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BOROUGH OF HARROW

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1954

CARYL THOMAS, M.D., B.Sc., D.P.H.
BARRISTER-AT-LAW

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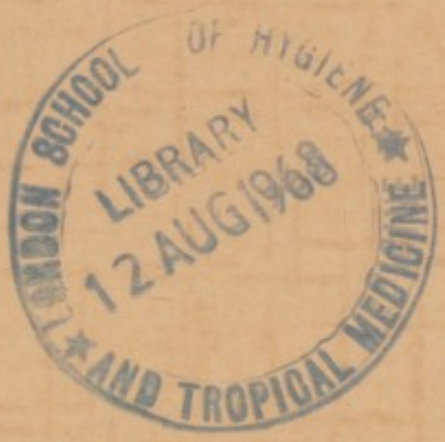
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ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH

To His Worship the Mayor, Aldermen and Councillors of the Borough of Harrow

Mr. Mayor, Ladies and Gentlemen,

I beg to submit the Annual Report on the Health and Sanitary Circumstances of the District for the year 1954.

One of the duties of a Medical Officer of Health as set out in the Sanitary Officers (outside London) Regulations, 1935, is that " he shall as soon as practicable after the 31st day of December in each year make an annual report to the local authority for the year ending on that date on the sanitary circumstances, sanitary administration and the vital statistics of the district containing in addition to any other matters upon which he may consider it desirable to report, such information as may from time to time be required by the Minister, and furnish the Minister with as many copies of such report as the Minister may from time to time require."

The pattern was for some years set by the contents of a circular from the Minister of Health issued each year which specified too any particular points to which especial reference should be made. Although in recent years the Minister's circular on the form the report should take has not been so detailed, each report for this district has been on much the same pattern as its predecessors. Before the second world war the circular would indicate when a more detailed or survey report was called for; in the intervening years it was customary to refer only to those circumstances which changed from year to year. This being the first report about the new Borough, the Public Health Committee decided that it should be a survey rather than an interim report.

The first section deals with the vital statistics of the district. They are again highly satisfactory. The death rate even when corrected for age and sex distribution by the application of the comparability factor is appreciably below that of the country as a whole. The important infant mortality rate is gratifyingly low. Harrow's rate has consistently been below that of the country as a whole. The national rate has since the war fallen so much that the difference between the local rate and that for England and Wales is now comparatively small. The lower the rate, the more difficult, of course, it will be to improve on it. For another year it can be reported the district has been free from diphtheria, this being the fourth consecutive year. The rates for the other infections were satisfactory, there being no fatalities from whooping cough or measles. In common with the country as a whole Harrow's incidence of poliomyelitis was light, there being only seven cases. Although the numbers of deaths from tuberculosis have in recent years been falling steadily, so much so that those for the country as a whole in 1953 were only one half those of 1948, there had not been a similar fall in the numbers of notifications of new cases. In this district the 1953 figures showed a fall. This was followed by a much greater decline in the number in 1954. A continued

fall in the numbers of these new cases would indicate that the position is perhaps returning to that obtaining just before the outbreak of the war when it seemed that this scourge was at last on the way to being overcome. This section, and others throughout the report, contains information relating to this district which has been abstracted from the census report for the county of Middlesex.

The second section sets out particulars of the various health services, being those more especially concerned with the individual. These are a product of this century. Up to the end of the last century the personal health services for the individual were very limited, being restricted to hospital provision for the infectious sick, some arrangements for the mentally sick and some help under the Poor Law Service. The earlier of the personal services, maternity and child welfare and school health were made the responsibility of the larger of the county districts as well as of the Councils of Counties and County Boroughs. The Education Act and then the National Health Service Act removed these responsibilities from the District Councils (minor authorities) transferring them to the Councils of the Counties (major authorities). The hospital service of the country had its origin in two main sources; whereas most of the hospitals for acute general cases were voluntary establishments, the hospitals for those with infectious complaints including tuberculosis and the institutions for the mentally defective were provided by local authorities. On the break-up of the Poor Law by the Local Government Act, 1929, local authorities (major authorities) became responsible for the first time for providing general medical and surgical accommodation. The National Health Service Act of 1946 transferred nearly all these establishments to the Minister of Health to be administered by Regional Hospital Boards so that they were no longer the responsibility of any type of local authority. The same Act made the major authorities responsible for providing many services which up to then had been maintained by voluntary agencies of one sort or another. In this way major authorities became responsible for maintaining a home nursing service; they also took over the midwifery service and the home help service where these had up to this been provided by the minor authorities. A list of the health services of a locality then includes some administered by the agents of the Minister of Health, most of the rest of them in an area like this by the County Council. Many County Councils have made arrangements for the day to day administration of certain of their local health services to be carried out by local committees comprising not only members of the County Council and members of the District Council, but also others with special experience in certain phases of the work of the committee. The county of Middlesex was divided into ten areas, for each of which a local Area Committee was appointed. Area No. 5 is coterminous with the Borough of Harrow. Many of the County Council's services referred to in the second section of this report then are administered by the local Area Committee. The Education Act provides for delegation to the local divisional executive which is in effect the Council with some others, of certain of the local education services including the administration of the school health services. These comprise essentially the arrangements for the routine

medical examination of pupils attending maintained schools in three age groups, the treatment of certain conditions and the measures for ascertaining handicapped pupils. The arrangements for treatment are made by the Area Committee, the same medical, dental and nursing staff providing the special services for mothers and young children under the National Health Service Act and for school children under the Education Act. The health visitors under the Superintendent, Miss A. Clifford, who carry out their home visits to mothers and young children and attend the various maternity and child welfare clinics, also act as school nurses under the Education Act.

The third section deals more especially with the environmental as contrasted with the personal health services referred to in the previous section. These are, of course, the basic health services of any district. If they are not sound the health of the district can never be good, no matter how effective the personal services may be. In most districts, most of these services were at one time provided by the District Council itself. The chief exception was the provision of water which in many towns was originally supplied by private enterprise and has remained independent of the local authority. The recent development of the arrangements for sewage disposal which is now carried out by another body, not the District Council, resulted from the growth not merely of this but of adjoining districts. This list of local health services should really include information about all the parks and open spaces, recreation grounds and playing fields which contribute so much to the healthiness and to the amenities of a district.

The next section deals essentially with the work of the sanitary inspectors. The sanitary inspectorate comprises the chief sanitary inspector, Mr. S. N. King, the deputy chief sanitary inspector, nine sanitary inspectors and one assistant to the inspectors. Except for such special work as that concerned with the campaign for clean food and the supervision of shops, all work arising in any district is carried out by the sanitary inspector for that district. Broadly these duties can be classed as those arising out of housing, the supervision of such premises as factories, the control of conditions that might give rise to nuisance, the arrangements for the protection of food in its passage in some instances from the earliest stage until it reaches the consumer, and measures for the control of some infections. The figures in the statistical summary indicate the vast volume of this work which is carried out unobstrusively and probably unknown to many burgesses, work which is concerned not only to remedy nuisances or other conditions which have already occurred, but which is also aimed at preventing those conditions ever arising.

The last section deals with certain of the communicable diseases. The improvement in the sanitation of the country in the last century did much to lead to the virtual elimination of such infectious diseases as cholera, smallpox and typhus fever which had even through much of the century wrought such havoc. This century has seen further improvements. Typhoid fever is now relatively rare, probably because of the satisfactory state of the public water supply. Smallpox is absent except when occurring secondary to the introduction into the country of unrecognised cases.

The incidence of diphtheria is only a fraction of what it was even fifteen years ago, largely as a result of immunisation. The infections then are of far less importance than they were only a few years ago. Two diseases call for special mention, poliomyelitis because of its special incidence since the country was invaded in 1947, and tuberculosis because although before the war it seemed about to be controlled, during the war it increased so markedly but now again looks as though it might be controlled.

This report then is a list of establishments of various sorts, hospitals, clinics, etc., at which services of different kinds, advisory or treatment, are available to those who can go to the premises to take advantage of them; and is a summary of the activities of large numbers of persons who provide services of various sorts, education or treatment by the doctors or nurses at the clinic or advisory or other at people's homes. Apart from the large staffs at the various hospitals to which those from this district as well as from others go, there are large numbers of persons who spend their whole lives on matters which affect the health of those living in the district. There are the many road sweepers, the collectors of house refuse, the men engaged in sewer work, the staff of the chest clinics, the home nurses, midwives and home helps, the health visitors and the medical officers at the clinics, the sanitary inspectors and the general medical practitioners. Much of the work of many of these is advisory. Full benefit from their labours can follow only if those who are being helped are prepared to profit by the advice. The staff at the Colindale Laboratory prepares diphtheria antigen which the Ministry of Health supply free of cost. This can be injected into children by general medical practitioners or by the medical officers at the clincs. All these facilities though come to nought unless the parent arranges for his child to be treated. In the ultimate the efficiency of much of the health services provided depends on the willingness of an individual to take advantage of them. This can be brought about only by education, and it is probable that in a district such as this where the general standard of environment is high, less emphasis needs now to be paid to this and more to education. Certain sections of the population who are in the priority groups are entitled to the arrangements for dental treatment provided by the local health authorities, a service available to them only; but although these groups are specially favoured with this free service, nothing like all who ought to take advantage of the facilities do so. In the same way those entitled to special vitamin preparations available free of charge do not take them to the extent that they should. Much work has been done to improve the conditions under which food is prepared and handled. Here again the purchaser has her own part to play, not only in helping to reduce any unsatisfactory or unpleasant habits of those in the shops or cafes dealing with the food, but herself to avoid such unpleasantnesses as dropping cigarette ash near exposed foodstuffs or handling food which she does not purchase. It must not be left to the shop keeper to see that dogs are not brought into food shops. The dog owners have their own responsibilities not only in this regard, but also in the matter of the fouling of footways. During the war reliance was placed on unofficial arrangements for help to be given by neighbours. There is the less need these days for the active measures of that sort;

but no less for the other side of good neighbourliness, to reduce that lack of consideration which allows a person to keep his chickens where they are of the greatest inconvenience to his neighbours, or to irritate his neighbours by noises or by the lighting of bonfires, by his compost heaps, or putting out food for the birds which attract rats which do not remain in his garden. The effects of his action may not be limited to his immediate neighbours. So very much of the smoke of towns, especially of one such as this where there is comparatively little industry, comes from the domestic chimney. An appreciable reduction in the pollution of the atmosphere can be brought about only if substantial numbers of householders will take those steps which they can to reduce the amount of smoke which they are at present causing to be emitted. Reference is made in the report to complaints about the condition of milk bottles; these cases too are mostly the result of thoughtless action or carelessness of some members of the public. In these many ways, the healthiness of a district might depend not on the activities of a local or central administrative body, but on those of the local residents.

I have the honour to be,

Your obedient servant,

CARYL THOMAS,

Medical Officer of Health.

COUNCIL OFFICES,
KYNASTON COURT,
HARROW WEALD.

5th May, 1955.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA

Area (in acres)	12,555
Registrar-General's estimate of resident population mid-year 1954	217,700
Rateable Value (1st April, 1954)	£2,279,172
Sum represented by a penny rate (1st April, 1954)	£9,317
Total number of occupied houses	54,433
Total number of occupied flats	8,554

Extracts from Vital Statistics for the Year

Live Births:—	Total	Male	Female	
Legitimate	2,646	1,379	1,267	Birth rate per 1,000
Illegitimate	101	54	47	population 12·6
Total ...	2,747	1,433	1,314	
Stillbirths:—				
Legitimate	56	28	28	Rate per 1,000 births
Illegitimate	—	—	—	20·0
Total ...	56	28	28	
Deaths ...	1,790	890	900	Rate per 1,000 population 8·2

Deaths of infants under one year of age	46
Infant mortality rate	16·7
Legitimate infant mortality rate	16·6
Illegitimate infant mortality rate	20·0
Deaths from pregnancy and childbirth: 2	Rate per 1,000 total births 0·7
Deaths from Cancer	361
„ „ Measles	0
„ „ Whooping Cough	0
„ „ Tuberculosis	32

Population

The mid-year population of the district was estimated to be 217,700. This includes members of the armed forces stationed in the district. It is, of course, only at the times of the census that the actual population

is known. At other times the figure is estimated. Various indications can be obtained by applying previously existing factors to known figures such as the number of inhabited houses, the numbers on the voter's register and in recent years the number of persons registered with the food office. The 1934 population of the district was 132,049. With the large number of houses erected each year the population figure reached 190,200 by 1939. There were fluctuations during the war years, after which there was a steady rise to reach the figure of 222,300 in 1950. Each year since then the number has fallen.

While most of the increase in population during the years when the figures were increasing was due to the movement into the district of families new to the area, part of it each year was due to the excess in the number of births over the number of deaths. This natural increase in population on this last occasion was 957.

The following table of population figures shows the growth of the district in recent years:

	Male	*Female*	*Total*
1921			49,020
1931	45,185	51,471	96,656
1951	103,263	116,231	219,494

The population in a growing district often has an unusual age distribution because it is the younger families which make the move. In the years of development of this district when the population enlarged to four times its original size, the age distribution became abnormal. The risk of dying varies at different ages; being high in the very early days of life, it falls during the ages of childhood and rises with increasing years. Changes in the age distribution then are reflected in the figure for the death rate for the district. The Registrar-General prepares for each district a comparability factor which allows for the effect on the birth and the death rates of these age group changes. With the passage of time the population will again revert to the normal age group pattern. The following table shows the percentage distribution of the local population and that of England nad Wales in 1951:

Age	Local		England and Wales	
	M.	F.	M.	F.
0— 4	7·9	6·8	7·4	8·5
5—14	14·9	12·7	13·7	13·8
15—44	42·9	43·4	43·0	42·6
45—64	27·3	26·9	27·1	24·2
65 and over	7·1	10·3	8·8	10·9

The age distribution of the local population at the time of the 1951 census is set out in the following table:

Age at last Birthday	Persons	Total Males	Total Females
All ages	219,494	103,263	116,231
0— 4	16,141	8,213	7,928
5— 9	15,513	7,906	7,607
10—14	14,583	7,493	7,090
15—19	13,626	6,119	7,507
20—24	13,651	6,419	7,232
25—29	14,373	6,787	7,586
30—34	14,057	6,489	7,568
35—39	17,810	8,210	9,600
40—44	21,139	10,200	10,939
45—49	20,023	9,821	10,202
50—54	16,762	7,889	8,873
55—59	12,799	6,048	6,751
60—64	9,801	4,379	5,422
65—69	7,465	3,128	4,337
70—74	5,468	2,042	3,426
75—79	3,584	1,295	2,289
80—84	1,881	624	1,257
85—89	642	166	476
90—94	152	31	121
95 and over	24	4	20

In each year towards the end of the last century there were something over 900,000 births, figures to be contrasted with those of about 600,000 these days. The survivors of those births are resulting in there being an undue proportion of the elderly in the population to-day, a state of affairs which will continue for many years. This altered age-distribution of population of the country is shown in the following table which shows the age-distribution of the population in 1901, in 1953 and that anticipated in 1993.

	Under 15	15—64	Over 65
1901	32	63	5
1953	22	66	11
1993	20	64	16

These figures also show that in spite of the increasing proportion of the elderly, the proportion of the working population remains more or less the same, the increase in the elderly being offset by a fall in those under 15 years of age.

For investigations into social conditions the population is divided into five classes, namely:—

Class 1—Professional, etc., occupations
Class 2—Intermediate occupations
Class 3—Skilled occupations
Class 4—Partially skilled occupations
Class 5—Unskilled occupations

The following table shows the proportion per thousand occupied and retired males in the various social classes in Harrow, in Middlesex and in the country as a whole:—

Class	1	2	3	4	5
Harrow	71	224	560	75	70
Middlesex	50	185	572	94	99
England and Wales...	33	150	527	162	128

The comment in the census report in the Middlesex county figures reads: "The higher proportion of men in Class 1 in Middlesex is a feature which appears also in the distribution for other parts of London and the South-Eastern Regions, and is probably due to the concentration in and around the Metropolitan area of the higher administrative and managerial functions of Government and the business world and of the higher ranks of the legal, medical and some other professions. The comparatively low proportion in Class 4 is due in part to the low representation of agricultural occupations and to the absence of mining activities."

The following table gives particulars of the housing in each of the Wards at the 1951 census:—

Ward	Population, Households and Dwellings			Density of Occupation	
	Acreage	Persons	Private Households	Persons per room	Percentage of persons at more than 2 per room
Belmont	519	12,202	3,743	0·66	0·3
Harrow-on-the-Hill and Greenhill	937	11,489	3,588	0·69	1·5
Harrow Weald	1,219	16,951	4,585	0·83	1·5
Headstone	630	10,669	3,486	0·67	0·5
Kenton	535	14,537	4,465	0·64	0·4
Pinner North and Hatch End	1,982	15,918	4,989	0·60	0·4
Pinner South	769	17,805	5,859	0·64	0·2
Queensbury	374	14,732	4,171	0·87	2·4
Roxbourne	478	14,341	4,325	0·69	0·7
Roxeth	558	15,403	4,690	0·76	0·9
Stanmore North ...	2,627	17,395	4,525	0·72	0·8
Stanmore South ...	438	13,363	4,043	0·79	1·6
Wealdstone North ...	511	17,591	5,270	0·76	2·2
Wealdstone South ...	422	12,847	4,036	0·70	1·1
West Harrow	556	14,251	4,545	0·70	1·0

Births

The total number of live births registered during the year was 2,747 (1,433 male and 1,314 female). Of these 101 were illegitimate, being a percentage of total births of 3·6. The number of live births registered in each of the years from 1944 onwards was 3,473, 3,068, 3,934, 3,828, 3,226, 3,083, 2,848, 2,895, 2,895, 2,855 and 2,721.

848 births occurred in the district (837 live, 11 stillbirths). Of this number 133 were to residents of other districts. 2,217 (2,169 live and 48 still) birth notifications were transferred from other districts, being mostly of births occurring to Harrow mothers in hospitals in Middlesex or in London.

The birth rate was 12·6. The local comparability factor for births is 1·02; the corrected birth rate was therefore 12·8; that for the country as a whole was 15·2.

The birth rate for many years has been falling, not merely in this, but in most European countries, in the United States and in the Colonies. In this country the fall has not, up to this, been reflected in a fall in the population figure, because over the same period the death rate too has fallen. Nevertheless, the nation was not reproducing itself. The fear was that the population would fall; the fall having been established, unless followed by a marked rise the population would decline markedly. The fact that a nation is not reproducing itself is best shown by the use of the net production rate, which is the ratio of the number of future mothers who will be born to the present mothers. A figure of 1·00 means that at the prevailing birth and death rates 100 women will be replaced by 100 of their daughters surviving to child-bearing in the next generation. As long as the figure is less than unity, replacement is not occurring. The rate before the war was well below unity. In 1939 it was 0·808. After figures of 0·772 and 0·761 in 1940 and 1941, it rose to 1·021 by 1944; the effective reproduction rate then fell to 0·936 in the next year, but rose again to 1·138 and then to 1·244 in 1947. Since then the figures have fluctuated over unity, being 1·035 in 1953. This slight increase which is the first which has occurred since the post-war peak of 1947 suggests the downward trend has come to an end, and a stable level of natality has perhaps now been reached. Moreover the level at which the birth rate has apparently stabilised is high enough for replacement of the population.

Deaths

The Registrar-General arranges that the information about those who have died outside the district in which they normally reside is transferred to the Health Office of those districts. These numbers are added to the deaths of those districts, corresponding reductions being made from the deaths allocated to any districts in respect of those who died in those districts, but who normally resided elsewhere.

Certain types of institutions are not regarded in ordinary circumstances as the usual residence of those living there. These include general, maternity and special hospitals, maternity homes, nursing homes, sanatoria, convalescent homes, homes for unmarried mothers,

hotels, boarding houses, etc. On the other hand, there are many institutions which are regarded as the usual residence of their inmates. These include accommodation provided under Parts III and IV of the National Assistance Act, 1948, boarding schools, convents, nursing homes for the aged and chronic sick, nursing homes (mental) and residential nurseries. Any deaths occurring then in the following institutions in this district are allotted to this district:—

Cottage Hospital, Stanmore; Oxhey Grove Hospital, Hatch End; Little Company of Mary Nursing, Harrow; St. Saviours, Harrow View, Harrow; Stanmore Residential Nursery, Honeypot Lane, Stanmore; St. Dominics Convent School, Harrow; Wembley Eventide Homes, Priory Close, Harrow; Springbok House, Stanmore Hill; St. Joseph's Convent, High Street, Wealdstone; "Woodcote," Stonegrove, Edgware; Bowden House, Sudbury Hill, Harrow; Roxbourne Hospital, Rayners Lane, South Harrow; Blythwood House, Uxbridge Road, Pinner; Chiswick House, Moss Lane, Pinner; Pinner House.

The occurrence of deaths at most of these institutions is not common except such of them as provide accommodation of the type available at the Roxbourne Hospital.

1,188 persons died in this district in 1954. This figure includes those members of the Armed Forces stationed here. Of these 149 were of persons who were not resident in the area. 79 deaths took place in the various hospitals and 33 in private nursing homes.

Of the 759 deaths of the local residents which occurred outside the district, most took place in institutions, 288 being at the Edgware General Hospital. 158 deaths took place in hospitals just outside the district, including 10 in nearby isolation hospitals, and 208 in various London hospitals.

The total number of deaths was 1,790. The figure for 1953 was 1,925. The 2,094 of 1951 was the largest number of deaths recorded for this district.

The death rate was 8·2 per thousand population. The rates for the years 1944 and onwards were 9·3, 9·0, 8·6, 8·5, 8·9, 9·5, 8·7 and 8·8.

Liability to death varies at different ages. Any changes in the age-distribution of a population then affect the death rate; similarly, the death rates of the sexes are not the same. To offset the effects of these variations and so produce a rate which can be compared with that of other districts, or that of the same district at other times, the Registrar-General calculates a comparative mortality index based on the 1951 census population. When the death rate figure is multiplied by this, a figure is obtained which would have been the death rate for the district had the age and sex distribution of the population been that of the country as a whole in 1951. The index figure is 1·14; the adjusted death rate is 9·3, a figure well below that of 11·3 for the country as a whole.

The following is the Registrar-General's abridged list of causes of death in this district:—

	Male	*Female*
Resp. tuberculosis ...	19	9
Other tuberculosis ...	2	2
Syphilitic disease	6	2
Diphtheria	0	0
Whooping cough	0	0
Meningococcal infections	0	1
Acute poliomyelitis ...	1	0
Measles	0	0
Other infective diseases ...	2	0
Cancer of stomach ...	29	23
Cancer of lung	71	12
Cancer of breast	0	39

	Male	Female
Cancer of uterus	0	8
Cancer of other sites ...	96	83
Leukaemia	7	0
Diabetes	2	5
Vascular diseases of nervous system	91	155
Coronary disease	183	104
Hypertension	28	29
Other heart disease ...	79	156
Other circulatory disease...	37	65
Influenza	1	1
Pneumonia...	31	30
Bronchitis	42	20
Other respiratory disease...	8	1
Peptic ulcer	10	12
Gastritis, Enteritis ...	3	7
Nephritis	9	7
Hyperplasia of prostate ...	25	0
Pregnancy, etc.	0	2
Congenital malformation...	11	2
Other diseases	62	88
Motor vehicle accidents ...	10	4
Other accidents	21	20
Suicide	12	9
Homicide	2	0

1,289 deaths were due to diseases of the circulatory system, vascular diseases of the central nervous system and to cancer, a percentage of 73 of the total deaths. In 1952 over two-thirds of the deaths in the country as a whole were due to these groups of causes. The growth of this fraction is due partly to the increased control over certain of the communicable diseases which in other days accounted for deaths, and to the extending longevity of the population.

The following table shows for each sex the percentage of deaths in different age groups of those in this district for last year and for the country as a whole for 1953.

	Local, 1954		England and Wales, 1953	
	M.	F.	M.	F.
Under 1 ...	3·1	2·1	4·0	3·2
1— 4	0·8	0·2	0·7	0·6
4—15	0·7	0·6	0·7	0·5
15—25	1·5	0·8	1·0	0·7
25—35	1·5	1·2	1·7	1·4
35—45	3·2	3·3	3·1	2·8
45—55	12·3	7·3	8·7	6·3
55—65	20·8	12·8	17·7	12·2
65—75	27·3	24·3	28·5	25·4
Over 75 ...	29·2	46·6	33·3	46·7

It will be noticed that of the local deaths 56·5 per cent of those of males were persons of 65 and over; of 75 and over 29·2 and in fact of 85 or over 5·6. The corresponding figures for females were 60·9, 46·6 and 14·4. Of local residents who died last year 28 per cent. had reached the age of 75, and 10 per cent. had reached the age of 85.

Infant Mortality

The infant mortality rate is the number of infants dying under one year of age per thousand born. It is one of the vital statistics of special interest because it has for long been accepted as an index of the healthiness of the community, being influenced by so many of the factors which affect the health of the population. This was perhaps more the case in the earlier days of the century when so much of the infant loss occurred

in older babies. The dramatic fall in the rate in the present century was mostly in the deaths which previously occurred in infants who had survived one month.

Because the deaths of infants under one month of age were largely due to factors so very different from those causing the deaths of those who survived one month but failed to survive the year, they have been classed separately as neo-natal deaths. So very many of these are due to many of the factors which have in others resulted in stillbirths, it being sometimes almost a matter of chance of whether the record was a still-birth or a neo-natal death, that some favour the grouping of the still-births and of the infant deaths occurring in the first week of life as the peri-natal mortality, in which case the deaths in the last three weeks of the first month should more correctly be classed with the deaths occurring during the rest of the year. As a contrast to the very marked decline in the number of infant deaths in the rest of the year apart from the first week, there has been very little fall in these peri-natal deaths in recent years.

The infant mortality rate for the country as a whole was about 150 in the early years of the century. Last year the figure was a record low one of 25·5. The local rates have for many years been very satisfactory. The figure has not been over 25 since 1948.

Last year 46 infants died under one year of age. In the same year 2,747 infants were born. The infant mortality rate was therefore 16·7.

Of these 46 deaths, 31 occurred in infants under one month old. The neo-natal rate was therefore 11·3, comprising 67 per cent. of the infant mortality rate. The mothers of only three of these infants had been confined in their own homes, all the others being delivered in hospitals. Of the hospital cases, deaths were due to birth injury in 8, to prematurity in 11, to asphyxia in 3, atelectasis 1, congenital defect 4 and broncho-pneumonia 2. The deaths of those who died at home were due one each to prematurity, congenital defects and enteritis.

Although five of the 15 deaths of those who survived one month but failed to survive twelve months were due to developmental abnormalities, the increasing extent to which environmental factors play their part in causing fatalities is shown by the fact that broncho-pneumonia, enteritis and other infections caused six deaths. Accidents caused two deaths.

Stillbirths

A stillbirth is a birth of a dead foetus at a period when it has become viable, a time usually accepted as the twenty-eighth week of pregnancy. Although it is known that certain illnesses of the mother might result in the death of the foetus, in so very many cases nothing is known of why the foetus has failed to survive. Many deaths occur when the foetus was alive at the time the mother went into labour. In numbers of these, the same cause might result in some cases in a stillbirth because the foetus did not survive birth, in others in an infant death because although the infant was alive at the time of birth it failed to survive.

56 stillbirths were registered last year. This was a rate per thousand population of 0·26 and a rate per thousand live and stillbirths of 20·0. The rate per 1,000 births for the country as a whole was 24·0.

Of the 55 stillbirths about which particulars are known, 45 were to mothers confined in hospitals, four in nursing homes and six in their own homes. Some women for unknown reasons are prone to miscarriages. If the pregnancy advances sufficiently far, the premature expulsion results in a stillbirth. In this series there were three such instances, the mother having failed to retain the foetus to term. Then there are many abnormal states of the mother which might bring about the death of the foetus which is later expelled. There were three instances of this in the series, two of the mothers having suffered from toxaemia, the other from diabetes. In other cases the foetus was probably alive up to the onset of a very premature labour. In many of these cases no cause can be found which could account for the early onset of labour. In one instance it seemed to occur after a fall. There were two instances of premature death of a twin. In ten of the sixteen cases where delivery was premature, there seemed to be no cause for the early labour or for the death of the foetus. In most of these stillbirths, the foetus was alive up to the time of delivery at or near full term. In three cases where the mother was suffering from toxaemia and in four in which there was ante-partum haemorrhage, the foetus was probably dead at the onset of labour; it certainly would be in the two instances where the foetus was macerated. In nine cases there were developmental abnormalities of the foetus. These might in some have caused intra-uterine death; in others they perhaps so complicated labour as to result in death during labour. In eight instances death apparently occurred during the course of labour. In eight of the 34 cases there was no apparent cause. The possibility of saving some of these deaths at full term is related to the standard of obstetric practice. Some of the intra-uterine deaths due to abnormal states of the mother have been reduced by effective ante-natal care. That there should have been a fall in the stillbirth rate during the war years when special attention was given to the dietary of the expectant mother suggests that nutrition has some part to play in these stillbirths.

Deaths of Infants 1 to 5 Years of Age

A child who survives the first year of life enters a period when the probability of dying is very small. Some survive their first birthday in spite of suffering from congenital abnormalities which later become responsible for, or contribute to death. Weaker children, especially in the earlier years, might succumb to infections which older children can throw off. Accidents too early start to exert their toll.

Six children survived their first but did not reach their fifth birthday. Of these two were in their second year, two in the third and two in the fourth. Of these, three suffered from abnormal developmental states. One child died of burns caused by her clothing having caught alight.

Maternal Mortality

The total maternal mortality rate includes all deaths of women primarily due to, or associated with pregnancy or childbirth expressed as a rate per thousand live and stillbirths registered in the year.

The rate up to comparatively recently used to be about four per thousand. For some years now the figure has been nearer one.

There were in this last year two deaths as a result of pregnancy or delivery. The maternal mortality was therefore 0·7.

The first of the fatalities was that of a woman of forty years of age who during the two months before was twice admitted to hospital suffering from ante-partum haemorrhage. About the time delivery was expected she had another haemorrhage. She was admitted to hospital where a stillborn infant was removed by Caesarean section. A posterior complete placenta praevia was present. After a period of recovery, in about nine hours her condition deteriorated and in spite of all measures death took place. The other fatality was that of a woman who had suffered from toxaemia of pregnancy at her two previous pregnancies. Toxaemia was noticed in this third pregnancy at about the eighteenth week. This got worse; when the foetus died at about the sixth month labour was surgically induced. About ten days afterwards there were marked signs of hypertension. The condition deteriorated and death occurred some six weeks later.

Deaths from Accidents

Ten males and five females living in this district were killed on the roads in 1954. In each of the accidents that occurred outside the district, a motor vehicle was involved. The victim was in a motor car in four instances, was on a motor cycle in two, was a pedestrian in two and was a cyclist on one occasion. A motor vehicle was involved in each of the four fatal accidents which occurred in the district. One victim was in a car, one was a cyclist, another was a pedestrian and the fourth was a child on a tricycle.

There were 41 other deaths from accidents. 21 of these were of males, 20 were of females. The commonest cause was a fall of the elderly; this accounted for the deaths of three men and ten women. In all but two instances the fall occurred indoors. A fall in an elderly person is especially serious because so commonly it results in a fractured thigh with the risk of subsequent hypostatic pneumonia. There seems to be a very great risk of the elderly person tripping over an object which causes no inconvenience to younger persons. Falls accounted for the deaths of two other adult males, one of them occurring at the place of work. Four persons (three males including one boy of two years and one female) lost their lives by drowning. Poisoning caused the deaths of four (two males and two females). Coal gas poisoning caused five (one male and four females) deaths; as contrasted with some previous years, only one of the persons was over 75 years of age. Many elderly persons live at home with only limited attention so that accidents of this sort are very liable to occur. Another risk of the elderly is from burns. This year two men died from burns, but neither was elderly.

The deaths of three children under the age of five years were due to accidents. One was the result of a road accident (a child on a tricycle run into by a car); one was by drowning; the third was an accidental death under an anaesthetic given for an operation to be performed.

Much attention is given to the question of safety on the roads. The accidents which occur in the homes tend to be ignored, in spite of the fact that in this country over the last ten years 57,413 persons have

died as a direct result of a home accident, some 10,000 of these being children under five years of age. The age distribution of those who died from an accident at home in 1954 was 0-4 years 12 per cent.; 5-14 years 2 per cent.; 15-44 years 6 per cent.; 45-64 years 11 per cent.; 65 years and over 69 per cent. Four-fifths then of the fatal domestic accidents occurred in children of under five years of age and in persons of 65 years and over. The more frequent types of fatal home accidents were—falls six per cent.; burns and scalds ten per cent.; coal gas poisoning ten per cent.; suffocation nine per cent.; poisoning three per cent. The coming into force of the Heating Appliances (Fireguards) Act, 1952, was followed by the reduction in the number of fatal burning accidents in the home. As these regulations refer, however, only to electric, gas and oil heating appliances which are on sale and do not apply to those already in the home, it must be some time before the full benefits of the legislation are attained. Even then, of course, they will do nothing to ensure the safety of the open domestic fire.

Deaths from Suicide

12 men and 9 women committed suicide during 1954. Seven of the men and six of the women chose poisoning by coal gas, another four (three males and one female) other forms of poisoning while two (one of each sex) drowned themselves. There seems to be no set pattern of distribution of these occurrences. In some years the incidence is fairly evenly distributed throughout the year. This year there were four suicides in May and another four in November, while there were four months without occurrences. The ages of all but two were between 30 and 70, the exceptions, both males, being 21 and 85.

Deaths from Cancer

Of the 1,790 deaths of residents in this district 362 were due to cancer, this causing 22 per cent. deaths of the males and 18 per cent. deaths of the females.

Of the 196 deaths from this cause amongst males, in 71 the site was the lung and in 29 the stomach. Of the 165 deaths amongst females, the site was the breast in 39, the stomach in 23, the lungs in 12 and the uterus in eight.

Although one type of malignant disease attacks the young, in general cancer attacks most heavily those of more advanced years, but not the very old. There is a period when a very large proportion of the deaths is due to cancer, but once that stage has passed, cancer as a cause of death is overshadowed by other factors. Of the males resident in the district who died last year malignant disease caused the death of only two under the age of 35. In the successive ten year periods, cancer caused the deaths of two out of 29 who died between the ages of 35 to 44 (percentage 7) and 30 out of 111 who died between 45 and 54 (percentage 27). In the next age group 55-64, there was a further rise to 53 deaths out of 182 (percentage 29). Although the figure in the next period rose to 62, the percentage of the 245 deaths was only 25 in the age group 65 to 74. Then followed a fall in the actual numbers, and a much lower percentage 15 of the 258 deaths in those of over 75 years.

The distribution of the deaths amongst females is rather different as there were thirteen deaths from this cause in those of under 45 years of age. In the next grouping of 45-54 out of 62 deaths 28 were due to cancer (percentage of 45). Of those aged 55 to 64, 38 out of the 113 deaths were the result of cancer (percentage 33). Then there was a fall to a percentage of 20 as only 42 of the 212 deaths in the group 64 to 74 were due to it, and a further fall in those of 75 and over in whom malignant disease accounted for only 40 out of the 414 deaths (percentage of 9).

Deaths from Infectious Diseases

Infections other than tuberculosis again caused very few deaths there being only two from influenza, one each from meningococcal infection and acute poliomyelitis, and none from diphtheria, scarlet fever, measles or whooping cough.

HEALTH SERVICES OF THE AREA

HOSPITALS

General Hospital Service

Under the National Health Service Act most of the hospitals of the country were taken over by the Ministry of Health. Apart from the teaching hospitals these have been grouped into fourteen regions. For each region a Hospital Board has been appointed; that of the hospitals in or serving those living in Harrow is the North-West Metropolitan Regional Hospital Board (Secretary A. J. Bennett, M.A., Senior Administrative Medical Officer, H. M. C. Macaulay, M.D., 11a, Portland Place, London, W.1, tel. No. Museum 9575). The area of this Board includes the county of Bedford and parts of Hertford, Middlesex, Berkshire, Buckingham and London.

The Hospital Board administers the hospital service through Hospital Management Committees. The area covered by the Hospital Board has been divided into 22 groups. The hospitals in each of these is under the management of a Hospital Management Committee. That of most interest to those in this district is the No. 11, or the Hendon Group Hospital Management Committee; its headquarters are at Edgware Hospital (Secretary, J. Fielding, F.H.A., Tel. No. Edgware 8181). The hospitals in this group comprise:—

Edgware Hospital	Edgware	644 beds 60 cots
King Edward VII Hospital ...	Hendon, N.W.4	65 beds
Hendon Isolation Hospital ...	Goldsmith Avenue, N.W.9 ...	110 beds
Colindale Hospital	The Hyde, Hendon, N.W.4...	205 beds
Middlesex Maternity Home...	Bushey Heath...	50 beds 30 cots
Stanmore Cottage Hospital...	Stanmore	9 beds 1 cot
Roxbourne Hospital	South Harrow	50 beds
Oxhey Grove	Oxhey Lane, Hatch End ...	42 beds

At the end of 1953 the Edgware General Hospital had 715 beds, these being 312 medical, 207 surgical, 120 gynaecological and obstetric, 64 maternity cribs and 12 emergency beds.

The following out-patients clinics are held:—

Medical; Children's Medical; Diabetic; Psychiatric; Child Guidance; Infertility; Ante-Natal; Post-natal; Gynaecological; Geriatric; Skin; Children's Surgical; Traumatic; Orthopaedic; Ear, Nose and Throat; Sinus; Deafness; Bronchoscopic; Vascular; Proctological; Genito-urinary; Ophthalmic; Dental; Radiological; Radiotherapeutic; Chiropody; Surgical Appliances. Out-patients are seen by appointment on the recommendations of their own doctors. The appointments office (Edgware 2381, extensions 13 or 56) is open daily from 9 a.m.-5 p.m. and Saturdays from 9 a.m.-12 noon.

The Harrow Council for many years maintained two Isolation Hospitals, the South Harrow Isolation Hospital having been built by the Harrow-on-the-Hill Council and the Stanmore Isolation Hospital by

the Hendon Rural Council. One of the early decisions of the Harrow Council was to erect a modern isolation hospital. Arrangements were well in hand in 1939. The experience of the following years showed that the isolation hospital accommodation needs of the population of this district could be met by a smaller number of beds than would be an efficient or economic hospital unit. Approaches were therefore made to the Hendon Borough Council and discussions started with this Council and later with Wembley Council on the possibility of the Hendon Isolation Hospital being extended to meet the needs not only of Hendon but of Harrow and Wembley as well. Progress was halted though because of the possibility of extensive changes being brought about in the administration of the hospitals by legislation, changes which in fact did come about on the passing of the National Health Service Act. In the meantime Harrow considered adapting Stanmore Isolation Hospital as a residential nursery particularly for the children of unmarried mothers, it being intended that some of the mothers also should be admitted. Because of these proposals, in 1948 this hospital passed into the hands of the County Council, becoming a residential nursery administered by the Children's Department, while the South Harrow Isolation Hospital passed to the Minister, becoming in time the Roxbourne Hospital providing accommodation for a number of elderly patients.

The Hospital Management Committee also administers the Harrow Chest Clinic, 199, Station Road, Harrow, and the Edgware Chest Clinic at the Edgware General Hospital.

The Harrow Hospital (Secretary, S. Garbutt, F.H.A., Tel. No. Byron 2232) is now associated with the Charing Cross Hospital. The hospital has 122 beds and maintains an out-patients department. It also maintains a physical treatment centre at the Car Park Building, Station Road, Harrow. Other hospitals in the neighbourhood which are in the Charing Cross Hospital group are the Wembley Hospital and the Kingsbury Maternity Hospital.

The other hospital in the district is the Stanmore Orthopaedic Hospital, a teaching hospital.

Included in Group 16, the Harefield and Northwood Group (Headquarters, Mount Vernon Hospital, Northwood. Secretary, F. A. Watson, F.H.A., Tel. No. Northwood 2665) are the Northwood, Pinner and District Hospital (36 beds); Mount Vernon Hospital and Radium Institute (427 beds); and the Grimsdyke Rehabilitation Unit, Harrow Weald (50 beds).

Accommodation for the Infectious

Most of the patients suffering from an infectious disease who have needed to be admitted to hospital have been accepted at the Hendon Isolation Hospital. Of the 112 beds at this hospital, 73 are for sufferers from infectious diseases, 20 for those with pulmonary tuberculosis, the remaining 19 being for gynaecological cases.

No case is known in the last year of a patient suffering from an infectious condition and needing to be admitted to hospital not having been accepted at some hospital. Patients for whom accommodation

cannot be found at the Hendon Isolation Hospital are admitted to hospitals further, and sometimes much further, afield.

Those suffering or suspected to be suffering from smallpox or typhus fever are admitted to special hospitals.

Chest Hospitals

There are in the area of the North-West Metropolitan Regional Hospital Board twelve hospitals for the reception of those suffering from respiratory tuberculosis, these containing 1,734 beds. The ones to which sufferers from this district are mostly admitted are Clare Hall, South Mimms; Harefield and Colindale. In addition, in nineteen general hospitals there are 901 beds for those suffering from respiratory tuberculosis. These include 56 at the Edgware General Hospital, 20 at the Hendon Isolation Hospital and 30 at Hillingdon.

Mental and Mental Deficiency Hospitals

There are six mental hospitals in the North-West Metropolitan Regional Hospital Board region with some 11,000 beds, and two more hospitals with 3,500 beds in another region used by this region. Sufferers from this area are admitted mostly to Shenley Hospital, near St. Albans.

There are in the region eight institutions for mental defectives with some 5,500 beds. There are about 1,500 beds in five institutions outside the region. In the main Middlesex patients are admitted to Harperbury Hospital, near St. Albans; and to a lesser extent Leavesden Hospital, Abbots Langley.

Convalescent and Recuperative Homes

Arrangements for the admission to convalescent homes of persons who need nursing or medical treatment while they are at the homes are made by the hospital almoners on behalf of the Regional Hospital Boards.

Persons who need only supervision and rest in homes which do not provide nursing or medical treatment are admitted to homes by arrangements made by the local health authority. These arrangements are intended for those in whom a period of rest in a home would speed up their recovery from some recent illness or perhaps make the recovery more complete. An application is submitted by the patient's doctor to the Area Medical Officer, being then passed to the County Medical Officer who decides on the home the person should go to. Recommendations made by the hospital staffs in respect of out-patients are not now accepted, the procedure being for the patient to be referred by the hospital to his own doctor. As contrasted with the arrangements for convalescence made by the hospitals, for this service a charge is made, but not in the case of pupils attending maintained schools.

NURSING HOMES

By Section 187 of the Public Health Act, 1936, any person who carries on a nursing home without being registered is liable to a penalty. The responsibility for registering and supervising these homes rests with

the Health Committee of the County Council. Application for registration should be made to the Clerk of the County Council.

The following table sets out the particulars of the various homes registered at the end of the year, with details of their ownership and their accommodation:

		Beds	*Type of Case*
Bermuda House, Mount Park, Harrow	Mrs. A. M. Elphick ... Mr. A. E. Elphick	13	Chronic
Beverley Maternity Home, 170, Whitchurch Lane, Edgware	Miss C. Dear	3	Maternity
		1	Chronic
Bowden House, London Road, Harrow-on-the-Hill	Bowden House Nursing Home Association Ltd.	19	Mental or borderline
Brockenhurst Nursing Home, 84, Hindes Road, Harrow	Mrs. T. O'Donnell ...	6	Chronic
College Hill Nursing Home, 123, College Hill Road, Harrow Weald	Mrs. M. Horrod ...	11	Medical or chronic
Convent of the Little Company of Mary, Sudbury Hill	Mother Superior ...	35	Medical or chronic
Culverlands Nursing Home, Green Lane, Stanmore	Dr. P. Vosper	11	Chronic
Glenleigh Nursing Home, 85, Marlborough Hill, Wealdstone	Mrs. Woodman... ...	14	Chronic
Grosvenor House Nursing Home, 100, High Street, Harrow-on-the Hill	Mrs. N. Chaplin ...	20	Medical or chronic
Heywood Nursing Home, London Road, Stanmore	Mrs. M. Guyatt ...	4	Medical or surgical
		1	Maternity
Maitlands Nursing Home, 54, Marsh Road, Pinner	Mrs. M. E. Donnelly ...	8	Maternity
		2	Medical
St. Michael's Nursing Home, 11, Hindes Road, Harrow	Mrs. T. O'Donnell ...	8	Medical or chronic
Roxborough Nursing Home, 25, Roxborough Avenue, Harrow	Miss Calland ... ... Miss Burrows	13	Maternity and others
Suffolk House Nursing Home, Marsh Lane, Stanmore	Mrs. D. M. Williamson	7	Medical
		8	Maternity
The Avenue Nursing Home, 28, The Avenue, Hatch End	Miss E. Grandvoinet ...	10	Medical
The Hall, Harrow Weald	Dr. Lincoln Williams ...	10	Mental (borderline)

At the beginning of the year there were 16 registered homes, with 194 beds, 20 maternity and 174 for other patients. At the end of the year there were 16 registered homes, with a total of 198 beds; of these 16 were for maternity patients.

ESTABLISHMENTS FOR MASSAGE AND SPECIAL TREATMENT

By Section 355 of the Middlesex County Council Act, 1944, no person shall carry on in this district an establishment for massage or special treatment without a licence from the District Council authorising him to do so. There is a saving clause for registered members of the Chartered Society of Physiotherapy and for members of the medical profession.

Before approving the licensing of any premises, the Public Health Committee requires to be satisfied about its general suitability for the work to be done in it, and about the equipment. Those in whose names

the premises are licensed have to comply with the bye-laws relating to the conduct of these premises. Licences are issued for one year. Further reports are received by the Committee when they are considering the renewal of the licences.

It is the premises which are licensed. Anyone who carries on similar treatment not at any premises but at the homes of patients, does not need to be licensed.

The Authority may refuse to grant or renew a licence, or may revoke a licence granted to any person because the person is under the age of 21 years, because the person is considered unsuitable to hold the licence or in respect of any establishment in which massage or special treatment is or may be administered by any person who does not possess such treatment qualifications as may be reasonably necessary. Power is also given to the local authority to make bye-laws prescribing the technical qualifications to be possessed by any person who administers massage or special treatment at any licensed establishment. The Council applied to be allowed to make a bye-law prescribing minimum standards of qualification of the practitioners at licensed premises. The request, however, was not granted. The question of what qualification or standard of training those practising at licensed establishments should possess, therefore, remains unsettled. That members of the Chartered Society of Physiotherapy are exempted from certain provisions suggests that membership of that Society as a minimum qualification cannot be insisted on; and yet it would be most invidious for an authority to have to determine that some qualifications or periods of training are acceptable, but others not, while again there are many practitioners whose previous experience in other fields enables them to give most helpful services although they possess no academic qualifications.

The following are particulars of the premises licensed at the end of the year:—

Mr. Arthur Arndt, 54, Methuen Road, Edgware.
Mr. Cecil Sidney Arnold, 27, Exeter Road, South Harrow.
Mr. Arthur Charles Back, 27, Shaftesbury Avenue, Harrow.
Mr. Sidney Barnard, 70, Sherwood Road, South Harrow.
Mrs. E. C. Blackburn, 40, Wimborne Drive, Pinner.
Mr. A. Blum-Chassereau, 5, Amersham Road, Harrow.
Mr. Augustyn Buczek, 326, Rayners Lane, Harrow.
Mr. I. H. Burden, 8, Oakfield Avenue, Kenton.
Miss G. N. Burgess, 31, Love Lane, Pinner.
Mr. John Darnton, 213a, Station Road, Harrow.
Mr. Arthur W. Dunlop, 41, Station Road, Harrow.
Mrs. B. Englefield, 155, Charlton Road, Kenton.
Mr. H. G. Gillett, 72, Gayton Road, Harrow.
Miss E. M. Humphrey, 5, College Road, Harrow.
Mr. B. Humphreys, 58a, High Street, Pinner.
Mr. Jack Ingrey, 32, St. Ann's Road, Harrow.
Mr. K. A. Jacobs, 304, Uxbridge Road, Hatch End.
Miss W. J. Johnson, 146b, Kenton Road, Harrow
Mr. R. Kinsman, 6, The Drive, Harrow.
Mr. Simon Sidney Knight, 73, Station Road, Harrow.
Mrs. Leigh-Grundy { 24, Kynaston Close, Harrow Weald.
31, High Street, Wealdstone.
Mrs. N. Mason, 1, High Worple, Harrow.
Mrs. D. Praeger, 50, Sheepcote Road, Harrow.
Mrs. G. Pragnell, 63, St. Thomas Drive, Hatch End.

Miss F. Sabin, 40, College Road, Harrow.
Mr. R. J. Turvey, 87, Streatfield Road, Kenton.
Watford Co-operative Stores, High Street, Wealdstone.
Mrs. A. D. Wilson, 53, Elgin Avenue, Harrow.
Miss Nesta Wimbush, 432, Pinner Road, Harrow.
Mrs. P. I. Young, Mrs. Hancock } 79, Bridge Street, Pinner.

The following are particulars of premises in respect of which certificates have been lodged by registered members of the Chartered Society of Physiotherapy:—

Miss A. M. Churchill, 50, Wychwood Avenue, Edgware.
Messrs. Crimmins & Spark, 40, Sheepcote Road, Harrow.
Mrs. B. A. Elsmore, 23, Devonshire Road, Hatch End.
Mr. Douglas C. Lelean, 18, Imperial Drive, North Harrow.
Mr. Walter M. Millard, 21, Cuckoo Hill Road, Pinner.
Miss B. Teasdale, 118, Headstone Lane, Harrow.

NURSING, MIDWIFERY, ETC., IN THE HOME

1. General Nursing

Up to 1948 apart from the few who could make their own arrangements with private nurses, those needing the attention of nurses in their homes relied on the services given by the staffs of the various District Nursing Associations. These were voluntary bodies who had assumed responsibility for maintaining a nursing service in their districts. In many places the district nurses were also the local midwives. These nurses or nurse-midwives lived either in their own homes or in nurses' homes provided and maintained by the Association. Some of the Associations developed contributory schemes, and also undertook work for local authorities and commercial undertakings. A charge was usually made for the service of the nurse, though this was reduced or even remitted in the case of those who were not well off. In Harrow there were a number of these Associations; the largest of them was that operating mostly in Harrow-on-the-Hill. Some of the smaller associations were disbanded and in time the Greater Harrow District Nursing Association covered the whole area except that of Pinner and Hatch End and part of Edgware. This Harrow Association as contrasted with some of the smaller Associations in the area provided a nursing service only, not a nursing and a midwifery service. They transferred from other premises to a nurses' home in Bessborough Road. Later they built as well a new nurses' home in Uppingham Avenue.

By Section 29 of the National Health Service Act: "It shall be the duty of every local authority to make provision in their area whether by making arrangements with voluntary organisations for the employment of those organisations' nurses or by themselves employing nurses for securing attendance of nurses on persons who require nursing in their own homes." In their proposals for the administration of this service the County Council decided: "It is not proposed to make any arrangements with voluntary organisations for the employment of home nurses unless the County Council find it expedient as a transitional measure." In 1948 then the County Council took over the premises of the Greater Harrow District Nursing Association and engaged the staff

then employed by them. Because of the inability to secure sufficient staff who wanted to live in to warrant both nurses' homes being retained, in 1951 the Bessborough Road home was closed. For the same reason in 1953 that at Uppingham Avenue was closed. From that time the service has been provided by nurses living in their own homes. For a while it was difficult to recruit whole-time nurses so the service depended on the help of part-time nurses. Gradually the numbers of whole-time staff engaged rose. As far as possible each whole-time nurse serves the district in which she lives, but as no houses can be offered to nursing staff, nurses have to be appointed to fill vacancies irrespective of where they live, so that the nurses engaged do not live in the areas in which they work to the same extent as do the midwives. Medical practitioners get into touch direct with the appropriate nurse. Although the proposals of the County Council said " as far as the members of the staff available will allow, a twenty-four hour service will be maintained " the service provided is essentially a day-time one, the nurses doing their routine rounds of morning and evening visits.

The following is a list of the whole-time nurses in the district in May, 1955:—

Mrs. G. Andrew, 425, Northolt Road, South Harrow. (Byron 1461)
Mr. R. J. Belding, 16, Luffenham House, Fairfield Avenue, Oxhey, Herts. (Hatch End 2144).
Mr. R. G. Bowman, 23, Woodstock Road, Wembley. (Wembley 9306.)
Mrs. J. Brown, 18, Woodlands Road, Harrow. (Harrow 8099.)
Miss J. Dutson, 254, Uxbridge Road, Hatch End. (Hatch End 4213.)
Mrs. M. R. Eastoe, 22, Church Avenue, Pinner. (Pinner 852.)
Mrs. B. C. Fagan, 113, Malvern Avenue, South Harrow. (Byron 6085.)
Mrs. G. R. Found, 12, Gloucester Road, North Harrow. (Harrow 5785.)
Mrs. I. M. Gardiner, 28, Headstone Lane, Harrow. (Pinner 1398.)
Miss K. H. L. Inglis, 59, Draycott Avenue, Kenton. (Wordsworth 9303.)
Miss K. P. Johnston, 10, Tudor Gables, Birkbeck Road, N.W.7. (Mill Hill 2800.)
Mrs. H. R. Newby, 124, Village Way, Pinner. (Pinner 5972.)
Miss I. G. Pearce, 1, Farrer Road, Kenton. (Wordsworth 8408.)
Mrs. D. Ridgers, 151, Headstone Drive, Harrow. (Harrow 9592.)
Mrs. G. O. Smith, 7, Headstone Road, Harrow. (Harrow 3108.)
Mr. L. J. Taylor, 120, Harrow View, Harrow. (Harrow 4104.)
Mrs. C. E. Thomas, 1, Albert Road, Harrow. (Harrow 4835.)
Mrs. M. Thomas, 171, Streatfield Road, Kenton. (Wordsworth 5132.)
Mrs. O. M. Wallis, 15, Hill Crescent, Kenton. (Harrow 0288.)
Mrs. G. E. Yorston, 102, King's Road, South Harrow. (Byron 0801.)

In addition there are seven part-time nurses engaged mostly in duties in the mornings.

The administration of the Home Nursing Service is one of the functions for which the Local Area Committee is responsible.

The Superintendent of the Home Nurses is Mrs. R. M. Bromley, who works from Kynaston Court.

NURSING EQUIPMENT. By Section 28 of the National Health Service Act a local health authority may make arrangements for the purpose of the prevention of illness, the care of persons suffering from illness, the care of mental defectives or the after care of such persons. The County Council's proposals under this section include: " the making available of nursing equipment within reasonable or practicable limits on loan to

patients being nursed at home. The articles will be stored at suitable centres in each area."

The Middlesex branch of the British Red Cross Society have operated the scheme on behalf of the County Council since November, 1951. The scheme provides that the equipment in the list approved by the County Council shall be readily available throughout the county, and that any necessary articles of equipment not readily available from the existing store of the Red Cross Society will be supplied in the first instance by the County Council on the understanding that the articles remain the property of the County Council and shall be replaced if necessary out of hire charges received. The Red Cross Depot in this area is that at 9, Peterborough Road, Harrow (Byron 2555) which is open on week days from 9.30 a.m. to 1 p.m. and from 2 p.m. to 5 p.m.

2. Midwifery and Maternity Nursing

Within 35 years of the profession of the midwife being recognised, it was in effect nationalised. In the earlier years of this century most mothers in this country were confined in their own homes, being attended by midwives. A number were attended by general practitioners who were often helped by maternity nurses who were usually non-resident and who were either midwives or those who had been trained only as maternity nurses. The remuneration of the midwife was low, sometimes very low so that many midwives had to attend on many women to enable them to make a living and in these circumstances had not much time for the nursing needed in the days after the confinement. In some areas the impossibility of anyone earning a living as a midwife meant that there was no one to provide this service. The service provided in this way by the independent midwife was supplemented in many areas by the activities of the nurse-midwives maintained by voluntary district nursing associations, and in some localities by midwives or medical students in training. To get over the shortcomings of these arrangements, the Midwives Act of 1936 made it the responsibility of local supervisory authorities to see that there were enough midwives practising domiciliary midwifery in their areas to attend on women to be confined in their homes. An authority could do this either by itself appointing midwives, or by arranging with local nursing associations for the work to be done by their staff. The effect in time of the setting up of the authority service was that the independent midwives ceased to practice. In Harrow the local nursing association provided a nursing but not a midwifery service, and the Harrow Council which was at that time the local supervisory authority for midwives had therefore to appoint its own staff. This it did very largely by selecting from those who were at the time practising as independent midwives in the district. The National Health Service Act transferred to the local health authorities the responsibility of maintaining the service and seeing: "that the number of certified midwives employed who are available in the authority's area for attendance on women in their homes as midwives or as maternity nurses during child birth and for time to time thereafter during a period not less than the lying-in period is adequate for the needs of the area." The service then passed in 1948 to the hands of the Middlesex County

Council. This is one of the services administered locally by the Local Area Committee. Most midwives live in their own homes, largely in that part of the district they serve.

The following are particulars of the local midwives whose work is co-ordinated by the Non-Medical Supervisor of Midwives, Mrs. R. M. Bromley, 213, Exeter Road, South Harrow (Pinner 5752):—

Mrs. M. M. Francis, 68, St. Paul's Avenue, Kenton. (Wordsworth 1433.)
Mrs. N. M. James, 6, South Close, Woodhall Gate, Pinner. (Pinner 5558.)
Mrs. B. A. Lundy, 47, Hillcroft Avenue, Pinner. (Field End 6569).
Mrs. F. R. Mooney, 23, Mayfield Avenue, Kenton. (Wordsworth 2153.)
Miss P. E. Raeburn, 16, Worcester Court, Wealdstone. (Harrow 1669.)
Mrs. E. W. Rees, 1, Masefield Avenue, Stanmore. (Grimsdyke 2610.)
Miss M. R. Robertson, 83, Merlin Crescent, Edgware. (Edgware 1181.)
Mrs. G. Shaw, 29, Dryden Road, Harrow Weald. (Harrow 1601.)
Miss R. C. Speaight, 585, Honeypot Lane, Stanmore. (Wordsworth 5564.)
Miss H. A. Swann, 2, Goldsmith Close, South Harrow. (Byron 4004.)
Mrs. B. Walsh, 168, Whittington Way, Pinner. (Pinner 7864.)

Last year the midwives attended the confinements of 582 women in their own homes, being present in 491 instances as midwives and in 91 as maternity nurses.

3. Home Helps

The County Council, as local health authority, provides domestic helps to households where such help is required because of illness, or the lying-in of an expectant mother, because of anyone who is mentally defective or is aged or because of children not over compulsory school age.

Home Helps are engaged full time or part time; they are paid by the authority. Depending on the financial circumstances of the household, part or all of this expenditure is recovered from those who are helped.

Although in essence an emergency service or at least one which it is intended shall be provided for short periods only, many of those who are assisted need continued help because their difficulty is not so much that they cannot find someone to help them as that they cannot afford to pay for that help. This applies more especially when the help is given to families where there is a member suffering from tuberculosis or where help is being given to the aged or to the chronically incapacitated. As contrasted with the arrangements for the engagement of nurses and midwives, the allocation of duties of home helps is made by the organiser of the service, Mrs. Chilvers, who works from the Area Health Office at " Kynaston Court " (Tel. No. Grimsdyke 3131).

4. Physiotherapy Service

The funds of the Greater Harrow District Nursing Association have been applied to provide a domiciliary physiotherapy service through the London Area Mobile Physiotherapy Service Ltd. who arrange for treatment by physiotherapists who practice in the area. The procedure is that a doctor who wishes his patient to have the treatment completes the application form which is sent to L.A.M.P.S., 19, Broadway, W.6 (Riverside 4058). The form is then passed to the appropriate physio-

therapist together with a receipt for the nominal fee to be collected by the physiotherapist after each treatment. She retains these fees which go towards the full fee for each treatment. The physiotherapist reports direct to the doctor on the patient's progress.

The object of the domiciliary service is as much to restore workers, including housewives, suffering from acute conditions as to stimulate to greater activity patients suffering from chronic conditions. It is not intended that the service be used if the patient can without detriment attend a hospital or clinic, and treatment may not be continued where a patient fails to respond to stimulation by physiotherapy.

The scheme came into operation on the 1st April, 1954. Fifteen private chartered physiotherapists have agreed to give treatment under the scheme.

GENERAL MEDICAL SERVICES

The number of general medical practitioners whose practice extends to the Borough of Harrow is learned of from notifications of infectious diseases or of births. This number of 147 includes some who live outside the district though visiting homes in this area and in some cases having surgeries here. According to the return of the Middlesex Executive Council in February, 1954, there were 123 doctors taking part in Harrow in the general medical service under the National Health Service Act. 82 of these also take part in the maternity services provided under the Act.

DAY NURSERIES, ETC.

Up to the outbreak of the war there had never been any marked demand in this district for the provision by the authority of day nurseries which are establishments which accept children from some days after birth up to the age of five years, primarily to free the mothers to go out to work. During the war seven day nurseries were opened. Some of these were closed as nurseries at the end of the war, two of them becoming nursery schools. The Harrow Council maintained the remaining four nurseries which in 1948 were taken over by the Middlesex County Council by the effect of the National Health Service Act. These nurseries were at Spencer Road, Wealdstone; Walton Avenue, South Harrow; Kenmore Road, Kenton and Headstone Drive, Wealdstone.

The nurseries are intended primarily for the children of mothers engaged whole-time on work classed as of national importance. In their Development plan, the County Council's proposals regarding day nurseries were: "It is considered that the provision of day nurseries is required to meet social, rather than health needs. In the circumstances, the demand is likely to be somewhat fluctuating and the County Council accordingly does not propose to embark upon a policy of progressive expansion of this service. It will be guided both as to the numbers of nurseries provided, and their siting, by local demands for women in industry. In any case, it does not propose to encourage the reception of infants under the age of two years in day nurseries."

Each of these nurseries was well attended until towards the end of 1952 when the County Council altered the arrangements for the admission of children to their day nurseries. Many children who had up to then attended were withdrawn. In some at least of these cases it was under-

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KYNASTON COURT,
BOXTREE ROAD,
HARROW WEALD.

Telephone:
GRIMSDYKE 3131

stood that the reason for the withdrawal was the charge for admission. When, however, the question of the number of nursery places required to accommodate those who needed to be admitted was raised, the analysis was based on the reduced numbers of children actually attending the nurseries and therefore did not indicate the true need. In addition the needs of those in localities in which there were no nurseries had to be ignored because they were not known. The findings were that the needs of the district were not much more than the number of places at one of the nurseries. The County Council decided that only two nurseries, namely those at Headstone Drive and at Walton Avenue should be retained; and at the end of 1953 the Spencer Road nursery and the Kenmore Road nursery were closed.

Children of over two but under five years of age are also admitted to one of the three nursery schools maintained by the Education Authority, those being at " Tyneholme," at Rayners Lane, and at Buckingham Road. Older children attend the nursery classes attached to some schools.

CLINICS AND TREATMENT CENTRES

Although little provision can be made for scattered groups of families, a local health authority can be looked to to provide a wide range of services for those in any area. Some who take advantage of the service will be encouraged to attend frequently and regularly. Others, and they might be only a small proportion of the population, might have to attend only very occasionally. For those in the first group the service must be taken to them. Those at the other extreme can be expected to travel some distance if necessary to obtain the benefit of the service. The mother with a young child is encouraged to attend for a while weekly or fortnightly. She cannot be expected to make this journey regularly if it exceeds half a mile. In most areas then the health services have developed by opening sessions in any available hall, these being held in such numbers and in such places as to be sufficiently convenient for the mothers of small children and for expectant mothers. In the same building school minor ailment clinic sessions might also be held; but treatment services in general can be made available only in buildings designed for the purpose. The early proposals for Harrow were that there would be at Tyneholme, Headstone Drive, Wealdstone, a central clinic building providing a wide range of treatment services, and some eight or nine peripheral clinics providing varying ranges of treatment services. It was expected that even when these nine or ten buildings were erected and were in use, it would still be necessary to use halls in a few areas for maternity and child welfare clinic sessions. The Wealdstone Urban District Council had erected clinics at the Broadway, Wealdstone and at Elmgrove Road, Kenton. The Harrow Council acquired sites at Honeypot Lane and at Alexandra Avenue on which clinics would be erected. It was later agreed by the Harrow Council and the Middlesex County Council that it was desirable that any building erected should also house a library. As the Middlesex County Council was the library authority and also the education authority, it was agreed that they should take over these sites and erect combined buildings on them. The work on both these sites was started just before the war. The Honey-

pot Lane building has since been completed and the clinic part of the Alexandra Avenue building. The new clinic building to serve the London County Council Headstone Estate was started in 1954. When the Kenmore Road nursery closed, the building was used for clinic purposes and is to be adapted for this purpose. A site is being acquired by the County Council at the junction of Marsh Lane and Rayners Lane, Pinner, as a clinic site for a building to serve those in Pinner.

Various services then are maintained partly in *ad hoc* clinic premises and partly in rented premises. The following is a list of the clinics and treatment centres in, or serving the district:—

Infant Welfare Centres

The Clinic, Alexandra Avenue, South Harrow ...	Mon. and Fri. p.m.
British Legion Hall, Headstone Estate	Wed. p.m.
Broadway Clinic, The Broadway, Wealdstone ...	Wed. a.m. and p.m.
The Pavilion, Chandos Recreation Ground, Edgware	Thur. and Fri. p.m.
Elmwood Clinic, Elmwood Avenue, Kenton ...	Mon. and Wed. p.m.
The Rectory, Elstree...	Mon. p.m.
Greenwood Hall, Rickmansworth Road, Pinner...	Wed p.m.
Memorial Hall, High Road, Harrow Weald ...	Thu. p.m.
The Clinic, Honeypot Lane, Stanmore	Mon. and Wed. p.m.
The Clinic, Kenmore Road, Kenton	Wed. a.m. and p.m.
Methodist Church Hall, Love Lane, Pinner ...	Fri. p.m.
Methodist Church Hall, Walton Avenue, S. Harrow	Thu. p.m.
St. Alban's Church Hall, North Harrow	Thu. a.m.
St. Anselm's Hall, Hatch End	Thu. p.m.
St. George's Hall, Pinner View, Harrow	Tue. and Fri. p.m.
St. Hilda's Hall, Northolt Road, South Harrow ...	Tue. and Thu. p.m.
Spiritualist Church Hall, Vaughan Road, Harrow	Wed. p.m.
Stanmore Park (R.A.F.) Station	Thu. p.m.

Ante-Natal Clinics

The Clinic, Alexandra Avenue, South Harrow ...	Wed. p.m.
Broadway Clinic, The Broadway, Wealdstone ...	Tue. a.m. and Thu. p.m.
The Pavilion, Chandos Recreation Ground, Edgware	Fri. a.m.
Elmwood Clinic, Elmwood Avenue, Kenton ...	Tue. p.m.
The Rectory, Elstree...	Mon. p.m.
Memorial Hall, High Road, Harrow Weald ...	Tue. p.m.
The Clinic, Honeypot Lane, Stanmore	Tue. p.m.
The Clinic, Kenmore Road, Kenton	Fri. p.m.
76, Marlborough Hill, Wealdstone	Mon. p.m.
Methodist Church Hall, Love Lane, Pinner ...	Mon. p.m.
Methodist Church Hall, Walton Avenue, S. Harrow	Thu. a.m.
St. Alban's Church Hall, North Harrow	Tue. a.m.
St. Hilda's Hall, Northolt Road, South Harrow...	Tue. a.m.
St. Anselm's Hall, Hatch End	Thu. a.m.
Spiritualist Church Hall, Vaughan Road, Harrow	Wed. a.m.

Toddlers' Clinics

The Clinic, Alexandra Avenue, South Harrow	Wed. a.m.
The Pavilion, Chandos Recreation Ground, Edgware	Thu. a.m.
Elmwood Clinic, Elmwood Avenue, Kenton	Fri. a.m.
St. George's Hall, Pinner View, Harrow	1st and 2nd Tue. a.m.
The Clinic, Honeypot Lane, Stanmore	Mon. a.m.
Methodist Church Hall, Love Lane, Pinner	Mon. a.m.
The Clinic, Kenmore Road, Kenton	Thu. a.m.
Spiritualist Hall, Vaughan Road, Harrow	1st Mon. a.m.

These clinics are to enable children who are too old to be brought regularly to the infant welfare sessions to be kept under medical supervision and, as contrasted with the infant welfare clinics, only those who have been given an appointment can be seen.

Birth Control Clinic

A birth control clinic is held on Friday mornings at the Broadway Clinic. Advice can be given only to those in whose case it is considered further pregnancy would be detrimental to their health. It is advisable that anyone intending to obtain advice should bring a note from her medical attendant indicating the grounds on which advice is necessary.

MARRIAGE GUIDANCE: The aim of the Harrow Marriage Guidance Council (Hon. Organiser, Mrs. D. H. Tupper, 110, Marlborough Hill, Harrow, Tel. No. Harrow 8694) is to promote happy marriage and parenthood. The service offered includes personal consultation to help engaged couples adequately to prepare themselves for marriage and to assist married couples with problems and difficulties of married life.

School Minor Ailment Clinic

Sessions are held at a number of premises in the district:—

The Clinic, Alexandra Avenue, South Harrow	Mon., Fri. and Sat. a.m.
Broadway Clinic, The Broadway, Wealdstone	Mon., Thu. and Sat. a.m.
The Pavilion, Chandos Recreation Ground, Edgware	Tue. a.m.
Elmwood Clinic, Elmwood Avenue, Kenton	Fri. a.m.
The Clinic, Honeypot Lane, Stanmore	Tue. and Sat. a.m.
Methodist Church Hall, Love Lane, Pinner	Mon. a.m.
The Clinic, Kenmore Road, Kenton	Thu. a.m.

Children attend at the request of the parents or of the teachers, or they are referred by school medical officers. Not only are those who need treatment for minor ailments seen at the clinics, but children are kept under observation for such conditions as cervical glands, cardiac murmurs, etc. Any children needing special examination, especially if these are likely to be prolonged, are referred to these clinics.

Ophthalmic Clinics

One of the earliest of the treatment services provided by Education Authorities was the provision of spectacles for those pupils needing them. Children with a low visual acuity in either or in both eyes and those suffering from symptoms apparently referable to their eyes found at the school clinics or at the routine or other school medical inspections are referred to the ophthalmic surgeon. Sessions are held at the Marlborough Hill clinic on Wednesday afternoons and Friday mornings and at the Alexandra Avenue clinic on Thursday mornings. Up to 1948 the Education Authority arranged for the surgeons' prescriptions to be made up, often a charge being made to the parents for the glasses. Since 1948 the procedure is that the child takes the prescription to an optician who then provides the glasses.

Arrangements are made to keep those children who have had glasses under observation.

The ophthalmic surgeons at the clinic are now on the staff of the Regional Hospital Board.

Although pupils attending maintained schools can take advantage of these arrangements, and it is only for them that this service is available, they can if they like take advantage of the arrangements open to any member of the public, the first step in this case being that they attend their own doctors.

The deflection of a squinting eye can sometimes be straightened by exercises. Miss Watling, a whole-time orthoptist, treats children in this way at the Marlborough Hill clinic.

Special Schools

There are certain groups of children for whom, because of mental or physical defect, special educational arrangements have to be made. These are the handicapped pupils. Of the mentally retarded those with higher intelligence quotients can satisfactorily attend ordinary schools, receiving there special educational treatment. Those of lower intelligence, but who nevertheless are educable, attend special schools for the educationally subnormal. These may be day or residential schools. The Shaftesbury School in this district is such a day special school accepting 60 educationally subnormal pupils. Pupils from this area who because of physical defect need to be educated in special day schools are admitted to the Lower Place School for Physically Handicapped Pupils in Willesden. Children who are partially deaf or partially sighted may be suitably educated at a special day school. Those from this district might attend such a school maintained by the Middlesex County Council or by the London County Council. Those more severely handicapped are admitted to residential schools, as are also those who are maladjusted. There are no day schools near this district to which delicate pupils can be admitted. Any pupils recommended for special education on these grounds are admitted to residential schools.

Child Guidance Centre

For many years the County Council maintained a Child Guidance Clinic at 2, St. John's Road, Harrow, under the administrative control of

the full-time psychiatrist, Dr. Margaret Saul, who was helped by such other members of the team as psychologists and psychiatric social workers. Those working at the clinic were a balanced team, the time of members being largely taken up in dealing with patients under the care of Dr. Saul. In 1951 the County Council decided that the child guidance arrangements should become part of the education service, from which time these establishments have been known as Child Guidance Centres. Each of the County Council's centres is under the administrative control of a psychologist, the medical service being provided by a psychiatrist now appointed by the Regional Hospital Board.

Speech Clinic

A speech clinic is held at the Marlborough Hill clinic where two whole-time speech therapists are engaged. Those attending are mainly pupils of maintained schools who have been referred for treatment either by the school medical officers or by the teachers. Sessions are now being held at some of the peripheral clinics.

Dental Treatment

Dental treatment, apart from that provided under the National Health Service Act, is available for certain priority sections of the public, namely, school children, children under five and expectant and nursing mothers.

The service is under the administration of the area dental officer, Mr. A. G. Brown.

There are dental surgeries at five premises, namely, 76, Marlborough Hill, Elmwood Avenue clinic, Alexandra Avenue clinic, Roxeth clinic and Honeypot Lane clinic.

Apart from the sessions when the dental officers are examining children in the schools, treatment sessions are held every week-day, morning and afternoon.

The school children treated there are those found, as the result of routine dental inspection of children at the schools, to need treatment. The only ones who can attend without a previous appointment are those who are referred by the head teachers of the schools, the children attending under the arrangements made for the urgent or emergency treatment of those needing such attention for some cause such as tooth-ache.

Most of the children under five and the expectant and the nursing mothers are referred by the medical officers at the clinics which they have attended. The Health Authority dental service is, however, available to ante-natal mothers who do not attend the local clinics, but who are referred for treatment by the medical practitioners under whose care they are, appointments being made through the Area Office.

An orthodontic surgeon works at the Marlborough Hill Clinic.

Physio-Therapy Treatment

The Harrow Hospital maintains a physical treatment centre at the Car Park Building, Station Road, Harrow (Tel. No. Harrow 0926).

The medical director, Dr. G. C. Farrington, attends at fixed sessions to see all new cases. A wide range of treatment is carried out by the staff under the supervision of Miss M. Lock. The orthopaedic surgeon, Mr. K. I. Nissen, attends once a month.

Care of the Feet

A limited chiropody service is provided by the local health authority for children attending maintained schools, for nursing and expectant mothers, and for children under school age. While these perhaps are not the sections of the population who suffer most from conditions of the feet needing this form of treatment, there is room for much useful work to be done in dealing with them. Apart from this aspect, it is hoped that the activities of the chiropodist will result in more attention being given to this matter, and that steadily more will appreciate what scope there is for preventing the development of disabling and painful conditions.

Chest Clinics

The foundations of the tuberculosis service established some forty years ago rested partly on the various forms of residential institution for the reception of sufferers and, more especially on the preventive side, on what were called tuberculosis dispensaries. The function of the dispensary was to act as a receiving house and a centre for diagnosis, as a clearing house and centre for observation, as a centre for curative treatment, as a centre for the examination of contacts, as a centre for after care and as an information bureau and educational centre. The responsibility for providing the tuberculosis service was placed on the Councils of Counties and County Boroughs. Under the National Health Service Act not only the hospitals but other places providing treatment passed from these authorities to the Ministry, so that since 1948 the tuberculosis dispensaries which are now more commonly known as chest clinics have been administered by the Regional Hospital Boards. In respect of their clinical duties the staff are engaged by the Boards, but as the preventive side remains the responsibility of the local health authorities, staff for this purpose are also engaged by them. Although the basic functions of these clinics remain the same as when they were first established, very much more is being done there now. Clinics are fitted with X-rays and a range of treatment including A.P.T. refills is carried out. Testing of tuberculin reactions and the use of B.C.G., antibiotics, and chemotherapy have widened the range of activities of the clinics. The shortage of hospital accommodation after the war demonstrated that many sufferers, who in other days would have been admitted to institutions of one sort or another, could satisfactorily be looked after at home.

The Chest Clinic serving most of this district is that at 199, Station Road, Harrow (Tel. No. Harrow 1075). The physician in charge is Dr. Grenville Mathers. Serving part of the district on the eastern side is the Chest Clinic at the Edgware General Hospital (Tel. No. Edgware 4467). The physician in charge is Dr. Trenchard.

Treatment of Venereal Diseases

The increase in the prevalence of venereal diseases during the first world war led to the Government deciding that arrangements should be made for the diagnosis of these diseases and the treatment of those suffering, either at clinics or hospitals, or by general medical practitioners. The responsibility for making arrangements was placed on the Councils of Counties and County Boroughs. In and around London, instead of the various authorities making their own arrangements, the London and Home Counties Scheme was agreed to. More emphasis on the preventive side was given in the nineteen-thirties by the appointment of almoners or welfare officers at the treatment centres.

The diseases have never been generally notifiable. Although a number of authorities have sought permission to make them notifiable in their district, approval has never been given, the main objection being the fear that compulsory notification would tend to drive sufferers to obtaining " quack " treatment. During the war years a modified form of notification was introduced by regulation 33B with the object of compelling anybody who had infected more than one person to undergo treatment. This regulation was withdrawn after the war.

By the National Health Service Act these centres for the treatment of those suffering from venereal diseases passed out of the hands of local authorities into those of Regional Hospital Boards. Sufferers can be treated at certain London hospitals and at the Central Middlesex Hospital, Acton Lane, Willesden; Hillingdon Hospital, Royal Lane, Hillingdon; and West Middlesex Hospital, Twickenham Road, Isleworth.

The most convenient of the London Hospitals at which treatment is provided are St. Mary's Hospital, Cambridge Place, Paddington; and University College Hospital, Gower Street.

PROVISION FOR SPECIAL CLASSES OF PERSONS

The Deprived Child

Under the Children's Acts authorities appointed Infant Protection Visitors to deal especially with infants in the care of baby farmers. In time in most areas these duties were taken over by the health visitors who were concerned with all the children in their areas. A few years ago a child who had been boarded by a local authority in the area of another died from ill treatment he had suffered at the hands of those to whom he had been entrusted. The anxiety felt by many about the treatment of children in public care led to the setting up of a commission, and in time to the passing of the Children's Act, 1948. Under this every local authority (major authority) was to establish a Children's Committee and appoint a Children's Officer. Local authorities exercised their functions under the general guidance of the Secretary of State. Each major authority then set up an entirely new service for dealing with certain classes of child. One duty of the authority is to accept into care the child under seventeen who has neither parent nor guardian, or has been and remains abandoned by his parent or guardian, or is lost; whose parent or guardian is for the time being, or permanently, prevented by reason of mental or bodily disease, or infirmity, or other incapacity,

or any other circumstances from providing for his proper accommodation, maintenance and upbringing, and the intervention of the local authority is necessary in the interests of the welfare of the child. These children are placed in residential homes, or are boarded out. In certain circumstances a local authority may assume parental rights with respect to any child in their care. It is also the duty of the authority to act as a fit person under the Children and Young Persons Act, 1953, when the court commits a child to their care. The responsibility for the supervision of children under the Children's Acts relating to child life protection has also passed to the Children's Department. These provisions relate to children who are maintained apart from their parents for reward; such children are now being supervised up to the age of eighteen years. The Children's Department has further responsibilities in regard to children who are about to be adopted.

The Children's Officer of the Middlesex County Council is Miss J. Rowell, of 10, Great George Street, S.W.1 (Tel. No. Trafalgar 7799). In this area the work is carried out by the Area Children's Officer, Miss Susan Boag, at Kynaston Court.

The Mentally Ill and the Mentally Defective

The mental health services are integrated with the other health services established under the National Health Service Act. The duties of the local health authority include responsibility for the initial care and conveyance to hospital of patients who fall to be dealt with under the Lunacy and Mental Treatments Acts, and for the ascertainment and community care of mental defectives. The Health Committee of the County Council is responsible for the mental health functions of the Authority.

The county was divided for these functions into the same ten areas as for the administration of the delegated health services. In 1952 a reorganisation was made. Harrow with Acton, Wembley and Willesden now form the central division which is served by Shenley Hospital. The Mental Welfare Officer, Mr. W. J. Pedel, and other officers, work at Winkworth Hall, Chevening Road, Kilburn, N.W.6 (Tel. No. Ladbroke 2411).

For the backward child who is educable special educational arrangements are made. Some children of school age or of even below school age are found to be ineducable. The responsibility for dealing with these rests with the Mental Health service of the County Council. A number of these children are helped by their attending an occupation centre. There was such a centre in Harrow, in Wealdstone. This transferred in 1954 to the building which was at one time the civic restaurant at Rayners Lane. There were at the end of the year 76 names on the register. Most of those attending are taken to and from the centre by coach. Many continue to attend after they have passed the usual school leaving age.

Persons in Need of Care and Attention

Part III of the National Assistance Act imposed certain duties on the County Council:

1. To provide residential accommodation for persons who by reason of age, infirmity or other circumstances are in need of care and attention not otherwise available to them.

2. To provide temporary accommodation for persons who are in urgent need thereof (their need arising in circumstances which could not reasonably have been foreseen or in such other circumstances as the County Council might in any particular case determine).

3. To make arrangements for promoting the welfare of persons who are blind, deaf or dumb and other persons who are substantially and permanently handicapped by illness, injury, congenital deformity or such other disabilities as may be prescribed by the Minister of Health.

The Act also places on the County Council certain duties in relation to the registration of homes for disabled and old persons, and in relation to the temporary protection of the movable property of certain persons.

These duties are the concern of the Welfare Department. For administrative purposes the county is divided into the same ten areas as for the County Council functions under Part III of the National Health Service Act. Acting under the supervision of the Chief Welfare Officer for the county there is a Welfare Officer in each area. The one for this district is Mr. H. G. Plummer, Kynaston Court, Boxtree Road, Harrow Weald.

Under Section 21 (1) (*a*) of the National Assistance Act the County Council is required to provide residential accommodation for persons who by reason of age, infirmity or any other circumstances are in need of care or attention which is not otherwise available to them. The Ministry of Health advised that this would not include sick persons needing treatment in hospital, but would comprise a wide range of elderly, infirm, disabled or subnormal people who were unable to look after themselves in their own homes and could not obtain from relatives, friends or others the care and attention they required. The residential accommodation was to be a substitute for a normal home, meeting all reasonable needs of the residents including clothing, extra comforts in the shape of tobacco and sweets which a resident may be unable to provide himself out of his own resources, and amenities and services such as recreational facilities, books and periodicals and opportunities for religious worship. The residents are required to pay for their accommodation. If they have sufficient means they pay the standard charge. In any event they pay a minimum prescribed by the Minister. If necessary the National Assistance Board make them an allowance sufficient to enable them to pay this and still retain a prescribed amount for personal requirements.

In July, 1953, the County Council had 31 homes with some 1,500 beds. Another 1,000 persons were being maintained in homes run by voluntary organisations, or by other local authorities. Except for two former Public Assistance institutions these homes are large private houses, or hotels which have been adapted to provide residential accommodation.

Enforced Removal. Apart from the powers possessed by the hospital boards or by the local health authorities to help persons in need of care and attention, the local sanitary authority has been given powers

to deal with those persons who, because they cannot look after themselves, are causing injury or nuisance to those living near. These powers are contained in Section 47 of the National Assistance Act, 1948, which sets out the arrangements for the removal to suitable premises of persons who (*a*) are suffering from grave chronic disease, or being aged, infirm or physically incapacitated, are living in insanitary conditions, and (*b*) are unable to devote to themselves and are not receiving from other persons proper care and attention. Both conditions must be satisfied before this section is applicable. The procedure to be followed was that on the Medical Officer of Health certifying in writing to the Authority that he is satisfied that in the interests of such person residing in the area of the Authority, or for preventing injury to the health of or serious nuisance to other persons, it is necessary to remove such person from the premises in which he is residing, the Authority could apply to a Court of Summary Jurisdiction for an Order. The Court if satisfied may order the removal of the person by an officer of the Authority to a suitable hospital or other place in or near the area of the Authority. But before the Order is made, the person managing the premises must be heard, or have been given seven days' notice of the intended application. Any Order made would be applicable for three months and the Court could extend the period. The machinery proved to be cumbersome. Under the new procedure of the 1951 Amendment Act, if the Medical Officer of Health and another registered medical practitioner certifies that it is necessary that a person shall be removed without delay from the place he is living in, an application for a Removal Order may be made to the Court or to a single justice without the necessity of giving notice to the person whose removal is desired, or to the person in charge of him; nor is it necessary that notice shall be given to the person in charge of the premises to which it is proposed to remove the person providing that the applicant can show that the person is willing to receive into the establishment the person in need of care and attention. An Order made under this machinery is valid for three weeks only; any application for the extension of an Order made under this arrangement has to be made under Section 47 of the 1948 Act.

Up to this, no action has been taken in this district under the powers given by this section. A number of persons throughout the county have been admitted to County Council homes as the result of such orders. In most cases they have been content to remain in the homes without the orders being renewed.

Laundry Service. One of the problems arising from those whose admission to hospital or institution is desirable but cannot be arranged, is the soiling of the bedding and the clothing of the incontinent. This problem occurs more particularly in the aged. There seem to be administrative difficulties in arranging for something to be done to help. Although in many cases the problem arises from the inability of the hospital service to accommodate patients, it would seem, and quite understandably so, that the hospital authorities cannot assist those who have not been admitted to the hospital. The Local Health Authority would seem to have the necessary powers under Section 28 of the National Health Service Act: "A Local Health Authority, may with the approval of

the Minister, and to such extent as the Minister may direct make arrangements for the purposes of the prevention of illness, the care of persons suffering from illness or mental defectiveness and and the after care of such persons." But there would appear to be difficulties about these arrangements being made under these powers. Local Sanitary Authorities have certain restricted powers under Section 84 of the Public Health Act, 1936; " Where it appears to a local authority upon a certificate of a Medical Officer of Health or the Sanitary Inspector that any article in any premises (*a*) is in so filthy a condition as to warrant its cleansing, purification or destruction in order to prevent injury or damage to the health of any persons in the premises, or (*b*) is verminous . . . the local authority shall cause that article to be cleansed, purified, disinfected or destroyed as the case may require at their expense." Anything done under these powers is limited in scope and cannot be of general application. Some local authorities have made use of their powers; some provide a form of laundry service. The Hendon Group Hospital Management Committee for long had this problem under consideration; they were prepared to arrange for the actual work of the treating of the articles and clothing to be done if the Local Sanitary Authorities would meet the expense. The Council agreed to this within the limit of their powers, as to the type of case to be helped. Early in 1954 arrangements on these lines were made, the first case being helped in February. In all 20 persons were helped. The periods of assistance ranged from 1 to 36 weeks. The average cost per week per person was about 3s. A number of those helped were admitted to hospital; the service was discontinued then, being resumed on the return home. 11 persons were being helped at the end of the year. This service can be made available only to small numbers of persons because of the restricted powers of the Council. Nevertheless, for those who can be helped in this way, the assistance is of real benefit to the patients and to those who are looking after them.

The Blind and Partially Sighted

Under the Blind Persons Act, 1920, the County Council had the duty of promoting the welfare of blind persons who for this purpose are persons unable to perform any work for which eyesight is essential. This definition excluded from the benefits of the arrangements made those who were unable to continue their own occupation, but who had sufficient eyesight to do some kind of work. This markedly handicapped children leaving schools for the partially sighted who had to compete with sighted persons. Under the arrangements of the National Assistance Act, the partially sighted who are handicapped substantially and permanently are now eligible for welfare services.

In providing the service the County Council works in close co-operation with various voluntary organisations for promoting the welfare of the blind, especially the Middlesex Association for the Blind, the Royal National Institute for the Blind, the Royal London Association for the Blind and the National Library for the Blind.

The foundation of the arrangements is the registration of the person as blind, or partially sighted. Registration is carried out only after the

person has been examined by an ophthalmic surgeon whose certificate includes a recommendation for treatment or re-examination, the Welfare Department seeing that the recommendations are carried out. The general welfare service for all blind and partially sighted persons includes a home teaching service and provides for the giving of advice in domestic problems, arranging for home helps, dinners, medical attention, reading, writing letters, etc. Braille and Moon lessons are given in the homes. When proficient readers, they become members of the National Library for the Blind. Those who cannot learn to read Braille or Moon can be helped by talking book machines. The home teachers give instruction in many types of pastime. Wireless sets are supplied to blind persons by the British Wireless for the Blind Fund.

The Aged

The problem of the aged has come to the fore both because of the actual increase in their numbers (this is a factor of importance when there is competition for available services such as hospital beds which have not increased in the same proportion as the population needing them) and because of the relative increase, a factor of importance when the ratio of consumers to producers is under consideration.

The needs of those who require help vary. There is the hospital group, the group of those needing permanent medical and nursing attention; these are the responsibility of the Regional Hospital Boards. In some hospitals much encouraging work has been done which has shown that there is no need to allow many of these elderly chronics to remain bedridden. By treatment, rehabilitation, mobilisation and occupational therapy, many of those previously bedridden can be got up, and many can reach the stage of no longer being hospital patients, being capable of transfer to welfare hostels. A number of hospitals, including the local Edgware General Hospital, have set up special geriatric departments with their specialist officers with their primary responsibility of seeing to the interests of those aged who are ailing.

During 1953 the average number of beds available for the geriatric service was 155. Of these 18 were at the Edgware General Hospital, 51 at the Roxbourne Hospital, 40 at Oxhey Grove, 14 at the Stanmore Cottage Hospital and 26 at St. Elizabeth's Hospital. Since then a further 23 have been made available at Orme Lodge, Stanmore, and 24 at Glebe House, Barnet. A geriatric out-patients' department and follow-up clinic has been established at the Edgware General Hospital where patients can be seen by appointment.

Another group is those who, while not needing the special nursing or medical care of the first group, nevertheless require care and attention which is not otherwise available to them. These are helped by the Welfare Department of the County Council (Area Welfare Officer, Kynaston Court, Harrow Weald) which arranges admissions to residential homes.

The third group is that of those old people who are living as ordinary members of the community but who, nevertheless, are not really ordinary members because many have their own special needs. There is no official authority responsible for them, though many agencies,

especially voluntary, help in different ways. The homes of the aged need special consideration from the point of view of the location of the accommodation, its design and furnishing and equipping. As a housing authority, the Council has built a number of houses specially designed for the aged. The Harrow Housing Society, Limited (the Secretary, Miss D. Walding, 2, Manor Road, Harrow, Tel. No. Harrow 1418), provides accommodation for a number of elderly persons at Pinner House, Church Lane, Pinner. A number of aged are helped to obtain meals. There is a luncheon club at the Assembly Hall, North Harrow, where some 80 old people are served with meals at a charge of 1s. a meal. The Council under Section 31 of the National Assistance Act decided to contribute £500 per annum towards the cost of operating the Belmont central kitchen and restaurant, and £150 in respect of the initial cost of kitchen utensils, etc., and another at Belmont Assembly Hall, Kenton Lane. Applications to join these clubs should be made to the Secretary, Harrow Old People's Welfare Committee, Harrow Weald Lodge. In addition, the Women's Voluntary Service maintains a "Meals on Wheels" service, taking meals to some old people confined to their homes. Enquiries should be made to the Harrow Administrator W.V.S., Bradstowe House, Headstone Road. There are a number of old people's clubs in this area, including six "Evergreen" Clubs run by the British Red Cross Society (Organiser, Mrs. G. Sichel, 9, Peterborough Road, Harrow) and four "Darby and Joan" Clubs run by the Women's Voluntary Service (enquiries to the Harrow Administrator, W.V.S., Mrs. M. E. Kingett, Bradstowe House, Headstone Road).

The Harrow Old People's Welfare Committee, on which are representatives of the many agencies in the district helping the aged in any way, helps to link up the work of these organisations. The Committee appointed a co-ordinating officer, who is at the Council Offices, Peel Road, Wealdstone (Tel. No. Harrow 2974) on Tuesdays, 10 a.m. to 12 noon, Thursdays 2 to 5 p.m. A home visiting service has been set up under which arrangements are made to recruit visitors who will keep in touch more especially with lonely old people.

LABORATORY SERVICE

The examination of clinical material of public health significance is carried out free of cost to the patient and to the doctor at the Central Public Health Laboratory, Colindale Avenue, London, N.W.9 (Tel. No. Colindale 6041 and 4081). Most samples submitted are throat swabs for the presence of organisms of diphtheria or of the haemolytic streptococcus.

Another group of samples is of dejecta for the presence of organisms of the typhoid or dysentery group. Specimens of sputa are submitted for examination for the presence of tubercle bacillus. Blood serum is sent for examination of the reaction indicating the infection of the body by the typhoid group. Cough plates are examined for the presence of the organisms of whooping cough. In general the examination is carried out of material which will be of aid in the early diagnosis of infectious conditions, one purpose of the laboratory being to carry out investigations of public health significance.

It is not intended that other clinical material shall be sent, this work being carried out at the laboratories of certain hospitals. The laboratory does not deal in the ordinary way with the examination of specimens of those suspected to be suffering from venereal disease, which are sent to hospitals which provide clinics for the treatment of those suffering from these diseases.

Apart from the examination of this clinical material, the laboratory also carries out the routine bacteriological examination of such foods as milk or ice-cream, and examines other foodstuffs considered possibly to have been the source of a food poisoning. The staff of the laboratory also carry out investigations in the field in the case of various forms of outbreak, however spread.

Another service provided by the laboratory is the issue of certain preparations such as lymph for vaccination against smallpox, and antigens for the immunisation of the population against diphtheria.

The clinical material is collected each day by a van sent from the laboratory calling about mid-day at the Harrow Hospital, " Kynaston Court," and the Central Fire Station, Pinner.

The following is a summary of the examinations of material from this district, carried out during the year : nose and throat swabs 142, faeces 64, sputum 39, miscellaneous 6.

AMBULANCE SERVICE

Although the County Council decided that the Fire and Ambulance Service should be run as one combined service, the combination of the two services is limited to organisation and administration. Fire appliances are manned by firemen specially enrolled and trained for that purpose, and ambulances are manned by ambulance driver/attendants and attendants.

" Ambulances specially equipped to deal with accidents and similar emergencies are kept at 28 fire stations throughout the county. These ambulances and their crews, who are trained in first-aid, are always ready to respond immediately to accident and emergency calls. A call which is received at a station when the ambulances are away attending other calls is instantly transmitted to a control centre from which the nearest available ambulance is ordered to answer the call.

" Sick removal cases far outnumber accident cases. Many vehicles carry out the day to day task of transporting sick persons to and from hospitals, clinics, maternity homes and other treatment centres. No matter where the destination may be, the County Council is responsible for the transport if the need arises within the county on medical grounds, always provided the patient is not capable of travelling by public transport."

The County Council development plan provided for the building of ten ambulance depots at various places throughout the county. All ambulances and sitting case vehicles were to be housed in these depots which would cater for the needs of the surrounding districts. They would also assist in accident work if this became necessary in an emergency, e.g. in the event of a train accident or aircraft crash. Of the three of these buildings which have been erected one is in this district at

Imperial Drive (Tel. No. Pinner 7351). The Highways and Cleansing Committee agreed to granting the County Council a lease for 99 years of a parcel of land on the former Great Stanmore Sewage Farm as a site for an ambulance depot.

The hospital car service, operated jointly by the British Red Cross Society, the St. John Ambulance Association and the Women's Voluntary Services, provides cars and drivers, who give their services voluntarily, and by arrangement with the County Council takes many patients to and from hospitals and clinics.

LEGISLATION IN FORCE

The following adoptive provisions and orders are in force in the district:—

Infectious Disease (Prevention) Act, 1890
Public Health Acts Amendment Act, 1890: Parts II and III
Public Health Acts Amendment Act, 1907: Parts II and III; S.S. 52-65, 67 and 68 of Part IV; Parts V and VI; S.S. 81 (modified), 84 and 86 of Part VII; Parts VIII and IX; and S. 95 of Part X
Private Street Works Act, 1892
Public Health Act, 1925
Sunday Entertainments Act, 1933
Orders under S. 33 Local Government Act, 1894:
- Orders of Local Government Board of 23rd July, 1896; 1st August, 1896; 30th April, 1897; and 19th April, 1902

Order under the Infectious Disease (Notification) Act, 1889:
- Order to include the disease of pemphigus as a notifiable disease (effective as from 17th August, 1935)

Order under the Public Health Acts Amendment Act, 1907:
- Order of Local Government Board, 6th April, 1910, under S. 51, declaring the trade of fish-fryer to be an offensive trade
- Order of the Minister of Health of 16th April, 1936, under S. 51, declaring the following trades, businesses or manufactures to be offensive trades: rag and bone dealer, blood drier, leather dresser, tanner, fat melter or fat extractor, glue maker, size maker and gut scraper

Order under the Midwives Act, 1936:
- Order of Minister of Health of 6th April, 1938, applying to the Borough S. 6 which prohibits unqualified persons acting as maternity nurses for gain.

Bye-laws made by the District Council in respect of the following matters are in force in the district:

Removal of house refuse
Slaughterhouses
Regulation of Offensive Trades
Smoke abatement

Nuisances in connection with the removal of offensive or noxious matter
Prevention of nuisance arising from snow, filth, dust, ashes and rubbish, and for prevention of keeping of animals in premises so as to be injurious to health
Houses let in lodgings
Sanitary conveniences
Cemeteries
Pleasure grounds
Pleasure fairs
Hoardings and advertisements
New streets and buildings
Hairdressers and barbers
Camping grounds and movable dwellings
Establishments for massage or special treatment
Handling, wrapping and delivery of food

Bye-laws made by the Middlesex County Council relating to the following matters are in force in the district:

Nursing Homes
Good Rule and Government
Children and Young Persons:
(*a*) Street Trading
(*b*) Employment of Children
School Attendance
Cycling on Footpaths
Roller Skating
Fouling by Dogs of Footpaths
Deposit of Litter
Sale of Contraceptives from Automatic Machines in Streets
Loading of Vehicles, and carrying of mud, etc., on to the streets
Under Section 3 of the Public Libraries Act, 1901, as to the proper use of public libraries

There are Rules or Regulations in respect of:

Underground Rooms
Allotment Gardens
Cemeteries and Burial Grounds
Swimming Baths
Use of Sports Track at Headstone Manor Recreation Ground.

SANITARY CIRCUMSTANCES OF THE AREA

WATER

Supply

Apart from the houses in three roads in the south-west part of the district (Wood End Avenue, Wood End Road, and Westwood Avenue), which are supplied by the Rickmansworth and Uxbridge Valley Water Company, the area is supplied with water by the Colne Valley Water Company.

Up to the middle of the last century many of the areas which now form part of Greater London had no piped water supply. In 1873, the Company was incorporated to supply the parishes of Bushey, Aldenham and Elstree, Stanmore, Pinner, Kingsbury and parts of Harrow-on-the-Hill and Hendon. A well was sunk at Bushey and the first supplies given in 1876. In 1885, the Company acquired the Harrow Water Works Company. In 1894 they acquired the Central Middlesex Water Company Limited, taking over the supply of water to those parts of the parish of Harrow-on-the-Hill not up to then within the limits of supply, and also the supply to Alperton, Sudbury and parts of Wembley. The area supplied has remained largely unchanged; the demand though has increased markedly as the result of building. The area supplied is some 51 square miles in Middlesex and 30 square miles in Hertfordshire. The population of over half a million receives an average of 30 gallons per head per day, the combined demand for domestic and industrial purposes being over 23 million gallons a day.

Nearly all this water is obtained from a series of wells with adits driven into the Upper and Middle Chalk along the valley of the river Colne, the water originating in the gathering grounds in the Chilterns. The main pumping stations are at Aldenham Road, Bushey, Eastbury (between Watford and Northwood) and Berrygrove (2 miles north of Bushey). During the last war supplies were augmented from wells at Ruislip Common and Poors Field, and in the immediate post-war years by wells north of the Berrygrove well at Wall Hall, Brickett Wood and Netherwild Farm. There is also a well at Bessborough Road, Harrow, which originally belonged to the Harrow Water Works Company.

The water from these wells and adits is lifted to the surface by deep well pumps. After treatment most is then pumped into surface reservoirs at Windmill Lane, Bushey Heath, the highest point in the area supplied by the Company. From these reservoirs the water is distributed by gravity through some 300 miles of trunk mains and 650 miles of distribution mains. A boosting station at Grove Hill Road ensures adequate pressure on Harrow Hill.

The water is treated by softening, partly by Clark's lime process, part by the method of base exchange, and is then chlorinated.

The Colne Valley Water Company is at present "carrying out a major programme of new capital works in order to be in a position to meet the increasing demands for water throughout the 81 square miles supplied by the Company. The new works include a very large treatment and softening plant. It has since the inception of the Company been the policy to soften the water supplied and that policy remains

unchanged. Until the new works are completed which will be in some two to three years, it is impossible to express an opinion as to the amount of softening which will be carried out."

Purity

Section III of the Public Health Act, 1936, lays it as a duty on every Local Authority " to take, from time to time, such steps as may be necessary for ascertaining the sufficiency and wholesomeness of the water supplies within their district." On consideration of a circular letter issued by the Ministry of Health relating to the purity of public water supplies controlled by Local Authorities and Statutory Water Companies, it was resolved " that the Medical Officer of Health be instructed to obtain from the Colne Valley Water Company and the Rickmansworth and Uxbridge Valley Water Company, respectively, weekly analyses of the water supplied by them, and periodically, himself, to take samples of the water supplied for the purpose of comparison with the analyses submitted by the Companies." The Colne Valley Water Company have supplied, each week, the result of an analysis undertaken at their laboratories of samples collected at different premises within the district.

The following is a copy of the result of the analysis of a sample of water supplied by the Colne Valley Water Company taken in May which is typical of all the analyses (Results in parts per million):—

Appearance : Bright with a few mineral particles.
Colour : Nil. Turbidity less than 3. Odour : Nil.
Reaction pH. 7·3. Electric conductivity 670. Free Carbon dioxide 18.
Total Solids 450. Chlorine in Chlorides 54. Alkalinity as Calcium Carbonate 245.
Hardness : Total 250. Carbonate 245. Non-carbonate 5.
Nitrate Nitrogen 4·4. Nitrite Nitrogen absent.
Ammoniacal Nitrogen 0·000. Albuminoid nitrogen 0·20.
Oxygen absorbed 0·20. Residual Chlorine absent.
Metals : Iron, less than 0·03; other metals absent.
Bacteriological Results:
No. of colonies per mil. on agar in 24 hours at 37°C.: nil.
B. Coli (absent in) : 100 mil.
B. Welchii (absent in): 100 mil.

" This sample is practically clear and bright in appearance, neutral in reaction and free from metals apart from a negligible trace of iron. The water is hard in character, but not to an excessive degree, contains no excess of salinity or mineral constituents in solution and it is of very satisfactory organic quality. From the aspect of chemical analysis these results are indicative of a pure and wholesome water. Suitable for drinking and domestic purposes."

Some diseases are water borne. So that the Company shall know of the occurrence of any of these, particulars are sent to them of those households at which there are patients suffering from diseases which might have been contracted by the consumption of infected water, even though there was nothing to suggest that in those particular cases infection had been contracted in this way.

HARDNESS. The water supplied to this district is classed as hard. A typical analysis, for instance that of May, 1954, was that the total hardness was 250, made up of temporary or carbonate hardness of 245 or permanent or non-carbonate hardness of 5. The accepted classifica-

tion of water according to hardness is that those of under 50° of hardness are soft, those of 50 to 100 p.p.m. moderately soft, 200 to 300 hard and over 300 very hard. This district is being supplied with water which is harder than that supplied throughout most of the country. But whatever may be the objections to hard water and however great the disadvantage to the housewife and to those in industry, there is probably no direct relationship between the hardness of water supplied and the health of the consumers of that water.

Harrow had agreed to join Wembley Borough Council and the Watford Rural Council in a protest to the Colne Valley Water Company about the hardness of the water supply. The company submitted:

(1) that the average hardness of the water supply compares favourably with that supplied by adjoining undertakers, and that the company is one of the relatively few undertakers in the country which give a softened water supply; that the large new treatment works at Clay Lane, Bushey Heath, which incorporates a softening process has been under construction for two years, but it will be another two years before it is ready for softening water;

(2) that in the meantime to meet demands for water it has been necessary to bring new sources into service notwithstanding that the water cannot be softened and that it is likely that greater quantities of such water will have to be used which will have the effect of increasing the hardness of the water put into supply;

(3) that the softening plants at the Eastbury and Bushey pumping stations are used regularly; that in order to increase the amount of softening at the Eastbury plant would necessitate heavy capital expenditure which is not warranted as the Clay Lane works will be completed in two years.

FLUORIDATION. In different parts of the world people have suffered from discoloration or disfiguration of the teeth which has now been recognised to be the result of the consumption of water containing fluorides. The population in small areas of this country have been found to be affected. It was later appreciated though that the teeth affected to lesser degrees seemed to be more resistant to caries. This led to the suggestion that water which contained no fluorides might have fluorides deliberately added in such concentration as to give the consumer of the water the benefit of this resistance to caries, but short of the amount that might result in gross damage to the teeth. In parts of America this step has been taken, apparently with gratifying results. A mission was sent from this country in 1952 to study the procedure and the results. They brought back evidence that dental caries is much less prevalent in people who throughout their lives drink water with a natural fluoride content of 1 p.p.m. or more than in those whose water supply is practically free from fluorine. Surveys made in many parts of the world have confirmed this. In five large scale experiments carried out in America since 1945, fluoride has been added to the water as a prophylactic against dental

caries. This has been followed by a reduction in the incidence of dental caries in younger children to the level of those drinking water with a naturally-occurring fluoride content. Four places in the British Isles, Watford, Darlington, Anglesey and Kilmarnock have accepted an invitation to add fluorine to the public water supply. One of the objects of the mission to North America was to determine what hazards there were. On this they reported there is no scientific evidence that there is any danger to health from the continued consumption of water containing fluoride in low concentration. Many factors will influence the effects of the consumption of water to which fluorides have been added so that results as striking as those obtained elsewhere will not necessarily be seen here. Nevertheless some reduction in dental caries to the level of those living in high fluorine areas in this country might reasonably be expected.

DRAINAGE AND SEWAGE DISPOSAL

Sewerage

Until 1935 all the work of maintaining sewers and purifying sewage in Middlesex was carried out by the local authorities for each particular district. The sewage from Harrow-on-the-Hill Urban District was treated at the sewage farm, Newton Farm, Rayners Lane. The sewage after screening was passed through detritus tanks on to sedimentation tanks. The effluent was then distributed on the land by the system of broad irrigation, the final effluent discharging into streams leading to the Yeading Brook. The sewage from the Wealdstone Urban District was treated at the sewage disposal works at Elmgrove Road. These works comprised screening chambers, detritus and sedimentation tanks and percolating filters fitted with rotatory distributors. After passing through humus tanks, the effluent was discharged into the Brook. There were three sewage works in the Hendon Rural District. At the works at Cannon Lane, Pinner, which took the sewage from Pinner and part of Harrow Weald, the sewage after passing through sedimentation tanks passed through percolating filters and humus tanks, the effluent discharging into the Yeading Brook. Most of the sewage from the Parish of Great Stanmore was treated at the sewage works at Honeypot Lane, being treated by sedimentation and broad irrigation, the effluent discharging into the Edgware Brook. The Little Stanmore sewage works took the sewage from Little Stanmore, the southern part of Great Stanmore and part of Harrow Weald. The sewage passed through sedimentation tanks, percolating filters and humus tanks, the effluent being discharged into the Hendon Brook.

With the building development in many parts of the county, local authorities found difficulty in extending their sewage works to cope with the ever-increasing volume of sewage to be dealt with. The local authorities, therefore, agreed to the County Council obtaining powers by special Act of Parliament to make provision for the main drainage and the purification of sewage from an area embracing the whole of the western part of the county.

The West Middlesex Sewerage District. This district included 15 sanitary districts served by 28 separate local sewage works. The new

scheme designed to serve an ultimate population of two million was started in 1931. By 1936 the 28 old sewage works including five in this district were closed down. The sewage from the whole area is drained by gravitation along the main sewers to the purification works at Mogden, Isleworth, being treated by the activated sludge process. The works include the sewage pumping station, screening and disintegrating plant, grit chambers, sedimentation tanks, biological purification by the activated sludge process using compressed air, final separating tanks, storm water tanks, first stage sludge digestion plant with gas collection and a methane operated power station. The purified effluent is discharged into the River Thames at Isleworth Ait. The sludge after digestion is pumped to the Perry Oaks works where it is pumped on to beds for drying. The dried sludge is either tipped on to land or is used for agricultural purposes.

The capacity of the local trunk sewers and main outfall sewers is such that it is estimated on a dry weather flow at 40 gallons per person per day, they can serve an ultimate population of 330,000. At South Vale, Sudbury, a pumping station lifts sewage some 80 feet from the South Vale area to the high-level sewer in South Hill Avenue.

There are still a few houses on the northern fringe of the district from which the sewage is treated mostly in small plants in the grounds of the houses, the effluent finding its way to a water course.

Drainage

The district is served by the separate system of drainage. The County Council maintained all the important water courses in Middlesex until the passing of the Land Drainage Act, 1930. The object of this Act was to overcome conditions prevailing in certain parts of the country where the neglect of water courses had resulted in serious deterioration of agricultural land. On the passing of that Act all the water courses falling within the catchment areas of the River Thames and the River Lee passed from the control of the County Council to that of the Thames or of the Lee Catchment Boards. The County Council still retains control of the water courses in the catchment areas of the Rivers Brent and Crane which discharge into the Thames below Teddington Lock. Legislation about the prevention of pollution of streams was consolidated in the Rivers (Prevention of Pollution) Act, 1951. In areas for which river boards had to be formed under the River Board Act, 1948, the powers of the Act are exercised exclusively by those bodies; in the Thames and Lee catchment areas it is enforceable by the Thames Conservators and the Lee Conservancy Catchment Board.

Open water courses generally are under the jurisdiction of the County Council or of the Thames Conservators, but long lengths running through developed land have been culverted and so have become the responsibility of the district council. In some cases, the Council has acquired land along the banks. There are five main water courses in the district. The River Pinn (under the control of the Thames Conservators up to where it crosses St. Thomas' Drive) rises in the Royston Park Estate and runs in a southerly direction to High Street, Pinner, during which part is open and part culverted. It is joined near Leighton Avenue by a tributary which crosses from Pinner Park. It crosses

Cannon Lane, turning in a westerly direction to pass out of the district between Cuckoo Hill and Eastcote Road. The Yeading Brook rises in two sources, one near the Pinner Road recreation ground, the other near Headstone Manor. The two streams, which are culverted in part, join at Hooking Green Bridge, and then run in a south-westerly direction through North Harrow and Harrow Garden Village, leaving the district near Yeading Avenue. The Wealdstone Brook, rising in Harrow Weald, runs in an easterly direction through Wealdstone, crossing out of the district at the Kenton Road, near Kenton Grange Farm. The Kenton Brook, rising out of the district, passes near the site of the old Little Stanmore Sewage Farm to flow in a southerly direction through the Glebe Estate, crossing out of the district near Kenton Lane, later to join the Kenton Brook. The Edgware Brook, which rises in two sources south of the Stanmore Village, flows in a southerly direction through Stanmore Marsh, then easterly to Edgware, later to run into the Silk stream.

Lakes

The largest of the lakes are those at Canons Park (8·7 acres and 10 m. gals); Bentley Priory (4·3 acres and 5 m. gals); Harrow Weald Park (3·1 acres and 2 m. gals); Temple Ponds, Stanmore Park (2·9 acres and 2 m. gals.).

Wells

There are eight groups of wells in this district. The few which are now in use are:—

(*a*) One at Braziers Farm, a well of about 250 feet deep, the water from which is used for cooling purposes in connection with the dairy business. The results of the analyses of samples have been satisfactory.

(*b*) Two at Kodak Works. Of the six wells, four are sealed and have not been opened for many years. The other two are deep wells, the water being used in connection with the work of the factory.

(*c*) A shallow well in the yard of the Harrow Motors, Limited, West Hill, Harrow. The water is used for car washing purposes only. This well is superficial and does not draw its water from the depth of the other functioning wells in the district; nor is it likely that its water can find its way to the deeper underground supplies.

The other wells which are not in use are:—

(*d*) Two at Messrs. Patterson & Company, Stanmore Hill. These are two disused brick wells which have not been used for years, both being sealed off with planks. The tops of the wells are above the level of the ground, so surface water or surface washings are unlikely to find their way into the wells.

(*e*) A shallow well at the City Cottages which has for years been sealed off with stone slabs. No pollution is likely to occur, nor is it probable that the well water communicates with the deeper underground water.

(*f*) A shallow well in the forecourt of the Fountain public house, Church Road, Stanmore. This has not been used for years, and is now surfaced over.

(*g*) There is a deep well at Messrs. Hivac Limited, Greenhill Crescent. The well opening is concreted over.

(*h*) The deep well at the Greenhill Laundry is no longer in use, and is sealed over with a stone slab.

The position, then, is that the use of the superficial wells has been largely discontinued and no pollution of the deep wells is likely to occur. Those not in use are adequately sealed, so that their pollution is unlikely. On the other hand, there is little risk of pollution of these deep wells which are in use.

PUBLIC CLEANSING

The cleansing services are under the administration and control of the Borough Surveyor.

Refuse Collection

All the house refuse in the district is collected by direct labour once a week from some 67,740 premises. In some areas more frequent collections are made and sometimes it is suggested that this practice is more hygienic; but if the volume of refuse which accumulates in a week is not too much for the size of the bin, the only advantage of more frequent collections is the reduction in the risk of the breeding of flies and the decomposition of the contents of the bin. When during the war collections could be arranged only once a fortnight, flies round the bins were more prevalent, but at ordinary temperatures the incubation period is sufficiently long for a weekly collection to be adequate. More frequent collections might reduce the risk of putrefaction; but this again is no real risk even with a weekly collection if care is taken to keep the contents of the bin dry. From the hygienic point of view then there is no case to be made for a collection more frequently than once a week. The householder in her own interests should take care not only to keep the contents of the bins dry, but to avoid depositing hot materials in the bins as these destroy the galvanised coating which increases risk of corrosion of the bins so shortening their life. This risk is greater these days because of the emptying of red-hot ash from the all-night burning fire.

At times special arrangements are made for the collection of what might otherwise find its way to the refuse bin. Sometimes the demand for paper warrants special arrangements being made for its collection, while, of course, during the war and for years afterwards householders were encouraged to deposit any waste food in special bins whose contents were then made into pig food. From many parts of the district complaints were received from nuisances arising from these bins because the spilled contents favoured the breeding of flies and attracted rats. When it was no longer obligatory on the Council to make arrangements for the special collection of this waste food, the practice was discontinued.

The house refuse bin is intended to receive only ordinary house refuse, mostly ashes from fires and kitchen waste. Special arrangements have to be made if the householder wishes to have garden waste collected and disposed of. Apart from garden waste though and outside what is ordinarily disposed of as house refuse are articles which the householders at times have to dispose of and which cannot be put into the refuse bin. At one time the Public Health Committee was so concerned about the unsightliness and the risk of nuisance from accumulation of such materials as bicycle tyres, perambulators or bedsteads dumped in waste parcels of land that they suggested it was in the interests of the Council as a health authority to interpret generously the definition of house refuse so that such articles would be collected and disposed of in the same way as ordinary house refuse.

Trade refuse as distinct from house refuse is not collected free of charge by the Council. The following are the charges made for collection and disposal:

For each of the first two bins collected each week (after one free bin per week)...	£3 3 0 per bin per annum
For each bin in excess of three each week	£1 11 6 per bin per annum
For casual collection of bin (in addition to the free bin)	1s. 0d. per bin

The Food Hygiene Advisory Council asked whether in the interests of food hygiene trade refuse from food shops could not be collected free of charge. It would seem, however, that a local authority has no power to grant such a concession.

Dust bins are provided at houses by the owners and usually are replaced by them when necessary. Sometimes the existing bin is unsuitable and it is considered it should be replaced. When it was not provided, up to recently the owner in most cases was asked to provide the new bin, and court proceedings would be taken against him in default. A Court's decision a few years ago though created difficulties as it seemed that the question of whether a new bin should be provided by the owner or by the tenant should be decided by the Court. From that time the Committee in deciding whether the owner or tenant should be served with the notice has had regard to the same factors as would be taken into account by the Court, these including such points as the rent payable and the amount of recent expenditure incurred by the owner in maintaining his property. The position is now made easier by the Middlesex County Council Act, 1950, under which when a person on whom the notice to provide a dust bin is served, the appellant shall serve a copy of his notice to appeal on the other, and the Court might make such order as it thinks fit with regard to the compliance of the notice either by the appellant or by the other person.

Section 75 of the Public Health Act, 1936, enables a local authority to provide or maintain dust bins for the reception of house refuse. At that time the annual charge that could be made was limited to 2s. 6d.;

the 1953 Local Government (Miscellaneous Provisions) Act raised this sum to 5s. The former Urban District Council, although it considered the matter, made no use of these powers.

Refuse Disposal

The three constituent authorities of the Urban District Council adopted different methods of disposing of house refuse, that from Harrow-on-the-Hill being burnt at the incineration plant at South Harrow, that for Wealdstone being treated at the separation plant at Elmgrove Road and that from the Hendon Rural District being disposed of by controlled tipping at various sites. The Urban District Council decided before the war to treat the refuse from the Harrow area at the hyganic plant. Work on this was started before the war but was abandoned. Owing to the altered composition of the house refuse during the war years, the use of the incineration plant at South Harrow and the separation plant in Wealdstone was discontinued. For a time then the 50,000 tons of refuse was disposed of by controlled tipping at various sites in the district. As these had a very limited life arrangements were made for the refuse to be disposed of by controlled tipping at a site at Hillingdon. The contract with the Uxbridge Council for this arrangement runs to 31st March, 1959. In the meantime though the Council had decided that the refuse should be treated by incineration at one or more plants. A public enquiry was held in 1949 into the Council's proposals to erect a new incinerator on the site of the old plant in South Harrow.

Street Cleansing

The lengths of highways repairable by the public are the nine miles of roads directly maintained by the Middlesex County Council, the 36 miles of main roads maintained by the district council under agreement with the Middlesex County Council, and the 163 miles of district roads.

The entire length of roads is divided into eighty beats, the street cleansing service being operated by eighty street orderlies and four mechanical sweepers.

Of the county roads those in shopping centres are cleansed twice daily, the remaining Class 1 roads once a day and Class 2 and 3 roads twice or three times weekly.

Of the district roads, those in shopping centres are swept once daily, the bus routes and other important thoroughfares once a week and other roads once in every ten days. Sunday cleansing is limited to some eight miles of roads in shopping centres.

PUBLIC CONVENIENCES

There are five public conveniences sited near shopping centres in the district where male and female staff are in attendance. They are at Station Road, North Harrow; Peel Road, Wealdstone; Havelock Place, Harrow; High Road, Harrow Weald; Whitchurch Lane, Edgware.

The conveniences are open every day of the year (Christmas Day excepted) from 7 a.m. to 11 p.m. Monday to Saturday and from 8 a.m. to 10 p.m. on Sunday.

There is also a convenience in the Car Park, Station Road, Harrow, which receives attention from the Car Park Attendant. All these conveniences are maintained at a high standard of cleanliness and are not abused in the way those are where a full time staff are not on duty.

Except a one-stall urinal in Northolt Road, South Harrow, the other 25 public conveniences in the district are on recreation grounds or other Open Spaces maintained by the Corporation. Five of these, at Alexandra Park, South Harrow; Stanmore Common; Little Common, Pinner; Stanmore Recreation Ground; and Montesole Playing Fields, Pinner, are near main or well-used thoroughfares, and serve the travelling and the shopping public as well as the users of the Open Spaces in which they are located. These with the other conveniences on the Open Spaces are closed at dusk. Unfortunately many of these are badly damaged by irresponsible persons. The rough-casting of walls and the burying of pipes and other methods have been tried as a way of lessening the damage caused but without success.

The provision of new conveniences at Kenton, Rayners Lane, Brockhurst Corner, Queensbury, Hatch End, Belmont and Pinner is being considered by the Highways and Cleansing Committee. The rebuilding of the conveniences in Headstone Manor Recreation Ground was approved by the Open Spaces Committee.

In addition to those maintained by the Council, there are two conveniences on the property of the London Transport Executive to which the public have access.

There are conveniences at four licensed premises in the district which, by arrangement made with the brewers, the public may use. Three of these are in Pinner; their general use will be discontinued when a new convenience is provided in this area.

At the conveniences where staff are in attendance, washing facilities are available. These are free to any who wish to take advantage of the service, the facilities offered being the same except that a cloth towel is offered when the service is paid for, whereas a paper towel is provided with the free service. During 1954 the washing facilities were used as follows:

	Paid	*Free*
Havelock Place	2,760	1,585
Peel Road	1,740	1,570
Whitchurch Lane	731	2,165
Harrow Weald	725	1,531
Pinner Road	389	849
	6,345	7,700

Following consideration of a suggestion from the Public Health Committee the Highways and Cleansing Committee at their meeting in November resolved that the Public Health Committee be informed that free washing facilities, including free paper towels, are already provided in the five public conveniences in the Borough at which male and female attendants are on duty, and that these facilities will continue

to be provided in connection with the provision of future public conveniences so staffed; but that, owing to the possibility of damage thereto, the Highways and Cleansing Committee do not favour the provision of electric hot-air hand driers as suggested by the Public Health Committee.

SWIMMING BATHS

There are two open-air swimming baths in the district, one at Charles Crescent, Honeybun Estate, Harrow, and the other at Christchurch Avenue, Wealdstone. The former, constructed in 1923, measures 165 feet by 75 feet, with a depth of 7 feet to 3 feet 6 inches. The water, after being filtered, is treated by chlorination. Dressing accommodation, shower and foot baths and sanitary conveniences are provided. The Wealdstone bath, constructed in 1934, measures 165 feet by 75 feet, with a depth of 8 feet 6 inches to 2 feet 6 inches; in addition, there is a shallow semi-circular beginners' pool. Suitable dressing accommodation, with shower and foot baths, and sanitary conveniences are provided. The water is treated by passing through filters and is then chlorinated.

The duration of the turn-over period varies according to the amount the baths are used, but it is at least once a day, and at busy times is every eight hours.

Daily tests are carried out for the presence of free chlorine and to determine the pH value.

DISPOSAL OF THE DEAD

Burial Grounds

The Council by the provisions of Section 46 of the Middlesex Review Order, 1934, became the burial authority for the district. The Corporation controls the cemeteries at Pinner (22·4 acres) and Byron Road, Wealdstone (6·5 acres) and burial grounds at Roxeth Hill, Eastcote Lane (3·46 acres), Pinner Road (7 acres), Paines Lane and Harrow Weald (10·78 acres). The burial grounds at Roxeth Hill and Paines Lane are now used only for reopenings. The acreage now in use is about 54, sufficient to last at the present rate for about 27 years. There is, apart from reopenings, little available at the grounds under the control of the church authorities, namely Harrow, Roxeth, Pinner, Harrow Weald, Great Stanmore and Whitchurch.

In 1949 the Council agreed in principle to acquiring land forming part of the Carpenders Park site at Oxhey Lane, Herts, for cemetery purposes and in 1953 purchased 7·63 acres of this land.

Cremation

At their meeting on the 4th November, 1944, the Council agreed in principle to the provision and erection at the appropriate time of a crematorium on land forming part of the Harrow Weald cemetery reservation. A meeting of representatives of a number of West Middlesex authorities discussed the possibility of the joint use by such authorities of a crematorium to be provided by the Council. The outcome was that the Council agreed that the early provision of a crematorium to serve Harrow and Wembley was desirable. A suggestion that the crematorium should be built at Northwick Park was later abandoned, and discussions

took place on the possibility of erecting the crematorium on the Harrow Weald site. It is not an infrequent occurrence for the crematoria near this district to be unable to meet demands, with resulting delays. This points to the need for more accommodation being provided. An authority of Harrow's population and financial resources ought to be able to provide this service not only for those in the district but for adjoining areas. Districts such as this with only limited land now free for any purpose ought to take what steps they can to ensure that the land required for burial purposes is not obtained out of that which would otherwise be put to health-giving purposes. A sum has been provided in the schemes of capital development for the erection of a crematorium within a five-year period.

Burial

Under Section 50 of the National Assistance Act, 1948, the Council can arrange for the burial or cremation of any person who has died or has been found dead in their area if no other suitable arrangements are being made. The Council decided that in such circumstances the body should be transferred to the mortuary, and enquiries should be made as to the person or persons likely to be responsible for the burial of the body and where such cannot be found that arrangements should be made for the burial. For this purpose arrangements were made with one of the undertakers in the district.

The County Council decided to exercise its powers in regard to the burial of any deceased persons who had been living in accommodation provided by them. The only establishments of this nature in which there are persons for whose cost and maintenance the County Council is responsible is the home of the Harrow Housing Society at Pinner House, Church Lane, Pinner.

Each year there has been a small number of requests for these arrangements for burial to be made. In this last year the number was only two.

Exhumations

Licences for the removal of human remains are granted by the Home Secretary under powers contained in Section 25 of the Burial Act of 1857. Copies of Licences issued are forwarded to the Local Authority. When the exhumations take place, a representative of the Health Department is present.

One exhumation was carried out in the district during 1954.

Mortuary

The district is served by the one mortuary at Peel Road, which is under the care of a full-time mortuary attendant, Mr. C. Russell, of 30, Lorne Road, Wealdstone. The number of admissions to the mortuary fluctuates in the course of the year, being heaviest in the winter months when deaths are more frequent. With the growth of the population the facilities at the mortuary were at times strained so the Council decided in 1951 to enlarge it. The mortuary now has four slabs and is provided with two refrigeration chambers capable of receiving six bodies. The

room for the post-mortem examinations is separate from that for the reception of bodies and has a separate pathological room with a sanitary annexe. The reception room has a separate viewing room.

During the year 275 bodies were received in the mortuary. Post-mortem examinations were carried out on 265; inquests were held on 51; 10 bodies were received for storage.

The Coroner for this district is Dr. A. Cogswell, 14, Airdale Road, Ealing (Ealing 8544).

SANITARY INSPECTION OF THE DISTRICT AND THE INSPECTION AND SUPERVISION OF FOOD

The activities of the sanitary inspectors may be divided into four main categories, viz., housing inspection; inspection and supervision of other premises; the inspection and supervision of food; and measures to control certain infections. The following tables summarise the visits paid and the action taken.

Inspections Made and Conditions Found

HOUSING

Inspection of Houses

VISITS

(i)	On complaint of dampness or other housing defects	1,075
(ii)	On complaint of other nuisances	736
(iii)	Routine inspections	655
(iv)	Revisits arising from defects found	6,632
(v)	Surveys under S. 157, Housing Act, 1936	377

CONDITIONS FOUND

(i)	Number of dwelling or other premises where defects were found	1,859
(ii)	Number of cases of overcrowding revealed	50

PUBLIC HEALTH

Inspection of Other Premises

(i)	On complaint or request	206
(ii)	Routine inspections of premises	650
(iii)	Revisits arising from defects found	1,022
(iv)	Surveys arising from rats and mice complaints ...	1,757
(v)	Inspection of Factories	419
(vi)	Inspection of Workplaces	89
(vii)	Inspection of Outworkers' Premises	371
(viii)	Inspection of Cinemas and Places of Entertainment...	78
(ix)	Inspection of Licensed Premises	58
(x)	Visits under Shops Acts	1,776
(xi)	Evening observations under Shop Acts	38
(xii)	Sunday observations—Shops Acts	8
(xiii)	Observations made for Smoke Nuisances	40

CONDITIONS FOUND

(i)	Premises visited as a result of (i) and (ii) where defects or unsatisfactory conditions were found	174
(ii)	Number of premises where action taken by Council's Rodent Operatives to deal with rats or mice ...	1,313
(iii)	Number of Factories, Workplaces and/or Outworkers' Premises where defects or contraventions were found	27
(iv)	Number of Cinemas and/or Licensed Premises where defects were found	38
(v)	Contravention of Shops Acts—	
	(*a*) Failure to observe closing hours	5
	(*b*) Other contraventions (failure to exhibit notices, etc.)	292

FOOD HYGIENE

Inspection of Food: Food Shops, and Food Preparing Places

VISITS

(i)	Slaughterhouses	185
(ii)	Butchers' Shops	512
(iii)	Cowsheds	14
(iv)	Dairies	60
(v)	Fish Shops	199
(vi)	Bakehouses	170
(vii)	Cafes and Restaurants	374
(viii)	Ice Cream Premises	293
(ix)	Provision Merchants	704
(x)	Greengrocers	378
(xi)	Other Food Premises	197

COMPLAINTS RECEIVED

Summary

Accumulations of refuse	90
Animals causing a nuisance	12
Dampness and housing defects...	601
Drains and Sewers—choked	108
defective	136
Dustbins defective	105
Flooding—Gardens	19
Vermin	50
Insect infestations	104
Overcrowding, alleged	55
Smoke nuisances	24
Water courses	6
Other complaints wasps' nests, defective fences)	241
Food unfit (excluding requests received from shops to inspect unfit food)	42

NOTICES SERVED

Under Housing Act, 1936

Statutory notices served under S. 9 requiring execution of repair work	18
Dwellings reported under S. 11 as being unfit for human habitation	1
Dwellings reported under S. 12 and closing orders made ...	13
Informal notices served under S. 9	57

Under Public Health Act, 1936

Statutory Notices under:—

(i)	S. 24—Work to a public sewer...	178
(ii)	S. 39—Repair or renewal of drains	29
(iii)	S. 45—Repair or renewal of defective water closets ...	4
(iv)	S. 56—Undrained or badly drained yard area ...	5
(v)	S. 75—Renewal of a dustbin	30
(vi)	S. 93—Abatement of a nuisance	53
(vii)	Informal notices served	1,439

ACTION TAKEN

Following Housing Act Notices

(i)	S. 9—Dwelling rendered fit:—	
	(*a*) By owners ... ... In ten cases the notices were served during 1953	20
	(*b*) By local authority in default of owners ...	1
(ii)	S. 11—Demolition order made... ... ... (Action commenced 1953)	2
(iii)	S. 12—Closing order made ... ... (Seven of these orders relate to properties reported for action under S. 12 during 1953)	14
(iv)	Dwellings rendered fit by owners after receipt of informal notice	48

Following Public Health Act Notices

(i)	S. 24—Public sewers repaired	25
(ii)	S. 39—	
	(*a*) By owners	19
	(*b*) By local authority in default of owners ...	6
(iii)	S. 45—	
	(*a*) By owners	3
	(*b*) By local authority in default of owners ...	1
(iv)	S. 56—	
	(*a*) By owners	4
	(*b*) By local authority in default of owners ...	Nil

(v) S. 75—

(*a*) By owners	16
(*b*) By local authority in default of owners ...	5
(*c*) By occupier	7
(vi) S. 93—Nuisances abated (13 outstanding from 1953)	50
(vii) Nuisances abated and/or other work carried out by owners on receipt of informal notice	1,381

SUMMARY PROCEEDINGS

It was necessary on four occasions only to make application to the Courts for Abatement Orders. In two of these cases as the nuisance was abated before the date of the hearing, it was not necessary to ask for an Order. In the other two cases the Orders were granted. Costs were allowed in two cases.

HOUSING

Inspection of Houses

One of the chief duties of a sanitary inspector is the investigation of complaints, including those relating to housing conditions. Most of these refer to defects such as of roofs, gutters or windows, faults affecting drainage whether defective sinks, water closets, drains or the choking of drains, and defective yard paving. Most of the defective conditions giving rise to complaints are remedied on drawing the attention of the owners to the conditions; in a few, formal action under the Public Health Acts is required. The remedy in such instances, if the nuisance continues after the service of a statutory notice, is application to the Court for an order that the work shall be done.

In ordinary circumstances then, when an inspector visits a house, especially if it is because of some complaint, he has to consider whether action should be taken under the relevant provisions of the Public Health or of the Housing Act. He therefore makes a thorough inspection of the house, determines what work is required to put the house in a habitable condition, and if the estimated cost is not out of all proportion to the value of the house, the Committee's approval is sought to the serving of the necessary notice. The advantage of proceeding by way of the Housing Act is that more can be called for than under the nuisance sections of the Public Health Acts, while in default of the owner undertaking the repair the authority can execute the work and recover from the owner.

Sanitary authorities have been given increasingly greater powers to obtain satisfactory housing conditions since the time when any premises in such a state as to be a nuisance or injurious to health were made statutory nuisances under the Public Health Act of 1875. By the Housing of the Working Classes Act, 1885, sanitary authorities had to secure the proper sanitary condition of all premises within their districts. In 1890, it became the duty of the Medical Officer of Health to report to his authority any dwelling-house that appeared to be in a state so dangerous or injurious to health as to be unfit for human habitation. Local authorities under the Housing and Town Planning Act, 1909, were required to see that inspections were made in their districts of houses so dangerous or injurious to health as to be unfit for human habitation.

The implied contract that a house should be kept by the landlord reasonably fit for human habitation during the holding became under the 1925 Housing Act, an obligation on the owner of property not exceeding a certain rental to see that the house would be kept in all respects reasonably fit for human habitation. At the same time it was made the duty of the local authority to cause inspections to be made from time to time with a view to ascertaining whether any dwelling-house was in a state so dangerous or injurious to health as to be unfit for human habitation, and a duty of the Medical Officer of Health to report such houses to the local authority.

The procedure under this Act for dealing with groups of houses was replaced by the machinery of the 1936 Housing Act. The " clearance areas " under this Act were groups of dwelling-houses which by reason of disrepair or sanitary defects were unfit for human habitation, or which by reason of bad arrangement or of the narrowness or bad arrangement of the streets were dangerous or injurious to the health of the inhabitants and which were more satisfactorily dealt with by the demolition of all the buildings. Steps could also be taken to demolish an individual dwelling-house unfit for human habitation.

Apart from the structural state of houses, conditions of living may be unsatisfactory because of overcrowding. The Housing Act, 1936, was the first great effort to tackle this problem on a national scale. An obligation was imposed on every local authority to cause an inspection to be made with a view to ascertaining what dwelling-houses were overcrowded, and to submit proposals for providing new houses to abate the overcrowding. The degree of crowding which could occur before the house was statutorily overcrowded was very high, this standard having to be adopted because of the appalling conditions obtaining in parts of the country. It was accepted that when circumstances had permitted the abatement of most of the crowding according to that standard, a higher criterion would be adopted.

It will be seen then that it is the duty of the authority to cause inspection of properties to be made, the so-called routine inspections. Where housing defects are found, the question to be settled is whether repairs could be reasonably required, in which case the owners were approached; or if not, then steps are taken to obtain a demolition order in the case of a single house or a clearance order in the case of a group of houses. In regard to overcrowding approach is made to both owner and tenant, whilst many owners request the authority to give them a certificate of the permitted number of occupants.

This routine inspection accounts for only part of the work of the sanitary inspector in regard to housing. To an increasing extent their help is sought by tenants who complain of some structural fault. Since amalgamation, progress had been made in the eradication of the poorer classes of habitation in the district. Concurrently, repairs were being carried out to quite a high standard. The overcrowding survey showed that there was comparatively little statutory overcrowding in the district. The war soon altered this relatively satisfactory housing situation. Shortage of labour and shortage of material restricted action under the Housing Acts, quite apart from the shortage of inspectors to carry out

the inspections. Repairs to property were limited to that work necessary to comply with the more urgent standards of the Public Health Acts. No further houses were reported with a view to the making of demolition or clearance orders, while the demolition of properties already condemned was suspended. The standard of housing then fell; while, too, the position in regard to crowding became very much worse.

Demolition of Houses

The earliest of the Acts enabling local authorities to clear unhealthy areas were the Artisans and Labourers Dwellings Improvements Acts of 1875 and 1879. Further powers were given by the Housing of the Working Classes Acts, 1885 and 1890. This latter Act though often amended was the principal Act until 1925. Little real clearance of slums or collections of unsatisfactory houses was carried out under these powers. The 1930 Housing Act was the first Act designed to speed up the clearance of unhealthy areas, larger subsidies being introduced specifically for houses built for occupation by those displaced from slum areas. The Housing (Financial Provisions) Act, 1933, gave more favourable subsidies. Local authorities were required to complete five-year programmes of slum clearance operations. These programmes were to provide for the demolition of nearly half a million houses. By the outbreak of the war about 300,000 of these houses had been made the subject of confirmed Clearance or Compulsory Purchase Orders. About 173,000 houses in the pre-war programme were still occupied in 1940. Between 1939 and 1952 44,000 houses were dealt with, leaving about 128,000 houses still outstanding which were considered before the war to be unfit for human habitation. To this figure must now be added those houses which have become unfit for habitation since the beginning of the war. Some indication of the size of the slum clearance problem of the country as a whole can be obtained from the number of old houses. Some four million houses in the country are over 75 years of age; of these two and a quarter million are over 100 years old.

During the year a number of Demolition Orders and Closing Orders were made which affected the following houses:

Demolition Order: 39, West Street, Harrow-on-the-Hill.

Closing Orders: Dower House Cottage.
4 and 6, High Street, Pinner.
38, 42, 44, 46 and 48, Milton Road.
51, Pinner Road.
34, Milton Road.
5a, Alma Road.

At their meeting in October the Clearance and Redevelopment Committee declared the following Clearance Areas:

Palmerston Road Clearance Area, 1953, comprising numbers 2, 4, 6, 8, 10 and 12, Palmerston Road.

Pinner Hill Road Clearance Area, 1953, comprising numbers 1, 3, 5 and 7, Pinner Hill Road.

Little Common Clearance Area, 1953, comprising numbers 29, 30, 31, 32, 33 and 34, Little Common, Stanmore.

The first steps with regard to a number of other houses were taken during the year. Many of these related to Closing Orders or Demolition Orders. At their November meeting the Clearance and Redevelopment Committee declared the following clearance areas :

Harrow (Northolt Road No. 1) Clearance Area, 1954, comprising Nos. 31, 33, 35, 37, 39, 41, 43 and 45, Northolt Road.

Harrow, Alma Road and Alma Crescent Clearance Area, 1954, comprising Nos. 1a, 1b, 3a, 3b, 5a, 5b, 7a, 7b, 9a, 9b, 11a, 11b, 13a, 13b, 15a, 15b, 17a, 17b, 19a, 19b, 21a, 21b, 23a, 23b, 25a, 25b, 27a, 27b, 29a, 29b, 31a and 31b, Alma Road; Nos. 1a, 1b, 3a, 3b, 5a, 5b, 7a, 7b, 9a, 9b, 11a, 11b, 2a, 2b, 4a, 4b, 6a, 6b, 8a, 8b, 10a and 10b, Alma Crescent.

Harrow (Northolt Road No. 2) Clearance Area, 1954, comprising Nos. 115, 117, 119, 121, 123, 125, 127, 129 and 131, Northolt Road, South Harrow.

Harrow (Northolt Road No. 3) Clearance Area, 1954, comprising Nos. 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, Northolt Road, South Harrow.

Harrow (Crown Street) Clearance Area, 1954, comprising Nos. 31, 33, 35 and 37, Crown Street, Harrow-on-the-Hill.

The following properties subject to a Closing or a Demolition Order were still occupied at the end of the year:

Address	*Date of Order*
101, Greenford Road	1938
1 to 6, Kingsfield Terrace	1939
23, 25 and 29, Milton Road	1953
4 and 10, Shelley Road	1953
279, 283 and 285, Pinner Road	1953
42 and 44, Marlborough Road	1953
50, High Street, Harrow	1954
34, 38, 42, 44, 46 and 48, Milton Road	1954

The following properties, the subject of Clearance Orders confirmed before the war, were still occupied:

2-40, Headstone Drive	3 properties vacant
1, 2, 3, 4, 5, Brewery Cottages, Stanmore Hill	None vacant
Albany, Appleton, Park View, Northumberland House, Stanmore Hill	1 property vacant

The following houses which had been the subject of Closing Orders or Demolition Orders were demolished during the year:

Nos. 1, 2 and 4, Canning Place
Nos. 28 and 30, High Street, Pinner
Nos. 44, 46 and 48, College Road, Harrow Weald.

Repair of Houses

Section 9 of the Housing Act, 1936, authorises a local authority, satisfied that any house is in any respect unfit for human habitation, unless they are satisfied that it is not capable at a reasonable expense of being rendered so fit, to serve a notice on the person having control of

the house requiring him within a specified time to execute the works that will render the house fit for human habitation. When the authority considers the house cannot be rendered fit at a reasonable expense, they serve a notice under Section 11 of the time and place at which the condition of the house and any offer with respect to the carrying out of the works, or the future user of the house, will be considered.

STANDARD OF FITNESS FOR HUMAN HABITATION. Section 188 (4) of the Housing Act, 1936, reads: " In determining for the purpose of this Act whether a house is fit for human habitation, regard shall be had to the extent, if any, to which by reason of disrepair or sanitary defects the house falls short of the provisions of any byelaws in operation in the district, or any enactment in any local Act in operation in the district dealing with the construction and drainage of new buildings and the laying out and construction of new streets, of the general standard of housing accommodation for working classes in the district." The requirement as to the standard of accommodation for the working classes was repealed by the Housing Act, 1949. Sanitary defects under the 1936 Act included lack of air space or of ventilation, darkness, dampness, absence of adequate and readily accessible water supply or sanitary accommodation or other convenience, and inadequate paving or drainage of courts, yards or passages.

This section is repealed by the Housing Repairs and Rents Act, 1954; as is also so much of any local instrument as specifies defects by reason of which a house is to be deemed not to be in all respects fit for human habitation. Instead, Section 9 of the new Act reads:

" In determining for any of the purposes of the principal Act whether a house is unfit for human habitation, regard shall be had to its condition in respect of the following matters, that is to say: (*a*) repair; (*b*) stability; (*c*) freedom from damp; (*d*) natural lighting; (*e*) ventilation; (*f*) water supply; (*g*) drainage and sanitary conveniences; and (*h*) facilities for storage, preparation and cooking of food and for the disposal of waste water; and the house shall be deemed to be unfit as aforesaid if and only if it is so far defective in one or more of the said matters that it is not reasonably suitable for occupation in that condition."

A decision that a house is unfit may be passed either upon a major defect in one of the matters listed, or upon an accumulation of smaller defects in two or more of them.

HOUSEHOLD ARRANGEMENTS AND AMENITIES. The forms used at the last census contained headings for information about certain arrangements in houses. The report points out that some persons completing the forms seemed to have much difficulty in interpreting the definitions given, and suggests that the records should be used only as a general indication of the availability of household arrangements.

A piped water supply is defined as a tap connected to the mains or to a storage tank which could be reached by a household without leaving the shelter of a building containing the rooms occupied by it, or of an attached covered structure. Of the 66,320 households in Harrow, 7,932 share a supply and 64 were said to be entirely without. The percentage without a supply for exclusive use was 15. The corresponding figure for the county was 21 and for London 31.

A cooking stove or a range is any cooking stove, kitchen range or other fixed grate using gas, electricity or any other fuel providing there is an oven. 4,331 households share and 315 are without, the percentage of households not having exclusive use being 7. The corresponding figure for the county is 7 and for London 8.

A kitchen sink means a sink inside the building whether in a kitchen or not, with a drain pipe leading outside the building and normally used for washing up, etc. 4,180 households share a sink, 1,172 are without. The percentage of households without exclusive use is 9. The corresponding figures for Middlesex and for London were 11 and 16.

A water closet means a water closet flushed with water either from a cistern or by hand and emptying into a main sewer, septic tank or cesspool. 8,591 households share and 60 are without. The percentage of households without exclusive use is 18. This is the same figure as for Middlesex and is about half that of London.

A fixed bath is a bath permanently installed and connected with a waste pipe leading outside a building. 9,100 households share a bath, 2,840 are without. The percentage of households without exclusive use is 18. The corresponding figure for Middlesex is 35 and for London 62.

The figure of 60 as the number of households without water closets points to the need for accepting these figures about these household arrangements with some reserve, as none of these houses is known.

Houses Capable of Repair. Very slowly the difficulties resulting from the shortage of labour and materials were removed and it was possible year by year to call for increasing numbers of houses to be improved, this work being done to an increasing extent under the powers of the Housing Act rather than those of the Public Health Act. On the other hand though a new position had arisen. Whereas before the war the view of the local authority that a house was incapable of repair would be opposed by the owner, in many instances these days the owner himself is submitting it, even about a house which is considered to be capable of being rendered fit for a further term of years. For some time past the position has been unsatisfactory in that the owner has not been getting sufficient return on his money to warrant his spending any more on the house. On the other hand the houses are being occupied, although suffering from serious defects and to lose them as housing units only adds to the difficulties confronting the many who are unsatisfactorily housed. Legislation passed in 1954 designed to encourage work being done on houses might ease the situation.

Repairs Increase in Rent. The Housing Repairs and Rents Act allows a "repairs increase" of the rents of controlled houses. Such increase is permitted for improvement, structural alterations or the provision of additional or improved fixtures, or fittings. A house must be in good repair and fit for human habitation before a repairs increase can be claimed and must be kept so. Good repair relates to structure and decoration, and fitness for human habitation means reasonably suitable.

The permitted increase is an annual amount equal to eight per cent. of the amount of the expenditure. The maximum increase is twice the statutory repairs deduction of the house for rating purposes. The

landlord's expenditure test is that over 12 out of 14 months before the notice, work of repair has cost not less than three times the statutory repairs deduction. The Act applies to unfurnished houses of rateable value of not more than £100 in the Metropolitan Police district and £75 elsewhere, which were let before September 1st, 1939.

The landlord is required to notify on a set form his intention to increase the rent. The tenant can apply to the local authority for a certificate of disrepair where the landlord has claimed a repairs increase to rent and the tenant feels that the house is not in a sufficiently good condition to justify it. The authority may charge the tenant one shilling for the certificate. If it is granted the tenant can recover the shilling from the landlord.

The Housing Repairs (Increase of Rent) Regulations set out the forms to be used in connection with the rent increases. A repairs increase of rent can only be charged after statutory notice has been given by the landlord. If the premises are occupied at least six weeks' notice of the increase must be given to the tenant; and within 28 days after the service of the notice of increase, the tenant may challenge the landlord's declaration by applying to the County Court to determine whether the work of repair carried out is of the value required by the Act to entitle the landlord to a rent increase.

The certificate of disrepair may relate to defects of repair or to defects as to suitability for occupation. Defects of repair might relate to:—(1) External structure, (2) internal structure, (3) external decoration, (4) internal decoration, (5) fixtures and fittings, (6) other defects of repair.

Defects as to suitability for occupation might relate to:—(1) Instability, (2) condition as to damp, (3) natural lighting, (4) ventilation, (5) water supply, (6) drainage and sanitary conveniences, (7) facilities for storage, preparation and cooking of food, and for the disposal of waste water.

Improvement and Conversion Grants. Under the Housing Act, 1949, money grants could be made to the owners to modernise their houses by improvement or conversion. Little use was made of these powers. The conditions of grants have now been revised by the Housing Repairs and Rents Act. Any house which needs modernising is eligible for a grant if, when the work is done, it will provide a satisfactory dwelling for at least fifteen years. The standard is that when improved or converted it must

(1) be in a good state of repair and substantially free from damp;

(2) have each room properly lighted and ventilated;

(3) have an adequate supply of wholesome water laid on inside the dwelling;

(4) be provided with efficient and adequate means of supplying hot water for domestic purposes;

(5) have an internal or otherwise readily accessible water closet;

(6) have a fixed bath (or shower) preferably in a separate room;

(7) be provided with a sink or sinks and with suitable arrangements for the disposal of waste water;

(8) have a proper drainage system;

(9) be provided in each room with adequate points for gas or electric lighting (where reasonably available);

(10) be provided with adequate facilities for heating;

(11) have satisfactory facilities for storing, preparing and cooking food;

(12) have proper provision for the storage of fuel (where required).

Improvement is any work other than ordinary repairs needed to bring a house up to the standard of comfort and convenience which is expected in a modern home. The improvements most commonly made in older houses consist of one or more of the following items: providing an indoor water supply or bringing gas or electricity into the house from a nearby main; in rural areas sinking a new well; putting in a bathroom or an indoor w.c.; changing over from a cesspool to main drainage; installing a hot water system, or standard kitchen equipment like sinks and draining board; doing any work needed to put right any fundamental defects in the structure of the house, such as remedying dry rot and putting in a damp-proof course; changing the levels of ceilings, floors or roofs in order to get a proper ceiling height; putting in a new staircase to replace one that is inadequate by modern standards, or badly placed; making new windows in order to improve the lighting and ventilation ; providing proper storage for food or fuel ; adding an extra room where it is necessary to provide adequate living space.

Conversion means dividing a large house or a pair of houses, or a row into smaller self-contained flats or making a house or flats out of a building built for some other purpose. The grant is up to half the cost of the work of improvement or conversion, up to a limit of £400 a dwelling, providing the cost of the work of improvement or conversion is not less than £100.

The Council at their meeting on the 10th December, 1954, agreed to exercise their powers under Section 20 of the Housing Act, 1949, and Sections 16 and 37 of the Housing Repairs and Rent Act, 1954, for the making of grants for the improvement and conversion of privately owned dwellings to the extent that the cost upon the rate fund shall not exceed £4,000 in any single year over a period of 25 years.

Overcrowding

The standard for the assessment of overcrowding was set out in the Housing Act of 1936. In one table account is taken of the number of rooms, the number of units permitted to occupy one room being 2, two rooms 3, three rooms 5, four rooms 7½, and five rooms 10. The second table has regard to the sizes of the rooms. Any room of under 50 sq. ft. is not counted. For a room of 50 to 70 sq. ft. the permitted number is ½ unit, for 70 to 90 1, for 90 to 110 1½ and for rooms of over 110 sq. ft. 2 units. The actual permitted number is the smaller of the numbers calculated in this way. In taking into account the occupants of the

rooms, regard is had not to the number of individuals but to the equivalent number of units. For this purpose a child of under one year of age is ignored, while a child between one year and ten years of age counts as half a unit.

The survey carried out as required by the Housing Act, 1936, showed that of the 12,943 houses visited 152 were overcrowded by the standards of the Housing Act. By 1941 the number of overcrowded premises had been reduced to 17. The figures remained low for the next three years. Towards to end of 1945, however, there was a marked increase which was followed by a still greater rise in 1946 when 486 new cases were added to the register. The number of overcrowded houses reached the highest level of 628 at the end of 1948. In the succeeding years more cases were abated each year than there were new cases, so that by the end of 1950 the number of houses known to be overcrowded had fallen to 338 and by the end of 1952 to 229.

On January 1st there were 139 known cases of overcrowding. During the year the circumstances of all these families living in accommodation crowded by more than one unit were brought to the notice of the Public Health Committee. In most cases the recommendation that some family should be rehoused was forwarded to the Housing Committee. Of the 106 cases of overcrowding which were abated 43 were the result of housing by the Council, this being in a Council house in 36 instances and in a requisitioned house in 7. Many of the 63 families rehoused by other means were accommodated in the new towns. During the year 50 new cases of overcrowding were learned of so that at the end of the year the number of known cases of overcrowding was 139. Of these 50 were overcrowded by half a unit and 52 by one unit. The distribution of the other cases was 18 houses overcrowded by 1½ units, 12 by 2, 3 by 2½, 2 by 3, 1 by 3½ and 1 by 4.

The extent to which houses in the district are occupied is given by the following figures which are taken from the Middlesex census report, 1951:—

The number of dwellings occupied by	
one private household	56,128
two „ households	4,548
three „ „	332
Total dwellings occupied	61,008
Dwellings wholly vacant	873
Total dwellings, occupied and vacant	61,881
Number of private households therein	66,320
Total persons in households	216,437
Total rooms occupied	305,251
Average number of persons per room	0·71
Number of households in shared dwellings	10,415

Percentage of persons living at more than two per room—

1931	1·17
1951	1·32

The following particulars relate to the housing of private households:—

Structurally separate dwellings	61,881
percentage increase 1931 to 1951	153·5
rooms per dwelling 1931	5·01
1951	5·83
percentage with 1 or 2 rooms only	3·00
Households	66,320
percentage increase 1931 to 1951	159·4
percentage sharing dwellings	15·7
rooms per household	4·60
percentage occupying 1 or 2 rooms only	8·5
persons per household 1931	3·26
1951	3·66
percentage of 1 person households	6·6
Density of occupation (persons per room)	
persons per room	0·71
percentage of population of density over 2	1·2
over 1½	5·4
percentage of households of density over 2	0·7
over 1½	3·3

Provision of Houses

Although the first of the Acts which enabled local authorities to build houses to be occupied by those living in their districts was passed as far back as 1890, it was not until after the first world war that local authorities took advantage of their powers on any scale. The housing situation in many districts had been becoming difficult before 1914. The position was made more severe for a number of reasons. During the years of the first world war no houses had been erected; the lack of maintenance during these years resulted in a speedier obsolescence of houses, whilst in addition building costs rose markedly.

In the 1920's a number of Housing Acts were passed to encourage the building of new houses, the subsidies of some of these favouring construction by local authorities, of others by private enterprise. The flow of new houses was sufficiently satisfactory that the Housing Acts of the 1930's aimed not so much at the construction of new houses as at the prohibition of occupation of those which had had their day and at the abatement of overcrowding. Nevertheless, it was becoming apparent that the provision of houses for quite a substantial section of the community would have to be the responsibility of local authorities rather than private enterprise. The second world war added to housing difficulties in just the same way as had the first war, with the added factor of the large number of houses which were destroyed by enemy action. The post-war period, then, found almost every section of the community looking to the local housing authority to find them accommodation, a very changed outlook from the time when it was only a limited section of the population which would consider living in Council houses.

The number of houses in the ownership of the Harrow Council at the outbreak of the war was some 2,000. Most of these had been erected

by one of the three constituent authorities before amalgamation. The housing programme of the Harrow Council was of quite modest dimensions designed to meet the needs of a limited section of the community. The needs of the rest, private enterprise was meeting, especially at the time of the construction of much new property which had been such a feature in this district.

NEW HOUSES. The total number of new permanent and temporary dwellings provided from the end of the war up to the 31st December, 1954, was 2,316, comprising 2,093 new permanent dwellings, 200 new temporary dwellings and 23 in hutted accommodation. 1,166 permanent dwellings have been provided by private enterprise. 337 dwellings destroyed by enemy action have been rebuilt by private enterprise and 333 existing houses have been converted. In addition 954 family dwelling units were provided in requisitioned premises. Of these 319 have been released and 54 reduced from two to one unit dwellings, leaving 581 held at the end of the year.

This district with twelve other Middlesex and two Hertford authorities is linked as an exporting sector with the new towns of Harlow, Hatfield, Hemel Hempstead, Stevenage, and Welwyn and the expanded towns of Aylesbury, Bletchley, Harpenden, Hertford, Letchworth, St. Albans and Swindon. The Council's policy is to encourage the transfer to new and expanded towns of Harrow families who have a housing need and who can obtain employment in the new districts. At their April meeting they agreed to enter into agreement with the Swindon Borough Council for the provision of dwellings in Swindon to be allocated to Harrow residents selected by the district Council. By the end of 1954 654 Harrow families had been housed at either the new towns or the expanded towns, these being 356 Hemel Hempstead; 82 Stevenage; 12 Crawley; 35 Harlow; 30 Welwyn and Hatfield; 9 Basildon; 5 Bracknell; 82 Bletchley; 7 Aylesbury; 36 Swindon. Of these 654 families 443 were families whose names were on the normal waiting list.

ALLOCATION OF NEW HOUSES. When the first of the housing units became available after the war, the Council decided to allocate them on a points system, the points being earned by a variety of factors. Three groups of persons remained outside the scheme whose applications were dealt with independently because their claims for rehousing rested essentially on health grounds. Of these three groups, the overcrowded family was later brought into the points scheme by additional points being given because of the overcrowding. This left two groups outside the scheme. One was the family living in the condemned house. This family was helped by the Public Health Committee making an appropriate recommendation to the Housing Committee. The other group was the family with a member suffering from tuberculosis. To meet the needs of those in this group, one-sixth of the housing accommodation which became available was allotted to them.

In July, 1952, it was estimated that the total number of new units of Council dwellings to be provided in 1952, 1953 and 1954 would be 1,075. Of these 255 had to be allotted to meet certain commitments including 65 for applicants on the main waiting list already promised

houses, 93 on the main list who qualified but to whom no promise had been made, 13 outstanding cases of families with a member suffering from tuberculosis and 84 for the rehousing of families in Merrion Avenue hutments, etc., families in houses the subject of operative Closing Orders and Demolition Orders, hardship cases and the licensees of some requisitioned properties. Allowance was made for 137 houses to rehouse tuberculous families, 100 houses to meet new cases of hardship, licensees of requisitioned properties and newly qualified applicants and 55 houses were being provided for rehousing families from properties the subject of existing Clearance (41) Orders and Demolition (14) Orders. That left 528 housing units to be allocated, half for families to be rehoused from further insanitary dwellings to be demolished and from persons living in accommodation statutorily overcrowded by more than one unit, and the other half to applicants qualifying under the points scheme.

In September, 1953, the Housing Management Sub-Committee, feeling that the Council's house building programme was reaching its final stage and that within two years would cease altogether from lack of suitable building land, decided to remove from the housing waiting list applications from childless couples, from those where the applicants are adequately housed and from those persons living outside the district. The residential qualification required by an applicant for admission to the normal housing waiting list is continuous residence in Harrow of either the husband or wife from 1st June, 1940.

No provision had been made in the 1952 review to provide for the permanent rehousing of the licensees of requisitioned houses. By a later ruling of the Ministry of Housing and Local Government, December, 1956, was the date set to the Corporation for the release of these houses.

A further review of the Council's housing took place in 1954. The following information is extracted from the report of the meeting of the Housing Management Sub-Committee on 23rd March, 1954. It was estimated that 700 new dwellings would become available (excluding a certain number linked with the Poet's Corner proposals). Against this figure of 700 there were commitments totalling 108, comprising 51 under the points scheme, 5 families in overcrowded accommodation, 7 families with a member suffering from pulmonary tuberculosis, two cases authorised on the grounds of hardship and 43 families to be rehoused from requisitioned houses. In addition there were 44 families in houses the subject of confirmed Clearance or Demolition Orders and a further 100 houses were earmarked for the housing of licensees in requisitioned properties. The remaining houses were to be allocated to:—

Tuberculous cases. The proportion suggested is approximately a one-tenth allocation of all new dwellings coming forward...	70
Housing List applications qualifying under the normal operation of the points scheme	200
Eviction cases	30
Rehousing of families from halfway houses...	96
Overcrowded families	20
A small balance to rehouse further hardship cases, or for "decanting" families from further insanitary properties, etc. ...	32

SUPERVISION OF OTHER PREMISES

Routine visits are paid by the sanitary inspectors to such premises as factories, licensed premises, cinemas and other buildings.

Factories

Sanitation. Legislation about the health of those working in factories preceded that which led to the development of the Public Health Service and has all along remained distinct with the result that even to-day local sanitary authorities have very little concern with the conditions of work of those employed in factories. Earlier legislation was largely repealed and to a certain extent re-enacted in the Factories Act, 1937. Under this a distinction is drawn between those factories in which mechanical power is used and those where it is not. The District Council has responsibilities in regard to the cleanliness, overcrowding, temperature, ventilation and drainage of floors of those factories where mechanical power is not used. In all factories whether or not mechanical power is used the District Council is concerned to see that sufficient and suitable sanitary conveniences are provided, maintained and kept clean. The standard of adequacy is set out in the Sanitary Accommodation Order, 1903. District Councils are also concerned with fire escapes at factories and with basement bakehouses. The Factories Act also lays a duty on District Councils about home workers. Lists of outworkers of those engaged in certain trades have to be kept and action taken if the persons are employed in unwholesome premises.

Industrial Health Service. The first of the Factory Acts of general application, that of 1833, required the appointment of factory inspectors and prohibited the employment of children under nine years of age. The Act of 1844 provided for the statutory medical supervision by certifying surgeons. Later legislation was largely incorporated in the Factories Acts of 1937 and 1948. The provisions of all these and the orders and regulations made under them afford the control of environmental working conditions, dangerous hazards and the employment of juveniles. Quite apart from what has been required by legislation, since the middle of the last century a few progressive employers have appointed doctors to care for the health of their workers. But it was not until the first world war that the importance of the human factor in industry began to be recognised. The second world war emphasised this. The conditions of work at factories are supervised by the department of the Ministry of Labour and National Service. Under central direction the country is divided into areas for each of which a factory inspector is appointed. There are some 400 inspectors of whom 16 are medical men. The office of the local inspector is 38/39, York Terrace, Regents Park, N.W.1.

In each district there is the appointed factory doctor, previously known as the factory surgeon. He is usually a part-time general medical practitioner. Amongst his duties are the examination of young persons under the age of eighteen within fourteen days of their first employment to determine whether they are fit for work or fit only for some kinds of work, or fit for work only under certain conditions. He also investigates

causes of notifiable industrial diseases and gassing cases, and carries out periodical medical examination of workers engaged in the dangerous trades. The surgeon for most of this district is Dr. D. V. Morgan-Jones, 7, Welbeck Road, West Harrow; for Edgware, Stanmore and Kingsbury he is Dr. E. E. Stephens, 3, Sefton Avenue, N.W.7.

In the last few years many authoritative bodies have surveyed the needs and the structure of the present industrial services. To-day, there are engaged in the various aspects of the health, safety and conditions of work of those engaged in factories, a variety of agencies which include the public health service, industrial medical officers, and the general practitioner service under the National Health Service. One of the chief demands seems to be for the general application and extension to industries throughout the country of industrial health services of the kind irregularly distributed among a comparatively few industries. There is no questioning the advantages to employers and employees alike, of an industrial health service. Such a service should be made available as soon as possible for all industries, and should be extended to cover non-industrial employment. Some seem to see the picture of a future industrial health service embracing all aspects of health created as a separate entity and controlled by a central department which will not necessarily be that concerned primarily with the administration of the health services. Some bodies consider the industrial health service should be an integral part of the National Health Service in its fullest sense. The Dale Committee which was set up to examine the relationship between the preventive and curative health services provided for the population at large and the industrial health services which make a call on medical manpower considered there should be a considerable measure of co-ordination between the various agencies—medical, legislative and administrative—at present providing health services for industry.

The types of medical service that might be needed will vary at different factories. The best arrangement might not be that by which all the services are provided by the same authority. For instance research into health hazards and into the scientific aspects of working conditions is something which could be done only by a special scientific research organisation. There are the treatment and rehabilitation services including emergency treatment and first-aid which are of the kinds of service also provided under the National Health Service. In addition there are certain aspects which are of the same pattern as some of the health services provided by local authorities. These environmental and preventive services include replacement and retirement examinations, routine medical examinations of fitness for employment, the medical aspects of job selection, the maintenance of health standards in all places of work and the routine investigation of non-industrial hazards together with the application of methods of prevention. While an artificial division between medical treatment of the man at work and at home is undesirable, there is nothing to be said against the preventive health aspects of the man at home and at work being dealt with as distinct problems, and this work could well be taken on by the health staff of the health authority in association with the local factory inspector.

At most of the factories in the district less than 50 persons are engaged. Of the 24 larger factories there are eleven at which over 50 but under 100 are employed, eight at which there are between 100 and 200, two engage between 200 and 500, and at three over 500 are employed.

The following is a summary of the types of work in which those at the various factories in this district are engaged:—

	Staff employed
Motor engineers, panel beaters, body builders, etc.	67
Boot and shoe repairers	39
Engineering, tool making, steel stamping, sheet metal workers	43
Radio, T.V., electrical	23
Tailoring, dressmaking	51
Cabinet makers, upholsterers, joiners	24
Printers	13
Miscellaneous and non-mechanical factories	208

In addition there are four laundries (two employing over 100 hands); a glass works and a brush works each employing over 200 but under 500 workers; one film factory and one paint and brush factory each engaging over 500 persons; two electronic engineering firms; one film developing and printing works; one factory making household furniture and one leather works.

There are 562 factories or premises which are supervised by the sanitary inspectors of the district. At 79 of these mechanical power is not used and these are therefore supervised not only as regards sanitary conveniences but also as to the general health provisions. To these premises 419 visits were made with the result that 22 notices were served; 27 defects were found. Of these 10 were due to want of cleanliness, 6 were in respect of sanitary conveniences (one insufficient and five unsuitable or defective). Information is passed to the local inspector of factories about matters found at these premises with which he is concerned. In the same way he draws the attention of the inspectors to points he has found which concern them.

There are 226 outworkers' premises in the district. At 129 of these wearing apparel is dealt with, being either made or cleaned; at 75 Christmas crackers and Christmas stockings were made.

Shops

The provisions of the earlier of the Shops Acts were concerned more particularly with the hours the shops were open, orders made under the 1912 Act fixing a particular day for half day closing and fixing the closing hours at night. In many areas the Shops Act Inspectors were members of the staff of the Town Clerk, not of the Public Health Department. 1934 legislation was concerned mainly with the hours of employment of young persons. The duties of the local sanitary authority included responsibility for enforcing provisions about the ventilation and tempera-

ture of shops and of sanitary conveniences. Local authorities under the Shops Acts had further responsibilities about lighting and the facilities for washing and taking meals. In this district the Shops Act Inspector appointed in the early days of the Council was from the first appointed to the staff of the Public Health Department. In addition each of the Sanitary Inspectors devotes a small part of his time to duties under the Shops Acts. The emphasis on the conditions of work of those in shops rather than on the hours of closing of the premises brought the work of the Shops Act Inspector more into line with the preventive work of a health department. The war years caused many disturbances and much work was needed before the various establishments were again satisfactory both from the point of view of hygiene and also of the keeping of the obligatory records and the exhibition of the statutory notices. One change brought about by the war is that there has since been no marked tendency to return to the pre-war practice of shops keeping open late in the evenings. The time came then when the Shops Act Inspector found himself able to devote time to the conditions of work of others, namely those at factories. Being a qualified Sanitary Inspector he was able to take on these duties. Following the resignation of a Sanitary Inspector last year, the committee agreed to the post of Shops Act Inspector being removed from the establishment of the Public Health Department, the Inspector becoming one of the Sanitary Inspectors with special responsibility in regard to shops and factories.

During the year 1,776 visits were made under the Shops Act to shops in the Borough, and arising from the various contraventions found, 292 warnings were given to traders.

Most of the contraventions were the failure to exhibit notices or to keep the records that are required by the Shops Act. There were no prosecutions under the Shops Act. Four cases were reported to the Committee; to two final warning letters were sent, and in the other two it was decided to institute legal proceedings.

There were three contraventions of the Edgware and Little Stanmore weekly half-holiday order. Two ladies' hairdressing saloons failed to close on the half-holiday prior to Christmas; each was warned. The Police reported a contravention, a retailer supplying fireworks to a child on a Sunday; here again a warning letter was sent.

Another contravention was by a multiple firm employing a young person under 18 in excess of 48 hours per week and who failed to report the overtime. The assistant's hours were adjusted and compensatory time off was given with pay. In another case, an adult female was found to be employed on every Sunday in excess of the hours permitted by the Shops Act; the warnings given were ignored. This matter was reported to the Committee who gave instructions for proceedings to be instituted.

The principal statute relating to shops is the Shops Act of 1950, which repealed eight earlier Acts and parts of three others. The Shops Act of 1950 states the hours at which shops shall close, but at the same time enables orders to be made which permit different hours for different classes of shops in different parts of the district.

The following orders are in force within the Borough:—

Areas	*Effect of Order*	*Shops Affected*
(i) General Half-holiday Orders:—		
Little Stanmore ...	Fixes Thursday as early closing day	All non-exempted shops except barbers, hairdressers, furniture dealers, cabinet makers and motor engineers and agents.
Wealdstone	Fixes Wednesday as early closing day	Barbers and hairdressers.
(ii) Extensions of Half-holiday Orders to exempted orders :—		
Wealdstone	Fixes Wednesday as early closing day	Fruiterers and greengrocers.
Wealdstone	do.	Butchers and pork butchers (uncooked meat including pork but excluding bacon and ham).
Wealdstone ... ... (Kenton area only)	do.	Fishmongers.
Wealdstone ... ... (except Kenton area)	Fixes Monday as early closing day	do.
(iii) Exemptions from half-holiday obligations:—		
Harrow-on-the-Hill ...	Total exemption from half-holiday	Wardrobe dealers and retailers of toys and fancy articles.
Wealdstone	do.	do.
(iv) Closing Orders:—		
Harrow-on-the-Hill ...	Fixes closing hours	Butchers and pork butchers.
Wealdstone	do.	Wardrobe dealers and retailers of toys and fancy articles.
(v) Orders under Shops (Hours of Closing) Act, 1928:—		
Harrow-on-the-Hill ...	Fixes later closing hours	Tobacco and smokers' requisites.

The total number of shops on the register at the end of the year was 2,348, an increase of 5 on the previous year. The following is a list of the various types of shops and their numbers:

Antique Dealers	9	Pets Shops	6
Boot Repairers	61	Second-hand Wardrobes ...	6
Boots and Shoes Retailers ...	52	Wines	41
Corn Chandlers	8	Outfitters (Gents)	81
Confectioners/Cafes	172	Radio T.V.	62
Drapers	55	Toys/Sports	14
Fruiterers and Greengrocers ...	144	Miscellaneous	95
Builders' Merchants	25	Fish Shops	63
Butchers	133	Grocers	229
Chemists	77	Hardware	68
Motor/Cycle Accessories ...	99	Library	5
Coal Order Offices	36	Mixed Shops	14
Dairies	36	Newsagents	125
Florists	27	Outfitters (Ladies)	93
Furnishers	50	Public Houses	56
Glassware...	14	Tobacconists	144
Hairdressers	129	Wool	22
Jewellers	30	Photographers	15
Leather Goods	11	Stationers	6
Musical	4	Wallpaper/Paint	12
Opticians	20		

Places of Public Entertainment

In Circular 120 issued on the 25th August, 1920, the Minister of Health suggested that the Sanitary Authority should arrange for all theatres, music halls, and other places of public entertainment to be visited periodically with regard to their sanitary condition. The Secretary of State also suggested that when considering an application for the grant or renewal of a licence of any theatre or other place of public entertainment, the licensing authority should require a certificate from the Sanitary Inspector that the condition of the building is satisfactory in sanitary and other respects.

There are 75 premises in the district licensed for public entertainment. These include the Coliseum Theatre, 10 cinemas, 14 public houses, 13 church halls, 3 local authority assembly halls, 21 schools and 12 private dance and other assembly halls, clubs, etc.

Reports on the state of these premises are forwarded each year to the Clerk of the County Council.

Licensed Premises

There are 56 licensed premises in the district. Although at most of them the state and adequacy of the sanitary conveniences are quite satisfactory, at some there is room for improvement. With the easing of the difficulties arising out of the shortage of labour and materials most of these shortcomings are being overcome. A report is sent to the Clerk of the Justices each year about the state of these premises.

Keeping of Pet Animals

The Pet Animals Act, 1951, made it necessary for a person keeping a shop for the sale of pet animals to be licensed with the local authority. Before granting the licence the local authority must be satisfied that the animals will be kept in accommodation that is suitable as respects size, temperature, lighting, ventilation and cleanliness; that the animals will be adequately supplied with food and drink; that they will not be sold at too early an age; that all reasonable precautions will be taken to prevent the spread among the animals of infectious disease, and that appropriate steps will be taken in the case of fire or other emergency.

The number of licensed pet shops in the district is 15. These premises were inspected during the year, matters found requiring attention being dealt with.

Rag Flock

Under the Rag Flock and Other Filling Materials Act, 1951, it is necessary for any premises using filling materials to which the Act applies to be registered with the local authority. There are four premises in the district registered under this Act. The persons concerned use materials carrying the Certificate of the British Standards Institution. Inspections were made during the year and the records which the occupier must keep were inspected. In no case was any dirty filling material found.

Marine Stores

In 1953 the Public Health Committee became responsible for the registration of marine store dealers. This term includes the dealer in old metal which in turn under the Old Dealers Metal Act of 1861 includes any person dealing in buying and selling old metal, scrap metal, broken metal or partly manufactured metal goods or defaced or old metal goods. At the end of the year five persons were registered with the Authority.

Hairdressers' and Barbers' Premises

Section 282 of the Middlesex County Council Act, 1944, enables a local authority to make byelaws for the purpose of securing the cleanliness of any premises in their district used for the purpose of carrying on the business of a hairdresser or barber and of the instruments, towels, equipment and materials used in the premises. Every person using any such premises shall keep exhibited in a suitable place a copy of the byelaws. There are in the district 128 such establishments. They are visited periodically to see that the requirements of the byelaws are being complied with.

CONTROL OF NUISANCES

The Sanitary Inspectors keep under supervision various buildings, water courses and parcels of land so as to be in a position to take action to prevent unsatisfactory conditions arising.

Atmospheric Pollution

The small interest that has been taken in the subject of pollution of the atmosphere has been reflected in the limited reference to it in legislation. The nuisance sections of the Public Health Act, 1936, refer to any dust or effluvia caused by any trade, business, manufacture or process which is prejudicial to the health of or a nuisance to the inhabitants of the neighbourhood, and some half a dozen clauses deal specifically with smoke nuisance, one of these clauses exempting the domestic chimney. One section gives powers to an authority to make byelaws; but these byelaws are concerned more with limiting rather than eliminating black smoke. There is then in the legislation nothing of the preventive outlook; the powers given are to take action only when an offence has been committed.

In recent years the aid of legislation has been invoked to provide something on the preventive side because local authorities, by powers obtained by private Acts, are establishing smokeless zones. A smokeless zone is an area in which the emission of smoke from premises is prohibited, with recurring penalties, except where it can be shown that the smoke arises from an appliance suitable for authorised fuel and properly maintained and used and that it resulted in the burning of that authorised fuel, or of other fuel when that authorised fuel was not available. The area is prescribed by an order made under powers obtained by a local Act and confirmed by the Minister. There is usually a provision that the area may later be extended. The order specifies the authorised

fuel or fuels. The Corporation may bear the cost or part of the cost of work of adaptation, and there may be provisions to enable a tenant incurring expenses to vary the agreement of tenancy. All premises within the area shall be subject to the Order unless specially excluded.

Two towns, Coventry and Manchester, already have established zones. By the end of 1953 17 other towns had secured powers to establish zones and a number of other towns were seeking similar powers. Both towns that established zones took steps to enlarge the areas. Nottingham have in effect secured a smokeless zone without legislation because on a large post-war housing estate the use of smokeless fuels in the suitable appliances provided is made a condition of tenancy. Bradford has imposed similar conditions on the tenants of a post-war housing estate.

The interim report of the Beaver Committee said: " The cause and remedies of pollution by smoke are known. The problem is one of practicability and economics and of the education of the whole community." The following extracts are taken from the final report of the committee, being those which are of more especial concern to a district such as this, which is not heavily industrialised and therefore one in which much of the smoke nuisance comes from the domestic chimney. An early paragraph in the report says:—" In presenting this report we wish to state our emphatic belief that air pollution on the scale with which we are familiar in this country to-day is a social and economic evil which should no longer be tolerated, and that it needs to be combated with the same conviction and energy as were applied one hundred years ago in securing pure water."

This is encouraging as showing an altered outlook about this nuisance. The four thousand deaths from the fog of December, 1952, will not have been in vain if they have led to public opinion accepting this position.

That more attention should be given to the pollution by the domestic chimney especially in a district such as this in indicated by the following paragraph in the report:—" We have made it clear that much can be done to reduce industrial smoke. But nearly half of all the smoke in the air comes from domestic chimneys. The proportion is greater in areas where houses predominate. Further, most of the domestic smoke is produced during the winter months when foggy conditions are most likely to occur. Although the smoke from domestic chimneys is less dense than that from industrial chimneys, it is discharged at a low level and its harmful effects are thereby accentuated. No cure can, therefore, be found for the heavy smoke pollution of our cities and towns unless the domestic chimney is dealt with. In our view there would be little justification for requiring industry and commerce to take all possible measures to prevent smoke, often at considerable cost, if the problem of domestic smoke were not also tackled."

There seems to be too great a willingness to do nothing because we in this country will never agree to do without our coal fires, or because there is no satisfactory alternative, or because there are no adequate supplies of smokeless fuels, or if there are that they will cost that much more than coal, While under 20 per cent. of coal consumed in Great

Britain is burned in the domestic hearth it contributes nearly 50 per cent. of the smoke. The part to be played by the householder is set out in the next paragraph:—" We realise that there may be some difficulty at first in getting people to accept coke in place of house coal, their traditional fuel, but we feel sure that this difficulty can be overcome by improved and consistent quality coupled with vigorous and convincing presentation of the value and desirability of coke supplemented by a good information and consumer service. The householder should be made to realise that coke is cleaner than raw coal both for himself and for his neighbours and that when burnt in modern appliances it provides an equally pleasant source of room heating and is a more efficient, labour-saving and economical fuel. Coke is not, as some people say 'coal with the goodness taken out'; it is 'coal with the smoke taken out of it.' If properly used it gives more heat weight for weight than coal. We are confident that the domestic consumer will ultimately recognise the advantages of a supply of this high grade fuel and its convenience, coupled with the major advantage of freedom from smoke and dirt."

Local authorities as landlords have their part to play. Most authorities now instal improved appliances capable of burning coke efficiently in the new houses they build. It would be helpful if private builders followed the same practice. Local authorities, too, can take steps to obtain the powers necessary to enable them to create smokeless zones. The report suggests: " that local authorities should have powers not only to establish smokeless zones in which the emission of smoke from chimneys would be prohibited, but also powers to establish smoke control areas in which the use of bituminous coal for domestic purposes would be restricted."

The Middlesex County Council were asked to convene a conference of County District Councils in Middlesex with a view to defining smokeless areas in the county and the Council agreed to support the action of the Willesden Corporation who requested the Middlesex County Council to introduce as early as possible a General Powers Bill to empower District Councils in Middlesex to create smokeless zones in their areas. The County Council decided to seek the advice of the Middlesex Boroughs and District Councils Association on the desirability of obtaining powers on these lines, or of trying to secure general legislation dealing with the matter.

Having considered the Beaver Report, the Public Health Committee at their December meeting resolved to recommend that the Ministers of Housing and Local Government and of Fuel and Power be urged to secure the passing of legislation to implement, as soon as circumstances permit, the recommendations contained in the Report of the Committee on Air Pollution presented to Parliament in November, 1954.

There has for some time now been a strong suspicion that there is an association between smoking and cancer of the lung. The Ministry's Standing Advisory Committee on Cancer and Radiotherapy, having received a report from a panel of statistical experts set up under the chairmanship of the Government Actuary, reported:—

1. It must be regarded as established that there is a relationship between smoking and cancer of the lung.

2. Though there is a strong presumption that the relationship is causal, there is evidence that the relationship is not a simple one, since:—

(*a*) the evidence in support of the presence in tobacco smoke of a carcinogenic agent causing cancer of the lung is not yet certain;

(*b*) the statistical evidence indicates that it is unlikely that the increase in the incidence of cancer of the lung is due entirely to increases in smoking;

(*c*) the differences in incidence between urban and rural areas, and between different towns suggest that other factors may be operating, *e.g.* atmospheric pollution, occupational risks;

3. Although no immediate dramatic fall in death rates could be expected if smoking ceased, since the development of lung cancer may be the result of factors operating over many years, and although no reliable quantitative estimates can be made of the effect of smoking on the incidence of cancer of the lung, it is desirable that young people should be warned of the risks apparently attendant on excessive smoking. It would appear that the risk increases with the amount smoked, particularly of cigarettes.

Rats and Mice

Section 1 of the Rats and Mice (Destruction) Act, 1919, reads:— "Any person who shall fail to take such steps as may from time to time be necessary and reasonably practicable for the destruction of rats and mice on or in any land of which he is the occupier, or for preventing such land from becoming infested with rats or mice shall be liable. . . ." Although this is a service which the County Council could have delegated to District Councils, it retained control until 1944 when on the representations of the Ministry of Food it handed over its responsibilities. The work involved was brought into line with the routine duties of Sanitary Inspectors, the actual work of baiting being carried out by the Rodent Operatives. Apart from dealing with complaints, work is at intervals carried out at the larger areas of infestation, including the plots formerly used as refuse tips, the sewers and the watercourses. While a free service is provided for the householder, for work done on business premises a charge is made.

1,386 complaints were received during the year, 1,177 of rats and 209 of mice. Of the 1,313 infestations found 1,115 were of rats and 198 of mice. 11 of the complaints were from Council property (8 rats and 3 mice), 1,198 from private dwellings (1,069 and 129) and 167 (94 and 73) from business premises. No large reservoirs of infestation were found, most of the infestations being associated either with the keeping of poultry or with accumulations of waste matter.

In May, 499 manholes on the soil and surface water sewers were test baited. Infestation was found in 32. In November these manholes were again treated, as well as 76 nearby other ones. 20 of the 108 were found to be still infested and to be in need of further treatment.

The 1,313 infestations dealt with during the year were a slight increase on the figure of 1,264 in 1953. The complaints over the years do not fall in a set pattern. It cannot be felt that the problem is really being got on top of because although for a while fewer complaints may be received, this period is followed by one in which complaints are again more common.

Wasps

The rodent operatives dealt with 278 nests during the summer and autumn. The destruction of a wasps' nest presents little difficulty when the nest is accessible. Many, however, are found in roof spaces, under floors, behind tile hung bays and in cavity walls. Dealing with these can be very difficult, it being necessary sometimes to remove flooring, tiles or other parts of the structure to be able to get at the nest. The work sometimes entails evening visits, with overtime payment. The Public Health Committee considered whether a charge should be made for this service, but decided it should continue to be free.

Caravans

The two plots on which there were caravans are still being used for this purpose. On town planning grounds application for permission to use the site on the Watford by-pass as a caravan site had been refused. The proposers appealed but their appeal was dismissed by the Minister of Housing and Local Government. A further application was made by the promoters, but it was again refused by the Plans Sub-Committee on the grounds that the development would be prejudicial to the amenities of the surrounding locality, that the provision of sub-standard dwellings would increase the number of persons eventually to be rehoused in the county and that the site is in an area allocated for green belt in the county development plan. At the end of the year the outcome of a further appeal to the Minister was being awaited. The position in regard to the North Lodge, Stonegrove, site is also unsatisfactory. The County Council had indicated their desire to acquire the site, but were reluctant to proceed on these lines until they knew from the results of the enquiry of the County Development Plan that the purpose for which they had in mind to use the site would be agreed to. In the meantime persons are occupying caravans on both these sites and are living under most unsatisfactory conditions.

The Planning Committee who had been asked by the Public Health Committee to consider the possibility of a caravan site being provided in the district to obviate the indiscriminate use of land as caravan sites were not favourably disposed towards the extension of caravan sites in the district. In their view the provision of authorised sites would not result in any diminution in the use of unauthorised sites.

Noise Nuisance

Noise is one of the annoyances or nuisances to which up to this little enough attention has been paid whether considering that affecting the person at work or in his home. There is no questioning the seriousness of the effect of some noise on some people. Unfortunately, noise is very difficult to control. Legislation gives relatively little help. Amongst

the byelaws for good rule and government is one prohibiting the sounding or playing upon any musical or noisy instrument or singing in any street or public place within one hundred yards of any church, place of public assembly, hospital or house. Another byelaw prohibits keeping within any house, building or premises any noisy animal which shall be or cause a serious nuisance to the residents in the neighbourhood; proceedings in this case can be taken only after the expiration of a fortnight from the date of service of a notice signed by not less than three householders residing within hearing of the animal. Yet another byelaw prohibits calling or shouting in a street so as to be an annoyance for the purpose of hawking, etc. Another which refers to the noise from wireless loudspeakers, gramophones, etc., which "shall be so loud or so continuous or repeated as to cause a nuisance to occupants or inmates of any premises in the neighbourhood."

Section 313 of the Middlesex County Council Act, 1944, reads:—

"(1) A noise nuisance shall be liable to be dealt with as a statutory nuisance under the Act of 1936: Provided that no complaint to a justice under Section 99 of the said Act shall be of any effect unless it is signed by not less than three householders or occupiers of premises within hearing of the noise nuisance which is the subject of the complaint. (2) In any proceedings under the Act of 1936 in respect of a noise nuisance occasioned in the course of any trade, business or occupation, it shall be a good defence for the person charged to show that he has used the best practicable means of preventing or mitigating the nuisance having regard to the cost and to other relevant circumstances. (3) For the purpose of this Section a noise nuisance shall be deemed to exist where any person makes or continues or causes to be made or continued any excessive or unreasonable or unnecessary noise which is injurious or dangerous to health. (4) Nothing contained in this Section shall apply to a railway company, the Transport Board, or any statutory undertakers or their respective servants exercising statutory powers."

Fouling of Footpaths by Dogs

Many of the owners of dogs who live in flats more especially flats over shops make it a practice to exercise their dogs on rather defined routes. The occupiers of the houses on these roads complain of the fouling of the footways, and periodically some submit the suggestion that the byelaws relating to the fouling of footways by dogs should be exhibited on such places as the lamp standards in these roads. The General Purposes Committee decided that publicity should be given instead by copies of this byelaw being exhibited on the Council notice boards. The byelaw reads:—"No person being in charge of a dog shall allow the dog to foul the footway of any street or public place by depositing its excrement thereon. Provided that a person shall not be liable to be convicted of an offence against this byelaw, if he satisfies the Court that the fouling of the footway was not due to culpable neglect or default on his part. For the purposes of this byelaw the owner of the dog shall be deemed to be in charge thereof, unless the Court is satisfied that at the time when the dog fouled the footway it had been placed in or taken into the charge of some other person."

INSPECTION AND SUPERVISION OF FOOD

(A) MILK

Production

Local authorities have for years been concerned with the care of milk at all stages. An order of 1885 required persons following the trade of cow keeper or dairy man to be registered. By the Milk and Dairies Order, 1926, every local authority was required to keep a register of all persons carrying on in their district the trade of cow keeper or dairy man, and of all firms and other premises used as dairies. By the Milk and Dairies Regulations, 1949, however, the Minister of Agriculture and Fisheries became responsible for the registration of dairy farms and of persons carrying on the trade of dairy farmer. The execution and enforcement of the regulations on dairy farms (except in so far as they relate to diseases communicable to man) became the responsibility of the Minister of Agriculture and Fisheries, while local authorities retained responsibilities for those provisions which apply outside dairy farms, for the provisions relating to diseases communicable to man and for the registration of dairies which are not dairy farms and of dairymen who are not dairy farmers.

The number of cow keepers in this district had been declining for a number of years because of building development so that the number had fallen to 17 by 1934. Since then the number has further declined so that to-day there are only nine. These are: Messrs. Hall & Sons, Pinner Park Farm; Harrow School, Watford Road; S. K. Hedges, Pinner Wood Farm; Noad, Wood Farm Ltd., Wood Farm, Wood Lane; P. T. Dalton, Copse Farm; G. Williams, Grove Farm, Stanmore; Convent, Little Company of Mary, Harrow; R. Bradley, College Hill Road, Harrow Weald; L. Smith, Oxhey Lane Farm, Oxhey Lane.

All but the last two, which produce ungraded milk which is sold wholesale, produce tuberculin tested milk.

Distribution and Licensing

Milk is liable to contamination by a variety of organisms. Being an excellent medium for the growth of bacteria and being so often consumed raw it can be particularly dangerous. Many of the cows in this country have been infected by the bovine tubercle bacillus; a proportion of these yield milk containing virulent organisms. Many ways have been tried of reducing the incidence of tuberculosis in cattle. The milk from special herds, the tuberculin-tested cattle, is almost always free from the tubercle bacillus. But while in general such milk is safer than other raw milks because of the special attention given to the cattle and to the question of milk production, it can nevertheless be infected. The organisms may be from the cow as in the case of the brucella of abortus fever, or from the human such as the streptococcus which might cause scarlet fever or sore throat in the consumers. These risks can be virtually eliminated by heat treatment of the milk, a treatment which may be sterilisation or pasteurisation in which the milk is heated to a certain temperature for a specified length of time so that the pathogenic organisms are killed. The practice of heat treatment of milk is growing.

As compared with the 69 for the years 1945-46, the percentage of milk supplied by retail in Great Britain which was subjected to heat treatment was 87 in 1952.

The Milk (Special Designations) Regulations set out the procedure to which the milk has to be subjected before it can be sold under one of these categories. The designation "accredited" was abandoned last year. By the Milk (Special Designations) (Pasteurised and Sterilised Milk) Regulations, 1949, licences for pasteurised and sterilised milk are granted by the Food and Drugs Authorities; other licences are issued by the local authority. By the Milk (Special Designations) (Specified Areas) Order, 1951, the Minister specified certain areas including the whole of Middlesex in which retailed milk had to be one of the special designations. A retailer is obliged to obtain a licence to retail in a district even if he has no premises in that district. On the other hand firms retailing from two or more premises have to obtain licences for each of the premises. A number of company distributors have many premises in this district.

There are two licensed pasteurising plants in the district, these being at Braziers', Kenton Lane and Hall's Farm, Pinner Park.

The following are particulars of the numbers of the various types of licences issued:—

(1) Number of premises from which pasteurised milk was sold	52
(2) Number of premises outside Harrow from which pasteurised milk was retailed in the district	19
(3) Number of premises from which T.T. milk was sold ...	47
(4) Number of premises outside Harrow from which T.T. milk was retailed in the district	19
(5) Number of premises from which sterilised milk was sold	48
(6) Number of premises outside Harrow from which sterilised milk was retailed in the district	17

The earlier of the bottles containing pasteurised milk were closed with a cardboard disc which was sunk below the lip of the bottle. This arrangement led to risks of contamination of the milk. For many years much of the milk has been distributed in bottles sealed with a foil cap which has overlapped the lip of the bottle, a much more satisfactory arrangement. From 1st October, 1954, the Milk (Special Designation) (Pasteurised and Sterilised Milk) (Amendment) Regulations, 1953, required all bottles of pasteurised milk to be sealed with the overlapping cap.

Up to recently retailers of pasteurised milk could buy supplies of pasteurised milk, bottling it at their premises. From the 1st October, 1954, it has been obligatory to bottle pasteurised milk at the premises at which it is pasteurised.

Supervision

Although certain responsibilities about the supervision of the production of milk passed to the Minister of Agriculture and Fisheries others were still left with local authorities. It would be an advantage if the Ministry of Agriculture and Fisheries were obliged by regulation to

notify local authorities of dairy farmers who are registered by them. 74 visits were paid by sanitary inspectors during the year to cow sheds and dairies.

Sampling

Samples of all types of milk produced or retailed in the district are taken and submitted for analysis at the Colindale Laboratory, more especially during the summer months. It is quite exceptional to receive an adverse report, more especially about the heat treated milks: Special attention is paid to the sampling of milk produced locally. During the year 52 samples were taken and submitted to analysis. All but one proved satisfactory. The one unsatisfactory sample was a milk from a T.T. herd. Follow-up samples from the same source proved to be satisfactory.

Complaints

While from the point of view of elimination of the risk of spread of infection by milk the fact that much of that delivered and consumed in the district is heat-treated is grounds for satisfaction, the arrangement for distribution of the treated milk raises its own problem. Although at one time there was hope that a satisfactory non-returnable container might be devised which would have eliminated so many of the difficulties, in fact the returnable glass bottle is still being used. Much of the trouble arises from the abuse of the bottle in the home. There might have been the neglect or failure by the staff at the bottling establishments to detect anything unsatisfactory, a failure possibly due to carelessness or inefficiency, but that failure would not have mattered if there had not been the previous abuse. There are many ways in which the bottle is wrongfully used. A common fault is the failure to rinse the bottle, with the result that the milk dries and cakes inside the bottle. Bottles are often used to hold contents other than milk and are later returned. A common practice is to leave a note for the milkman in the neck of the bottle; this gets pushed in. Although all the bottles are subjected to strenuous cleansing processes, these cannot remove material which is firmly deposited on the walls and of course often there is failure to wash out other contents.

During the year 14 complaints were received. Four were about the dirty condition of the bottle, five were of the presence of cardboard or paper, two of the presence of glass. Sometimes it seems the glass must have been present in the bottle when it was bottled; at other times it has probably been introduced during the bottling process. These complaints are of course those which have been brought to the notice of the department. The figure does not necessarily indicate the true number of such occurrences, but the actual number must still be a very small proportion of the number at risk as it seems that every year some fifty million milk bottles are distributed to homes in this district.

(B) MEAT

Slaughtering

Before the Food and Drugs Act, 1938, there were three classes of private slaughterhouse:

(1) The registered, being premises in use since the Towns Improvement Clauses Act, 1847.

(2) Those licensed without limit of time, being slaughterhouses established between 1847 and 1890, the date of the passing of the Public Health Act (Amendment) Act.

(3) Those licensed for specific periods, usually for one year.

Licences and registrations in force before the coming into operation of the 1938 Food and Drugs Act expired four months after this date, namely 1st October, 1939.

There had in fact been no registered slaughterhouses in the district, but there were in 1934 nine licensed premises. Owing to changes there just before the war eight licensed slaughterhouses, namely those at 9, Northolt Road, South Harrow; 46, High Street, Wealdstone; 94, High Street, Wealdstone; High Street, Pinner; Green Man, Honeypot Lane, Stanmore; Stanmore Hill; Stanmore Hall Farm and 63, High Street, Edgware. These slaughterhouses were not very busy as only a limited amount of killing took place there. For instance in 1938 the killings were of 146 cattle excluding cows, 59 cows, 314 calves, 1,601 sheep and lambs and 1,561 pigs. 732 visits were paid to the slaughterhouses during that year by the Sanitary Inspectors to examine these 3,681 carcasses.

The other type of premises used for killing was the public abattoir. This where provided was usually owned by the local authority who granted facilities to the local butchers. Although local authorities have for many years had powers to provide abattoirs and in such cases to close private slaughterhouses little use has been made of these powers. When the Harrow Council considered the position in 1935 they decided that the limited amount of killing performed in this district did not warrant the establishment of a municipal abattoir.

Shortly after the outbreak of the war most of the killing at private slaughterhouses ceased. The Livestock (Restriction on Slaughtering) Order of the Ministry of Food came into operation early in 1940. This resulted in the work previously carried out in about 11,500 premises being concentrated at some 500 slaughterhouses. The continuance up to the outbreak of the war of the use of a large number of private slaughterhouses throughout the country was a reflection on the Public Health Services as so many of the premises were anything but satisfactory, while too, their very numbers made it impossible to arrange for the examination of all the animals killed there. Because many of the premises selected by the Ministry of Food were accepted more from the point of view of convenience of distribution of the meat than from their suitability for use as slaughter houses, the effect of the operation of the Order, although bringing about great improvements, still left the situation in some areas not satisfactory.

Only very little use was made of any of the local slaughterhouses during most of the war years. The occasional pig or sheep which was killed belonged to an institution or private pig club, though for a short time more use was made of one of the slaughterhouses to provide meat for troops stationed just outside the district. From the end of the war until last year the same arrangements have continued, and the use of private

slaughter-houses throughout the country had virtually ceased. It had been hoped that never again would the large numbers of slaughterhouses used before the war again be brought into use, but that killing could be concentrated in a small number of buildings designed for the purpose and which would therefore be more satisfactory than those the Ministry of Food had been continuing to use, and that all animals killed at these premises would receive full post-mortem examination. The Government had erected seven slaughterhouses at Guildford, Fareham, Grimsby, Swindon, Canterbury, Wimborne and Salisbury. Another is scheduled for Sunderland. Apart from these Plymouth has built its own slaughterhouse since the war. In 1938 the report of the Livestock Committee suggested that an abattoir should serve an area of radius 15 to 25 miles.

Circular MF.5/54 of the 24th March, 1954, set out the principles to be taken into account by an authority considering the licensing and provision of slaughterhouses for the period immediately following the decontrol of meat and livestock in July. The Government had already announced its intention to bring about concentration of slaughtering facilities throughout the country, though it was recognised that the long-term policy would take some years to apply. In the meantime it was the duty of local authorities to make use of their powers to secure that efficient slaughtering accommodation would be available after decontrol. The responsibility for licensing slaughterhouses in the interim period was to remain with the local authorities of the districts in which the slaughterhouses were situated. When dealing with applications for the grant or renewal of licences local authorities were to consider whether, having regard to the accessibility and capacity of public slaughtering accommodation in its own district or in the district of a neighbouring authority, the privately owned slaughterhouses were required.

In the summer then local authorities were faced with a problem of what to do when the Ministry of Food ceased on 29th June, to be responsible for the slaughter of animals. There had to be adequate facilities for killing and in the meantime local authorities were receiving many applications for the renewal of the licensing of premises in their areas which had been used for this purpose just before the war.

At their meeting on the 1st June the Public Health Committee resolved "that, subject to the premises complying with the requisite standard, licences, pursuant to Section 57 of the Food and Drugs Act, 1938, be granted to the applicants concerned:—

Applicant	*Location of Slaughterhouse*
Louis Rance, 46, High Street, Wealdstone	46, High Street, Wealdstone.
M. Dixey, Bushey Hall Road, Bushey	Dracotts, Stanmore Hill, Stanmore.
Angus Keen, High Street, Stanmore	Stanmore Hall Farm, Dennis Lane, Stanmore.

That Mr. H. E. Wright, of 7, Northolt Road, South Harrow, be informed that, subject to the reconstruction of his former slaughterhouse

at these premises to the approval of the Chief Sanitary Inspector, the Committee would be prepared to grant his request for a licence.

The consideration of the application of Mr. George Massey, 720, Honeypot Lane, Stanmore, be deferred for further information".

The Slaughterhouse Act, 1954, came into operation in July, 1954. In considering applications for licences local authorities were to have regard to the requirements of Section 13 of the Food and Drugs Act, 1938, of any slaughterhouse byelaws relating to sanitary conditions and to the provisions of the Slaughter of Animals Acts for the prevention of cruelty.

Section 3 (3) of the new Act makes special provisions for a licence to be refused where the local authority are not satisfied that the premises conform with the requirements of Section 13 of the 1938 Act and of any regulations in force relating to hygiene. Authorities were authorised to grant licences for periods greater than the maximum of 13 months allowed by the 1938 Act provided the period does not go beyond 31st July, 1959. Licences granted or renewed after the 30th June, 1956, will remain subject to the maximum period of 13 months. No licences may be granted for premises which had not been used and licensed or registered as a slaughterhouse at any time from 1st October, 1934, without the consent of the Minister of Food.

The new Act repeals the special provisions under which licences had to be granted as of right to slaughterhouses which prior to the coming into operation of the 1938 Act were classified as " registered " or " licensed without limitation of time," though the special privileges attaching to these two classes of slaughterhouse continued to the end of 1954, when the application for a licence in respect of such premises was made before then.

Section 61 of the 1938 Act enabled a local authority which had provided a public slaughterhouse to close some or all of the private slaughterhouses in the district. Section 4 of the new Act extends the power so that it may be exercised by a local authority which has not provided a public slaughterhouse, but which is of the opinion that there is adequate alternative public slaughtering accommodation in a neighbouring district to meet the needs of the district. When a local authority are satisfied that there is sufficient slaughtering accommodation, private or public, available for their district and that no additional facilities are required, they may by resolution determine that no further licences will be granted or renewed in respect of any premises not licensed on the date the resolution takes effect.

Section 5 of the new Act provides that claims for compensation may be made by any person having an interest in any licensed slaughterhouse which may no longer operate as a result of such a resolution, and in any premises which were licensed and in use as a slaughterhouse on 1st October, 1939, but were not licensed on the date of any resolution passed in 1954. The basis of compensation is an amount representing the reduction in the value of the premises consequent upon the prohibition to use the premises as a slaughterhouse. The Ministry may make a grant to the authority not exceeding one-half of the amount of the compensation.

The Urban District Council of Yiewsley and West Drayton suggested that a municipal slaughterhouse erected by them in that locality to serve the authorities in West Middlesex and part of Buckinghamshire might be the best way of implementing locally the long-term slaughtering policy of the Ministry of Food. As they had already decided to issue licences to the owners of some private slaughterhouses in the Borough, the Public Health Committee could not support the proposal. They did agree, however, to send a representative to attend a conference on the matter.

By the Slaughter of Animals (Amendment) Act, 1954, which came into force on 1st October, 1954, a licence granted for the use of premises for the slaughter of horses is invalid unless it expressly authorises the use of the premises for the purpose. Provision is also made for the licensing of premises used for the confinement of animals awaiting slaughter outside the curtilage of the premises used for slaughter.

SANITATION OF SLAUGHTERHOUSES. The byelaws of the former Harrow Urban District Council confirmed on the 20th February, 1936, and which came into operation on the 21st April, 1936, dealt with the licensing and registering of slaughterhouses, for keeping the same in a cleanly and proper state, for removing the filth at least once in every 24 hours and requiring such slaughterhouses to be provided with a sufficient supply of water.

PREVENTION OF CRUELTY. The Slaughter of Animals Act, 1933, requires that:—

(*a*) Animals must be stunned before slaughter by a mechanically-operated instrument (there is exemption for Jews and Mohammedans).

(*b*) The requirement as to stunning does not apply to sheep unless the local authority apply it by resolution. Goats can be excluded by resolution.

(*c*) No animal may be slaughtered or stunned in a slaughterhouse or knacker's yard by any person who is not the holder of a licence granted by a local authority (these licences are issued by the authorities of the areas in which the applicants live, not where they work. Each year before the war, about five slaughtermen were licensed).

(*d*) Persons engaged in slaughtering are required to house, feed, drive and fix animals in such a manner as to prevent unnecessary suffering prior to or during slaughter.

The Slaughter of Animals (Amendment) Act, 1954, empowers the Minister of Food to make regulations for securing humane conditions and practices in connection with the slaughter of animals at slaughterhouses and knacker's yards. Also, except in the case of animals slaughtered for food for Jews or Mohammedans, licences granted to slaughtermen must specify the kinds of animals which may be slaughtered by the holders of the licences and the types of instrument which may be used. Licences authorising the slaughter of horses will be valid only in the district of the local authority granting the licences. Section 4

extends to all animals throughout England and Wales the provision of the Slaughter of Animals Act, 1933, under which certain animals shall be instantaneously slaughtered, or shall be instantaneously made insensible to pain by stunning.

By the Slaughter of Animals (Pigs) Act, 1953, which came into force on 1st July, 1954, pigs over the age of twelve weeks which are required to be slaughtered elsewhere than a slaughterhouse or knacker's yard shall be instantaneously slaughtered, or be stunned and thereby rendered insensible to pain until dead, and the slaughter or stunning shall be effected by a mechanically operated instrument.

Five slaughtermen applied for the renewal of their licences. The applications were granted.

Meat Inspection

NOTICE OF SLAUGHTER. From 29th June, when the Ministry of Food ceased to be responsible for the slaughter of animals, slaughter of animals for sale for human consumption became again subject to the requirements of the Public Health (Meat) Regulations, 1924-52, and of any local Act or byelaw.

The relevant requirements of the meat regulations are:—

(*a*) Not less than three hours' notice of intention to slaughter, stating the day, time and place of slaughter, must be given to the local authority by the person responsible for the slaughter of the animal. Separate notices are not required, however, where it is the regular practice to slaughter at fixed times on fixed days of which notice has been given. Notice of intention to slaughter can be dispensed with when the animal has to be slaughtered in an emergency, *e.g.* for humanitarian reasons, but in any such case notice of slaughter must be given as soon as possible.

(*b*) The local authority must be notified forthwith when, on the slaughter of an animal for sale for human consumption, any part of the carcase or internal organ appears to be diseased or unsound.

The carcase of an animal, including the mesentery and internal organs, other than the stomach, intestines and bladder, must not be removed from the place of slaughter until they have been inspected or their removal has been authorised by an officer of the local authority. The foregoing does not apply to sheep or to any animal in respect of which there is an exemption from the requirement to give individual notice of intention to slaughter, unless some part of the carcase or organs appears to be diseased or unsound. The carcase and internal organs may in any case be removed from the place of slaughter at the expiration of three hours from the time of slaughter or six hours from the time of delivery of the notice to slaughter, whichever time is the later, except that when such time falls between 7 p.m. on one day and 7 a.m. on the next, the removal shall be postponed until the later time. The carcase and organs of an animal which has been slaughtered for reason of accidental injury may be moved to a more convenient place if the place

of slaughter is not suitable for the retention of the carcase and organs and the notice shall be sent to the local authority of the district to which the carcase and organs are moved.

STANDARD FOR CONDEMNING MEAT. For over 30 years the practice of meat inspection has followed the recommendations given in the Ministry of Health Memo 62/Foods issued in 1922. This has now been replaced by Memo 3/Meat of 1952, the provisions of which came into operation in February, 1953.

The revised memorandum based on the recommendations of the Interdepartmental Committee on Meat Inspection (1951) introduced changes to safeguard public health against the dangers associated with the consumption of meat derived from, or contaminated by contact with, carcases or offal of animals which were diseased or suffering from an infectious condition; and recommended examination by laboratory methods where this is thought to be necessary. Certain modifications were made in the recommendations about the action to be taken when evidence of disease is found.

From July to the end of the year, 888 animals were slaughtered at slaughterhouses in this district. Of these 148 were beasts, 334 pigs, 361 sheep and 45 calves.

All animals slaughtered in the district are inspected. One pig was found to be suffering from swine fever. By the orders of the Ministry of Agriculture and Fisheries the movement of animals to and from the affected premises was prohibited. Those pigs on the premises were slaughtered. 27 were found to be affected; the carcases were destroyed.

5,166 lbs. of meat were found unfit for human consumption and were destroyed.

DISPOSAL OF MEAT UNFIT FOR HUMAN CONSUMPTION. The Livestock (Restriction on Slaughtering) Order, 1947, placed a statutory obligation on occupiers of premises to have meat unfit for human consumption stained before it left the premises. This order is now repealed though it is hoped that the practice of staining such meat will continue. It is an offence under Section 9 of the Food and Drugs Act, 1938, for any person to sell or have in his possession for sale any food which is intended for, but is unfit for, human consumption. Meat and offal at slaughterhouses which is rejected has to be disposed of in a way which does not contravene the provisions of that section. Before the war condemned meat was disposed of by burning in the furnace of the disinfecting plant. There was no problem during the war years as so little use was made of the local slaughterhouses. Before these again came into use the arrangements at the disinfecting plant had changed and the boiler was not in operation all day. Arrangements were therefore made for the incineration of condemned meat at the furnace at the incineration plant of the Wembley Corporation at a charge of 35s. per ton subject to a minimum charge of five shillings.

Circular MF.21/53 of the Ministry of Food sets out the treatment to which meat and offal in slaughterhouses which are unfit for human consumption shall be subjected. In addition to such conditions as may be imposed by a local authority in the exercise of its statutory powers

for the prevention of danger to public health, the meat and other material must have been processed, boiled or sterilised, and the seller of raw condemned meat and other material shall before delivery notify the Medical Officer of Health of the district to which the meat is being consigned of the names and addresses of the consignees.

FAT STOCK GUARANTEE SCHEME. The Council agreed to their meat inspectors carrying out certification duties in respect of private treaty sale of pigs by dead weight. Under this arrangement the Ministry pay sixpence per pig subject to the minimum of 3s. for each certificate, this sum being payable only on pigs eligible for guarantee payments.

(C) OTHER FOODS

Condemned Food

Before the war retailers of foodstuffs would either return unsaleable commodities to their suppliers or make private arrangements for the goods to be collected and disposed of, where possible, for animal feeding.

During the war rationing made it essential, if replacements were wanted, for retailers to produce certificates certifying that goods had been found unfit for human consumption and had been disposed of by the local authority. In these cases if the amount was sufficient and if it were of a type suitable for animal feeding or could be used in the manufacture of some other article, the salvage division of the Ministry of Food arranged for collection and disposal. Now that the rationing of foodstuffs has ceased, the demand for certificates has fallen. This is reflected in the figures of the quantity of food destroyed last year, being 12,714 lbs., or about two-thirds of that of the previous year. The following summary gives details for the years 1953 and 1954.

	1953	1954	*Decrease*
Fruit	5,319	2,535	52½ per cent.
Vegetables	968	853	12 ,, ,,
Fish	849	517	39 ,, ,,
Meat and Meat Products	8,269*	6,995*	16 ,, ,,
Groceries and Miscellaneous ...	3,942	1,812	54 ,, ,,
Eggs	1,365	24	

*The figures relating to meat do not include 5,166 lbs. found unfit during the inspection of carcases in slaughterhouses.

The method of disposal of unsound food varies with the nature of the food and the circumstances giving rise to its surrender or condemnation. Meat surrendered as a result of contamination during transit or because of bruising was disposed of by burning in the destructor of the Corporation of Wembley. Other food stuffs after collection by a member of the staff of the Public Health Department were rendered unsaleable and disposed of either by burning or by burying on a controlled tip.

Complaints

42 complaints about foreign matter being found in food were received. 14 related to bread, six to cakes, four to tinned foodstuffs, and

five to cooked pies. The foreign matter found included a nut and bolt, glass, price tickets, nails, wire, pieces of wood, and insects.

In no case was the cause of the trouble found to be due to gross negligence or failure to maintain conditions satisfactory to the preparation of food.

Ice Cream

Although the risks from the consumption of contaminated ice cream were fully appreciated, it was not until some 200 persons suffered from typhoid fever in 1946 in Aberystwyth that commercial ice cream was made a safer product by the requirements of the Ice Cream (Heat Treatment, etc.) Regulations, 1947.

Section 14 of the Food and Drugs Act requires the registration of premises used in connection with the manufacture or sale of ice cream. As during the year one manufacturer ceased to make ice cream, the number of premises registered is now 7. Three of the manufacturers made ice cream throughout the year, three only at intervals in the summer.

At the end of the year there were 350 premises registered for the retailing of ice cream; this was 5 less than the number on the register at the 31st December, 1953.

The number of samples taken was 86. Grades I and II are considered satisfactory; Grades III and IV are not, and if repeated indicates fault in practice. 66 of the samples were Grade I or II; 13 Grade III or IV. In the case of the Grade III or IV samples enquiries were made and follow up samples were taken. 15 of the samples were taken from local manufacturers. Two of these which were unsatisfactory led to the detection of a defective piece of equipment.

Preserved and Pickled Foods

The Food and Drugs Act of 1938 requires premises where sausages or preserved or pickled foods are prepared or manufactured to be registered by the local authority. The number of such premises in the district which are registered is 119. Most of these are butchers' shops, the registration being in respect of the manufacture of sausages. During the year six premises were registered but over the same period the manufacture of sausages ceased at a number of shops and the entries relating to these were removed from the register.

Registration of Hawkers

The Middlesex County Council Act, 1950, requires that any person not being a shopkeeper retailing any food from a cart, barrow, basket or other receptacle shall be registered with the local authority, and that the storage premises used by him shall also be registered.

At the beginning of the year 62 hawkers were registered as trading in the district; of these 31 were operating from storage premises in Harrow.

During the year there were five new registrations, four being in respect of hawkers of greengrocery, one of shell fish; one application

was in respect of a mobile canteen. One hawker ceased to trade and his name was removed from the register.

Most of the hawkers who are registered retail greengrocery on regular days of the week on established rounds. Their supervision and control presents little difficulty. The position is very different though in the case of the casual trader who appears only when certain fruits or vegetables are in season. There has, however, been a marked fall in the numbers of casual hawkers coming to the district and taking up stands in roads leading off the main shopping centres. This was largely due to the Order made by the Council in October, 1952, prohibiting street trading during the hours of 9 a.m. to 6 p.m. in many of the roads which attract street traders.

The Police have been most helpful in enforcing the provisions of the Order.

(D) ADULTERATION OF FOOD

The Food and Drugs Act, 1938, provided that County District Councils of over forty thousand population should be Food and Drugs Authorities. There was, however, the proviso that if a County Council satisfied the Minister that the area in respect of which they would be the Food and Drugs Authority would be rendered inconvenient in size, shape or situation for the efficient performance of their duties as Food and Drugs Authority, the Minister could direct that the County Council should be the Food and Drugs Authority as respects the district or districts of any one or more of the local authorities who but for such direction would be the Food and Drugs Authority under the Act but were not such authorities under the law in force immediately before. Before the passing of the 1938 Act, the County Council had always been the Food and Drugs Authority for the whole county. In 1938 sixteen of the county districts in Middlesex had a population of over forty thousand. The County Council applied to the Minister of Health for a direction that it should be the authority in each of these county districts. This direction was given so the County Council remained as before the Food and Drugs Authority for the whole county.

One result of the coming into operation of the Milk (Special Designations) (Pasteurised and Sterilised Milk) Regulations, 1949, was the transfer from the District Council to the County Council as Food and Drugs Authority of the responsibility for the licensing of milk pasteurisers and the periodic inspection of plant, although the District Council remain responsible for the inspection, etc., of the structural condition of the premises. This was felt to be a further argument in favour of the District Councils being made the Food and Drugs Authority. On being approached about this, however, the County Council saw no reason at the time that any alteration should be made in the County Council's position as Food and Drugs Authority for the whole of the county.

Towards the end of the year the County Council, considering the question of delegation of certain of their functions to District Councils, discussed a suggestion that the County District Councils should be given an opportunity of exercising the functions of the County Council as Food

and Drugs Authority. The Middlesex Local Government Conference Committee submitted a report on this matter to the County Council and District Councils and a recommendation: "It is not desirable at the present time that the County Council should delegate to County District Councils in Middlesex its function as Food and Drugs Authority, but that the County Council be asked to send more frequent reports of the action which it takes under the Food and Drugs Acts to County District Councils for their information." The Public Health Committee when it considered this report at its meeting in December submitted no observations.

While the work of an authority under the Food and Drugs Act is very closely related to that of a sanitary authority, the two functions are in fact quite distinct. The local sanitary authority is concerned mainly with sanitary questions relating to the sale, etc., of food unfit for human consumption, to the taking of precautions against contamination and to the avoidance of food poisoning. In regard to milk it is concerned with preventing contamination, and with the registration of milk distributors and of certain dairy premises. The functions of the Food and Drugs Authority, however, as regards food relate mainly to the composition of food and drugs, and to the additions that should not be made to milk, with the object of securing that food and drugs are sold only in a pure and genuine condition. Because the sanitary authority has its own responsibilities in regard to food, responsibilities which it cannot pass to any other body, responsibilities too which necessitate the visiting and inspecting of all places where food is dealt with at any stage, there are advantages in the staff of the local sanitary authority carrying out the duties of the inspectors of Food and Drugs Authorities. There is too the advantage of the local knowledge acquired by sanitary inspectors, and so often it is the District Council which is first approached on these matters by an aggrieved member of the public. The case for the County Council seems to rest primarily on the fact that under the existing arrangements for the distribution of foodstuffs the result of a sample submitted for analysis in one district might well be accepted as indicative of the state of a similar commodity in another area, and that covering a large field they can more efficiently plan their scheme for sampling. In regard to costs of administration, the County Council points out that these food and drugs activities are only part of the functions of the staff of the Public Control Department, an arrangement which results in economic management.

The following information has kindly been provided by the Chief Officer of the Public Control Department of the Middlesex County Council: Of the 887 samples taken 57 were unsatisfactory. 31 of these adverse reports were of 315 samples of raw milk which were taken on delivery at milk depots in the district. In 13 instances deficiency was in fat, in 18 in solids-not-fat. Where in spite of any deficiency it was probable the milk was genuine, advisory action only was taken. This was so in all these instances. Seven adverse reports related to various milks of which 62 samples were taken. Six of these were of hot milk in four cafes. In only one instance was prosecution instituted. The seventh sample was of bottled milk sold by retail. This had a very

slight deficiency of solids-not-fat, but no added water. Nine adverse reports were received in respect of 57 samples of vinegar. In three cases the samples though genuine were deficient in acetic acid. In two instances retailers sold non-brewed condiments as vinegar. Five out of the 25 samples of liver were unsatisfactory, in each case pig's liver being passed off as lamb's liver. Five prosecutions were undertaken. The other unsatisfactory samples were one each of chocolate drink, drugs, ice cream and sweets.

(E) HYGIENE OF FOOD

The activities of local authorities in their campaigns for the cleaner handling of food have followed no uniform pattern. In this district the campaign has been on three fronts. The first two concerned essentially those handling food at any stage and concentrated on the one hand on the condition of premises and on the other on the technique involved. To encourage those who handle food, the Council issued certificates which can be earned only if both requirements are met, that is the standard of fitness and the care of the premises and the handling of the foodstuffs at all stages. After the first rush of applications only small numbers have been received. Although the campaign started in 1948, it was not until 1950 that any certificates were issued; by the end of that year they had been granted to nearly one-quarter of the establishments in the district dealing with the preparation or the sale of food. By the end of 1954 certificates had been issued to 256 out of the 916 traders in the district.

This does not mean that only these numbers of premises are satisfactory, and that the others either do not come up to the desired standard or that there are shortcomings in the handling of the food by the staff. On the contrary there are many places for which certificates would undoubtedly be issued were application made. There are, of course, a few of the older premises that cannot be put into a really satisfactory state, though even here there may be no real risk to infection, because in spite of the difficulties the standard of the handling of the food is high. They are all, of course, subject to the provisions of the Food and Drugs Act and to byelaws. The following is an analysis of the various types of establishments and the numbers of these to which certificates have been issued:—

Trade	*Number in District*	*Number Holding Certificate*
Bakers	67	13
Butchers	133	53
Caterers	109	29
Confectioners	164	32
Fishmongers	63	10
Greengrocers	144	9
Grocers	229	106
Ice Cream Manufacturers ...	7	4

These figures do not include large departmental stores.

The third front in the campaign is the education of the consumer. In this regard much progress has been made in the last year. Talks are now being given regularly at the schools, including some voluntary schools, and many talks have been given to various bodies and organisations. It is hoped that in time not only will those who are future housewives and food handlers attain a high standard in their own handling of food, but being aware of what is necessary will help to raise the standard of care by those from whom they purchase food.

This side of the campaign is a long-term one which is not likely to bring about any benefits for some considerable time. In some districts most effort is concentrated on dealing with the persons handling the food. Where the response to those approached is good, it is probable that efforts on these lines will more speedily bring about results and will sooner be reflected in a reduction in the numbers of cases of food poisoning. More diffuse education cannot be expected to bring this about. In fact, much of the work of many of the food hygiene campaigns probably has little direct effect on the incidence of food poisoning. What is aimed at, that is a high standard of food hygiene, is desirable in itself whether or not it helps in reducing illness; and the campaign of the education of the consumers and future consumers is well worth while if it will lead to a reduction in some revolting practices of some of those who handle foodstuffs. At the same time, no one knows what proportion of the minor illnesses so many suffer from in the course of their lives is due to some degree of food poisoning, which poisoning might be reduced if all handlers of food can be educated to decent aesthetic standards.

In the draft of the new Food and Drugs Bill powers were to be given to the Minister to enable him to make orders extending registration to any type of food premises. It was expected that such orders would be made in respect of catering establishments. It seems, however, that although the Minister will have the necessary powers to make orders for compulsory registration, these will not be used. Instead reliance is to be placed on a code of practice which will specify standards. These, however, will not be compulsory. As they will apply to the whole country, it is unlikely that they will be of as high a standard as the codes accepted voluntarily by those in this district who have applied for and have been granted the food hygiene certificate. In 1950 byelaws with respect to the handling, wrapping and delivery of food came into operation in this district. They, of course, apply to all types of premises and although in general of a lower standard than those set out in the codes of practice, they apply to all premises and not merely to those who elect to accept the higher standards of the codes. But while there are these legal standards, standards which are lower than is desirable or in general practicable, standards, too, which are useful in the case of the chronic offender, little use is made of them as higher standards can be obtained by agreement. There is in this district no law or byelaw which prohibits dogs being taken into food shops. The practice is undesirable though, and most shopkeepers agreed in 1952 to exhibit near the entrance to the shops notices suggesting that dogs should not be taken in. From the first the mere exhibition of these notices must have had some effect. By reiteration of the message, the time will come when those who persist

in taking dogs into food shops will begin to feel their errors and this without the introduction of any legislation banning the entry of dogs. It is this continual series of messages about so many of the aspects which may have their effect on the cleanliness and wholesomeness of food on which reliance will probably have to be placed for the desirable standards to be reached. The food hygiene campaign in the district is at present essentially one of education of various groups of people in the basic principles of the clean handling of food, including in these groups many pupils at maintained and other schools. Mostly the pattern followed is of a talk to a series of film strips. These talks are proving so very popular that their scope has been broadened, and instead now of their being restricted to certain aspects of the hygiene of food, they are becoming talks on general health education.

PREVALENCE OF AND CONTROL OVER INFECTIOUS AND OTHER DISEASES

PREVALENCE OF INFECTIOUS DISEASES (other than Tuberculosis).

Disease	Und. 1 yr.	1–4 yrs.	5–9 yrs.	10–14 yrs.	15–19 yrs.	20–24 yrs.	25–34 yrs.	35–44 yrs.	45–54 yrs.	55–64 yrs.	65 & over	Total
Scarlet Fever	2	43	139	19	1	3	2	—	—	—	—	209
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	3	4	5	2	1	1	3	9	10	10	11	59
Dysentery	—	1	2	6	—	—	1	2	1	—	1	14
Erysipelas	—	—	—	—	—	2	—	6	4	4	4	20
Cerebrospinal Fever	—	1	1	—	—	—	—	—	1	—	—	3
Puerperal Pyrexia	—	—	—	—	—	4	11	1	—	—	—	16
Ophthalmia Neonatorum	3	—	—	—	—	—	—	—	—	—	—	3
Poliomyelitis, paralytic	—	1	3	—	—	—	—	—	—	—	—	4
Poliomyelitis, Non-paralytic	2	—	—	—	—	—	—	—	—	—	—	2
Encephalitis, Infective	—	—	—	—	—	—	—	—	—	—	—	—
Measles	1	23	12	2	2	1	—	—	—	—	—	41
Whooping Cough	23	87	96	5	—	—	—	—	—	—	—	211
Paratyphoid Fever	—	—	—	2	—	—	—	—	—	—	—	2
Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—
Food Poisoning	—	4	4	7	—	1	9	6	—	4	2	37
Malaria	—	—	—	—	—	—	—	—	—	—	—	—

CONTROL OF INFECTIOUS DISEASES

Notification

The first step in the control of any infection is to obtain a knowledge of the incidence and, more especially, to learn of the early cases. This is done by notification.

In 1889, a number of communicable diseases was set out in the Infectious Diseases (Notification) Act, which was adoptive, that is, it was not of general application, but could be operative in any district at the election of the local authority. Ten years later the Act became generally applicable throughout the country, though London had its own Acts. In the consolidating Public Health Act, 1936, some small amendments were made to the list which now includes smallpox, cholera, diphtheria, membranous croup, erysipelas, scarlet fever, typhus, typhoid, enteric and relapsing fevers. These are the " notifiable diseases."

A local authority can, with the sanction of the Minister, add to the list of diseases which are notifiable. In this way, pemphigus of the newborn has been made notifiable in this district.

The Minister of Health is empowered to take steps to control the spread of various infections. Under these he has made regulations which call for the notification of the following conditions:—plague, acute poliomyelitis, acute encephalitis, meningococcal infection, tuberculosis, puerperal pyrexia, ophthalmia neonatorum, malaria, dysentery, acute primary pneumonia, acute influenzal pneumonia, measles and whooping cough. Puerperal pyrexia is any febrile condition occurring in a woman when a temperature of 100·4°F. or more has occurred within 14 days after childbirth or miscarriage. Ophthalmia neonatorum is defined as a purulent discharge from the eye of an infant commencing within 21 days of birth. The most recent of the regulations are the Public Health (Infectious Diseases) Regulations of 1953.

Food poisoning is notifiable to the Medical Officer of Health under the provisions of the Food and Drugs Act, 1938.

Under the Leprosy Regulations, 1951, a medical practitioner must notify the Chief Medical Officer of the Ministry of Health of any case of leprosy he is attending.

In general, notification is required by the medical attendant and by the head of the household. In practice it is most exceptional for the parent to send in a notification. The medical practitioner is required to notify forthwith on becoming aware that his patient is suffering from the notifiable condition. This is necessary not so much in the interests of his patient, because so often no action by the local authority as regards the patient might be necessary, but so that other steps might be taken to limit the spread of infection.

Since 1948, when the administration of the isolation hospitals passed from the local authorities to the Regional Hospital Boards, there has been a fall in the standard of notification. That there is delay in the notification of a patient admitted to the local isolation hospital is no more serious than it was before, as the fact that there was such an infectious patient is soon learned of from the hospital. But to-day, a smaller proportion of those suffering from scarlet fever is removed to hospital which, of course, means that a larger proportion is being nursed at home so that even with the same standard of notification a bigger proportion of patients is not learned of as early as might be. But apart from this, it seems there is more slackness in notification, more cases being learned of from the returns of the Head Teachers of children absent from school because of some infection. In some of these cases it would seem that the case has not been notified for the very good reason that it had not been decided that a suspicious case was, in fact, a true case of the infection, though because of the possibility, precautionary measures were advised; but in numbers of cases there seemed to have been no good reason for the notification not having been sent in. In these cases of course, the delay in the Health Department's knowing of the case prevents the taking of those precautionary measures that might be available to prevent further spread at the time when they might be most effective.

The Medical Officer of Health is required to send each week to the Registrar-General a return of infectious and other notifiable diseases. A duplicate copy is also sent to the County Medical Officer. When a patient living in one district is recognised while he is in another district to be suffering from a notifiable disease, there is sometimes the risk of duplicate notifications. This will occur not so often when the patient is temporarily staying in that other district as when he is attending a hospital in that other district, especially when attending as an out-patient. Sometimes the complication arises when he is an in-patient, more particularly when the infection which is notified has almost certainly been contracted before the patient was admitted to hospital. Another way in which notification figures might be an inaccurate indication of the incidence of a disease is in the case of such long standing diseases as tuberculosis. A patient who has been notified in one district moves to another where he comes under the care of another doctor; that doctor

rightly notifies the disease to the Medical Officer of Health of the new district. If that notification appears in the returns to the Registrar-General, his figures of notifications give a false indication of the number of new cases learned of during the year. Yet another complication occurs more especially in those districts near London because of the varying procedures to be followed in regard to diseases diagnosed at hospitals, some of them being classed to the districts from which the patients were admitted, others being classed to the districts in London in which the hospitals are situated. Although, then, the practice of notification is governed by Section 144 of the Public Health Act, which reads: " When an inmate of any building used for human habitation not being a hospital in which persons suffering from an infectious disease are received is suffering from a notifiable disease . . . every medical practitioner attending on or called in to visit the patient shall, as soon as he becomes aware that the patient is suffering from a notifiable disease send to the Medical Officer of Health of the district in which the building is situate a certificate stating the name of the patient, the situation of the building and the disease from which in the opinion of that medical practitioner the patient is suffering," to prevent the inclusion of the same case in the returns from more than one district a circular from the Registrar-General's Office G.R.O. Circular (M.O.H.) No. 1/1955 sets out the following requirements:—

(1) Subject to the exceptions set out in the following sub-paragraphs, notifications are required to be made to the Medical Officer of Health of the district where the patient is when the notifiable disease is diagnosed. The notification should be counted in the return for that district whether or not the patient is normally resident there. Particulars passed for information to the Medical Officer of Health of the district of normal residence should not be counted as notifications in the receiving district.

(2) Tuberculosis notifications are required to be made to the Medical Officer of Health of the district in which the patient " is living at the time." In general, this will be the district in which the patient is normally resident. The regulations provide that if the patient normally resides in a place other than that in which he is living when the disease is diagnosed, full particulars must be passed to the Medical Officer of Health for the former area. The notification should, however, be counted for the purposes of weekly and quarterly returns only in the area where the patient " is living at the time." Notifications " transferred " from one area to another on removal of the patient's normal residence should not be counted in the weekly and quarterly returns; the returns relate only to new cases notified. In the case of patients where the disease is diagnosed in hospital, notifications will usually be sent to the Medical Officer of Health of the area in which the patient normally lives. In the case of certain long-stay patients (such as many patients in mental hospitals) the hospital will be regarded as the patient's residence, and the notification should be sent to the Medical Officer of Health for the area in which the hospital is situated.

(3) In London Administrative County, notification of certain diseases diagnosed in hospital is required to be made to the Medical Officer of Health of the district from which the patient was admitted and should be counted in the returns of that district. The diseases concerned are:—Smallpox, cholera, diphtheria, membranous croup, erysipelas, scarlatina or scarlet fever, typhus, typhoid, enteric fever, relapsing fever, plague, measles, whooping cough.

Cases of other diseases diagnosed in hospital in London should be notified to the Medical Officer of Health of the district in which the hospital is situated, as is required by paragraph 1 above and should be counted in the returns for that district.

Enquiries

Following receipt of the notification, a visit is made to the home. Up to recent years, this was carried out by the sanitary inspector, because so many of the infections were considered to have their origin in some defect in the drainage or in the structure or ventilation of the house. To-day, with an appreciation of the individual as the source of infection, in most cases the visit is made by the health visitor. It is felt, too, that she might be the more suitable person to give advice about isolation and concurrent disinfection, which is considered to-day to be in most cases of more importance than terminal disinfection. Nevertheless, in certain conditions, such as food poisoning or the enteric or the dysenteric infections, or smallpox, the sanitary inspector visits. The enquiries are directed to two ends. The first is to determine, if possible, the source of the infection, with the object of taking whatever steps might be practicable to avoid others being infected from that source. It is for this reason that enquiries are made as to the source of the water or milk, or about the school or other buildings, at which the child has been. The second line of enquiry is to enable such steps to be taken as will minimise the spread of infection by the infected person. It is for this reason questions are asked about his place of occupation and lists obtained of the contacts and their places of work.

Aid to Diagnosis

The earlier the diagnosis, the greater the likelihood that preventive measures will limit the spread of infection. In some diseases, the laboratory is of help. (See Laboratory Service, page 44.)

Where a patient is suffering from some clinical condition which is suspected as being infectious, and in which the help of the laboratory is sought, it is usually advisable, pending the confirmatory diagnosis, for the same precautionary steps to be taken as if the patient were known to be suffering from the infectious condition.

The other assistance a practitioner can obtain in the making of a diagnosis is having a second opinion. Because of his training and because, too, he was so often associated with an isolation hospital, the Medical Officer of Health usually had more experience in infectious diseases than his colleagues in general practice. It was quite usual then for him to see cases about which the general practitioner was in doubt.

Since 1948, the Medical Officer of Health has not been any more closely associated with infectious cases than the medical practitioners, who now obtain the second opinion from the medical superintendent of the isolation hospital. To obtain a consultant's opinion in doubtful cases of smallpox or typhus fever, advantage is taken of the arrangements made by the Ministry of Health.

Isolation

Whether the isolation of a patient suffering from a communicable disease is necessary depends on the usual mode of spread of the complaint. The stringency of the isolation is partly dependent on the severity of the disease; its value is largely determined by the infectiousness of the patient before the nature of the disease is first recognised.

Isolation hospitals were established as places to which infectious patients might be admitted with the object of preventing the spread of infection to others. The diseases from which those who were accepted were suffering were scarlet fever, diphtheria and enteric fever. In this object, isolation hospitals failed largely because of the infectiousness of the patient before the disease is diagnosed, so that secondary infection would already have occurred. Nevertheless, isolation hospitals have continued to be erected and have continued to be used, but to-day's conception of their purpose is that they are institutions to which are admitted patients suffering from conditions needing hospital treatment, but who, because of their infectiousness, cannot be admitted to the ordinary ward of a general hospital. At the same time the range of usefulness of the hospital has been widened, and most of those suffering from communicable conditions who need to be treated in hospital are now admitted to the isolation hospitals. Not all those suffering from the communicable diseases, then, have to be admitted to hospital. It is not usual to admit those suffering from the commoner non-notifiable children's complaints, such as mumps, chickenpox and german measles. It would not be practicable, nor is it necessary, to admit all those suffering from measles and whooping cough, though it is most desirable that those suffering from these complaints who are very young or are badly housed, or are suffering from the more serious of the complications, should be admitted. Diphtheria and enteric fever are two diseases which need skilled nursing, and all sufferers should be treated in hospital. Although infection is considered to have only rarely been spread by actual cases of poliomyelitis and cerebro-spinal fever, sufferers from these diseases are treated more often in isolation than in general hospitals. Particularly during an epidemic of influenza, those suffering from the complications of this complaint are if possible admitted to hospital. With the very mild clinical type prevailing to-day, it is unnecessary for many of those suffering from scarlet fever to be admitted to hospital. Although the proportion of those suffering from scarlet fever who are admitted to hospital is to-day less than it was before 1948, there are to-day many beds which could be better used if parents and medical practitioners would realise that not only is it unnecessary for many of the children to be removed to hospital, but that there are actual disadvantages in this being done, because, having to be admitted to a general ward, as so many of

them are, they are exposed to more dangerous strains of the organisms than that which caused their complaint. Most of the patients admitted to an isolation hospital are accepted at the Edgware Isolation Hospital, Goldsmith Avenue, Hendon (Medical Superintendent, Dr. Livingstone, Tel. No. Colindale 8182). For those patients who cannot be accepted here, but who are considered to be in need of admission to hospital, application for their admission elsewhere is made to the Emergency Bed Service.

Smallpox is one of the notifiable diseases which is treated in a hospital quite apart from those taking in other infections. Before such patients are removed to hospital, it is now customary for the diagnosis to be confirmed by a consultant attached to one of the larger isolation hospitals. A panel of doctors with special experience in smallpox has been set up by the Ministry of Health. The procedure for summoning the consultant is set out in a Ministry's circular letter:—" When a general practitioner or a member of a hospital staff raises the possibility of the diagnosis of smallpox, he should in every such case first call in the Medical Officer of Health of the district concerned. It will be for that Medical Officer of Health to decide whether he requires a further opinion. It is important to bear in mind that the fee for these consultations will be paid by the Ministry only when the further opinion is called for by the Medical Officer of Health."

The consultant for the North-West Metropolitan Regional Hospital Board area for North of the Thames and the adjoining Home Counties is Dr. W. Gunn, Royal Free Hospital, Hampstead (PRImrose 7671, Bartram Lodge, Fleet Road, N.W.3, PRImrose 2212).

Dr. G. W. Ronaldson, Physician Superintendent of the Eastern Hospital, Hackney (AMHurst 1193), is the consultant for suspected cases of typhus fever.

Since 1950 cases of smallpox from any part of Middlesex have been admitted to the Joyce Green Hospital, Dartford, Kent (Dr. Mitman, (DARtford 3231). Although actual removal of smallpox patients is made by the ambulances of the London County Council, the approach for the removal of a patient is made to the Middlesex County Council Ambulance Service.

There are special institutions for the treatment of those suffering from tuberculosis, many of the pulmonary cases being admitted to sanatoria, while those suffering from the non-pulmonary disease who are mostly children are, in general, admitted to separate institutions. The arrangements for the admission to hospital of those suffering from tuberculosis are made by the physicians at the chest clinics.

The schoolchild who has suffered from scarlet fever is usually excluded from school for seven days after his discharge from hospital or from home isolation. This period is extended should he develop a cold in the head, a discharge from the nose or ear, a sore throat or septic spots. The period of exclusion of those who have suffered from diphtheria is determined usually by the child's clinical condition; after recovery, it is usual to obtain negative nose and throat swabs. A sufferer from measles is excluded for 14 days from the appearance of the rash; from german measles for seven days from the appearance of the rash; from

whooping cough for 28 days from the beginning of the characteristic cough; from mumps for 14 days from the onset of the disease, or seven days from the subsidence of the swelling; and from chickenpox for 14 days from the date of the appearance of the rash.

Exclusion of Contacts

Because the contact of a sufferer from an infectious disease might be a carrier either contact or incubationary, it was at one time customary to insist on the exclusion of contacts from work. The stringency of this practice has been greatly relaxed so that to-day most authorities exclude only those contacts whose work brings them into association with those of susceptible ages or which renders them possible instruments of widespread outbreaks through their handling of milk or some other medium. Even where exclusion is required, it is imposed only in the case of the more severe of the infectious diseases. In regard to children attending day schools the practice in this district is that recommended in the addendum issued in 1942 to the Memorandum on the Closure of and Exclusion from Schools which had at an earlier date been issued by the Ministry of Health and the Board of Education. It is now only exceptionally that adult contacts are excluded from their work. There are two main classes of workers who may be required to abstain from their ordinary work. The one is of those persons whose work brings them into close contact with those such as young children who are especially susceptible to attack, or hospital nurses who might cause infection in a ward. The other group is of those whose work brings them into contact with such foods as milk which, if infected, might result in widespread infection. Even in the case of persons so employed, it is not always necessary that they should stay away from work, but only from that work at which there is the risk of spread. Many employers are able to put the contact employees temporarily on to some alternative work where there is no greater risk of the spread of infection than in the case of ordinary members of the public. If a person has to remain away from work with a view to reducing the risk of spread of infection, he is entitled to draw sickness benefit at the rate he would receive were he ill. This payment can be made, however, only if the Medical Officer of Health for the district can issue a certificate that the exclusion of the contact is necessary with a view to reducing the risk of spread of infection. The Ministry of Health Circular 115/48 reads:—

> " As Medical Officers of Health are aware, it is only exceptionally that it is necessary to require a contact or carrier of infectious disease to stay away from work, and then only as regards the more serious infections. But a Medical Officer of Health, in his responsibility for preventive action, may on occasion consider it necessary, where there is special risk, that such a person should absent himself from his employment for a time; and it is in such circumstances that the right to draw sickness benefit will arise. Benefit will only be paid on the strength of a certificate by a Medical Officer of Health that the person concerned is under medical observation by reason of being a carrier of infectious disease, or of having been in contact with a case of infectious disease (as the case may be), in circumstances

which made it advisable to exclude him from work. The Medical Officer of Health should accordingly be prepared to issue such a certificate where he thinks it proper to do so in order that the person concerned may send it to the local office of the Ministry of National Insurance in support of his claim for sickness benefit. The certificate should be given in writing, preferably on official notepaper."

It is only exceptionally that exclusion of an adult is necessary. The only certificate issued under these arrangements in respect of one in this district was to a student nurse at a hospital. She was a contact of a case of german measles. She had not had the disease, so she was excluded for the period she would have been infective had she been going to contract the illness.

Because of the special features in the spread of poliomyelitis, more stringent precautions are advised for the contacts of those suffering from this complaint than from others. (See page 127.)

The practice of excluding from school child contacts of infection has been markedly relaxed in recent years. Not only is exclusion required of the contacts of a much smaller number of diseases, but the period of exclusion asked for at all is shorter. It was once usual where exclusion was thought to be necessary, to require the child to remain away from school for a few days longer than the longest limit of the period of incubation of that disease. To-day, on the other hand, the time is a day or two longer than the common period of incubation. Another relaxation is that when a patient is nursed at home, the period of exclusion of the contact is for a period from the time the patient is satisfactorily isolated, whereas before that the period ran from the date the patient was declared to be free from infection. It is not felt that these relaxations have resulted in infections having spread any more than they would have under the more rigid restrictions previously imposed.

The period of exclusion of day school contacts of those suffering from scarlet fever is seven days after the removal of the patient to hospital or from the beginning of his isolation at home. Contacts of diphtheria are excluded for seven days after the removal of the patient to hospital, or the beginning of his isolation at home. If there are any suspicious signs, the child is excluded further until pronounced by a medical practitioner to be free from infection. Infant contacts of measles who have not had the disease are excluded for 14 days from the appearance of the rash in the last case in the house; other contacts are allowed to attend school. Infant contacts of whooping cough who have not had the disease are excluded for 21 days from the onset of the disease in the last case in the house. It is not now the practice to exclude for any time contacts of those suffering from a number of infections, *e.g.* german measles, mumps or chickenpox.

The County Council has recently revised their regulations as to the exclusion of contacts of infectious diseases which are a guide to head teachers where no intimation has been received from the Medical Officer of Health, or no certificate has been received from a private medical practitioner. Under these regulations, contacts of those suffering from enteric fever, erysipelas, german measles, dysentery, whooping cough, chickenpox, mumps or cerebro-spinal fever, need not be excluded; nor

need the contact of a patient suffering from measles, unless that contact suffers from a cold, chill, or red eyes. It is quite probable that it will ultimately be found that even further relaxation can be permitted in the rules as to exclusion of contacts of infection without this practice being found to result in the spread of infection.

Under the Public Health (Infectious Diseases) Regulations, 1927, persons suffering from enteric fever or dysentery could be prohibited from continuing in an occupation connected with the preparation or the handling of food. The 1927 Regulations were superseded by those of 1953 under which these provisions apply now to typhoid fever, paratyphoid fever and other salmonella infections, dysentery and staphylococcal infections likely to cause food poisoning; and not only to those suffering from these conditions but also to carriers. Under the new powers such a person can not only be prevented from continuing to work in the occupation, but can be prevented from entering such occupation.

Disinfection

The surroundings of the infectious person may be contaminated. The extent to which this will take place depends very largely on the way in which the organisms leave the body of the patient. In most of the infections, the organisms leave the naso-pharynx, passing out to the air. Many of the heavier particles will fall immediately and so will infect the floor coverings, the bed clothes or the patient's clothing and hands. Some of the smaller particles remain buoyed in the air, being carried long distances, but ultimately falling on horizontal surfaces such as floors or shelves, or infecting curtains. The air then probably does not remain infective for any very long period. Naso-pharyngeal infections might also be transmitted by the soiling of the patients' hands or fingers, with the subsequent contamination of articles including furniture, books or door handles. Hands are also liable to contamination with the organisms which cause gastro-intestinal complaints originating in the infected dejecta. The procedure to be followed, then, to effect sterilisation of the premises and their contents will depend partly on the degree to which these are liable to contamination. Another factor is the viability of the organism away from the human host. Some organisms are so very delicate that it is only with the greatest difficulty that they can be kept alive away from the human host. In the case of the infections due to these organisms, there is little point in carrying out any practice of which the object is to destroy the organisms. Yet another factor to be taken into account is the susceptibility to infection of those who might be exposed to infection in the premises. While a room in which there had been a case of scarlet fever might not need to receive any special treatment if it is to be occupied after the child's recovery only by the mother who had nursed the child throughout his illness, the position would be very different if it was to be occupied by an expectant mother nearing the time of her confinement. With the background of these various considerations, rules of practice have been evolved upon which is based the Council's policy in regard to the practice of disinfection following the occurrence of a case of infectious disease. Departure from the practice might be necessary in special circumstances. As these when required are neces-

sary primarily on medical grounds, any application for a modification of the general practice is usually supported by a medical certificate.

The Council decided that except is cases of smallpox and typhoid fever, and in any exceptional cases approved by the Medical Officer of Health, where disinfection cannot be carried out in the home, terminal fumigation and removal of bedding and other articles for stoving after the commoner notifiable infections shall be abandoned, the householder being instructed as to the precautionary measures to be taken. Where householders still requested that fumigation or stoving be carried out, a charge was to be made. It was later decided that terminal fumigation and stoving of articles should be carried out free of cost in the case of open tuberculosis and of scabies. Experience during the war showed that the risk of transmission of infection in scabies by clothing is very much less than it had been thought to be. Although, then, when the incidence of scabies rose so markedly in the earlier of the war years, arrangements were made for the stoving of the clothing, the practice was later modified, as ordinary laundering of under garments was considered sufficient in most cases. In regard to the treatment of premises which have been occupied by those suffering from open tuberculosis, it is felt that in this even more than in the other infections, it is essential that the premises should be thoroughly cleansed beforehand, otherwise the organisms are too likely to be protected against the action of the disinfectant. The practice has been adopted, then, through the kindness of the staff of the chest clinics, of a report being obtained from them that the other steps have been taken and the premises cleansed. On receipt of this report, but not until then, arrangements are made for the treatment of the rooms and their contents.

Many trials have been made of various means by which the air of rooms could be treated so as to reduce the bacterial content and so reduce the risk of spread of infection to the occupants of the rooms. Ultra violet rays from lamps have been used. The Annual Report of the Chief Medical Officer of the Ministry of Health for 1953 refers to the use of aerosols which are bactericidal mists. In a controlled experiment in an office, some of the rooms were treated with the vapour of heavy resorcinol. There was no detectable effect on the bacterial content of the air, on the number of colds recorded by the staff, or on the number of days of absence by members of the staff from sickness. The conclusion reached was that " So far no method of treatment of the air of closed rooms by disinfectants in tolerable concentrations has been proved to have any beneficial effect on the reduction of respiratory disease."

For most of the period since 1934 the steam disinfection of articles needing treatment has been carried out in the Washington Lyon Steam Disinfector at what was the Honeypot Lane Isolation Hospital. On the handing over of the hospital to the County Council, who converted it into a residential nursery, the volume of work fell. The plant was run in conjunction with the laundry which had been kept busy dealing more especially with articles from the two isolation hospitals, but also treating articles from such places as clinics. The volume of work dealt with at the laundry also fell markedly on the closing of the hospital, and left very little to be treated from the Harrow Council premises. The laundry

was maintained over the years although it was engaged mostly in dealing with articles from the County Council's residential nursery and other County Council premises. It was, however, being maintained at too high a cost so in 1953 the Council decided to close it. While the laundry was being used, steam was raised every day so that it was possible to treat any articles in the disinfecting plant without any delay. On the laundry's closing though, it was necessary to raise steam solely for the disinfecting plant which meant that each treatment was that much more costly. It was estimated that the cost reached 37s. for the first load and 15s. for each subsequent load.

At their March meeting, the Public Health Committee decided on the following revised charges for disinfection:

(1) Articles from households where there has been a case of infection and where disinfection should be carried out.	Free of cost.
Fumigation of rooms	Free of cost.
(2) Articles from households where disinfection is not considered necessary by the Public Health Department, but where the householder wishes this to be done.	20s. for the first load. 10s. for each subsequent load.
Fumigation of rooms	10s. 6d. per room.
(3) Articles from the Royal National Orthopaedic Hospital: where disinfection is necessary to limit the spread of infection.	Free of cost.
Articles other than those referred to in the previous paragraph.	
(*a*) subject to the understanding that the same shall be delivered to and collected from the disinfecting plant, and with no assurance as to immediate treatment.	7s. 6d. per load.
(*b*) for immediate treatment and subject to the understanding that the same shall be delivered to, and collected from, the disinfecting plant.	37s. for the first load. 15s. for each subsequent load.
(4) Stoving of articles for despatch to certain other countries.	2s. 6d. per parcel.

The last item relates to a practice which has grown since the war of persons sending parcels of clothing to their relatives or friends in countries on the continent which require a certificate that the articles have been disinfected. The contents of these small parcels are treated when other articles are being passed through the disinfector.

In spite of the fact that organisms planted in books have been recovered some weeks later, it is very questionable whether infection has been spread by means of books. Nevertheless it is felt desirable to reduce the risk of conveyance of infection by a book which has been recently used by a person suffering from an infectious condition brought about by an organism which can readily survive away from the human host. It is the practice then to collect for fumigation in the bacterol container those books from households in which there are persons who have been notified as suffering from such diseases as scarlet fever, diphtheria, tuberculosis, smallpox and typhoid fever. The books are collected and receipts given which the borrowers hand in at the libraries from which the books have been taken out. Books borrowed from any

of the County Council libraries are returned to the Kenton branch library. Those from private libraries are returned to the branches from which they were borrowed, or, by arrangement with the company concerned, to their principal local libraries.

When it was decided that the laundry should be closed, consideration was given to the question of whether arrangements might not be made with some other body or authority for the disinfection of articles from this district. Although enquiries showed that such arrangements could be made, possibly at a lower cost than that falling to the Council if it made its own arrangements, the Council decided that as a health authority it should be responsible for undertaking this work and not be dependent on others, an arrangement which might put them in a position of not always being able to disinfect goods without delay. There was, too, the other point that disinfection at the plant is only one part of the disinfection service and that although the extent to which fumigation at the home is carried out is now only small, there are the cases where it is most necessary that the work should be done. At the same time enquiries were made about whether in the event of the Council continuing to operate its disinfecting plant, any other authority would wish to have their goods done by it. None of the adjoining authorities wished to. Because the continued use of the existing plant would sterilise for other use a large plot of land, the question was gone into of erecting a new plant. There is no existing steam raising plant with which it could have been incorporated, nor did it seem that there would be one for many years. At their December meeting then the Public Health Committee agreed to the disinfector plant being installed within the curtilage of the mortuary at Peel Road, and to provision for the expenditure being made in the capital estimates for the financial year 1955/56.

Cleansing

Of Premises. Section 83 of the Public Health Act, 1936, empowers a local authority to deal with filthy or verminous premises by calling upon the owner or occupier to take such steps as may be necessary to cleanse the premises or render them free from vermin; in the event of the notice not being complied with the local authority may themselves undertake the work and recover the cost from the owner or occupier. During 1954 50 complaints were received about verminous premises. In one case Statutory Notice had to be served. In the remaining cases action was taken by the owner or occupier on advice given by the Sanitary Inspectors.

Of Articles. Section 84 of the Public Health Act, 1936, requires a local authority upon a certificate from the Medical Officer of Health or the Sanitary Inspector to cleanse or disinfect any article which is so filthy or verminous as to render its cleansing, purification or destruction necessary. In these cases the cleansing or destruction is carried out at the expense of the local authority. Articles of clothing or furniture from 6 properties were cleansed or destroyed during the year.

The treatment of furniture and household effects of families moving to new dwellings from properties dealt with by the Corporation under the Closing or Demolition Sections of the Housing Act is also under-

taken whenever it is found necessary. In these cases arrangements are made by the Housing Officer with a specialist firm, who collect all furniture except bedding that is to be moved to the new address; while in the removal van, all the articles are subjected to treatment, the furniture then being delivered at the new address. The bedding is collected as early as is convenient on the morning of the day of the move, and after being passed through the Corporation's plant at Honeypot Lane it is delivered ready for use to the new address later the same day. No treatments under these arrangements were carried out last year.

Occasionally from circumstances beyond the control of their owners articles of bedding are infested with moths and similar insects. In some instances householders are advised what action they may themselves take to deal with their problem, in others the articles are removed and dealt with by the local authority by passing them through the disinfecting plant. For this service a charge is made unless the householder is an old age pensioner or in receipt of public assistance.

Hydrogen cyanide has proved of great value in dealing with verminous premises and articles. The Hydrogen Cyanide (Fumigation) Act, 1937, was designed to regulate the fumigation of premises and articles with cyanide. The 1938 Regulations specified the procedure to be followed including the giving of notice by the operator to the local authority before starting the work.

Of Persons. It is also necessary for the local authority to take such steps as are necessary to free from vermin any person who makes application to them that he is in need of cleansing. If this is found to be necessary the cleansing must be undertaken at the expense of the local authority. In 1951 arrangements were made with the Royal Borough of Kensington by which they would deal at their Cleansing Station with any persons found in Harrow to be in need of cleansing. Whenever it is necessary to use the facilities at Kensington, the person requiring treatment is taken to the Cleansing Station in Corporation transport where he and his clothing are dealt with. One case was dealt with during 1954.

DIPHTHERIA

Incidence

Five persons suspected to be suffering from diphtheria were removed to hospital. In none of the cases was the diagnosis confirmed. The district has now been free from the disease for four consecutive years. There had been a number of years when very few cases had occurred, but it was not until 1948 that it was possible to record a year with no notifications. Since the end of 1947 there have been two cases only, one a nasal, the other a faucial infection.

It is common knowledge that throughout the country the incidence of and fatality from diphtheria have fallen markedly in recent years, a decline which has coincided with the increasing extent to which children have been immunised against diphtheria. Although in some districts facilities for protecting children have been available since the late nineteen twenties, it was not until the national campaign started during the war that the practice became general throughout the country. This was

followed by a dramatic fall in the incidence of the disease. While other factors such as a decline in the invasiveness of the organism might have played some part in this fall of incidence, it is generally accepted that the main factor is the extent to which the child population has been immunised.

Apart from the factor of immunisation though, the incidence of diphtheria in this district had been very light for many years. With the same incidence as the country as a whole this district might in each of the years of the nineteen-thirties have expected anything between 200 and 400 cases. Actually the highest number of cases notified was the 98 in 1937.

Immunisation

When the Harrow Council first agreed in 1934 to arrangements being made for children to be immunised against diphtheria, this was to be done by the general practitioners rather than by the usual arrangements by which children attended special immunisation sessions. When the national campaign started, facilities were offered to those mothers who brought their children to the infant welfare centres to have them treated there, while for a short time school children were treated at some of the schools. All children attending the day nurseries are required to be immunised against diphtheria. During the last few years the numbers of those who have been treated at the clinics have exceeded those treated by the general medical practitioners.

Under the provisions of the National Health Service Act, the responsibility for offering facilities to the public of the district to be immunised against diphtheria has passed from the District Council to the County Council. Under these arrangements the general medical practitioners play a big part in the diphtheria immunisation campaign. It was first understood that this would be a service provided by the doctor for his patient independent of his contract of service under the Act. Only those therefore who contracted with the County Council to undertake the work were to take part in the scheme. Later, though, it was ruled that this service was part of the ordinary service to be provided by the doctor for his patient. The County Council, however, pays 5s. for each record of immunisation carried out sent to the local health office. It is quite likely, though, that many children have been immunised about whom the health office has received no records, and that a higher proportion of children have been protected than the records indicate. This is certainly the view of the health visitors. General practitioners can obtain from the public health office, or from the Central Laboratory, Colindale, the necessary antigen. For the immunising of children A.P.T. is the accepted antigen, 0·5 c.c. being given, followed by another dose in a month's time. It is now recommended that reinforcing doses should be given when a child attains the age of two, and again at three, and then again just before he is admitted to school. For those who are susceptible, and they will include most adults who need to be treated, T.A.F. is recommended as an antigen less likely to cause reactions. This is supplied free of cost to the doctor wishing to use it.

Immunisation of the infant is now advocated at six to nine months, so that the full effect of the inoculation, which takes some three months

to develop, will come into play by the time the infant is losing his natural immunity and is reaching the stage when he is more likely to come into contact with infection.

Many children are treated by general practitioners at the same time against diphtheria and against pertussis. The antigen in this case is not provided free of cost. Large numbers of children who attend the infant welfare clinic receive their immunising doses there. In most cases the mothers are anxious for the children to be protected at the same time against pertussis so in these cases the combined preparation is used. Most children attending the day nurseries have already been protected before admission. Facilities are available though for immunising those who have not been treated.

During the year 2,387 children were treated for the first time, 1,148 by general medical practitioners, and 1,239 at infant welfare centres. The number of births notified during the year was 2,747. It is estimated that at the end of the year 64 per cent. of children under five years were protected and 87 per cent. of children aged 5 to 15 years.

SCARLET FEVER

Incidence

Scarlet fever is a disease which is always present to some extent in a district of any size. Typically it is more common in the autumn. It attacks children more than adults. Twenty per cent. of the population suffers from this illness some time during their lives. Few suffer from more than one attack, though the proportion of second attacks of scarlet fever is higher than for instance of measles. In some years the disease is very much more prevalent than others, though the added prevalence is not necessarily associated with increased virulence. Local rates of incidence since 1934 have ranged from 1·06 to 4·7 per thousand population, the greatest number of cases being the 707 of the year 1943.

The incidence locally and throughout the county in 1954 was light. The 209 local cases were an incidence rate of 0·95 per thousand population compared with the national rate of 0·98.

The infection was slightly more prevalent in the first quarter of the year when there was an average of six cases per week; in the next quarter the weekly incidence rate was 3·5; there was a slight fall to 3·0 in the third quarter and back to 3·5 in the last quarter. There was no autumnal rise. The period of lightest incidence was from 21st August to 25th September, when only five cases were notified.

Deaths

There have been no deaths from scarlet fever in this district for many years. For the country as a whole the case mortality is a fraction of one per cent. This is in marked contrast to the position at the end of the last century when scarlet fever had a case mortality of sixteen per cent. In parts of Europe just before the war the infection was of this severe nature. There have been localised outbreaks of virulent infection since the general type became mild. There can then be no feeling of

assurance that the organism will not again revert to its virulent strain and lead to a recurrence of scarlet fever of a severe type.

Place of Treatment

Although very many sufferers were nursed at home, it was felt up to 1948 when the isolation hospitals were maintained by the local authority that many children were being admitted to hospital who could have safely and adequately been nursed at home. In some of these cases there would have been the added advantage in doing so that the child would not have run the risk of being exposed to infection by an organism of a different strain. So few are the secondary cases in households where a patient is nursed at home which would not have occurred had he been removed to hospital at the time the disease was recognised that it is apparent that with the present strain of organism there is little need to remove patients to hospital with a view to reducing the risk of spread of infection. Still less is it necessary to admit the child to hospital with a view to his receiving skilled medical or nursing attention. Since 1948 when the arrangements for the administration of the hospitals changed there has been a fall in the proportion of patients admitted. Last year only 36 out of the 212 cases notified were admitted to hospital. In almost every case this was to the Hendon Isolation Hospital.

Secondary Infection

There were ten cases of secondary infection occurring in six households, one secondary case occurring in each of two houses, two in each of four. In all but two of these cases the primary and the secondary case were notified together so that presumably removal to hospital of the primary case would not have saved the other patient contracting the infection.

Return Cases

Sometimes the return home of a patient from hospital to which he has been admitted suffering from scarlet fever is followed within a few days by the onset of illness in another member of the family. When this occurs it offsets to some extent the advantage there is in removing a patient to hospital to limit the spread of infection. There were no such cases this year.

Schools and Infection

There were a number of cases in which the pupils at schools seemed to be unduly heavily attacked with scarlet fever and in which school attendance might have played some part in the spread of infection. In the spring term cases of scarlet fever smouldered amongst the pupils of the infants' department of Priestmead school. Over a period of 11 weeks there were 11 cases. No one class though was especially attacked. Over the same period there were three cases amongst those attending the junior department. Another suggestive series was six cases in six weeks at St. Joseph's school in the summer term; and yet another, five cases over five weeks at the Stanmore school in the autumn term. In the spring term, too, there was a marked incidence of scarlet fever amongst the pupils at one of the private schools in the district.

SMALLPOX

It is only exceptionally these days that there are any patients in this country suffering from smallpox. The greatest risk of entry of the disease is when a person on a boat or an aeroplane coming to this country develops the infection; he might have passed on the disease to his contacts. In such cases, the contacts are listed, the health authorities of the areas to which they are proceeding are advised, and the contacts are visited up to the limit of the incubation period of the disease. Air transport has added to the risks of importation of this infection, and has considerally swollen the number of persons who have to be kept under observation. The Aircraft Regulations 1950 modified the arrangements by which information about possible contacts of smallpox arriving by air was passed on to local authorities in the same way as that about those arriving by boat.

There were no occasions in 1954 on which persons in the district were thought to have been contacts of those suffering from smallpox.

The National Health Service Act removed the compulsory element of the Vaccination Acts. Instead of the practice being obligatory, except to those exempted under the conscientious objection clauses, it is now left to the parents to decide about having their children vaccinated. This they can have done by their own doctors. As in the case of diphtheria the local health authority pays 5s. for a report submitted by a doctor that he has vaccinated or revaccinated anyone. Encouragement to mothers to have their children vaccinated against smallpox is given by the doctors themselves and by the health visitors, clinic medical officers and other members of the local health authority's staff. In spite of this only about one child in three was being vaccinated. In 1952 the County Council obtained the approval of the Ministry of Health for arrangements being made for infants who were attending the infant welfare centres to be vaccinated against smallpox just as they are immunised against diphtheria.

In this district in 1954, 1,808 persons were vaccinated against smallpox for the first time. Of these 1,387 were under one year of age and 144 over one but under two years of age. 654 persons were revaccinated. 2,747 babies were born in that year. The number of vaccinations of those under one year of age was, therefore 50·5 per cent. of the births. This figure compares with that of 34·5 for the country as a whole in 1954, a figure which was an improvement on those of the preceding years. Of those under one year of age who were vaccinated, 462 were treated at the local infant welfare centre sessions.

While most emphasis needs to be placed on the desirability of each member of the population being vaccinated, because there is no assurance that in the case of any particular person the degree of protection will not wane and fall to a dangerously low level, it is advisable that all should be revaccinated. This is especially desirable to reduce the risk of the spread of infection, a risk which occurs because of the atypical nature that an attack of smallpox might take in a person who has been vaccinated but whose protection has waned, but has not completely disappeared; the atypical attack may not be recognised for what it is. In the meantime the illness from which the patient is suffering may be

sufficiently slight that he goes about his ordinary business, so spreading the disease. It would be helpful if the practice could be cultivated of a child being revaccinated as routine on his entry to school and again just before he leaves.

Patients suffering from smallpox are admitted to special hospitals. For many years those from Middlesex have been admitted to one of the London County Hospital special hospitals. Under to-day's arrangements patients are admitted to Joyce Green Hospital (Superintendent Dr. Mitman, Dartford 3231). The Ministry of Health has set up up a panel of consultants who will visit patients suspected to be suffering from smallpox. The one nearest to this district is Dr. W. Gunn, Royal Free Hospital, Hampstead, Primrose 7671. The patients are removed by an ambulance of the London County Council. The service of the ambulance is obtained by approach being made to the Middlesex County Council Ambulance Service.

MALARIA

Although at one time endemic in large areas in this country, to-day malaria is endemic only in limited localities. Most of the cases notified are those who are suffering from a relapse of an infection acquired abroad. The two cases notified this year are such instances.

ENTERIC FEVER

Each year a small number of cases of enteric infection amongst those living in this district are received. Very rarely the disease is typhoid fever; the vast majority of the cases, though, are of paratyphoid fever, the organism nearly always being the para B type. Although clinically similar, though typically the paratyphoid infection is of a milder character than typhoid, epidemologically the diseases are very different in that typhoid fever infection is almost always associated at some stage with contamination of water, while paratyphoid infections are more commonly food borne.

In an attempt to discover whether there is any hidden infection in the district, in 1951 Moore's swabs were put down at points in the sewer system. It had been intended if typhoid organisms had been found on any of the swabs, that other swabs would have been put down further up the sewers with a view to tracing back as far as possible to the source of infection. No results were obtained though, because organisms might be recovered on the swabs in the smaller sewers and yet not be found on those in the larger sewers to which these led.

Two patients were notified to be suffering from paratyphoid infection. They were two sisters who fell ill within a few days of each other. The laboratory work on the organisms which were recovered was carried out at the Colindale Laboratory. An enquiry into the distribution of organisms of the same phage type of which the laboratory had knowledge led to the discovery that two members of two families in districts adjoining this were infected with the same organism. Enquiries of the local cases pointed to the consumption of a preparation from a local bakery as the source of infection. Enquiries at the households of these other patients disclosed that those affected had consumed prepara-

tions made at the same bakery though in one case the foodstuffs had been purchased at a branch bakery at another establishment out of the district. About the same time the illness of another person not resident in the district seemed to be due to the same organism; as he had many meals out it is conceivable he contracted his infection from the same source. The bakery at which the foodstuffs had been made is one of a very high standard of hygiene at which there is very little handling of foodstuffs. Suspicion centred on the fillings used in some cakes. The Colindale Laboratory carried out very full investigations to try to determine the origin of the infection. The small numbers employed at the bakery and their very willing co-operation made enquiries easy. Nevertheless the blood and stools examination proved negative except in the case of a roundsman from whose stools an organism of food poisoning was recovered; he possibly had been infected by consuming foodstuffs prepared in the bakery. The laboratory examinations pointed to Chinese liquid egg probably being the origin of the organism. Different samples of this preparation were found to be heavily contaminated with food poisoning organisms though on no occasion was the paratyphoid bacillus recovered. This liquid egg preparation is apparently much favoured by bakers. When used in the manufacture of ingredients that are exposed to sufficiently high temperatures for a sufficiently long time, there is probably little risk in the use of this contaminated product. The position is different though when the preparation enters into the composition of material which is not at any stage exposed to heat. Another risk is while the actual ultimate product is heated and so made safe, the preparation itself might contaminate some of the equipment used in the bakery which in its turn can infect some other preparation which is not made safe by heating. Investigations at the bakery pointed to the need of education of food handlers. Although the bakery was up to date and conducted at a high standard, it was apparent that the operatives had not acquired the same insight into the fundamentals of food hygiene as had their opposite numbers engaged in dairies or in milk pasteurisng establishments.

It is usual each year to learn of some who have taken holidays abroad succumbing to typhoid infections. This year a local resident who was one of a party in a yacht sailing up the Rhine fell ill with typhoid fever. It seemed that a number of the party contracted the infection at a meal taken at one of the places they stopped at. Information was received of two other persons from this district who were members of parties some of whom contracted paratyphoid infection abroad, one in France, the other in Austria. The local residents escaped.

DYSENTERY

This is an infectious complaint manifested typically by gastro-intestinal symptoms which may follow infection by a variety of organisms. Those which cause such widespread infection in some parts abroad do not occur in this country except amongst those who contract their infection overseas. Some of the organisms present in this country can cause severe attacks; on the other hand, some of them cause so little disturbance that the infection is attributed merely to a gastro-intestinal

upset. Dysenteric infection is probably very widespread. Attack by one variety of organism is responsible for the very marked invasions of the populations of mental institutions. A different organism, however, is responsible for the infections which occur so frequently in children's hospital wards. How common the infection is amongst the general population is not known. If the dejecta of those suffering from alimentary disturbances were submitted more frequently to bacteriological examination, it is probable that it would be demonstrated that infection is very widespread. In the absence of full use being made of the services of the laboratory it is probable that the number of infections bears little relation to the actual number of persons infected. Probably in most years the numbers of those throughout the country who are notified are mostly the result of infection of those in institutions. Even if all cases in which a doctor were summoned were correctly diagnosed and notified, it is probable that these figures would still reflect only a fraction of those who have suffered infection, as in so very many the severity of illness would be too slight for the doctor to be summoned. However mild, though, the attack might be, it is important that all cases should be recognised because of their infectiousness, the unsuspected patient infecting in most cases only one member of the same household; if she handles food, though, she might infect very many, all of whom might not escape with a similar mild attack.

There is a marked variation in the numbers of cases notified from year to year. Single case were notified in two of the years from 1934, 28 in another year. The largest number of notifications received in any one year was 45, but these included 26 cases at a residential school at which there was an outbreak.

In this last year although 23 notifications were received, the corrected number was 16. Of these 5 were pupils at a local residential school. In 8 of the 9 instances in which the organism was recovered this was Sh. Sonnei. In the other case the infection was amoebic dysentery; this case was of interest because neither the patient nor any member of his family had ever been abroad. In two instances more than one case occurred in the same family.

FOOD POISONING

In spite of the attention given these days to the subject of food hygiene, food poisoning seems to be just as prevalent throughout the country. In this last year 37 cases were notified in this district. In some of these there were groupings of cases. It is only in such cases that there can be any real hope of determining the cause of the trouble. In September seven members of one household succumbed to an illness which was thought to be the result of consuming a stew. The organism Cl. Welchii was recovered from the stew and from the stools of some of the sufferers. Two children of one family fell ill shortly after the return from a holiday abroad; staphylococci were recovered from the stools. Three members of a household fell ill within a few hours of eating minced beef; the meat was found to be contaminated and organisms were recovered from the stools, this probably being a case of staphylococcal infection. In November and early December a number of persons in

the same neighbourhood were notified as suffering from food poisoning. In five of these 12 cases more than one member of the family was infected, the symptoms being abdominal pain, diarrhoea and vomiting; enquiries did not point to any special food being the cause of the trouble. In another household three members fell ill simultaneously with a short illness which followed the consumption of grilled steak.

One case proved fatal, this being an adult of 37 who suffered from gastro-enteritis due to S. typhimurium. He had the same meals as the rest of the family, but none of the others suffered from any illness.

Of the outbreaks (which are instances in which there was more than one case) in which the organisms were recovered, this was S. typhimurium in one instance (two cases), Cl. Welchii in one (six cases) and staphylococci in one (three cases). In six of the single cases where the organism was recovered, this was S. typhimurium.

An interesting case where none of the sufferers were notified to be suffering from food poisoning was that in which the history strongly pointed to cheese as being the cause of the trouble. Laboratory examination of the cheese showed it to be heavily contaminated with an organism which produced a toxin which causes symptoms of food poisoning.

In the country as a whole so far from the numbers of cases falling, those in 1953 were nearly half as big again as those of 1952. Most of the increase was of salmonella infections. There was evidence that the increase was due to better reporting but "illness due to ingestion of contaminated food was at least as common in 1953 as in previous years." As was the case in previous years, over 60 per cent. of all outbreaks where the food consumed was known were associated with meat; about 80 per cent. of these were associated with processed, made up, or reheated meat. Cold meat, meat pies and pasties figured most prominently, followed in descending order of frequency by pressed meats, ham and boiled bacon, brawn, stews, fresh and smoked sausages and reheated meats. Of the outbreaks in which members of the public were affected, the proportion associated with canteens fell to 35 per cent. from an average of 47 per cent. for the period 1950-52; by contrast the proportion associated with shops, restaurants and hotels rose from 24 to 43.

In his Annual Report for 1953 the Chief Medical Officer of the Ministry of Health said that processed, made up and reheated dishes and duck eggs were incriminated as often as before. He went on: "The efforts of Food Inspectors and Medical Officers of Health in drawing attention to the need for high standards in kitchen hygiene and the proper use of refrigeration in cooked food factories and canteens have as yet had no appreciable effect; nor have the repeated warnings that duck eggs should be boiled for fifteen minutes or used only in the preparation of foods, subjected to high and prolonged temperatures after the duck eggs have been added. Food poisoning is not usually serious in itself. It is important as an indication of poor hygiene and inadequate or wrong use of refrigeration in food factories and kitchens. Exhortations and education have their place, especially in schools and technical colleges and in time will influence the habits of food handlers; but an immediate improvement could best be brought about by customers refusing to accept

food prepared in conditions known to be unhygienic and by methods known to be potentially dangerous."

The following is taken from a report on food poisoning issued by the Public Health Laboratories. "It may be that the time has arrived for the Medical Officer of Health, the bacteriologist and the sanitary inspector as a team to give less time to lectures and demonstrations on food hygiene and more time to visiting and advising meat manufacturers, caterers and canteen managers on the practical application of theoretic knowledge in individual factories and kitchens. . . . Processed and made up dishes accounted for just over half the food poisoning in which the vehicle of infection was ascertained. . . . An immediate and substantial reduction in the incidence of food poisoning would occur if processed and made up dishes were rendered safe. . . . Though manufacturers, most of them small, are willing to co-operate in improving standards, they still have very little knowledge of the steps to be taken." The Chief Medical Officer of the Ministry in an earlier report had said: "Food poisoning is preventable. The safety of food depends on the hygienic standard and sense of responsibility of the individual to a far greater extent than does, for example the provision of a safe water supply, and the amount of food poisoning is an indication that the individual does not take his responsibilities in this matter seriously enough."

ERYSIPELAS

Erysipelas is a disease which, although notifiable, has now little public health significance. It no longer causes the dreaded outbreaks in institutions especially amongst patients in the surgical wards, while to-day's methods of treatment have reduced the mortality rates of those attacked. Sufferers may be admitted to hospital, but if so, this is usually to enable them to obtain nursing and medical attention not available at home, and it is not now carried out with a view to limiting the spread of infection. There are, however, still some circumstances in which the disease may be dangerous, and so although for most little needs to be done, enquiries are still made at the homes of the notified cases. The most important of these conditions, perhaps, is that of an expectant mother nearing the time of her confinement being in the same house as a patient suffering from erysipelas.

Each year, from 1934, the number of cases of erysipelas notified has ranged from 31 to 48.

In 1954 20 cases were notified. The cases were fairly evenly distributed over the year. Of these 11 were females. In all but one the face was the affected site. Four of the patients were admitted to hospital.

MENINGOCOCCAL INFECTION

Each year a number of sporadic cases of cerebro-spinal fever occurs, the average for the years 1934 to 1939 being three. There was a sharp rise in incidence in 1940 which was part of the national outbreak. Although the numbers in the succeeding years fell, the average number of cases each year was appreciably higher than the pre-war figure. Since 1947 though the average figure has been only four. In 1954, although 11 patients were suspected to be suffering from the infection, in only

two instances was the diagnosis confirmed. The first was an adult female who fell ill in February. In the following month a boy of six succumbed. Post-mortem examination of a woman of 69 who died in April led to the recognition that she had suffered from meningococcal meningitis. This case had not been notified.

ACUTE ANTERIOR POLIOMYELITIS

Poliomyelitis is a disease which only comparatively recently has developed an epidemic phase. Though sporadic cases are known to have occurred for many years, the greater of the epidemics have occurred only in this century more particularly in America, Scandinavia and Australia. The first serious infection in this country was in 1920; there was another in 1938. The first country-wide epidemic in Great Britain was in 1947. Since then the incidence each year has been much higher than it was in the years before 1947, being particularly heavy again in 1949 and 1950. The numbers of notifications in each of the years for 1947 onwards were 7,766, 1,848, 5,967, 7,752, 2,609, 3,902, 4,542. The local figures for the same years were 57, 14, 23, 30, 8, 18, 18.

The disease in this country is most common in the late summer and autumn. Whereas before 1947, after the outbreak of the year had passed there would be a period of many months freedom from new cases, since 1947 there has never been any period of complete freedom though the bulk of infection fell in the same months as before. The monthly percentage distribution of cases for the period 1947-53 is: 0·6, 0·5, 0·3, 0·4, 1·1, 1·9, 9·3, 32·2, 27·2, 16·0, 7·0, and 3·5.

1954 was a year of relatively low incidence, only 1,955 cases being notified in the country, a rate of 0·04 per 1,000 population. This was the first year since 1947 that the weekly numbers of notifications on no occasion reached 100.

The local attack rate was low, there being only seven notifications. There was a doubtful case in an adult in July. Whatever infection she suffered from was probably contracted out of the district. Then towards the end of July there was a grouping of three cases in one part of the district. On the 24th July a girl of five was admitted to hospital with a paralytic attack, the onset of illness being the 18th July. On the 27th July, a boy of six from the same locality was admitted with a paralytic attack, the date of onset being the 21st. This boy attended the same school, but not the same class as the first patient; the school closed on the 23rd July. The third case of the grouping was a younger sister of the first case who fell ill on the 29th July, with a non-paralytic attack. The only other case up to this was a child of one year who was recognised on the 26th August to be suffering from a paralytic attack. The child attended the Headstone Drive Day Nursery, being last there on the 21st August. The date of onset of the illness was the 23rd.

Then followed two more cases in one household. On the 5th September a boy of six fell ill being admitted to hospital on the 7th suffering from a paralytic attack which proved fatal the next day. His brother of six months was removed to hospital with him suffering from what proved to be a paralytic attack.

Little is known about the spread of poliomyelitis or what leads only one out of many exposed to succumb. The child at the Headstone Drive Nursery was the only child present at that time with this infection and was the only child in that part of the district suffering from this complaint. Then, while infection passed from a boy of six to his six-months old brother, three children in the family of ages between these limits escaped. It was earlier presumed that infection was spread mainly by respiratory droplets, the virus entering the nervous system from the nose. It is now known that the virus is present in the oropharynx and in the small intestine, and it may be that the portal of entry is the mouth. It would seem that infection can be acquired by close association with an infected person, virus passing in the pharyngeal excretion; but contamination of hands, immediate environment, utensils and food by pharyngeal virus may also be involved.

The Memorandum on Poliomyelitis issued by the Ministry of Health in 1954 advised that more stringent precautions should be taken by contacts of those suffering from poliomyelitis than had hitherto been the practice. These are:—

Contacts

Adults who have been in close contact with a case of poliomyelitis should, for at least three weeks after last exposure, avoid unnecessary meetings outside their home or business circles and take complete rest if feeling ill. Normal measures, such as adequate ventilation, etc., directed against droplet infection are of importance, and more than usual attention should be paid to hand hygiene for six weeks or more.

The institution of quarantine measures in the case of adults is not justified in the normal outbreak. Modified quarantine, obtained by persuasion, might, however, be applied with advantage in special circumstances. . . . Before quarantine for adults is advised there are many factors to be considered, not least of which is the degree of contact with others met at work and in travelling there, and the type of employment, *e.g.* handling food. If a close adult contact is employed in a community of children, he should be suspended from work for a period of three weeks.

In the case of children, intimate contacts should be under " home and garden quarantine " wherever possible, for three weeks from the latest date of possible infection.

Gatherings

1. BATHING. Although there is no evidence pointing to poliomyelitis having been contracted from bathing in sewage-polluted rivers, in theory, at any rate, the possibility does exist and the practice should be discouraged. Similarly the water of swimming baths is a potential source of contagion, but it has never been clearly implicated in the spread of the disease. The swimming bath must be considered, however, not only in regard to water infection but also as a place of concourse.

2. ENTERTAINMENT. Unnecessary gatherings of children, when poliomyelitis is prevalent in an area, are undesirable. Closing of baths,

cinemas, fairs, etc., is not ordinarily advocated, but people should not travel for such gatherings to or from an area where there is an outbreak of poliomyelitis.

3. SCHOOLS. (*a*) *Exclusion.* All family contacts should be excluded from school for period of 21 days. This means all school children, teachers, school nurses, school meal workers, clerical assistants and caretakers in whose household a case has occurred. Similarly, close school contacts of an affected school child who have been in contact with him up to five days before the onset of his illness should be excluded for the same period. In the light of present day practice in some school classes this may amount to class closure, but in most cases exclusion will relate only to those immediately around the child in class, his intimate friends or his gang. Children who have recovered from an attack of poliomyelitis should not be allowed to return to school until the expiry of six weeks from the onset of the disease.

MEASLES

Measles is a disease which had a marked biennial incidence, an outbreak starting in the last months of the year to reach a peak in the spring of the next year, fading to extinction by the late summer or autumn, after which the district would be free until the development of the next outbreak. This district has not as yet acquired this typical biennial periodicity. A typical invasion in the early months of one year is not followed by any real freedom in the next year, while sometimes the period of heaviest invasion has been postponed to the later months in the year. 1953 was a year which showed the more characteristic prevalence of the disease as seen in an urban community. From a weekly incidence of 200 in the first two months of the year, the attack rate fell to a weekly notification of only eight in May and then followed almost complete freedom in the second half of the year. There was in the latter weeks no building up of cases which is the usual prelude to an invasion in the early months of the following year, and in fact there was no such invasion in 1954. At the other end of the year, too, there was no building up of cases to give any warning of an outbreak in the early part of 1955. The actual number of cases of measles notified in 1954 was only 41. These few cases were evenly distributed throughout the year. This is the smallest number of notifications in any one year since measles was first made notifiable in 1939.

The disease was generally mild in character; there were no deaths.

Because such a high proportion of the population suffers from measles and that mostly in childhood, this infection can be more damaging than many other diseases which are thought to be more serious. The danger was the result not so much of the attack of measles as the effect of the secondary invaders. These can be much more readily controlled now than was possible only a few years ago by the exhibition of antibiotics. The result is that, even when it is prevalent, measles now is responsible for much less damage than was the case not many years ago. There is as yet no preparation which can be used to set up

an active immunity in children who must then continue to be liable to contract this infection which is so very invasive. All that can be done for the average child is to hope to avoid his being exposed to infection in his early years, an attack in a child being usually much less serious than in a baby or in an infant, and to take precautions, if the child is thought to have been exposed to infection, so as to reduce the risk of secondary infection if the attack of measles should develop. There is in gamma globulin a preparation which is quite effective in protecting from and more effective still in modifying an attack. As this is prepared from the blood of those who have had the infection, supplies are limited, and must therefore be reserved for special children, such as the child of under six months who has been exposed to the disease and whose mother has never had an attack of measles, or the exposed child of under two years of age who is weakly, is suffering from some other illness, or is living in a poor home.

WHOOPING COUGH

The incidence of whooping cough fluctuates most markedly. In this district since the disease was first made notifiable in 1939 the range has been from the 1,259 cases in 1941 to the 191 in 1949. The disease is endemic in all temperate climates. There is a periodicity of two to three years. Epidemics occur at any time of the year though more commonly in cold or damp weather. The 211 cases in 1954 were fairly evenly distributed throughout the year, the number in each of the quarters being 59, 47, 48 and 59; there were no deaths. Nine patients were removed to hospital.

With the relatively low incidence, few schools were at all heavily attacked.

Much work has been and is being done on the preparation of a vaccine to protect those treated from the risk of contracting whooping cough. The result of the Medical Research Council enquiry into the efficiency of the then preparations showed that they were effective, though not to the same extent as the preparations used in immunisation against diphtheria. It is probable that to-day's preparations are an advance on those used in the enquiry. As yet the County Council has not made arrangements for offering facilities to the public for children to be immunised against whooping cough by their own doctors in the way that they have for diphtheria. Many local practitioners, though, have for years carried out this practice of immunising against whooping cough either by preparations aimed at this disease only or more commonly by the use of the combined antigen in which the one preparation confers protection against whooping cough and against diphtheria. It is known that 969 children were inoculated against whooping cough by their own doctors. This figure, though, is probably far fewer than the number of children actually treated. At the infant welfare centres many children are treated with the combined preparation aimed at whooping cough and diphtheria. In all during the year 2,175 children were immunised against whooping cough for the first time. Of these 1,206 were treated at the clinics.

PUERPERAL INFECTION

The state which is notifiable under the 1951 regulations is any febrile condition occurring in a woman in whom a temperature of 100·4°F. or more has occurred within fourteen days after childbirth or miscarriage. This raised temperature may be the result of some state such as an infection following the confinement or miscarriage, or it may be due to a cause which may affect any person and be entirely unrelated to the pregnancy. Many of the notified patients are removed to the isolation hospitals for treatment. This is especially necessary if the febrile patient is in a nursing home and some innocent cause of the pyrexia has not been found. Because of the risk of transmission of infection to other patients, the midwife who attends other confinements is relieved of her duties of attending the febrile patient who is at home and who is thereafter attended by the home nurses who do not nurse women at their confinements.

The notification under these regulations is sent to the Medical Officer of Health who sends a copy to the Local Health Authority. If a woman living in one area is confined in a hospital in another area and develops puerperal pyrexia, the notification is sent to the Local Health Authority of the district in which the hospital lies and appears in the returns of that district. At one time this was not the case in regard to London hospitals as notifications of patients suffering from pyrexia in those hospitals were sent to the areas in which the homes of the patients were.

There were four cases of puerperal pyrexia amongst those who were confined in their own homes in this district. In one the raised temperature followed an incomplete abortion, in another the fever was due to an inflamed breast. The cause of the rise in temperature in the other two patients was not detected.

OPHTHALMIA NEONATORUM

Ophthalmia neonatorum is an inflammation of the eyes of the new-born. At one time it was responsible for much blindness. To-day, probably mainly as the result of preventive treatment carried out at the time of the birth of the infant, the position is much more satisfactory. Infection of the eye, however, can so readily lead to blindness that for many years local authorities have made special arrangements for the treatment in hospital of the more severe cases or the treatment by skilled nurses of those infants remaining at home. If the infant has to be admitted to hospital, it is as well for the mother to be admitted too.

During 1954 three notifications were received of infants who had been born in this district suffering from ophthalmia neonatorum. All cases were mild and recovered without any injury to the eye.

PEMPHIGUS NEONATORUM

This is a disease of the skin which in the new-born can cause extreme illness, or even death. Outbreaks have occurred in which the spread seemed to be associated with the practice of a particular midwife, though the exact mode of transmission is unknown.

Although it is rarely met with, because of its seriousness when it does occur, the Council approached the Ministry of Health to add it to the list of diseases notifiable in the area, the request being acceded to.

In 1954 no cases of pemphigus neonatorum were notified in this area.

NON-NOTIFIABLE INFECTIONS

Knowledge of the prevalence of some of the infections which are not notifiable in this district is obtained from intimations received from the head teachers about the absence of children from school.

Chicken Pox

The district was heavily attacked by chicken pox in 1954, in all 1,381 intimations being received from the schools. While the disease was most common in the first quarter (551 cases in the three months, including 344 in March) the disease was quite prevalent in the second quarter, 447 cases being evenly distributed throughout the three months. There was a fall in the summer, but the numbers rose steadily in the last months. There were 298 cases in the last quarter, 144 of them being in December. In general a heavy prevalence at any school in one term was associated with a slight incidence in the other terms. For instance after 86 cases in the first term the Harrow Weald school was virtually free for the rest of the year; similarly Longfield school with its 92 cases in the spring term. At the Cedars school, the attack was almost confined to the summer term. On the other hand Stag Lane school was heavily attacked both in spring and in the summer terms, while at the Vaughan Road school the disease was prevalent throughout the whole year.

Contacts of infectious patients are not now excluded from school.

Mumps

The district was never entirely free from mumps in 1954 when 858 intimations were received from the schools. The invasion rose to a peak in the summer months, falling again in the later months of the year. As was the case in chicken pox, some schools were infected only in the one term. For instance Camrose school had 41 cases in the spring term; Kenmore and Harrow Weald were attacked in the summer term only. On the other hand Stag Lane was affected both in the spring and in the summer terms, as also was Aylward school. Some schools such as Cedars were never entirely free from attack through the whole year.

Contacts are not now excluded from school.

German Measles

At times this infection appears in widepread epidemics without there being any undue prevalence of the commoner type of measles. More usually it appears at the same time, but if so to nothing like the same extent as measles. During 1954 intimations were received of 51 cases scattered throughout the district.

For long accounted as little importance, the disease has in recent years assumed a much more serious aspect because of the possibility of

the development of congenital defects in a child born to a mother who has suffered from german measles in the early stages of her pregnancy.

Contacts are not now excluded from school.

Influenza

Influenza as such is not notifiable so there is no direct indication by this means of its prevalence. Other guides are not true indications of the incidence. For instance, influenzal pneumonia is notifiable, but the extent to which this occurs depends not only on the prevalence of the primary influenza but also on the character of the particular invasion, as a mild type of influenza might be very prevalent but lead to few or no cases of influenzal pneumonia. In the same way the returns of those whose deaths have been ascribed to influenza, although when they occur they indicate there was some influenza, do not give any real indication of its true incidence. Local authorities learn of the prevalence of this condition from what is gathered about the absence from this cause of those at nurseries, or schools or places of employment and from information from health visitors and general practitioners. This district seemed to escape any invasion from influenza in 1954. There was in fact only one death ascribed to it, and only 10 notifications of influenzal pneumonia.

TUBERCULOSIS

Notification

Any patient notified as suffering from one of the acute notifiable conditions will probably have contracted the infection about the time the case was notified. Because of the very indefinite onset of tuberculosis this is not the case in this disease, and a patient recognised to-day to be suffering from the infection may in fact have contracted it some considerable time earlier. For this reason then the notifications received in any one year do not necessarily indicate the number of persons who in fact succumbed to the disease in that year. This aspect is perhaps not so important from an epidemiological point of view when the patient has in fact lived in the district for long enough for the illness to be contracted in the first place while he was resident there. The position is different though when a person moves to a new district when he is already suffering from the infection which has not up to then been recognised. Even though the district is counting only the newly notified cases, when such a case is notified for the first time in the new area, that area accepts that case so that the number of cases of tuberculosis contracted by those living in the district while they are living there is swollen. This increase could be quite substantial where there is much movement of population which will occur in a growing district. Another complication arises in the case of those who move into the district suffering from an attack which has already been recognised, the patient having in fact been notified in the other district. The notification regulations require a doctor to notify any patient suffering from a notifiable disease to the Medical Officer of Health of the district in which the patient is residing. When such a patient then moves into a new district, the doctor under whose care he comes should notify the case. This

notification is new to the new district and is therefore added to the number of cases notified. As this would be occurring over the whole country, the number of new cases would be inflated because many areas would be including a certain number of these transferred cases in respect of whom they have received notifications. Each Medical Officer of Health is required to send to the Registrar-General every week figures of the notifications received in that week. For some little time now the figures of the cases of tuberculosis notified have been included in these weekly returns. In a recent circular the Registrar-General asked that the numbers included in these returns should in future relate only to those cases notified for the first time. In future then the figure for any district will be that of the notifications received in that district in respect of patients who are being notified for the first time not merely in that district but anywhere. The figure for the country as a whole obtained from all these returns will in future be a much more accurate indication of the number of new cases than the figures hitherto returned. To bring these figures into line with those submitted to the Registrar-General only cases notified for the first time will be from now on referred to. At the same time as all these notified persons who have been transferred from elsewhere are now living in the district, their names must be added to the register of cases which, even though it is not now accepted as an official register, is still being kept.

The following table sets out the age and sex distribution of the cases notified, divided into the one group of those notified for the first time during the year and the other group of those who had previously been notified but of whom this authority became aware for the first time during this year:

	Primary Notification				Brought to notice other than on a Form "A"			
	Pulmonary		Non-pulmonary		Pulmonary		Non-pulmonary	
	M	F	M	F	M	F	M	F
Under 1	—	—	—	—	--	—	—	—
1- 4	2	6	3	—		—	—	—
5- 9	2	1	1	—	—	—	—	—
10-14	1	—	2	—	—	—	—	—
15-19	7	14	1	2	1	2	—	—
20-24	15	16	1	—	4	4	—	1
25-34	23	24	2	2	14	12	—	—
35-44	15	17	1	—	4	1	—	—
45-54	28	7	1	1	2	5	—	—
55-64	15	3	1	—	1	2	—	—
65 and over	7	—	—	1	4	1	1	1
Totals	115	88	13	6	26	27	1	2

The combined figures of 278 can be compared with the number of new cases learned of for the first time in the previous years, these being 357 for the year 1953 and the preceding years 271, 358, 370 and 439. The number of cases notified for the first time in 1954 might be

compared with the 241 pulmonary cases and 32 non-pulmonary cases which were notified in the district in 1953 and in which case the onset of illness was not definitely known to have preceded their coming to live in this district. The notification of new cases during 1954 was a rate per thousand population of 1·28, a figure to be compared with that of 1·0 for the country as a whole.

Each year the death returns disclose that some persons had suffered from tuberculosis who had not been notified during life. There were five such cases this year. One, however, related to a person who had not lived in the district for many years. One certificate related to an elderly lady who died of broncho-pneumonia in a hospital not in this area and who was found to have old standing tuberculosis. The death certificate of an elderly male who died of some other cause referred to an old standing tuberculous lesion of a bone; another of the cases was an old lady who died of peritonitis which post mortem examination showed to be of tuberculous origin. In only one of these cases was there the disadvantage that because the case had not been brought to the notice of the authority, precautionary measures which would have been advised had not been taken. The remaining case, though, which was not notified was known to those at the Chest Clinic so that there was not this risk in this instance.

Register

Under the 1952 regulations the official register is now that kept by the Chest Physicians. But whereas the register kept by the Medical Officer of Health included all cases notified and the names of those learned of by means other than by official notification, those kept by the Chest Physicians were the working registers of the clinics and would, therefore, not include the names of those who had not at any time attended the clinic and possibly not of those who having attended at one time had discontinued attending. For these reasons the numbers on the registers at the Chest Clinics must be smaller than those on the registers kept in the Public Health Department. The Minister, although making these changes about the official registers, urged that Medical Officers of Health would keep records for their own purposes. This is done in this district. It is not possible to compare the numbers of those on the two registers because both the Chest Clinics which serve the population of this district accept patients from other districts.

The following table is a summary of the changes which have taken place in the register during the year:—

	Pulmonary		Non-pulmonary	
	Male	Female	Male	Female
No. on register, January 1st, 1954	1,197	1,000	136	162
No. of new cases added	115	88	13	6
No. of cases other than on a Form "A"	26	27	1	2
No. of cases restored to the register ...	4	9	2	—
No. of cases removed	106	170	9	13
No. on register, December 31st, 1954 ...	1,236	1,017	143	157

On the 225 deductions, 120 (113 pulmonary) were of persons who had left the district, 44 (40 pulmonary) were of persons who had died, 51 (43 pulmonary) were of persons who had recovered, 6 (5 pulmonary) were of persons in respect of whom the diagnosis had been withdrawn, and 14 (12 pulmonary) were of persons who had been lost sight of.

The net increase in the number of cases on the register is 68, of which 56 were of pulmonary cases and 12 of non-pulmonary cases. This figure compares with those of 154, 160 and 183 for the three preceding years.

Deaths

28 persons (22 male and 6 female) died from pulmonary tuberculosis during the year and 4 (2 male and 2 female) from non-pulmonary tuberculosis. The number of deaths from tuberculosis in 1953 was 26.

This infection, then, accounted for a death rate per thousand population of 0·15, and for 1·7 per cent. of the total deaths. These figures are a marked contrast to those of 0·57 and 7·1 for 1934, and even of those of 0·42 and 4·9 for 1948.

Preventive Measures

In the years 1851-60 tuberculosis killed each year 70,000 people in this country out of a population of nineteen million. Although there was such an improvement that by the turn of the century in spite of the population having grown to thirty-three million, the number of deaths was less than 57,000 each year, nevertheless, that did mean that the disease was killing something over 1,100 people each week and was responsible for more than ten per cent. of the deaths from all causes. This century has seen a further marked improvement. For the years 1926-28 the average annual number of deaths was 30,000, for 1936-38 23,000, and for 1946-48 19,500. Even since 1948 the number has been halved there being only 8,902 deaths in 1953 compared with 19,797 in 1949.

On the other hand, the number of new cases diagnosed each year remains steady at something over 40,000. That there should be this constant addition of new cases with the fall in the mortality from the disease brought about probably by improved treatment means that there are many more patients in the population, and, so though not to the same extent, many more infective foci. Great as the improvements have been in the way of early recognition of the disease, operative treatment and chemotherapy, the disease is still killing nearly 200 persons every week and those persons in the best years of their lives.

Early Detection. The incubation period from the primary infection to the development of the declared disease of pulmonary tuberculosis with cavities may be anything from months to many years. During that period, in many the infection is symptomless. Various methods have been tried of discovering these persons in this symptomless stage:

(*a*) Examination of the contacts of those already diagnosed could be expected to bring to light either those infected by the patient or one

who had infected him. In the country as a whole 6,841 cases were discovered by this means, or 4·6 per cent. The incidence of tuberculosis in some 16,000 contacts examined at the Edgware Chest Clinic in 1949-52 was six per thousand. One-twelfth of the new cases discovered in the country as a whole were found amongst the contacts of known cases.

(*b*) Examination of class or school contacts of pupils recognised to be suffering from pulmonary tuberculosis. At a number of schools in this district all the pupils were examined following the discovery that one pupil was suffering from the disease. As the findings were negative, recent investigations have been limited to the immediate class contacts. Although a number of such examinations have been undertaken here no cases have been discovered by this means. It might be more profitable for efforts to be concentrated on the examination of the teachers or other adult members of the staff.

In December, 1953, a pupil at a girls' grammar school was found to be suffering from pulmonary tuberculosis. Because some cases had been discovered amongst the pupils at this school when they were mass X-rayed in 1951 arrangements were made for the immediate contacts of this pupil to be examined; no other cases were discovered. In January a pupil of a private school was notified as suffering from pulmonary tuberculosis. The immediate contacts were examined by the skin test, positive reactors being referred for X-ray examination. No other cases were found amongst these contacts. Apart from these cases four pupils attending primary schools in the district were recognised to be suffering from pulmonary tuberculosis and one pupil of a secondary modern school. Four of these cases were known contacts of cases, in most instances close home contacts. As there was no reason for ascribing the source of infection to attendance at school and as the patients themselves were not infective so that there were no risks to others at the school, no special examination of the pupils at these schools was carried out.

(*c*) A positive tuberculin reaction indicates previous exposure to the tubercle bacillus. A positive reaction in a young child might then be the result of a home infection, so that the routine tuberculin testing of young children followed up by the examination of the home contacts of the positive reactors might lead to the detection of unrecognised cases.

Where tuberculisation is high, such enquiries might not be worth while, and in such circumstances the following-up of the contacts of a child whose reactions have recently changed might be more fruitful.

The Education Committee agreed to facilities for tuberculin testing being offered to the pupils at two schools at the time they were being examined at their first routine school medical inspection. The head teachers were most helpful and the parents very willingly agreed to the skin testing being carried out. This testing caused no undue disturbance to the running of the school and did not necessitate any reduction in the numbers of children being submitted for examination. Unfortunately, however, there were only small numbers of pupils at these schools due for examination on that occasion so that no definite answer was obtained to the question of whether the routine testing of entrants to schools in this district would lead to the recognition of hitherto undetected cases.

Of the 154 children skin tested, 14 were found to be positive. The further examination of these children disclosed no abnormalities. Out of a possible 52 contacts of the positive reactors 36 accepted the invitation to attend the clinic. No adult was found to have tuberculosis but one child was found to have a primary lesion. The committee agreed to similar arrangements being made on a larger scale in the next school year.

(*d*) Examination by Mass Radiography. Throughout the country mass radiography units examine some 5,000 persons each week. Since the first unit started work in 1943 ten million people have been examined. Previously unsuspected tuberculosis was found in 3·3 per thousand of them. In the early days of the working of the mass X-ray unit some bodies pressed for their use on a very large scale. Quite apart from the fact that their use is limited by staff and the availability of the machines, there is the important aspect of whether the examination of any but special groups is worth while. The committee of the Medical Research Council on the Method and Conduct of Mass Miniature Radiography reported that: " Re-examination of the same individuals at short intervals for the sole object of finding pulmonary tuberculosis is not justifiable. . . . It is not worth while to examine for pulmonary tuberculosis alone by this technique children under the age of 14, while persons over the age of 45 merit special consideration. The two best uses for mass miniature radiography appear to be the examination of symptomatic cases referred by doctors, and the grouping of units for comprehensive surveys of ' black spots.' "

Of the new cases discovered in the country in 1953, one-fifth were the result of mass X-ray examinations.

The report of the working of the 5c mass radiography unit which is the one serving this amongst other districts showed that 61,905 persons were examined in 1953. Of these two-thirds were industrial groups. Examination of those at public sessions discovered 2·6 cases per thousand examined against 1·6 of industrial surveys. The figure for schools was 1·0. In the 8,713 in the industrial group examined in Harrow 56 cases were found, a rate of 0·6; amongst the 6,863 examined at the public sessions 69 cases were found, a rate of 1·0 per thousand. There was no visit by the unit to this district last year.

(*e*) The group which yields the highest proportion of sufferers on examination is that of persons referred to the Chest Clinics by their doctors. During the years, 1949-52, 12,665 new patients were referred for examination by their doctors. Of these 27 per thousand were found to be suffering from tuberculosis.

Preventive Inoculation. Although in some countries much use has been made of B.C.G. vaccination it has been accepted only slowly in this country. Many probably are awaiting the results of the Medical Research Council's enquiry to learn the true value or what is the best way of using it. There is in this country no case for the immunising of the general population and anything done will probably be limited to such groups as those who are close contacts of infection, or those of ages especially prone to develop the disease, or those whose occupations render them especially liable to infection. Many feel that facilities could

with advantage be offered to those about to leave school as they are about to be faced with special hazards, being possibly in their new occupations to be exposed to risks of infection greater than those they had hitherto faced. The Ministry of Health has authorised local authorities to arrange for older school children to be treated.

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