)
Educational Psychologist	Mrs. M. A. Spencer	
Clinical Psychologist	Mrs. P. Bunn	(Part-time)
Speech Therapists	Mrs. B. P. Pannell	
	Miss H. E. Philips	(Commenced 22.9.64)
Chiropodist	Miss Anne C. Drury	(Part-time)
Superintendent Nursing Officer . . .	Miss E. M. Richardson	
Deputy Superintendent Health Visitor and School Nurse	Miss A. M. Fraser	

NURSING STAFF

On the 31st December there were 10 full-time School Nurses, and 29 Health Visitors working part-time on School Health and part-time on Maternity and Child Welfare work—the equivalent of 12·36 full-time School Nurses.

The Superintendent Nursing Officer supervised the work of the staff and was assisted by the Deputy Superintendent Health Visitor and School Nurse.

DENTAL SURGERY ASSISTANTS

There were 8 dental surgery assistants employed on the 31st December.

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GENERAL INFORMATION

No. of pupils on registers of maintained schools 25,631

Children attending:

Nursery Schools	...	...	...	179
Primary Schools	...	...	...	14,923
Secondary Modern Schools	...	...	...	5,403
Secondary Technical Schools	...	...	...	1,449
Secondary Grammar Schools	...	...	...	1,845
Special Schools	...	...	...	378
Direct Grant Schools	...	...	...	1,419
Non-maintained and Independent Schools	...	...	...	35
(under arrangements made by Local Authority)				

The number of children attending primary schools included 910 children at 31 nursery classes held in 26 of the primary schools.

No. of schools maintained by the Authority... .. 90

Nursery Schools	...	...	...	2
Primary Schools	...	...	...	62
Secondary Schools	...	...	...	22
Special Schools	...	...	...	4

ARRANGEMENTS FOR TREATMENT AND SPECIAL EXAMINATIONS

Minor Ailments:

Consulation and Treatment Sessions—Doctor in Attendance

SCHOOL CLINIC	DAY AND TIME OF COMMENCEMENT	NO. OF SESSIONS WEEKLY
Robert Galloway Clinic, Ward Street	Tuesday and Thursday, 9.30 a.m.	2
	Wednesday and Friday, 2.0 p.m. (From May, 1964)	2
Charles Street Clinic, off Folds Road	Wednesday and Friday, 2.0 p.m. (Until May, 1964)	2
The Withins School Clinic, Withins Lane, Breightmet	Wednesday, 9.30 a.m.	1
Astley Bridge School Clinic, Moss Bank Way	Tuesday, 9.30 a.m.	1

Minor Ailment Treatment Sessions—Nurse only in Attendance

SCHOOL CLINIC	DAY AND TIME OF COMMENCEMENT	NO. OF SESSIONS WEEKLY
Robert Galloway Clinic, Ward Street	Monday to Friday, 9.30 a.m.	5
Charles Street Clinic, off Folds Road	Monday to Friday, 2.0 p.m. (Until May, 1964)	5
The Withins School Clinic, Withins Lane, Breightmet	Monday, Wednesday and Friday, 9.30 a.m.	3
Astley Bridge School Clinic, Moss Bank Way	Tuesday and Thursday, 9.30 a.m.	2

Treatment Centres with only a school nurse in attendance were conducted at the following schools:—

Brownlow Fold	...	...	...	Thursday morning
Gaskell Street	...	...	...	Wednesday afternoon
Whitecroft	...	...	...	Wednesday morning
Hayward	...	...	...	Monday, Wednesday and Friday morning

Dental Surgeries:

Six dental surgeries were in operation as follows:—

ROBERT GALLOWAY CLINIC	...	...	...	...	2 Surgeries
Monday to Friday, 9.30 a.m. and 2.0 p.m.					
CHARLES STREET CLINIC	...	...	...	...	2 Surgeries
Monday to Friday, 9.30 a.m. and 2.0 p.m.					
ASTLEY BRIDGE SCHOOL CLINIC	...	...	...	...	1 Surgery
Monday to Friday, 9.30 a.m. and 2.0 p.m.					
THE WITHINS SCHOOL CLINIC	...	...	...	...	1 Surgery
Monday to Friday, 9.30 a.m. and 2.0 p.m.					

Aural Clinics:

The Consultant Aural Surgeon attended fortnightly, until May, at both the Charles Street School Clinic and the Robert Galloway Clinic to see by appointment school children who were referred by the school medical officers. From May until the end of the year the clinics were held weekly at the Robert Galloway Clinic.

Ophthalmic Clinics:

The Consultant Ophthalmic Surgeons attended at Charles Street Clinic and the Robert Galloway Clinic to examine by appointment children referred by school medical officers.

The clinics were held as follows:—

CHARLES STREET SCHOOL CLINIC

Wednesday morning	1 session fortnightly (Until May, 1964)
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ROBERT GALLOWAY CLINIC

Monday afternoon	}	3 sessions weekly.
Thursday afternoon		
Saturday morning		
Wednesday morning (from May, 1964)		
		1 session fortnightly.

Morning sessions commenced at 9.30 a.m. and afternoon sessions at 2.0 p.m.

Child Guidance:

During the early part of 1964, because no Consultant Psychiatrist had been appointed, a few urgent cases were seen by Dr. Leyberg at Bolton District General Hospital or by a child psychiatrist at Manchester. This situation continued until April, 1964 when Dr. Dunn took up duty as Consultant Psychiatrist in place of Dr. Gage. Unfortunately, Dr. Dunn has to serve three other areas in addition to Bolton, and he has only been able to give one and a half sessions a week, every Tuesday morning and alternate Friday afternoons, for work in the county borough. Thus it has not been possible to clear the backlog of cases, let alone keep up with the new problems in child guidance.

More consultant child psychiatric sessions will be needed if the School Health Service is to cope adequately with the maladjusted children. More hospital beds for severely emotionally disturbed children are very necessary if the child psychiatrist is to be able to give proper therapy and help to those children who are too maladjusted to be placed in a suitable special school. The number of school places for maladjusted children, particularly girls, is still inadequate, and we look forward to the establishment of a local school for maladjusted children. Those few places that are available at present are in distant parts of the country, and the child psychiatrist and members of his team find it almost impossible to check the progress of emotionally disturbed children.

Speech Therapy:

At the beginning of 1964 one full-time speech therapist was employed. Another full-time speech therapist took up duty on the 22nd September. The Speech Therapy Service has thus been limited by shortage of staff during the greater part of the year.

Audiometry:

Routine audiometric testing continued to be carried out in schools on the same basis as in previous years. Routine testing is carried out as soon as possible after school entry and at the age of twelve years. In addition to the routine testing, full examination is carried out on children who have speech defects, who may be backward or who are specially referred for any reason.

Enuresis Clinic:

The Enuresis Clinic has continued weekly at the Robert Galloway Clinic on the same lines as before. Priority has been given to older children, particularly to those over the age of ten years, and attendance is by appointment only. Treatment has been mainly by the use of alarm units.

Children have been referred to the clinic by the Consultant Paediatrician, general practitioners, school medical officers, health visitors and head teachers.

Nocturnal enuresis is a very disturbing complaint and is more common among school children than is often realised. It is helpful to parents to be able to discuss this problem freely at school medical inspections and to be referred to a special clinic where staff are interested and anxious to help.

During the year 110 children have attended the clinic. Of these children, 79 have been new patients. On initial attendance at the clinic a full history was taken and urine examination carried out. Of the 79 new patients, 51 were cured and 16 have been greatly improved. Of the remaining children, 39 are still under treatment. Twelve children have not initially improved by this method of treatment, but as some of these children were rather young they will be kept under review and given a further course of treatment if required.

The results obtained from the work of this clinic are very encouraging and an excellent example of positive and valuable work being carried out within the School Health Service.

Ultra Violet Light Treatment:

Ultra violet light therapy was available in the Health Department on the same basis as in previous years. Children may receive this treatment on the recommendation of school medical officers.

Breathing Exercises:

The physiotherapist in the Health Department continued to give instruction in breathing exercises for children recommended by school medical officers, chest physicians and the aural surgeon. She also attended at Lostock Open Air School to give instruction in breathing exercises to children at the school.

MEDICAL INSPECTION OF SCHOOL CHILDREN

The routine medical inspection of children continued on the same lines as in previous years. Three inspections are carried out during the school life of each child – one on entry to school, one in the last year at primary school and one in the last year of attendance at secondary school. Children attending special schools are inspected annually.

In previous reports the possibility of substituting a selective medical examination of primary school leavers was discussed. This idea is still under consideration—the introduction has been delayed mainly because of changes of medical staff. It is hoped that the selective procedure can be introduced during the coming year.

Periodic Medical Inspections

The total number of periodic medical inspections carried out in 1964 was 7,256, an increase on the number carried out in 1963, namely 6,658.

Number of children inspected:

Entrants	...	...	...	...	...	...	2,657
Primary School Leavers...	...	...	...	...	...	...	2,059
Senior Leavers	...	...	...	...	...	...	2,030
							<hr/>
TOTAL							6,746
Additional periodic inspections							
(including Special Schools)	...	...	...	...	...	...	510
							<hr/>
GRAND TOTAL							7,256
							<hr/>

Other Examinations

Special examinations	8,846
Re-inspections	6,849
					<hr/>
TOTAL				...	15,695
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RESULT OF INSPECTIONS

Periodic Inspections

The number of defects requiring treatment found at periodic inspections was 2,511, compared with 2,518 in 1963. The number of cases requiring observation increased from 2,270 in 1963 to 2,843 in 1964, an increase of 573.

Defect or Disease	Periodic Inspections						TOTAL	
	Entrants		Leavers		Others—			
					Primary School Leavers	Additional periodic inspections and Special Schools		
Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation	Re- quiring treat- ment	Re- quiring obser- vation		Re- quiring treat- ment	Re- quiring obser- vation
Skin	47	53	74	54	67	42	188	149
Eyes:								
a. Vision . . .	154	139	393	63	455	147	1,002	349
b. Squint . . .	60	12	8	3	56	11	124	26
c. Other	11	8	8	9	6	3	25	20
Ears:								
a. Hearing . . .	62	73	16	28	54	136	132	237
b. Otitis Media	23	60	6	12	11	44	40	116
c. Other	11	9	8	3	10	7	29	19
Nose and Throat	192	269	39	42	62	130	293	441
Speech	22	77	4	7	23	136	49	220
Lymphatic Glands	10	108	—	9	1	44	11	161
Heart	20	29	7	9	7	15	34	53
Lungs	46	60	11	18	38	52	95	130
Developmental:								
a. Hernia . . .	9	17	—	1	1	5	10	23
b. Other	66	77	6	19	27	88	99	184
Orthopaedic:								
a. Posture . . .	4	23	1	15	6	15	11	53
b. Feet	43	43	4	26	26	36	73	105
c. Other	35	28	26	53	18	25	79	106
Nervous System:								
a. Epilepsy . . .	9	2	5	1	14	7	28	10
b. Other	8	11	8	3	8	9	24	23
Psychological:								
a. Development	6	28	1	2	9	193	16	223
b. Stability . . .	6	30	2	19	15	30	23	79
Abdomen	11	15	5	4	9	17	25	36
Other	26	23	34	22	41	35	101	80
TOTALS	881	1,194	666	422	964	1,227	2,511	2,843

Summary of Pupils found to require Treatment

Age Group Inspected (By year of birth)	For defective vision (excluding squint)	For any of the other conditions recorded in previous table	Total individual pupils
1960 and later	12	100	115
1959	66	221	264
1958	78	304	351
1957	17	30	42
1956	14	16	22
1955	16	18	27
1954	244	216	407
1953	125	122	215
1952	8	15	19
1951	13	10	16
1950	177	147	284
1949 and earlier	232	124	325
TOTALS	1,002	1,323	2,087

Special Inspections

The following table shows the number of defects found at special inspections.

Defect or Disease	Special Inspections	
	Requiring Treatment	Requiring to be kept under observation
Skin	307	55
Eyes:		
a. Vision	9	2
b. Squint	2	-
c. Other	16	12
Ears:		
a. Hearing	171	124
b. Otitis Media	18	4
c. Other	34	9
Nose and Throat	120	46
Speech	24	7
Lymphatic Glands	2	4
Heart	-	6
Lungs	21	11
Developmental:		
a. Hernia	2	1
b. Other	25	7
Orthopaedic:		
a. Posture	-	-
b. Feet	10	3
c. Other	39	8
Nervous System:		
a. Epilepsy	1	1
b. Other	18	6
Psychological:		
a. Development	12	10
b. Stability	21	11
Abdomen	9	5
Other	76	27
TOTALS	937	359

Presence of Parents at Periodic Medical Inspections:

Age Group Inspected	No. of pupils inspected	No. with parent present
Entrants	2,657	2,028
Primary School Leavers	2,059	1,368
Senior Leavers	2,030	150
Additional periodic inspections (including Special Schools)	510	227
TOTALS	7,256	3,773

Visits to the homes of children by school nurses:

The number of home visits paid by school nurses was 603, compared with 445 in 1963. These visits continued to be made for the same reasons as in the past; some were in connection with the cleansing of children who were found to be infested with vermin, and others were in connection with examinations made under Section 34 or Section 57 of the Education Act, 1944. Some visits were also made in connection with failure to attend clinics held either by the local authority or at the hospital.

MINOR AILMENTS

The number of individual children attending school clinics and treatment centres was 2,571, a decrease on the previous year when the total number was 2,853. The total number of attendances also decreased from 9,498 in 1963 to 8,213 in 1964.

It will be necessary during the coming year to reduce the time spent on minor ailments. Much of this work can be done by the school nurse, leaving the doctor to concentrate at the school clinics on children who have more serious physical and mental problems. More school visiting by nurses and doctors and discussion of the children's problems with head teachers may prevent serious maladjustments in some young people. It is more important to study the child in the school environment than at a clinic.

Clinic or Centre	No. of individual children who attended	Children seen by medical officer on first visit	No. of subsequent visits to medical officer	Children seen by nurse on first visit	No. of subsequent visits to nurse	Total No. of Attendances
Robert Galloway	971	605	295	777	1,864	3,541
Charles Street . .	522	271	39	427	1,122	1,859
The Withins . .	324	217	57	248	587	1,109
Astley Bridge . .	177	127	16	96	175	414
Treatment Centres	577	—	—	577	713	1,290
TOTALS . .	2,571	1,220	407	2,125	4,461	8,213

The number of visits by school children to the treatment centres in schools was as follows:

Whitecroft	...	...	...	...	...	15
Gaskell Street	...	...	...	...	...	17
Brownlow Fold...	...	...	...	...	...	190
Hayward	...	...	...	...	...	1,068
TOTAL...						1,290

NOTES ON SPECIFIC DEFECTS

Diseases of the Skin:

One hundred and twelve cases of scabies were treated during the year, compared with forty-six in 1963, and twenty-six in 1962. The incidence of scabies is increasing and this matter is receiving close attention. This rising incidence is linked with an increase of the condition in adults; these include the parents of affected children. Although this increase would suggest poor hygiene in a few families one might expect also a rising incidence in other skin conditions, such as impetigo, but this is not borne out by the low figures for this disease as shown in the following table.

Once again, no cases of ringworm of the scalp were discovered during the year.

Disease	Number of cases treated or under treatment by the Authority
Ringworm:	
(i) Scalp	—
(ii) Body	1
Scabies	112
Impetigo	17
Other skin diseases	239
TOTAL	369

Impetigo treated in School Clinics:

The number of cases of impetigo treated in school clinics was seventeen in 1964, compared with sixteen in 1963. The table below gives the figures for the past ten years.

Year	No. of Cases	Year	No. of Cases
1955	76	1960	63
1956	43	1961	34
1957	32	1962	33
1958	39	1963	16
1959	74	1964	17

Defects of the Ear, Nose and Throat:

A total of 681 children had their tonsils and adenoids removed during the year; eighteen had operations for diseases of the ear and seventeen for other nose and throat conditions. Two hundred and forty-two of these children were seen by the aural surgeon at the school clinics and referred to hospital for treatment, and 474 children were referred direct to the hospital for treatment.

Treatment

	Number of cases known to have been dealt with
Received operative treatment—	
for diseases of the ear	18
for adenoids and chronic tonsillitis . .	681
for other nose and throat conditions . .	17
Received other forms of treatment	119
TOTAL	835

Mr. G. Gordon Mowat, the Consultant Aural Surgeon, reports:

“Aural Clinics have continued at weekly intervals for the past twelve months, and many cases of slight hearing loss assessed for diagnosis and treatment.

There is still a need for a soundproof room for more accurate audiometry.

I would like to take this opportunity of thanking the nursing and administrative staffs of the clinics for their help and co-operation.”

Ear, Nose and Throat Clinics

No. of visits by patients	686
No. of patients attending	432
No. of new patients	341
No. of children referred from periodic inspections	133
No. of children referred from school clinics . . .	299
No. of children referred from other sources . . .	—

Children attending the clinics for the first time were seen for the following conditions, which may have been multiple in any particular child:

Disease or Defect	Referred from—			TOTAL
	Periodic Inspection	School Clinics	Other Sources	
Deafness	20	131	—	151
Otitis Media	3	8	—	11
Tonsil and adenoid abnormalities	97	141	—	238
Catarrhal conditions	2	4	—	6
Sinusitis	6	2	—	8
Speech difficulties	—	1	—	1
Other conditions	5	13	—	18
TOTALS	133	300	—	433

Four partially hearing children were recommended for special educational treatment. Three of these were admitted to the Thomasson Memorial School during the year and one was awaiting admission at the end of 1964.

Six children were recommended for attendance at the lip reading class.

The aural surgeon completed prescriptions for hearing aids in respect of fourteen children.

Pure Tone Audiometric Testing:

Pure tone audiometry was used for the routine examination of hearing in school children. A sweep test is carried out as a method of selecting those children who may have defective hearing. The sweep test is carried out twice in a child's school life, the first test being shortly after entry and the second at about the age of twelve years. Children who fail the sweep test are invited to the clinic for a full examination.

The early ascertainment of deafness in children is extremely important and the health visitors carry out screening tests for the ascertainment of deafness in pre-school children as part of the work undertaken by the Health Department.

The following table shows the numbers of children in various age groups tested at schools and tested at clinics.

Sweep Testing in Schools

Sources of Children tested	Tested			Failed Test		
	Boys	Girls	Total	Boys	Girls	Total
Ordinary Schools	1,388	1,279	2,667	141	125	266
Secondary Modern, Technical and Grammar	867	730	1,597	50	49	99
Remedial Classes	66	19	85	8	1	9
Special Schools	189	118	307	39	33	72
TOTALS ..	2,510	2,146	4,656	238	208	446

Full Testing at the Clinics

Source of Reference	No. of children referred for test	Awaiting app't for test 1964	App't not kept for test	Result of Audiogram		Unsatisfactory Audiograms and Recommendations				
				Satisfactory	Unsatisfactory	Change of position in class	For observation	Repeat audiogram	Treatment at the clinic	To Aural Surgeon
Failed sweep test in school ..	446	-	85	60	301	10	141	79	11	60
School Medical Officers ..	145	1	14	30	100	5	39	20	-	36
School Medical Officers on account of speech defect	72	4	7	44	17	-	11	1	-	5
On account of backwardness	26	2	5	11	8	-	7	1	-	-
Others:										
Aural Surgeon	36	1	5	5	25	1	14	4	6	-
Headmaster	6	-	1	-	5	-	1	4	-	-
Parent ..	14	-	3	2	9	-	5	1	-	3
Family Doctor	16	2	1	3	10	-	6	3	-	1
Health Visitors	12	-	-	3	9	1	4	2	-	2
Paediatrician	4	-	-	-	4	-	1	3	-	-
Educational Psychologist	1	-	-	-	1	-	1	-	-	-
Repeat Audiograms	347	5	46	53	243	8	112	61	3	59
TOTALS ..	1,125	15	167	211	732	25	342	179	20	166

Diseases of the Eye:

Altogether 1,944 children are known to have been dealt with for errors of refraction. Of these, 1,778 were refracted by the ophthalmic surgeons at the school clinics. The total attendances at the clinics numbered 3,690, of which 3,664 were for refraction, repairs to glasses and re-examinations, and 26 for diseases of the eye.

Two children were referred to the Bolton Royal Infirmary.

In 250 cases spectacles were repaired or replaced.

Thirty-four children were referred to the ophthalmic clinic at the Bolton Royal Infirmary for treatment for squint.

Dr. T. Shannon, Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports:

"I am pleased to report that the work of the Robert Galloway Ophthalmic Clinics has been carried out during the past twelve months with its usual smoothness, thanks to the nursing and clerical staffs.

It has been possible to cope with the waiting list and children are reviewed without any appreciable delay. Parents continue to co-operate in occluding their children's eyes, when advised, with good results.

It is pleasing to note that over the years inflammation of the eyes continues to decrease. The cases of ocular abnormalities, which are rare, are referred to the Hospital Services."

Dr. T. Chadderton, Consultant Ophthalmic Surgeon attending at the Robert Galloway Clinic, reports:

"I have to report that the Eye Clinics held by me at the Robert Galloway School Clinic continue to run extremely smoothly.

The number of children with refractive errors shows no increase on previous years, and there is co-operation from the parents.

The staff continues with its usual excellent efficiency."

Cases of eye disease, defective vision or squint for which treatment was initiated by the school medical officers, may be analysed as follows:

	Number of cases known to have been dealt with
External and other conditions excluding errors of refraction and squint.. ..	35
Errors of refraction (including squint) ..	1,944
TOTAL	1,979
Number of pupils for whom spectacles were prescribed	1,210

The following were found at periodic medical inspection to require attention for defects of the eye.

Defect	Age Groups Inspected				Totals
	Entrants	Primary School Leavers	Senior School Leavers	Additional Periodic Inspections and Special Schools	
Defective Vision	154	353	393	102	1,002
Squint	60	30	8	26	124
Blepharitis	3	2	1	2	8
Conjunctivitis ..	1	—	—	—	1
Other	7	2	7	—	16

Orthoptics:

Children requiring treatment by an orthoptist continued to be referred to the orthoptic clinic at the Bolton Royal Infirmary as it has not been possible to recruit an orthoptist to do this work in the school clinics.

Defective Colour Vision:

As in previous years, the colour vision of secondary school leavers has been tested using the Ishihara method. In 1964, thirty-eight children were found to have defective colour vision, compared with thirty-five in 1963. Thirty-six of these thirty-eight children were, of course, boys.

Orthopaedic Defects:

Two hundred and twelve children were found to have orthopaedic defects. One hundred and sixty-three of these were found on periodic medical inspection and the remaining forty-nine at school clinics. Twenty-one children were referred to consultant orthopaedic surgeons at the Bolton Royal Infirmary for advice and treatment.

Chiropody:

The number of sessions held by the chiropodist at the Robert Galloway Clinic remained at two until September, when an additional session was provided.

Miss Anne C. Drury, the Chiropodist, reports:

"During 1964 the Chiropody Clinic was well attended. By July the waiting list had increased to such an extent that an extra session was found to be necessary. This additional session was commenced in September, and reduced the waiting list considerably. At the present time an appointment can usually be given within a week."

The number of children attending, and a summary of the defects treated are given below:

	BOYS	GIRLS
No. of new patients who attended the clinic	116	232
Defects treated:		
Plantar Warts (verrucae pedis)	95	205
Chilblains	5	8
Hallux Valgus	—	6
Onychocriptosis (ingrowing nails)	3	5
Athlete's Foot (Tinea pedis)	5	2
Pronatiai	1	1
Onychogryphosis (thickened nails)	1	2
General chiropody advice, etc.	18	50
Total number of treatments given	1,771	

Cleanliness of School Children:

The percentage of children with infested heads in 1964 was 7.8, compared with 5.7 in 1963. This is somewhere near the high figure of 7.9 in 1961. In 1964, the school population had risen by over 1,000 children. This increase in numbers has given the hygienists extra work and in the schools where infestation is known to be higher than average an extra person was appointed to carry out more inspections than once a term.

Apart from the rising school population, another factor is probably the increasing length and thickness of hair both in girls and now, more commonly, in boys. As yet, the girls with infested hair outnumber the boys by two to one, namely, 1,326 girls to 696 boys. Both boys and girls must remember that long hair needs very careful cleansing and attention. The responsibility of the young person with untrimmed hair is to keep it clean—this is necessary if he is not to pass his infestation on to his friends. The hygienists who visit the schools will be defeated in their efforts unless all consider this problem seriously.

An increasing effort will be made by the hygienists and nursing staff in the coming year to cope with this problem.

During the year 90 children—25 boys and 65 girls—attended the Municipal Medical Baths at School Hill for vermin disinfection and bodily cleansing.

Notices to Cleanse were issued under Section 54(2) of the Education Act in 50 cases, compared with 54 in 1963.

	1960	1961	1962	1963	1964
School population	25,311	25,271	24,571	24,484	25,631
No. of head inspections .. .	54,720	49,318	53,167	50,962	54,234
No. of children with nits or vermin	1,775	2,021	1,456	1,398	2,022
Expressed as a percentage of school population	7.01	7.9	5.9	5.7	7.8

THE GENERAL CONDITION OF SCHOOL CHILDREN

Result of Routine Medical Inspection:

At the routine medical inspections, the school medical officer concludes his medical report with a statement on the child's general condition, whether satisfactory or unsatisfactory. This classification, which was adopted nationally from the 1st January, 1956, has the merits of simplicity and practicability.

Of the 7,256 children examined at periodic inspections, 7,229 (99.63%) were satisfactory and only 27 (0.37%) were unsatisfactory, a very small percentage indeed. Details are given in the following table.

Age Groups Inspected (By year of birth) (1)	No. of Pupils inspected (2)	Physical Condition of Pupils Inspected	
		Satisfactory (3)	Unsatisfactory (4)
1960 and later	464	463	1
1959	930	921	9
1958	1,279	1,272	7
1957	143	143	—
1956	88	88	—
1955	49	49	—
1954	1,386	1,379	7
1953	720	717	3
1952	56	56	—
1951	45	45	—
1950	1,072	1,072	—
1949 and earlier	1,024	1,024	—
TOTALS: . . .	7,256	7,229	27
Col. (3) total as a percentage of Col. (2) total		99.63	0.37
Col. (4) total as a percentage of Col. (2) total			

The School Meals and Milk in Schools Scheme:

The percentage of school children during 1964 taking school milk under the above schemes	89.11
No. of dinners produced in the school kitchens during 1964	2,945,999
Average number of children taking meals daily	13,591
Percentage of school children taking dinners in school during 1964:	
Expressed as percentage of average attendances	61.79
No. of central kitchens	2
No. of kitchen/dining rooms	41
No. of children on free meals listed at 31st December	1,550

IMMUNISATION

Immunisation against diphtheria, tetanus and poliomyelitis continued on the same lines as in 1963.

Children who have already been immunised against diphtheria, tetanus and poliomyelitis in infancy receive one booster injection against diphtheria and tetanus combined with one dose of oral Sabin vaccine at the age of five years. Where a child has not been adequately immunised against diphtheria or tetanus or poliomyelitis in infancy, a suitable course of immunisation is arranged.

DENTAL HYGIENE

Report of the Principal School Dental Officer

Staff:

It is with regret that staff resignations have to be reported. We have lost the services of two full-time and one part-time officer and by March 1965 the full-time equivalent will have dropped to 4 against an establishment of 8.

Clinics:

Two surgeries at the Robert Galloway Clinic and one at Astley Bridge Clinic operated throughout the year. The Withins Clinic operated on a full-time basis until August and on a half-time basis subsequently.

Both surgeries at Charles Street Clinic were open throughout the year but just as a third surgery was about to be equipped it was found that dry rot had attacked this part of the building and the project has had to be abandoned. This is a blow to the dental service, and the premises once again were condemned as unsuitable and out of date by the Inspecting Dental Officer from the Department of Education and Science. It is hoped that new premises will be made available in the near future to replace this obsolete clinic.

Dental Inspections:

14,412 children out of a school population of 25,631 received a routine dental inspection, as against 14,288 in 1963. Special inspections totalled 2,705, compared with 2,967 in the previous year, continuing the downward trend shown over the last six years. Children attending the special schools were dentally inspected as usual.

Treatment:

5,835 children received dental treatment and were made dentally fit, the fitness being maintained by a six-monthly recall system. 4,509 permanent and 1,978 temporary fillings were inserted, and the ratio of conservation of permanent teeth to the extraction of permanent teeth was 4,037 : 2,461, a ratio of 1.64 compared with 1.52 in 1963, again continuing the trend for the better.

Forty-two patients were fitted with artificial dentures and four crowns were fitted.

One hundred and sixty-three children received orthodontic treatment by means of appliances. Ninety-two of these were new cases, and one hundred and sixteen removable and two fixed appliances were fitted.

General anaesthesia was administered in 2,901 cases and 209 cases received a radiological examination and 317 X-ray films were taken.

9,171 other forms of treatment included scaling and gum treatments, treatment of oral ulcerations, dressings for the relief of pain, impressions, topical applications of stannous fluoride and adjustments to orthodontic appliances.

One notes that the new statistics required by the Department of Education and Science do not include information on many of the other operations listed above. In fact, no statistics of other operations will be required in future. However, all the work listed here is essential and time consuming, for which credit is due.

General Remarks:

Unfortunately, due to inadequate allocation of money, no progress was made in modernising equipment. The phased programme of modernisation referred to in last year's report has not yet been approved, and it was most disappointing that structural defects at Charles Street Clinic precluded the equipping of a third surgery. This was very unfortunate and made much needed expansion of the service impossible at present. An opportunity was missed which may not occur again for a long time.

Dental Health Education:

It is pleasing to report that Bolton is in the forefront in the county in this field. Two full weeks were devoted to dental health exhibitions, the first being the fourth Annual Dental Health Exhibition held as usual at the Bolton Technical College in July and attended by some 1,200 children. This followed the lines of the three previous exhibitions which have been fully described in previous reports, and which again proved successful. The second week was held in November and differed in some respects from the July project in that it was sponsored by the Bolton Evening News, who deserve great praise for devoting a generous amount of space each night for articles and features on various aspects of dental surgery and dental health education. These articles created great interest and this venture in dental health education was of proportions not previously undertaken by any provincial newspaper. The newspaper organised 25,000 free samples of toothpaste which were made available and distributed to school children in Bolton through the Education Department, the head teachers and their staffs, to whom our best thanks are due for all the hard work that this entailed. Their efforts are much appreciated by the Dental Department. Our own part in this excellent dental health project was to staff an exhibition stand in the Central Library and a mobile cinema van which was loaned by the Oral Hygiene Service and stationed near the Moor Lane Bus Station. These exhibits were visited by some 5,000 people during the week, giving an indication of the interest created by this project.

In conclusion, may I once again record appreciation of the help given by the Chairman and Members of the Schools Sub-Committee, the Chief Education Officer and Principal School Medical Officer and their staffs, and also Head Teachers and their staffs whose friendly co-operation is greatly appreciated by the Dental Department.

Dental Inspection and Treatment:

No. of pupils on the registers of maintained primary and secondary schools (including nursery and special schools) in January, 1965 ... 25,631

(a) DENTAL AND ORTHODONTIC WORK

I	Number of pupils inspected by the Authority's Dental Officers:						
	i At Periodic Inspections	...	...	14,412...			
	ii As Specials	...	...	2,705...	Total (I)	...	17,117
II	Number found to require treatment	...	...	...	...	...	12,203
III	Number offered treatment	...	...	...	...	...	10,175
IV	Number actually treated	...	...	...	...	...	5,835

(b) DENTAL WORK (other than Orthodontics)

I	Number of attendances made by pupils for treatment, excluding those recorded at (c) <i>i</i> below...	...	...	...	15,280
II	Half days devoted to:				
	<i>i</i> Periodic (School) Inspections	89...			
	<i>ii</i> Treatment	2,313...	Total II	...	2,402
III	Fillings:				
	<i>i</i> Permanent Teeth	4,509...			
	<i>ii</i> Temporary Teeth	1,978	Total III	...	6,487
IV	Number of Teeth Filled:				
	<i>i</i> Permanent Teeth	4,037...			
	<i>ii</i> Temporary Teeth	1,778...	Total IV	...	5,815
V	Extractions:				
	<i>i</i> Permanent Teeth	2,461...			
	<i>ii</i> Temporary Teeth	5,688...	Total v	...	8,149
VI	<i>i</i> Number of general anaesthetics given for extractions ...				2,901
	<i>ii</i> Number of half days devoted to the administration of general anaesthetics by:				
	A. Dentists	202...			
	B. Medical Practitioners	45...	Total vi	...	247
VII	Number of pupils supplied with artificial teeth...				42
VIII	Other operations:				
	<i>i</i> Crowns	4...			
	<i>ii</i> Inlays	-...			
	<i>iii</i> Other Treatment	9,171...	Total VIII		9,175

(c) Orthodontics

<i>i</i>	Number of attendances made by pupils for orthodontic treatment	760
<i>ii</i>	Half days devoted to orthodontic treatment	76
<i>iii</i>	Cases commenced during the year	92
<i>iv</i>	Cases brought forward from previous year	71
<i>v</i>	Cases completed during the year	51
<i>vi</i>	Cases discontinued during the year	25
<i>vii</i>	Number of pupils treated by means of appliances...	163
<i>viii</i>	Number of removable appliances fitted	116
<i>ix</i>	Number of fixed appliances fitted	2
<i>x</i>	Cases referred to and treated by Hospital Orthodontists	6

INFECTIOUS DISEASES IN CHILDREN

Measles continued to be the infectious disease with the greatest incidence among school children, although the total number of cases in 1964 was 884, a marked reduction on the number of cases notified in 1963 which was 2,182.

There were two cases of poliomyelitis during the year among children; both were paralytic.

The number of cases of dysentery was slightly greater than in 1963.

Incidence of Infection:

The number of cases of infectious diseases each month was as follows:

Disease	Number of Cases												Total
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	
Scarlet Fever	7	6	1	7	8	3	5	5	2	4	2	5	55
Measles	96	55	37	3	5	19	34	97	47	54	117	320	884
Whooping Cough ..	12	10	18	17	34	21	9	9	8	2	1	1	142
Pneumonia	1	1	-	3	-	-	-	-	1	-	-	1	7
Poliomyelitis													
Paralytic	-	-	-	-	-	-	-	-	-	-	1	1	2
Non-Paralytic ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever													
(Paratyphoid B) ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	5	4	8	1	10	6	2	6	2	5	3	2	54
Food Poisoning ..	-	-	-	-	5	-	-	-	-	-	1	-	6
Erysipelas	1	-	-	-	-	-	-	-	-	-	-	-	1
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal Infection	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Encephalitis ..	-	-	-	-	-	-	-	-	-	-	-	-	-

Age at Infection:

The age of the children at infection is shown below:—

Disease	Age															Total	
	Un- der 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14		15
Scarlet Fever	-	1	3	7	9	6	14	5	3	-	1	2	1	1	1	1	55
Measles	36	130	147	162	142	156	77	20	6	2	4	1	-	-	1	-	884
Whooping Cough ..	14	22	30	17	17	19	8	10	1	1	1	-	-	-	-	2	142
Pneumonia	3	-	1	-	-	1	-	-	-	2	-	-	-	-	-	-	7
Poliomyelitis																	
Paralytic	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Non-Paralytic ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever																	
(Paratyphoid B) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	1	9	4	6	2	7	1	3	2	2	2	3	4	3	3	2	54
Food Poisoning ..	-	3	-	1	1	-	-	-	-	-	-	-	-	-	-	1	6
Erysipelas	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal																	
Infection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Encephalitis..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REPORT ON PHYSICAL EDUCATION

1964 has proved to be a very good year in the field of physical education, and both teachers and pupils have shown great keenness and enthusiasm in every branch of this subject. It is felt that a very high standard has been achieved in indoor work. The Annual Demonstrations of Physical Education were again held at Smithills School and the very large numbers attending were proof of the great interest shown in this subject.

Swimming grows in popularity and the excellent results have been most gratifying. In the Annual Swimming Competition for the awards offered by the Humane Society for the Hundred of Salford, a Bolton boy was second and a Bolton girl third. The Captain Webb Shield for Girls, awarded by the Manchester and District Branch of the Royal Life Saving Society was won by Whitecroft County Secondary School, with Wolfenden County Secondary School second, and in the Boys' Section Whitecroft County Secondary School was second.

For the first time children were entered for the new Personal Survival Test of the Royal Life Saving Society, with excellent results.

Courses were organised in Games Coaching and Physical Education for junior children and were well attended.

THE WORK OF THE CHILD GUIDANCE CENTRE

Mrs. M. A. Spencer, the Educational Psychologist at the Child Guidance Centre, reports:

Staffing:

While the main plan of clinic services was little changed in the year under consideration, some staff changes were made. Most notable of these was the appointment of Dr. Dunn who joined us in April as the Consultant Psychiatrist.

Mrs. Bunn, part-time psychologist, increased her number of sessions from three to five each week so that we were able to decrease the waiting time for diagnostic appointments with psychologists even further. At the beginning of the Autumn term we had no waiting list at all though the number of referrals to the school psychological service had not decreased significantly. In spite of the usual increase in referrals from schools towards the end of the first term of the school year, by the beginning of 1965 the waiting list for a first appointment was not more than three to four weeks.

Remedial Teaching Service:

The February Survey of the Reading Ability of the 7-8 year age group was again carried out using the same battery of tests as in the previous two years. This year, 436 children were singled out for further testing as a result of the head teachers' tests. Of these 436 children, 101 were judged to be in need of remedial teaching. Thirty children were placed in junior remedial classes and twenty-five are being given remedial teaching in groups in their own schools.

A new venture started this year is group remedial teaching in the Child Guidance Clinic. Two remedial teachers take small groups of children twice each week. These children are mostly from the smaller or geographically more isolated schools and are brought to the clinic by parents. This is part

of a research project on comparative teaching environments now being carried out. This scheme has been only partly successful, the main difficulty being one of attendance. The children are too young to attend the clinic unaccompanied.

Twenty-three parents whose children were offered places in remedial classes or groups were unable or unwilling to have them attend. Two children in need of remedial teaching left the area. All but a very small number of children are now having their needs catered for and it seems likely that when it is possible to appoint the one further member of teaching staff for which provision is made the needs of the junior schools will be fully covered.

One new remedial class has been opened during the year at Holy Trinity primary school. When this school closes it should be possible to move the class elsewhere. There were thirteen children in the class at the beginning of its second term in operation and the number is quickly building up to the maximum twenty.

It may, at this stage, be worthwhile to note the continued decrease in the numbers of children, both in primary and secondary schools, in need of remedial teaching. This is probably attributed partly to a greater awareness of the problem by the ordinary teacher and partly to increase in the knowledge and use of modern techniques.

School Psychological Service:

During the year, 186 children were referred to the clinic—111 by head and other teachers, 34 by school medical officers and 17 by parents. The total number of referrals is slightly lower than in the previous year; a factor which may account for this is the very high number of possible special school children picked up in the 1963 junior remedial testing. The 1964 figures were only half of those of the previous year. These findings are almost certainly chance results; selection procedure and population in both cases were identical.

The chief reasons for referral to the clinic remained unchanged, with inability to respond to the normal school curriculum as the main problem, accounting for one-third of the children referred. Behaviour problems of all sorts were prominent. Details of these are given in Tables 1 and 2 below. It is encouraging to see that the larger number of referrals by parents noted in 1963 has been maintained.

Two hundred and five children were seen in the first diagnostic session by the psychologist-social worker team. Details of recommendations made are given below. Thirty-six children who had been seen some time previously were fully reviewed in the clinic. There were 636 attendances for group-therapy during the year.

Child Guidance Service:

The main difficulty in the smooth and efficient maintenance of this service is the inadequacy of psychiatric help. Dr. Dunn is with us for a very limited time indeed so that the waiting list for his services is both long and growing. Clinic policy throughout the year has been to maintain an efficient school psychological service so that the pressure on the child guidance service is relieved.

Observation Class:

The class is now up to its maximum size and is fully operative. Two children were discharged during the year, one to the Junior Training Centre and one to Woodside School. After a spell in this class the psychologists were able to make educational recommendations on the children with confidence, and the parents were better able to accept the children's limitations.

Three children joined the class during the year; one was admitted because of doubts about her educability and two because of problems of behaviour and adjustment.

One problem the class is meeting at the moment is that it is hardly possible to find suitable educational placement for children whose emotional adjustment is still unsatisfactory. The difficulty in finding residential school placement has meant that some children have had to stay in the class beyond the age range for which it should cater. This, of course, prevents other children in need from taking up places.

Certain local authorities in membership of the Associated Education Authorities of Lancashire and Cheshire are currently engaged jointly in the planning of three new boarding schools for maladjusted pupils – two for 50 boys each and one for 50 girls. Similar arrangements are also being made for the establishment of three new boarding schools for educationally sub-normal children—two for 80/100 boys each and one for 80/100 girls, and a boarding school for about 50 E.S.N./Maladjusted Boys. All these schools would be available for use by all local authorities in Lancashire and Cheshire.

Evening Class Report for 1963-64:

This year the classes reverted back to the system used up to July, 1962. That is, both classes catered for all ranges of ability. A very small number of pupils attended the two classes. The reversion took place because the Thursday class in the session 1962-63 steadily declined; this was due to having too many students together of very low ability, with a consequent decrease in motivation. In 1963-64 there were eighteen on the roll in the Tuesday class and sixteen in the Thursday class. The average attendance for the year for both classes was sixteen. The year was the best for attendance and work since the beginning of the classes twelve years ago. This steady increase over the year, except for last year's setback in one class, has been most encouraging and proof that the classes are filling an educational and social need.

All students who completed the course showed a good improvement in reading, spelling and general English. As previously reported, there was an increase in the amount of written work being done and an even better response to homework than last year. Three students during the year studied some arithmetic as well, attending both evenings.

As an aid to student needs Mr. Battersby undertook a survey of the actual usage of writing and reading in life situations. Both teachers have used his findings as an aid to their teaching.

TABLE 1

Children referred to Child Guidance Clinic

Reasons for Referral	No. of Cases
Backwardness in school	64
Behaviour problems mainly at home	31
Behaviour problems mainly at school	30
Behaviour problems at home and school	17
School refusal	7
Backwardness and associated emotional symptoms	2
Stress symptoms	8
General assessment of capabilities	27
TOTAL	186

TABLE 2

Symptoms leading to referral to Child Guidance Clinic of 68 children in categories 2, 3 and T4 of Table 1.

Symptoms	No. of Times mentioned
Lying	13
Stealing	19
Truancy	5
Enuresis	7
Encopresis	3
Temper tantrums	5
Aggressive behaviour	9
Wandering from home or school	8
Withdrawn behaviour	15
Others	9

TABLE 3

Sources of Referrals

Sources	No. of Cases
Head Teachers	111
School Medical Officers	34
Speech Therapist	2
Children's Department	4
Parents	17
Consultant Paediatrician	11
Consultant Psychiatrist	2*
Others	7
TOTAL:	188

* Not included in Table 1 above.

TABLE 4

Recommendations made for 205 children attending for diagnostic interview

Recommendation	No. of Cases
Referral to Psychiatrist	17
Examination by other medical specialist	7
Special residential school	13
Special day school	31
Special Observation Class	3
School exclusion and for junior training centre	2
Individual remedial teaching	4
Placement in remedial class	11
Placement in remedial groups	14
Group therapy in child guidance clinic	27
Transferred to speech therapy department	1
Parent guidance	37
Immediate advice to parents	23
Advice to head teacher and other teachers	22
Advice to other education officers	14
Advice to Children's Department	6
Other recommendations	15
No further action	7

HANDICAPPED PUPILS

One of the most important duties of the School Health Service is to advise the authority on the ascertainment of handicapped pupils. These are pupils who, because of some physical or mental disability, require special educational treatment if they are to obtain the maximum possible advantage from education. Correct ascertainment and placement is of considerable importance to individual pupils.

As far as possible, children are retained in ordinary schools unless their handicap is so severe that this would not give the child the best possible education.

The education of children who are ascertained as educationally sub-normal is carried out by medical officers who have attended a prescribed course in this work and have fulfilled regulations laid down in The Medical Examination (Sub-normal Children) Regulations 1959. At the beginning of the year two full-time medical officers and two part-time medical officers, having fulfilled the requirements of the regulations, were able to undertake this work.

Ascertainment in 1964:

The following children were ascertained as in need of special educational treatment as handicapped pupils during the year:

Blind	-
Partially Sighted	-
Deaf	-
Partially Hearing	10
Educationally Sub-normal	20
Epileptic	1
Maladjusted	6
Physically Handicapped	6
Pupils suffering from Speech Defects	61
Delicate	48
TOTAL	152

Children in Special Schools

At the end of the year there were 346 handicapped pupils receiving special educational treatment in special schools. Details are given in the following table.

HANDICAPP	SPECIAL SCHOOLS	NO. OF PUPILS	
		BOARDERS	DAY
BLIND	Liverpool School for the Blind	1	—
	Conover Hall, Shrewsbury	1	—
PARTIALLY SIGHTED	St. Vincent's, Liverpool	2	—
	Corporation Park School, Blackburn	—	12
DEAF	Thomasson Memorial School, Bolton	—	9
	St. John's, Boston Spa	1	—
PARTIALLY HEARING	Thomasson Memorial School, Bolton	3	15
DELICATE	Lostock Open Air School	90	—
PHYSICALLY HANDICAPPED	Birtenshaw Hall School, Bromley Cross	—	11
	St. Rose's School, Stroud, Glos.	1	—
	Bleasdale House School, Silverdale	1	—
	Children's Convalescent Home, West Kirby	2	—
	The Thomas Delarue, Tonbridge	1	—
	The Bradstock Lockett, Southport	1	—
EDUCATIONALLY SUB-NORMAL	Woodside School, Bolton	—	175
	Stone Cross, Ulverston	1	—
	Crowthorn, Edgworth	1	—
	Thingwall School, Liverpool	1	—
	Eden Grove, Appleby	1	—
	Thornbury House, Bristol	1	—
MALADJUSTED	Blue Coat School, Liverpool	1	—
	St. Thomas More's School, Devon	3	—
	Drayton Manor	1	—
	St. Laurence's, St. Leonard's-on-Sea	1	—
	Breckenbrough, Thirsk	2	—
	Chaigeley, Thelwall	1	—
	Marymount, Manchester	1	—
EPILEPTIC	Colthurst House School, Alderley Edge	1	—
	Soss Moss School, Chelford	3	—
SPEECH	Moor House, Oxted	1	—
TOTALS		124	222
TOTAL		346	

Children awaiting placement in Special Schools:

The following pupils were ascertained as in need of special educational treatment, but at the end of the year arrangements for accommodation had not been completed:

Partially Hearing	...	...	...	...	...	1
Physically Handicapped	...	...	...	...	...	4
Educationally Sub-normal	...	...	...	...	...	1
Epileptic	...	...	...	...	...	2
Maladjusted	...	...	...	...	...	13
						—
TOTAL	...	...	...	...	...	21
						—

Total number receiving or needing special school accommodation ... 367

Special Schools in Bolton:

WOODSIDE DAY SPECIAL SCHOOLS FOR EDUCATIONALLY SUB-NORMAL CHILDREN:

The numbers of children on the rolls, and those admitted and discharged, were as follows:

WOODSIDE SENIOR SCHOOL:

From the Bolton Area:	BOYS	GIRLS
No. of children on the roll, December, 1964 ...	57	32
No. of children admitted during 1964 ...	15	8
No. of children who left during 1964 ...	19	18

From Outside Areas:

No. of children on the roll, December, 1964 ...	4	8
No. of children admitted during 1964 ...	2	2
No. of children who left during 1964 ...	1	—

WOODSIDE JUNIOR SCHOOL:

From the Bolton Area:

No. of children on the roll, December, 1964 ...	52	34
No. of children admitted during 1964 ...	16	9
No. of children who left during 1964 ...	19	9

From Outside Areas:

No. of children on the roll, December, 1964 ...	3	1
No. of children admitted during 1964 ...	2	1
No. of children who left during 1964 ...	1	—

One of the medical officers who is approved for the purposes of ascertaining educationally sub-normal children attends these schools regularly.

Children leaving Woodside Senior School at the age of 16 years who are thought to require further supervision are reported informally to the local health authority.

THOMASSON MEMORIAL DAY AND RESIDENTIAL SPECIAL SCHOOL FOR DEAF AND PARTIALLY HEARING CHILDREN

Pupils were admitted from our own and other authorities' areas. With a few exceptions the children who lived in Bolton or nearby attended as day scholars; the remainder were resident.

The Consultant Aural Surgeon pays regular visits to the school. A school medical officer also paid regular visits.

The numbers of children were:

From Bolton Area:	BOYS	GIRLS
No. of children on the roll, December, 1964 ...	15	12
No. of children admitted during 1964	—	3
No. of children who left during 1964	3	3

From Outside Areas:

No. of children on the roll, December, 1964 ...	47	30
No. of children admitted during 1964	1	3
No. of children who left during 1964	9	3

LOSTOCK RESIDENTIAL OPEN AIR SCHOOL FOR DELICATE CHILDREN:

The open air school continued on the same lines as in previous years. During 1964, 137 children in the school were from the Bolton area and 54 from outside areas, principally Lancashire County. This compared with 118 children from Bolton and 55 from outside areas in 1963.

The school continues to be useful for children suffering from a variety of conditions and, apart from general debility, asthma is the principal single entity concerned.

A school medical officer visits the school each week, and the children are cared for by a local general practitioner when they are ill.

The following table gives details of the number of children in attendance, admitted and discharged during the year.

From the Bolton Area:	BOYS	GIRLS
No. of children on the roll, December, 1964 ...	44	46
No. of children admitted during 1964	23	27
No. of children discharged during 1964	25	22

From Outside Areas:

No. of children on the roll, December, 1964 ...	21	4
No. of children admitted during 1964	19	6
No. of children who left during 1964	22	7

An analysis of the medical conditions of the children who were in residence during the year is given below :

MEDICAL CONDITION	NO. OF CHILDREN	
	BOLTON	OUTSIDE AREAS
Asthma	27	21
Bronchitis	22	13
Bronchiectasis	7	4
Poor nutritional status	2	2
General debility	56	1
Other conditions... ..	23	13
TOTALS ...	137	54

Children in other Special Schools:

A number of Bolton children who are handicapped and who cannot be suitably educated in the special schools provided in Bolton attend residential schools in other parts of the country. These children are examined by the authority's medical officers during the school holidays when they return to Bolton so that progress can be assessed, and if there is any change in the child's disability an appropriate recommendation can be made.

Children suffering from Cerebral Palsy:

As far as possible, spastic children whose physical disability is slight and whose intelligence level is adequate are encouraged to attend an ordinary school. The majority of spastic children from Bolton whose physical disability makes them unfit for ordinary school attend Birtenshaw Hall Special School for Spastic Children. The admission and discharge of these children is the responsibility of the Medical Advisory Panel, which meets from time to time to consider applications.

Altogether, there were thirty-eight children known to the School Health Service to be suffering from cerebral palsy. The situation at the end of the year was as follows :

	BOYS	GIRLS
Attending Birtenshaw Hall Special School ...	4	7
Awaiting admission to Birtenshaw Hall Special School	3	1
Attending special school for partially sighted children	1	—
Attending special school for educationally sub-normal children	—	1
Attending residential grammar school	—	1
Attending grammar school	1	1
Attending ordinary schools	8	4
Not at school—pre-school children	5	1
TOTALS ...	22	16

Children unable to attend school because of Physical Disabilities:

The service of home teachers was needed for 31 children. The conditions necessitating this service were as follows:

	BOYS	GIRLS
Rheumatic disease	2	1
Asthma	1	1
Congenital abnormalities	3	2
Heart conditions	1	2
Epilepsy	1	-
Perthe's disease	1	1
Muscular dystrophy	1	-
Chorea	-	1
Scoliosis	1	3
Fractured leg	1	1
Other conditions... ..	2	5
	<hr/>	<hr/>
TOTALS ...	14	17
	<hr/>	<hr/>

Nine boys and twelve girls who had suffered from the conditions mentioned below were taken off the peripatetic teachers' list.

RESUMED ATTENDANCE AT ORDINARY SCHOOL :	BOYS	GIRLS
Rheumatic diseases	2	-
Congenital abnormalities	1	1
Heart condition	-	1
Perthe's disease	1	1
Muscular dystrophy	1	-
Scoliosis	1	2
Fractured leg	-	1
Other conditions	1	3
	<hr/>	<hr/>
ADMITTED TO SPECIAL SCHOOL :		
Congenital abnormalities	1	-
Asthma	1	-
	<hr/>	<hr/>
OVER SCHOOL AGE :		
Rheumatic disease	-	1
Other conditions	-	2
	<hr/>	<hr/>
TOTALS ...	9	12
	<hr/>	<hr/>

Co-operation with the Youth Employment Service:

Handicapped pupils may encounter difficulties in obtaining or keeping employment after they leave school and to assist the Youth Employment Officers in placing these children school medical officers provide advice on Forms Y.9 or Y.10 which are sent to the Youth Employment Officer.

FORM Y.9

This form was completed in respect of eighty-three children and was used for children who had relatively minor defects and who were not likely to need registration under the Disabled Persons (Employment) Act, 1944. The conditions for which the form was used are given in the following table:

						BOYS	GIRLS
Defective colour vision	...	...	...	...	...	36	2
Defective hearing	...	...	...	...	...	4	6
Epilepsy	...	...	...	...	...	2	4
Heart condition	...	...	...	...	...	1	1
Respiratory conditions	...	...	...	...	...	4	10
Deformities	...	...	...	...	...	3	1
Skin conditions	...	...	...	...	...	3	1
Other conditions	...	...	...	...	...	4	1
TOTALS						57	26

FORM Y.10

This form is used where children are sufficiently severely handicapped to make a registration under the Disabled Persons (Employment) Act, 1944, a possibility. In 1964 this form was issued in respect of five children, compared with six in 1963. Four of the children were, however, attending a day special school.

This form is not completed unless the parent is willing to sign a declaration stating that the nature of the disability may be revealed to the Youth Employment Officer. Generally speaking, it is to the advantage of the child that the handicap should be declared at this stage as failure to do so may lead to unsuitable employment and, eventually, to unemployment.

Leavers from—	Form Y.9 completed for—			Form Y.10 completed for—		
	Boys	Girls	Total	Boys	Girls	Total
Secondary Modern Schools ..	35	16	51	—	1	1
Art School	—	1	1	—	—	—
Technical Schools	7	1	8	—	—	—
Grammar Schools	4	1	5	—	—	—
Special Schools	7	1	8	2	2	4
Residential Schools	4	6	10	—	—	—
TOTALS	57	26	83	2	3	5

Speech Therapy:

Mrs. B. P. Pannell, the Speech Therapist, reports:

"Speech therapy was provided at the Robert Galloway Clinic throughout 1964.

During the course of the year the waiting list of children requiring speech therapy increased at a rate considerably greater than that at which children could be seen and admitted for treatment, and it still proved impossible to provide a service for those children at special schools.

In September a second full-time speech therapist, Miss H. E. Phillips, was appointed and consequently the number of children able to attend weekly was doubled. By December the number of children on the waiting list had been reduced to 29, most of these being recent referrals.

We have found that a number of children referred for speech therapy on entering school have quite mild defects which we prefer to call "immaturities of speech" and these children often make considerable spontaneous improvements after some weeks in school. For the most part, we prefer not to admit these cases for weekly treatment but place them on a five to six-monthly supervision. This enables us to reserve weekly appointments for the more severely handicapped children. Nevertheless, these young children should continue to be referred so that an early assessment may be made and speech therapy commenced as soon as possible, if required, as there is a more favourable prognosis if treatment is begun at an early age.

As usual, children were referred in 1964 by head teachers, school medical officers, consultants, etc.

A school medical officer has attended the clinic at monthly intervals—for the first part of the year Dr. James Carroll and for the second part Dr. Audrey Seddon—and we thank them both for their help and co-operation."

	Speech Defect				Total
	Dyslalia	Stammer	Physical Handicaps	Voice Disorders	
Number attending regularly	49	26	3	2	80
Number on supervision	28	11	8	2	49
Number of cases interviewed	81	18	3	1	103
Number of cases admitted	52	16	3	—	71
Number on present waiting list . .	25	2	2	—	29
Number of cases discharged	30	2	2	2	36

Total No. of attendances at speech therapy clinic	1209
No. of children referred to Child Guidance Clinic	2
No. of children referred to Consultants	1

Lip-Reading Classes:

One Lip-Reading Class was held each week at the Education Sub-Office, Mawdsley Street. One qualified teacher of the deaf was in charge of the Centre and ten partially hearing children attended. These children were ascertained as partially hearing and needing special educational treatment.

EXAMINATIONS UNDER SECTIONS 34 AND 57 OF THE EDUCATION ACT, 1944

Approved medical officers of the authority carried out examinations under the above sections of the Education Act, 1944, of children who were not making satisfactory progress at school. In twenty cases it was recommended that the children be ascertained as educationally sub-normal and that special educational treatment should be provided. In fifteen cases the children were found to be unsuitable for education at school.

One parent exercised the right of appealing to the Department of Education and Science in respect of a child ascertained under Section 57, but the appeal was disallowed.

Four parents whose children had been ascertained as educationally sub-normal also appealed to the Department of Education and Science but the Authority's decision was upheld and the children were subsequently admitted to Woodside School.

ADDITIONAL REPORTS

Physiotherapy:

ULTRA-VIOLET LIGHT TREATMENT:

Ultra-violet light treatment was continued at the Health Department throughout the year. The number of children attending in 1964 was 51, compared with 81 in 1963.

The conditions for which medical officers recommended children for treatment are shown in the following table:

Nasal catarrh...	...	...	...	...	6
Frequent colds	...	...	...	...	12
Recurrent bronchitis	...	...	...	...	8
General debility	...	...	...	...	3
Frequent coughs	...	...	...	...	10
General conditions	...	...	...	...	12
TOTAL					51

The treatment was given by a qualified physiotherapist.

Breathing Exercises:

The physiotherapist in the Health Department undertook the treatment of fifteen boys and four girls recommended by school medical officers and the consultant aural surgeon for breathing exercises.

She attended twice a week at Lostock Open Air School to give ultra-violet treatment, and also once a week instructed the children in breathing exercises and arranged the postural drainage and percussion treatment of the children with bronchiectasis.

Twenty children—fourteen boys and six girls—were recommended by the school medical officers for physiotherapy for the following conditions:

	BOYS	GIRLS
Genu valgum	1	1
Flat feet	6	—
Posture	—	1
Lumbago	—	1
Pain R. shoulder and arm	—	1
Postural drainage (Children from Lostock Open Air School)	7	2
	<hr/> 14	<hr/> 6
	<hr/>	<hr/>

Mortality in School Children:

Ten children of school age died during the year.

Eight of the deaths were due to natural causes and two were due to accidents. One child died as the result of an accident at school.

Health Education:

In order that a health education programme may be successful it must be directed principally to the younger generation. It is only by instilling the right principles to the younger people that we can ever hope to develop a generation with good sound ideas about health and conscious of its obligations to itself and to others. It is just possible that any efforts at preventing development of bad habits in adolescence may be reaching these adolescents too late, and it might be worth while reviewing our ideas and seeing whether it would be possible to make more information available to them at a much earlier age. For this purpose it would be necessary to draw up a graduated programme which would start at primary school level, to become progressively more embracing as the children approach school leaving age.

Many of the subjects to be taught in the primary schools are within easy reach of the average teacher without any special preparation. The subjects in the secondary school level, on the other hand, would be more specialised ones and could be dealt with by members of the health department. The latter might include subjects such as personal hygiene, puberty, adolescence, smoking, venereal diseases, personal relationships, marriage, etc.

A satisfactory health education programme for the schools can only be achieved through the combined efforts of the heads of the departments of education and health. The advice of a child psychologist on the best way of approaching a problem would, in my opinion, be most useful.

Great stress is laid on health education in schools in the Cohen Report published in 1964. Amongst other things it states, "Failure to find a place for systematic health education in the curricula of schools of all levels is failure to recognise priorities. Academic success is of reduced value unless achieved by children healthy in mind and body."

Parentcraft and Child Care

During the year school health visitors have undertaken regular teaching of parentcraft and child care within the domestic science syllabus of the school curriculum at three secondary modern schools. At one of these schools the syllabus of the National Association for Maternal and Child Welfare is followed, leading to the examination in Child Care for schools and colleges. School health visitors have undertaken the teaching and examination in the practical and oral tests at this school for the past ten years.

In March a school health visitor was invited to take part in a Mothercraft Course and Child Minding Session as part of the Community Service Programme being initiated at a secondary modern school. The aim of the programme was to widen the education of fourth year girls in an effort to refute the criticism that young people to-day are often accused of being selfish, and for taking without giving anything in return. It was arranged that the girls would hold a "baby-sitting" session once a week, when mothers living near the school could take their babies to the school to be minded whilst they were freed to spend the afternoon shopping. One girl would be responsible for one baby. The creche was planned as a link with the mothercraft lessons being taken by the girls as part of their curriculum. It was visualised that each girl would compile a comprehensive study of the child she was looking after. Projects such as the building of equipment and toys would be carried out in woodwork lessons by the boys as group work. The scheme was also planned to link with English, Domestic Science, Needlework and Cookery lessons.

Regular mothercraft classes were started at a third secondary modern school in 1963 and are now well established. At a fourth bi-lateral school, health visitors conduct classes in first aid and home nursing as part of the school's House Activities.

School health visitors find that close contact with teaching staff involved in the initiation and planning of child care courses is helpful in fostering good relationships with the schools, and would welcome opportunities for expansion in this field, particularly in Parent-Teacher Association activities.

Smoking

A letter explaining the dangers of smoking and its relation to lung cancer is sent to parents of children in secondary schools. This letter does not seem to have achieved any startling results so far, probably because at this stage smoking is indulged in without the parents' knowledge and consent. The result might be better if this subject were dealt with more directly with the school children in a series of talks at an earlier age. The possibility of developing lung cancer should not be the only deterrent. Lung cancer in late middle age is far too remote for children to appreciate it, but there should also be mention of the other effects of smoking—decreased efficiency in sport, bad appetite, bad teeth, impaired memory. A clear financial appreciation of the smoking habits should not be left out. Anti-smoking clubs are worthy of encouragement, and other incentives against smoking during school life are worth serious thought.

Venereal Disease

The same principles apply very broadly to this most important subject. It seems logical to suppose that all the information about V.D. should be imparted *pari passu* with sex education. As in the past, medical officers from the department have been asked by various schools to give talks to whole classes about sex education and V.D. After the talks, questions were invited from the pupils. Some of these questions were very illuminating and demonstrated very clearly the need for these talks, but they also showed very distinctly that it is a serious mistake to classify all children of an age as being in an identical stage of development. The doctors' observations have also revealed that there are vast differences between a group of school children in a grammar school and a similar group of the same age in a secondary modern school. Perhaps it might be possible, in future, to organise these talks on a selective basis, the selections being made on the personal recommendations of the teachers, parents' requests and observation of the children themselves.

THE CARE OF CHILDREN ATTENDING NURSERY SCHOOLS, NURSERY CLASSES AND SPECIAL SCHOOLS

Nursery Schools:

School medical officers visited nursery schools and classes throughout the year and the school nurse made monthly visits to the nursery schools.

The following are the relevant statistics:

KAY STREET NURSERY SCHOOL:

No. of children on the roll, December 1964	86
No. of children admitted during 1964	... 47
No. of children transferred to primary schools	41
No. of children removed by parents -

PIKES LANE NURSERY SCHOOL:

No. of children on the roll, December 1964	96
No. of children admitted during 1964	... 53
No. of children transferred to primary schools	47
No. of children removed by parents	... 6

Nursery Classes:

Medical examinations were carried out at the 31 nursery classes at which 910 children were in attendance.

Special Schools:

Monthly visits were paid by school medical officers to Woodside School, and weekly visits to Lostock Open Air School. The Consultant Aural Surgeon visits Thomasson Memorial School periodically throughout the year.

Results of Periodic Medical Inspection at Special Schools:

Defect or Disease	Special Schools			
	WOODSIDE (E.S.N.)		THOMASSON MEMORIAL (Deaf & Partially Hearing)	
	Requiring treatment	Requiring observation	Requiring treatment	Requiring observation
SKIN	10	1	3	—
EYES:				
Defective vision	51	34	24	7
Squint	12	1	10	1
Other	—	1	1	—
EARS:				
Defective hearing	8	19	1	104
Otitis media	2	3	1	9
Other	3	1	—	—
NOSE AND THROAT:				
Nasal catarrh	2	10	1	2
Tonsil and adenoid abnormalities ..	5	17	3	1
SPEECH ABNORMALITIES	7	20	—	94
LYMPHATIC GLANDS	1	8	—	—
HEART	1	1	—	2
LUNGS	2	6	10	1
DEVELOPMENTAL:				
Hernia	—	—	—	—
Other	6	7	1	3
ORTHOPAEDIC:				
Posture	2	3	1	1
Flat Feet	—	—	3	—
Other	3	8	2	—
NERVOUS SYSTEM:				
Epilepsy	8	2	—	—
Other	1	1	2	4
PSYCHOLOGICAL:				
Development	—	168	—	4
Stability	6	10	—	—
OTHER DEFECTS OR DISEASES	3	8	1	2
TOTALS	133	329	64	235

EMPLOYMENT OF CHILDREN

Five hundred and nine children were examined for employment outside school hours, including seven children who applied for Juvenile Performers' Licences under the Employment of Children in Entertainment Rules. The type of employment was as follows:

	NO. OF CHILDREN
Newspaper delivery	481
Shop or Store Assistants	15
Milk Delivery	4
Butchers' Assistants	2
Entertainments	7
TOTAL	509

One child was found to be unfit to undertake employment.

MEDICAL INSPECTION OF PUPILS ATTENDING DIRECT GRANT AND INDEPENDENT GRAMMAR SCHOOLS

School medical officers carry out routine medical inspection of pupils attending one direct grant grammar school and one independent grammar school in the borough. The following table shows the number of pupils inspected and the number found to require treatment.

Age Groups Inspected (by year of birth)	Number of pupils inspected	Pupils found to require treatment		Total individual pupils with defects
		for defective vision (excluding squint)	for other conditions	
1959 and later	3	2	1	2
1958	8	—	4	4
1957	3	—	—	—
1956	2	—	—	—
1955	—	—	—	—
1954	—	—	—	—
1953	1	1	—	1
1952	10	1	—	1
1951	3	3	3	3
1950	—	—	—	—
1949 and earlier	93	26	7	31
TOTALS ..	123	33	15	42

