

[Report 1937] / Medical Officer of Health, North-West Cheshire Combined Area (Bebington & Bromborough U.D.C., Ellesmere Port & Whitby U.D.C., Hoylake & West Kirby U.D.C., Neston & Parkgate U.D.C., Wirral R.D.C., Moreton).

Contributors

North-West Cheshire Combined Area.

Publication/Creation

1937

Persistent URL

<https://wellcomecollection.org/works/x3qehvxf>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

HEALTH IN NORTH-WEST CHESHIRE

WITH STATISTICS,

Presented to the Borough of Bebington
and the Urban Districts of
Hoyle, Neston and Wirral

AS THE

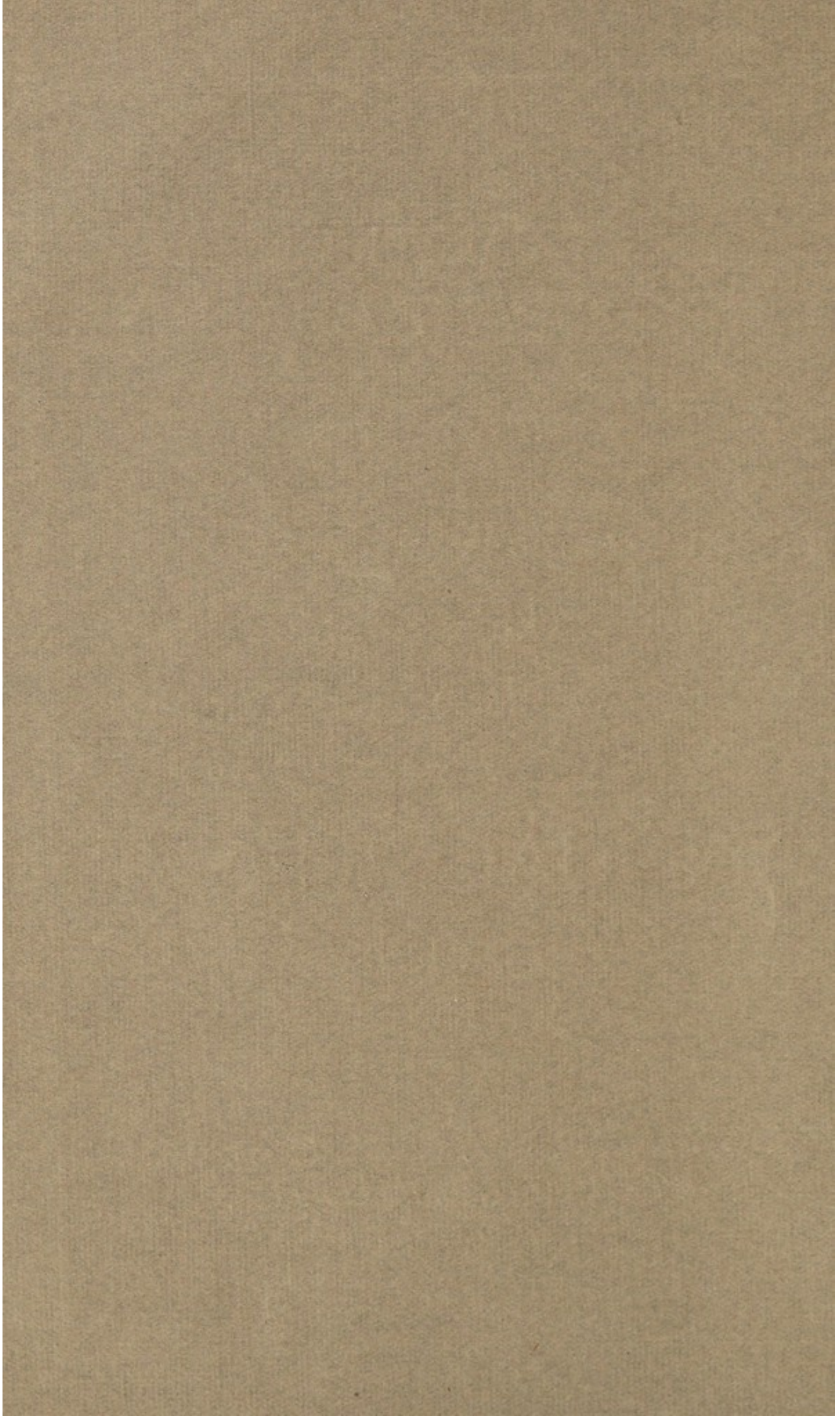
ANNUAL REPORT


FOR 1937

BY

J. B. YEOMAN, M.D., F.R.C.S. (Edin.), D.P.H.

*of the Middle Temple, Barrister-at-Law,
Medical Officer of Health*





HEALTH IN
NORTH-WEST CHESHIRE

WITH STATISTICS,

Presented to the Borough of Bebington
and the Urban Districts of
Hoyle, Neston and Wirral

AS THE

ANNUAL REPORT

FOR 1937

BY

J. B. YEOMAN, M.D., F.R.C.S., (Edin.), D.P.H.

*of the Middle Temple, Barrister-at-Law,
Medical Officer of Health*

LIVERPOOL :

Meek, Thomas & Co. Ltd., 9 Tithebarn Street

While such reports, like the official reports, of the Central Department, must contain the prescribed statistics and routine tabulations, they provide ample opportunity and scope for the Medical Officer to guide his authority and the public in the appropriate directions of advance.

(Newman).

Table of Contents

	Pages
Administrative Staff	3
<i>Districts.</i>	
North-West Cheshire Combined	17—49
Bebington Borough	50—93
Hoylake Urban	94—120
Neston Urban	121—142
Wirral Urban	143—166

Administrative Staff.

Medical Officer of Health North West Cheshire Combined (Public Health) Area; J. B. Yeoman, M.D., F.R.C.S. (Edin.), D.P.H. of the Middle Temple, Barrister-at-Law.

Clerk: Andrew Prince (Certificates, Liverpool University School of Hygiene; Royal Sanitary Institute; Meat Inspection).

Orthopædic Surgeon: T. Hartley Martin, M.B., B.Ch., at Bebington Clinic.

Gynæcologist: Morris Datnow, M.D., F.R.C.S. (Edin.), at Bebington Pre-Maternity Clinic.

Pathologists: R. Howard Mole, M.D., at Isolation Hospital. J. Morrison Ritchie, M.B., B.Ch., (Birkenhead Municipal Laboratory), at Clatterbridge (County) General Hospital. Dr. Taylor Chadwick for Hoylake.

Aural Surgeon: Philip Garson, F.R.C.S., (Edin.), at Bebington Clinic.

All the officers employed are fully qualified for the duties they perform, and are holders of the recognised qualifications for the offices they hold. Each Sanitary Inspector holds the certificate of the Royal Sanitary Institute and the special certificate for proficiency in the Inspection of Meat. The Health Visitors have the qualifying certificate required by the Ministry, the certificate of the Central Midwives' Board, and are State Registered Nurses.

BEBINGTON.

Chief Sanitary Inspector : E. V. Crapper.

District Sanitary Inspectors : E. M. Dutton (Housing).
 A. Davidson (Meat and Food).
 A. Reid (House Drainage).

Pupil Inspectors : E. H. Trafford. C. H. Crawford, T. H. Owen.

Clerk : Miss K. Davies.

Shorthand Typist : Miss M. Brodrick.

One Van Driver. One Disinfector. One Drain Tester.

Senior Health Visitor : Miss A. Owen.

Senior Assistant Health Visitor : Miss V. R. Ellerington.

Assistant Health Visitors : Miss E. Prescott, Miss M. Owen.

HOYLAKE.

Sanitary Inspector : J. W. Hocking.

Assistant Inspector : J. McKeown.

Clerk : F. K. Harrop.

NESTON.

Sanitary Inspector : G. W. Yearsley.

WIRRAL URBAN.

Sanitary Inspector : L. Gill.

Clerk and Pupil : R. Colenso.

Clerk : H. R. Bentley.

The purpose of this report is to comply with the instructions of the Ministry of Health to supply statistics and data whereby the sanitary condition of the area may be compared with that of other areas, and to make suggestions for improvement and criticisms of existing conditions. As in the compilation of the reports of past years any matter has been laid under contribution which was felt might be useful to local authorities. No compunction has been experienced in the bodily annexation of the extracts which appear here from Ministry and other reports, from answers to questions in Parliament, from newspapers, from papers and reports of other medical officers, and from authentic scientific works. Many are probably not available to readers until they appear in a local report, and even when placed at their disposal there is no compulsion to read. Kipling's Soldier, by his comment on Homer, expresses with exactitude the position of a Medical Officer :

*'An what he thought—'e might require,
'E went an' took—the same as me!*

A senescent Medical Officer of Health may be pardoned if he finds himself sceptical concerning the remedies for all diseases which the manufacturing chemist produces for consumption by the public. His unbelief may be stimulated and intensified when he sees in his daily work many examples of the varieties of ill health for which these nostra are advertised as specifics. An advantage derived from age is that he will no longer blindly bow to authority, as he had perforce to do in his youth. Prudence, as mentioned by Cicero, is the prerogative of old age, and this quality may lead him to relegate these evanescent preparations to the limbo to which bottles of medicine should long ago have been consigned. Whatever may be written, the evil-tasting from the bottle and the painful jab from the needle will be demanded by the public for many a day, and doubtless in some at present inexplicable fashion they may produce benefit. Turn to medical writings of any date from the Hippocratic texts to those of to-day, and there will be found infallible remedies for the illnesses which we are still striving to

alleviate. Opening a book dated 1696 at random, the first prescription which attracted attention read :

Take a mouse and flea it; then dry it with all the entrals in an oven so that you may powder it : drink all the powder at once.

This is a remedy for a defect which we are still unable to remove.

HERE IS THE PRESCRIPTION FOR KING'S EVIL (SCROFULA).

Take Sage, Rue of each a good handful, after they are well pickt from the stalks, chop and bruise them a little but loose none of their juice; put them in a thin bag of bolter cloth and hang it in four gallons of small ale new, at the same time take three hundred of live sows or wood lice, bruise them with a little white wine then press them out and put the liquor to the ale, put their skins into the bag with the herbs; after it hath wrought drink of it at meals, and at all times when you have occasion to drink, and continue the use of it until you are cured drinking no other liquor all that time : and to make it more greatful to the taste you may add one fourth part of white wine. Before one vessel is near spent prepare an other, that you may always have one under an other : and keep a slender and wholsom diet, for bear eating salt meat and fish. With this drink Sir Kenelm Digby cured the Daughter of Sir William Curtius at Francfort in Germany, in the year 1659. of a corroding ulcer in her Leg, after many Remedies used in vain, which had so mortified the place, by the long continuance of it, that the leg was shrunk and was shorter than the other by at least two Inches.

In the seventeenth century it would have been heresy to question the value of these, as Faust termed them, "hellish brews and cursed medicaments." In the twentieth century chemotherapy occupies the stage. Coincident with the introduction of a new chemotherapeutic remedy the mortality from puerperal sepsis at a large maternity hospital fell from an average of 22.7 per cent. over the years 1931—35 to one of only 4.7 per cent. If the improvement resulted from the use of the preparation, it must be admitted that the statistics indicate something approaching the miraculous. There is scarcely a disease due to bacteria which has not been reported as cured by the use of this drug. At the maternity hospital there may have been other factors besides the administration of the drug which tended to help the patients, such as a diminution in the intensity of the action of the causal germs. Question and answer in Parliament reveal how, without laboratory, chemotherapy improvement has been obtained.

Maternal and Infantile Mortality.

“ MISS WARD asked the Minister of Health whether he can give the comparative figures showing the maternal mortality rates in appropriate categories and infant death-rates for expectant mothers receiving special food from the National Birthday Trust Fund and those not receiving special foods? The Minister of Health (Sir Kingsley Wood): As the answer involves a tabular statement, I will, with my hon. friend's permission, circulate it in the *Official Report*.”

Following is the statement:

PARTICULARS OF RESULTS OF NATIONAL BIRTHDAY TRUST FUND NUTRITION SCHEME FOR EXPECTANT MOTHERS FROM 1ST JANUARY, 1935, TO 30TH JUNE, 1937.

Cases receiving Special Food.

Period	Total number of mothers receiving food	Puerperal death-rate from sepsis	Puerperal death-rate from other causes	Total puerperal death-rate	Maternal death-rate from associated causes	Infant death-rate (including Still-births)
1935-1936 ...	7,320	0·14	1·50	1·64	Not available	Not available
1937 ...	3,064	—	1·63	1·63	0·98	57
Total (1935, 1936 and 1937) ...	10,384	0·09	1·54	1·63	—	—

Cases not receiving Special Food.

Period	Total number of mothers receiving food	Puerperal death-rate from sepsis	Puerperal death-rate from other causes	Total puerperal death-rate	Maternal death-rate from associated causes	Infant death-rate (including Still-births)
1935-1936 ...	14,073	3·48	2·91	6·39	Not available	Not available
1937 ...	4,781	1·25	4·18	5·43	2·09	102
Total (1935, 1936 and 1937) ...	18,854	2·91	3·24	6·15	—	—

MISS WARD asked the Minister of Health whether he can make any further report on the effect on maternal mortality of the special foodstuffs granted by the Special Commissioners through the National Birthday Trust Fund for expectant mothers? Mr. Elliott: Particulars of results of this nutrition scheme, which is now being carried on by the Joint Council of Midwifery, covering the period from 1st July, 1937, to 31st December, 1937, have now been published. (See Table.)

Miss Ward: In view of the satisfactory results of the experiment, may I ask what the next step is to be? Mr. Elliot: We have to complete the experiment for which the Special Commissioner has given another £3,000.

Miss Ward: When is the experimental stage likely to be over? Dr. Summerskill: What is the reduction per 1,000 of maternal mortality in these particular areas? Mr. Elliot: Roughly speaking, the total puerperal death-rate was 0.45 for those receiving special foodstuffs and 3.54 for those receiving special food.

PARTICULARS OF RESULTS OF JOINT COUNCIL OF MIDWIFERY NUTRITION SCHEME FOR EXPECTANT MOTHERS FROM 1ST JULY TO 31ST DECEMBER, 1937.

Cases receiving Special Foods.

Period	Total number of mothers receiving food	Puerperal death-rate from sepsis	Puerperal death-rate from other causes	Total puerperal death-rate	Maternal death-rate from associated causes	Infant death-rate (stillbirth and neo-natal)
1st July to 31st December, 1937	4,446	Nil	0.45	0.45	0.67	54

Cases not receiving Special Foods.

Period	Total number of mothers not receiving food	Puerperal death-rate from sepsis	Puerperal death-rate from other causes	Total puerperal death-rate	Maternal death-rate from associated causes	Infant death-rate (stillbirth and neo-natal)
1st July to 31st December, 1937	9,040	1.77	1.77	3.54	1.33	83

Note.—All rates in the above tables are calculated per 1,000 total births.

Typhoid Fever.

The recrudescence of typhoid fever in England is a matter of great importance. For many years it was regarded as one of the diseases which improved sanitation, and especially pure water supplies, had almost succeeded in stamping out. In 1934 the number of cases notified was 1,213, in 1935 it was 1,750, and in 1936 it was 2,493. Owing to the Croydon epidemic in 1937 there will be a further increase to be noted. At Poole the source of the outbreak was traced to raw milk, and for the first time, as far as I can ascertain, it was accepted that cows drinking at an affected stream "may excrete typhoid organisms in their dung, or even in their milk." Deaths from typhoid in the period 1871-80 equalled 321 per million off the population living, and from 1931-35 they numbered 5 per million.

Cancer.—The causation is still undetermined.

It has to be realised that in the present state of knowledge the adequate treatment of more persons suffering from Cancer depends largely upon the provision of increased facilities for radiation therapy.

Conditions do not yet obtain whereby all the patients who could be benefited by this form of treatment can obtain it.

The material obtained has been analysed and indicates that the cancer patients who are at present cared for by the Local Authorities form about 20 per cent. of the estimated total number of patients suffering from Cancer, and that the great majority of these patients are persons for whom unfortunately no further active treatment is practicable.

THE FOLLOWING STATISTICS ARE THE LATEST TO BE ISSUED:—

The deaths ascribed to cancer during 1935 numbered 64,507—30,780 of males and 33,727 of females. For both sexes these numbers were the highest yet recorded. The standardized death-rate for males in 1935 amounted to 1,058 a million and that for females to 959. It is pointed out in the report that the recorded mortality from cancer of some parts of the body has continued to increase since 1921-30 at advanced ages, although it has become stationary or begun to decline in middle age, and it seems

necessary to conclude that the average age of appearance of cancer in some of these organs is becoming later. For a few organs, on the other hand, cancer mortality continues to increase at almost every age.

Cost of Social Services

The annual return of expenditure on Public Social Services in 1935 has been published:

The total for Great Britain was £503,783,000, made up as follows:—

	1935 (or latest year).	Number directly benefiting.
Unemployment Benefit, &c. ...	52,111,000	12,627,000
Unemployment Allowances and Transitional Payments ...	46,855,000	
National Health Insurance ...	38,344,000	19,170,000
Widows', Orphans', and Old Age Contributory Pensions ...	44,628,000	2,129,806
Old Age Pensions ...	43,774,000	1,857,000
War Pensions, &c. ...	40,450,000	910,250
Education ...	111,748,000	7,911,720
Approved Schools ...	679,000	9,250
Hospitals and Treatment of Disease	14,629,000	—
Maternity and Child Welfare ...	3,590,000	—
Housing ...	48,157,000	—
Relief of the Poor ...	51,819,000	1,815,325
Lunacy and Mental Treatment ...	6,999,000	147,470

For the previous financial year the total was £488,039,000, so that there was an increase of £15,744,000 during the latest period for which figures are available. In 1900 the total cost of the social services was £36,010,000.

The estimated expenditure for 1936-7, which is given for a number of items, shows little change in the aggregate from the figures for 1935-36.

National Physique.

One of the most marked characteristics of our time is the awakening or reawakening of interest in the national physique. Although there may be little justification for the statement made at a Health Congress not long ago to the effect that among the majority of people in Britain there is an alarming state of physical unfitness; yet it may be conceded that the physique of the nation may be materially improved. Army rejections for physical defects formed the premises from which the disturbing conclusions were deduced. Very gradually national consciousness on the subject of fitness has become aroused, and by its awakening the ultimate aim of attaining a fuller life will be accomplished. From time immemorial overnments have at intervals been propagandists of physical culture, and it would not be without interest to enquire for how long a period the impetus they initiated lasted among the citizens. With his housing assured, his diet approximating to satisfaction, and his hours of labour not excessive, the citizen may turn his attention in his leisure to the acquisition of fitness. The fallacy of attempting to reach fitness by tumblings and acrobatics which are necessary to the other primates still living among the tree-tops must be self-evident. What may not be so apparent is that the tired physical worker can gain nothing by periods of attempted muscle training. Contemporary States have a compulsory physical training for all citizens with the undisguised intention to produce soldiers. Games, organised and unorganised, from early youth upwards, appeal far more, and have a more permanent attraction for British citizens.

Closely allied to this subject is that of the acquisition of Public Parks, Recreation Grounds, and Playing Fields, and an extract from the Ministry of Health Report, 1936-37, is subjoined.

Loans amounting to £3 196,002 were sanctioned by the Department during the year for these purposes, including £1,952,270 for the purchase of land. The corresponding figures for 1935-36 were £2,467,245 and £1,109,889. The acreage purchased was 9,059, including 1,030 acres acquired under Section 69 of the Public Health Act, 1925, for grounds which could be let for games; the figures for 1935-6 were 4,732 acres and 1,322 acres respectively.

In addition, 3,570 acres were acquired under the Local Government Act powers for the benefit, improvement, and development of towns at a cost of £739,096; some of this land will be available for the purposes mentioned above. It is understood that over 500 acres

were presented during the year to Local Authorities or to the National Playing Fields Association.

Further progress has been made with the reservation of recreation areas and a green belt around London. By the end of the year under review, the London County Council under its scheme of assisting other Councils purchasing land for this purpose, had approved areas amounting to approximately 29,500 acres, and had made provisional offers of assistance amounting to £1,166,000.

An interesting purchase in this connection during the year was 2,005 acres of Enfield Chase by the Middlesex County Council from the Duchy of Lancaster. This land, which had been part of the estates of the Duchy since the time of Henry IV., was the last remaining portion in the hands of the Crown of the ancient Chase, which was no doubt a tract of the ancient forest of Middlesex. In Tudor days it was a favourite resort for Royalty for "the hunting of the hart."

Pasteurisation of Milk.

"It remains true that consumption of milk in all forms per head of the population is too low." This sentence is from the Eighteenth Annual Report of the Ministry of Health, in which it is recommended that at least seven-eighths of a pint per day should be the consumption per head of the population. The consumption is much lower than in other countries, and is only 60 per cent. of the suggested minimum. The wastage of skimmed milk is deplored because of the fallacy that abstraction of the fat removes all nutritive value.

In 1937 the Education Authority, at the instance of the Central Wirral Administrative Sub-Committee, sanctioned the provision of Pasteurised milk in the schools in the Borough of Bebington for one year. All liquid milk provided at the health centres of the Borough is Tuberculin Tested. Any local authority can now apply for an order making compulsory the efficient pasteurisation of milk sold within its area. There are exemptions to the order relating to Tuberculin Tested and Sterilised Milk, and no order comes into operation within two years after it is made.

Evidence that there is no significant difference in nutritive value between raw and pasteurised milk continues to accumulate. The results of three recent investigations . . . provide impressive evidence of this and demonstrate the immense advantage which pasteurisation confers in preventing the occurrence of Tuberculosis from the consumption of tuberculous milk.

Tuberculosis is not the only disease from which the community may escape if milk be pasteurised, for numerous outbreaks of epidemic disease—scarlet fever, enteric fever, diphtheria, paratyphoid, and septic sore throats—have been traced to milk. Risk of these outbreaks can be eliminated by pasteurisation. Moreover, it is the only practicable method known at present to destroy the disease-producing germs in a proportion of the milks which are sold. If nutritive value is not affected and disease germs are destroyed, it is difficult to comprehend why the subject should raise so many virulent discussions. Scientific opinion is entirely in favour of pasteurisation. Opposition to it comes from producers, who fail to realise that once the public is assured of a safe milk supply an increase in the consumption of milk would follow.

The fifteenth report of the National Milk Publicity Council, covering the 18 months ended June 30 last, estimates that there are now 2,500,000 children provided with milk in the schools. It would appear, the report says, that a good percentage of infants and juniors take milk, but that, in the senior classes, and particularly with the older boys, a very noticeable decline has taken place. In factories, mines, and offices consumption of milk at the end of last June had increased to 434,605 gallons a month. Distribution covered 4,186 factories, with 1,314,377 employees. The September issue of the monthly bulletin of the Milk Publicity Council, however, summarizes the results of the industrial campaign to the end of August, showing that 4,814 firms with a total of 1,525,579 employees were then participating. The total consumption reported and estimated by factories, works, and collieries where the scheme had been reported to be already working by the end of July was 589,144 gallons a month.

Population.

England's population problem has begun to be realised by the thinking section of the community. Broadcasting has made it aware that it is not a mere theoretical subject for debate, but a real indisputable difficulty requiring solution. A spate of books and pamphlets by the experts warns us, not of the fate of the race in the distant future, but of happenings within the next few years. Stress is laid on there being no element of prophesy about what is to come, but mathematical certainty. At the one end a birth-rate falling year by year; at the other, an increasing death-rate associated with the increased age of the population; and the ultimate result a decrease in the population. Formerly a large number of persons migrated from Britain, but about 1931

migration ceased, and had this not occurred the numbers of the population would now be stationary. Fertility, which governs the size of the family, simply means the number of children a woman will have on the average. From the birth-rate alone it cannot be told whether a community is reproducing itself or not. Carr Saunders states that when a hundred people die they leave behind them to take their place in the next generation only seventy, so we are not replacing ourselves. Professor Hogben writes :

The right way to decide whether a community is capable of replacing itself is to measure fertility by the number of girl children born on the average to one woman in the course of her reproductive life. This can be done when in public statistics the age of the mother at the birth of each child is stated. In England and Wales at the present level of fertility one hundred women on the average have eighty-five daughters in the course of the entire child-bearing period. There would thus be a fifteen per cent. deficit of replacement in each generation even if every daughter herself survived to become a mother. In other words, no further fall in mortality can arrest a continuous decline, and nothing short of immortality can safeguard us against extinction unless fertility is raised by considerably more than fifteen per cent. This would not be achieved even if all women married unless the average married woman had more children.

The Population (Statistics) Act, which comes into operation at the beginning of July, will enable particulars on the population problem to be obtained on registration of births and deaths. These particulars are confidential, and are merely to be used in the Registrar-General's Department for statistical purposes. When in Parliament the Bill was the subject of bitter controversy, but a plain explanation of why it was required was given by a teacher of medicine, who wrote :

A birth rate is a statistical curiosity, which gives no true indication of the degree to which a population in a given country, region or occupation is replacing itself—i.e., of what may be called its reproduction rate.

In all the leading countries of the world, Scotland, the British Dominions and the United States the required information has been obtained without protest or public irritation for years.

According to Kuczynski, the decline in fertility started in France in the second half of the eighteenth century and in England about 1880. The decrease was more rapid than in France, and births began to decline about 1909. In Germany there was a decline from 1,810,000 in 1901 to 971,000 in 1933, and rose again to 1,277,000 in 1936. He gives a table of birth-rates,

from which the rates for 1933-36 show: Austria, with 13.5, the lowest; Rumania, the highest, with 31.6; Japan, 31; England and Wales, 14.7; Scotland, 17.8; Northern Ireland, 19.6; Irish Free State, 19.5; Germany, 17.7; France, 15.7.

Only women from approximately 15 years of age to 50 can have children, so the fertility rate is the number of children born every year to 1,000 women of child-bearing age.

Until fifty years ago the gross reproduction rate exceeded two in every country in Europe except France and Ireland. By 1895 it had dropped below two in England and Sweden. By 1935 Russia was the only European country in which it exceeded two, and it was below one in England, Norway, Sweden, Belgium, France, Switzerland, Austria and Estonia. Wherever the gross reproduction rate is constantly below one the population must die out even if every newly born girl reaches the age of fifty. Wherever the gross reproduction rate is constantly above one the population will reproduce itself if a sufficient number of newly born girls passes through child-bearing age.

According to a paper by one of the Leverhulme Research Fellows--

Nothing can arrest a continuous decline of the total population, unless something happens to increase fertility above its present level.

Experts agree that the effect of changing mortality upon the net reproduction of the country will no longer play an important part. Only a temporary increase of births can be obtained through an increase in the number of marriages, and confirmation of this can be obtained from Germany's experience after the grant of marriage loans.

From an examination of numbers of children in age-groups it is calculated

- (a) That unless fertility increases, the number of children in the elementary and secondary school population is going to decrease steadily from now onwards.
- (b) That the proportion of persons belonging to the age-groups of wage-earners will not change greatly in the near future, because the inflation of the later age-groups is largely compensated by the diminution of the juvenile population.

One estimate is to the effect that in twenty years' time the age group of 4-14 will be decreased to 79 per cent. of the present figure, and the age group of 60 and over will be increased to 132 per cent. Circular 1426 of the Ministry of Education anticipates a decline of 1,000,000 in the elementary schools between 1933 and 1940.

The crude birth-rate per 1,000 in twenty-five years' time will be 12 and the crude death-rate 16.5.

The percentage drop in the fertility rate in Cheshire, shown in the census figures of 1931, was 33.8 of the 1911 census, while in England and Wales as a whole it was 35.5. Cheshire was not replacing itself in 1911. In 1871 it was thirty-fifth in the order of its gross reproduction rate, and in 1931 it was forty-eighth. In 1911 the Administrative County had a population of 597,771 and a gross reproduction rate of 1.232; in 1931 the population was 675,296 and the reproduction rate 0.816, a decrease in the rate of 0.416.

The percentage of men of 20 years of age and over employed in agriculture and fishing in 1871 was 19.8, and in 1931 the percentage of men, 21 and over, so employed was 8.3.

Low fertility is associated with female employment; hence its low rate in the textile areas. The mining and the metal industries, and, to a somewhat less degree, agriculture, are associated with relatively high fertility.

These dismal statements, which are facts and not prognostications, are from the recently-published *Political Arithmetic*, edited by Professor Hogben.

In fifty years from now the population will be 82 per cent. of its present size and in one hundred years it will be reduced to one half, if the fertility and mortality rates remain at the 1933 level. If they continue to fall as suggested by the rates for the last ten years then a century from now the population of England and Wales will be below four and a half million, i.e., considerably less than the population of London at the present time.

The Registrar-General's report upon occupational birth-rates in 1931 is not yet complete, but the Minister of Health gave the following advanced figures :

ENGLAND AND WALES.		Crude live birth-rate per 1,000 married males under 55 years of age.
OCCUPATIONAL BIRTH-RATES, 1931.		
All married males (including unoccupied) under 55 years of age.		95.9
Clergymen (Anglican Church)	... ..	70.5
Teachers (not music teachers)	... ..	59.9
Professional occupations (excluding clerical staff).		73.5
Social Class III, skilled workers	... ..	95.3
Social Class V, unskilled workers	... ..	122.2

North-West Cheshire Combined District

Statistics and Social Conditions of the Area.

AREA.—The area is 32,212 acres or practically 50.3 square miles.

POPULATION.—The population at Mid-Summer, 1937, is estimated by the Registrar-General to have been 82,787. This is an increase of 3,667 on the population estimated in 1936.

SOCIAL CONDITIONS.—There is no marked alteration on the Social Conditions recorded at the Census in 1931. They may be summarised as industrial along the Mersey, residential along the Dee, with agricultural and residential groups in the centre of the Peninsula.

POPULATION.—The natural increase (that is the excess of births over deaths) of the population is shown in the following table (1921-37).

Year.	Population.	Natural Increase per 1,000 population.
1921	79,088	11.6
1922	79,873	8.5
1923	81,572	9.9
1924	84,777	8.1
1925	87,417	7.3
1926	95,308	8.0
1927	101,526	6.8
1928 Part of year	95,195 (91,795)	7.0

	Year.	Population.	Natural Increase per 1,000 population.
	1929	93,412	6.4
	1930	94,893	7.8
	1931	96,411	7.4
	1932	99,061	5.9
Area altered 1st April	1933	96,180	4.8
	1934	98,730	5.9
	1935	101,560	5.09
	1936	104,220	5.2
Area altered by omission of Ellesmere Port Urban District.	1937	82,787	4.9

Natural Increase of Population (i.e., excess of Births over Deaths) 1921-1936, England and Wales.

Year.	Per 1,000 Population.	Year.	Per 1,000 Population.	Year.	Per 1,000 Population.
1921	10.3	1927	4.3	1933	2.1
1922	7.6	1928	5.0	1934	3.0
1923	8.1	1929	2.9	1935	2.9
1924	6.6	1930	4.9	1936	2.5
1925	6.1	1931	3.5		
1926	6.2	1932	3.3		

Extracts from Vital Statistics, 1937.

Live Births.

The births numbered 1314: males 694, females 620; 1,285 were registered as legitimate, and 29 as illegitimate. **The birth-rate was 15.87** per 1,000 of the population.

The 1937 birth-rate of England and Wales was 14.9 per 1,000 of the population. It was 0.1 above that of 1936 and 0.5 above that of 1933, the lowest recorded.

The fall in the birth-rate is due to restriction of the size of families and to a certain extent to the greater age at which women marry. It is not confined to any one section of the community but shows a steady decline.

The highest rates were recorded in Wirral, Bebington and Neston. The rate in Hoylake was 2.89 below that of England and Wales.

For purposes of comparison the Registrar-General's figures are quoted.

	Birth Rate per 1,000 Total Population Live Births.
England and Wales	14.9
125 County Boroughs and Great Towns including London	14.9
148 Smaller Towns with estimated resident population of from 25,000—50,000 at 1931 Census	15.3
London (Administrative County)	13.3
Administrative County of Chester Birth Rate	13.9

Still Births.

The still births were 42 in number, giving a rate of 30.9 per 1,000 total live and still births or 0.5 per 1,000 of the population.

The Registrar-General's figures:—

	Rate per 1,000 of population.
England and Wales	0.60
125 County Boroughs and Great Towns including London	0.67
148 Smaller Towns (1931 Census adjusted populations 25,000—50,000)	0.64
London	0.54

The Registrar-General states the number of stillbirths per 1,000 total births (including stillbirths) was 39.

Deaths.

903 deaths were recorded; 449 males and 454 females.

The death rate was 10.9 per 1,000 of the population. It was lowest in Bebington and Neston. It was highest in Hoylake and Wirral.

The Registrar-General's figures are quoted:—

ANNUAL DEATH RATE PER 1,000 POPULATION.

	All causes	Enteric Fever and Paratyphoid	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence
England and Wales ...	12.4	0.00	0.00	0.02	0.01	0.04	0.07	0.45	0.54
125 County Boroughs and Great Towns including London	12.5	0.01	0.00	0.03	0.01	0.04	0.08	0.39	0.45
148 Smaller Towns (1931 adjusted Populations 25,000—50,000)	11.9	0.00	0.00	0.02	0.01	0.03	0.05	0.42	0.42
London	12.3	0.00	0.00	0.01	0.01	0.06	0.05	0.38	0.51

The death rate was the highest recorded since 1929 and was .3 above that of 1936 and 1.0 above that of 1930, the lowest recorded.

The death rate has lessened owing to cheap food, improved housing and sanitation, and medical aid. With the smaller birth-rate there is an increase in the number attaining the older ages, so that, even if the birth-rate did not decline any further, there would be a gradual diminution in the increase of the population, owing to the increased liability to death at the higher ages.

**Registrar-General's Memorandum on Comparability factor
for adjusting the Local Death Rates of 1931
and subsequent years.**

If the population of all areas were similarly constituted as regards the proportions of their sex and age group components, their crude death rates (deaths per 1,000 population) could be accepted as valid comparative measures of the mortalities experienced by the several populations.

In practice, however, populations are not thus similarly constituted and their crude death rates fail as true comparative mortality indexes in that their variations are not due to mortality alone, but arise also from differences in their population constitution, the two elements being combined in indistinguishable proportions. In order to isolate the mortality factor it is first necessary to identify and remove the population variable.

One of the methods commonly adopted for this purpose is to select a set of mortality sex-age rates as a standard and to ascertain the hypothetical population death rates yielded by applying the standard mortality to the appropriate sex-age sections of the populations under review; variations in the hypothetical death rates thus produced can only arise from differences in population constitutions and they thus provide a means of assessing the extent to which the ordinary crude death rates should be modified in order to provide a valid mortality comparison as between one population and another.

For the present purpose, the average mortality rates experienced in England and Wales during the three years 1930/2 divided into 11 sex-age groups have been adopted as the standard and have been applied to the corresponding sex-age groups in the 1931 Census population of every Borough, Urban District and Rural District in the country. The adjusting factor now supplied in respect of a given area represents the ratio of the resulting death rate for the national 1931 census population to the similarly obtained hypothetical death rate for the said area.

The factor may be said to represent the population handicap to be applied to the area and, when multiplied by the crude death rate experienced in the area, modifies the latter so as to make it comparable with the crude death rate for the country as a whole or with the similarly adjusted death rate for any other area. Strictly, the adjusting factor applies only to death rates experienced in the year 1931 on which the several population handicaps have been measured, but population constitutions change relatively slowly, and save in exceptional circumstances, the 1931 factor may be used for practical purposes until fresh population constitutions are available from the next Census.

The utilization of the adjusting factor may be illustrated by applying it to Bournemouth County Borough and Dagenham Urban District as examples of somewhat extreme types of population.

				Bournemouth C.B.	Dagenham U.D.
1933 deaths	...	...	...	1,618	622
1933 estimated population	...	...	...	115,200	95,550
1933 crude death rate	...	...	...	14.0	6.5
Comparability Factor	...	...	...	0.75	1.53
1933 adjusted death rate	...	...	...	10.5	9.9
Ratio to national death rate in 1933 (viz. 12.3) of—					
Local crude death rate...	...	...	...	1.14	.53
Local adjusted death rate	...	...	...	.85	.80

Thus, whereas by the crude death rate comparison the mortality of Bournemouth appears to be 14% *above* the national average, by the adjusted comparison it is seen to be 15% *below*; the apparent excess in the first comparison being nothing more than a reflection of the elderly nature of the Bournemouth population.

Again, the comparatively youthful nature of the Dagenham population produces a crude death rate for 1933 which is but 53%

of that of England and Wales, though the mortality experienced is shewn by the adjusted comparison to be more like 80% of the national figure.

Comparing Bournemouth directly with Dagenham the crude death rates are seen to be in the ratio of 14.0 to 6.5, a meaningless comparison in respect of the relative mortalities experienced which are expressed by the adjusted figures as 10.5 and 9.9 respectively.

The Areal Comparability Factors supplied for the districts in the North-West Cheshire area are:—

Bebington	...	...	1.11
Hoylake	...	...	.92
Neston	...	...	1.03
Wirral	...	...	1.01

TABLE FOR NORTH-WEST CHESHIRE COMBINED DISTRICT.
ANNUAL DEATH RATE PER 1,000 POPULATION.

	All Cases.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence
North-West Cheshire Combined District	10.9	0.00	0.00	0.00	0.01	0.07	0.14	0.54	0.47

Causes of Death.

A new "Short list of Causes of Death" has been adopted by the Registrar-General, after agreement with the Ministry of Health, and the deaths in the Combined District arranged in this list are shown in the subjoined Table.

All Causes.						M.	F.	Total
1.	Typhoid and Paratyphoid Fevers	...	...	...	...	0	0	0
2.	Measles	...	...	...	...	0	0	0
3.	Scarlet Fever	...	...	...	...	1	0	1
4.	Whooping Cough...	...	...	...	...	1	5	6
5.	Diphtheria	...	...	...	...	6	6	12
6.	Influenza	...	...	...	...	25	20	45
7.	Encephalitis Lethargica	...	...	...	...	1	2	3
8.	Cerebro-spinal Fever	...	...	...	...	0	0	0
9.	Tuberculosis of Respiratory System	...	...	...	...	21	15	36
10.	Other Tuberculous Diseases	...	...	...	...	3	3	6
11.	Syphilis	...	...	...	...	1	0	1
12.	General Paralysis of the Insane : Tabes Dorsalis	...	...	...	...	2	0	2
13.	Cancer, Malignant Disease	...	...	...	...	48	59	107
14.	Diabetes	...	...	...	...	7	9	16
15.	Cerebral Haemorrhage	...	...	...	...	16	26	42
16.	Heart Disease	...	...	...	...	130	133	263
17.	Aneurysm...	...	...	...	...	0	0	0
18.	Other Circulatory Diseases	...	...	...	...	31	37	68
19.	Bronchitis...	...	...	...	...	6	5	11
20.	Pneumonia (All forms)	...	...	...	...	27	22	49
21.	Other Respiratory Diseases	...	...	...	...	4	3	7
22.	Peptic Ulcer	...	...	...	...	6	3	9
23.	Diarrhoea (under 2 years)	...	...	...	...	2	0	2
24.	Appendicitis	...	...	...	...	5	5	10
25.	Cirrhosis of Liver	...	...	...	...	1	2	3
26.	Other Diseases of Liver, etc.	...	...	...	...	2	4	6
27.	Other Digestive Diseases	...	...	...	...	10	8	18
28.	Acute and Chronic Nephritis	...	...	...	...	17	14	31
29.	Puerperal Sepsis	...	...	...	...	0	2	2
30.	Other Puerperal Causes	...	...	...	...	0	0	0
31.	Congenital Debility, Premature Birth, Malformations, etc.	...	...	...	...	25	15	40
32.	Senility	...	...	...	...	5	7	12
33.	Suicide	...	...	...	...	7	3	10
34.	Other Violence	...	...	...	...	14	15	29
35.	Other Defined Diseases	...	...	...	...	24	30	54
36.	Causes Ill-defined or Unknown...	...	...	...	...	1	1	2
Totals						449	454	903
<i>Special Causes (included in No. 35 above)</i>								
	Smallpox	...	...	...	...	0	0	0
	Poliomyelitis	...	...	...	...	0	0	0
	Polio-encephalitis	...	...	...	...	0	0	0

The seven principal zymotic diseases (Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (Typhus, simple, continued, and Enteric), and Diarrhoea, accounted for 2.3 % of the total deaths; Tuberculosis (all forms), for 4.6 %; Cancer, 11.8 %, and Heart Disease for 29.1 %.

Expressed in rates per 1,000 of the population the figures are:—

Zymotic diseases ...	.25	Cancer ...	1.2
Tuberculosis ...	.5	Heart disease...	3.1

Corresponding figures for England and Wales:—

Tuberculosis (all forms) ...	0.58
Cancer ...	1.63

North-West Cheshire Public Health area is a healthy one, and yet in the twelve years 1926-37, 1,460 deaths from cancer were recorded and 746 from tuberculosis.

DEATHS FROM PUERPERAL CAUSES.

	Deaths.	Rate per 1,000 Total (Live & Still Births).	Rate per 1,000 Live Births.
Puerperal Sepsis ...	2	1.47	1.52
Other Puerperal Causes —	—	—	—
<hr/>	<hr/>	<hr/>	<hr/>
Total ...	2	1.47	1.52

DEATHS FROM PUERPERAL CAUSES—ENGLAND AND WALES.

	Rate per 1,000 Total (Live & Still Births).	Rate per 1,000 Live Births.
Puerperal Sepsis ...	0.94	0.97
Other Puerperal Causes ...	2.17	2.26
<hr/>	<hr/>	<hr/>
	3.01	3.23

The Corresponding Figures in 1936 were 3.65 and 3.23.

PERCENTAGE OF TOTAL DEATHS.

	Causes of Death Certi- fied by Regis- tered Medical Practitioners.	Inquest Cases.	Certified by Coroner after Post- Mortem. No Inquest.	Uncertified causes of Death.
North-West Cheshire	93.5	4.0	1.5	1.2

The percentage of deaths of persons dying in Public Institutions was 31.6.

DEATHS BY PLACE OF OCCURRENCE, ENGLAND AND WALES,
1926-1930.

	Number of Deaths	Per cent.
Deaths in Institutions... ..	680,529	32.7
Deaths elsewhere than in the Institutions	1,606,192	67.3
	2,386,731	100

Death Rate of Infants under 1 year of age.

	Number.	Rate.
All Infants per 1,000 live births	55	41.
Per 1,000 legitimate live births	55	42.
Per 1,000 illegitimate live births	—	—

The Registrar-General's Table is as follows:—

	Rate per 1,000 Births.
England and Wales	58
125 County Boroughs and Great Towns,, including London	62
148 Smaller Towns (1931 adjusted populations 25,000—50,000)	55
London	60

The Infantile Mortality Rate was 1 per 1,000 live births above that of 1935 which was the lowest recorded.

The infantile mortality figure is accepted as an index of the health conditions of a community. Our infantile mortality rate was lower than in England and Wales, County Boroughs, Smaller Towns and London.

	Year, 1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Deaths from Measles (all ages)	8	3	12	2	4	1	7	5	1	10	0
Deaths from Whoop- ing Cough (all ages)	7	5	5	5	13	5	1	7	0	6	6
Deaths from Diarrhœa (under two years of age)	14	12	10	6	9	6	7	2	1	6	2

REGISTRAR-GENERAL'S TABLE.

	Rate per 1,000 Live Births. Diarhœa & Enteritis (under 2 years).
England and Wales	5.8
125 County Boroughs and Great Towns, including London	7.9
148 Smaller Towns (1931 adjusted populations 25,000—50,000)	3.2
London	12.0

In the North-West Cheshire Combined Area, the diarrhœa rate was 1.5.

General Provision of Health Services in the Area.

1. PROFESSIONAL NURSING in the Home :—

(a) General.—In every one of the large centres of population there is a district nursing organisation which provides a trained nurse. Subscriptions from charitable persons, and small charges for services rendered, serve to support the organisation. No scheme of co-ordination exists with the work of the Local Authorities.

(b) For Infectious Diseases.—There are no arrangements for nursing infectious cases with the exception of Pneumonia. In each district steps have been taken or are contemplated to secure home nursing for sufferers from Pneumonia in accordance with the Ministry's Circular.

“ Where adequate nursing in the home is available, admission to an institution primarily for nursing attention can often be avoided, as also can the unnecessary retention in hospital of patients who have reached a stage at which medical attention in the home is sufficient if proper nursing also is available there.” (Ministry of Health Report 1934-35).

2. MIDWIVES.—There are 32 midwives practising in the district.—Bebington 14, Hoylake 9, Neston 4, Wirral 5. There is no employment of midwives by the Local Authorities. The Mid-

wives' Act, 1936 is administered by the County Council and an adequate number of state registered midwives has been allocated to each area.

3. **LABORATORY FACILITIES.**—Chemical work was formerly carried out by the County Analyst at the expense of the County. This arrangement has been terminated and it is now left to each district to select its own Analyst. The work consists of analysis of water and milk samples. Food and drugs throughout the area are submitted for analysis to the County Analyst. The samples are taken by County officers. Under the report to each constituent authority of the Combined District, a table is given of the number and nature of samples taken and the results of analysis. The Clinical Research Association and Manchester and Liverpool Laboratories are used for investigation of disease at the public expense. The Municipal Laboratory, Birkenhead, and two private laboratories are also employed.

4. **LEGISLATION IN FORCE.**—A list of local and general adoptive acts and bye-laws is given under each district report.

5. **HOSPITALS.**—There were no changes in the hospital services, public or voluntary, whether within or without the area, which are used by the inhabitants of the area.

On 1st April, 1935, the Infirmary at the Wirral Institution was appropriated for Public Health Purposes and has been named the Clatterbridge (County) General Hospital.

TUBERCULOSIS.—The County Council is a partner in the Joint Sanatorium at Market Drayton. It has also an Institution at Wrenbury and pays for beds in the Sanatoria of other authorities, and in Leasowe and Heswall Open Air Hospitals for Children

MATERNITY.—A maternity hospital is provided by Messrs. Price in Bromborough, for the use of the wives of their employees. The County Council provides a well equipped Maternity Hospital, separate from other buildings, at Clatterbridge, and retains the services of a Consultant for Gynæcological work. This contains 19 beds and 19 cots. An innovation in the year 1936 is worthy of mention, viz.: the introduction into general use of the Minnitt

Apparatus for lessening pain. It has been used in a very large number of the cases of motherhood with uniform success. Dr. Minnitt has himself supervised the selection of the instruments. The British College of Obstetricians and Gynæcologists has now given its blessing to the employment of this simple method of obtaining relief from pain. The suggestion of the College is that midwives should be allowed to use the Minnitt Apparatus in confinements where a medical examination of the patient has been made to ensure the absence of contraindications to its use. It is easy to employ and safe, and where it has been used it is very noticeable that there is complete absence of exhaustion and debility which so frequently followed the birth.

FEVER.—The whole area is served by the hospitals of the Wirral Joint Hospital Board. These hospitals also admit infectious cases from the Chester Rural District. The main infectious diseases hospital is situated at Clatterbridge, and has an accommodation of 100 beds, which can be extended to 116.

Provision has been made to receive Encephalitis patients.

Under certain conditions beds may be available for measles and for Whooping Cough.

Major Duncan Campbell, F.R.I.B.A., Architect to the Joint Hospital Board, supplies the following details of buildings which have been recently erected and were formally opened in 1937.

The Isolation Hospital, Clatterbridge.

New Nurses' Home.

The Home provides accommodation for 25 Sisters and Nurses in addition to a self-contained suite for a Sister-in-charge comprising Sitting Room, Bed Room and Bath Room.

One wing on the ground floor contains a Dining Room, 25ft. x 17ft., a Servery fitted with a hot plate, sinks, china cupboards, etc., and a small Larder, but no kitchen is provided, as it is intended that all meals shall be cooked in the existing Central Kitchen.

A Nurses' Sitting Room and a Lecture Room, separated by a moveable Screen, can be thrown together if necessary, forming one room 50ft. x 17ft., with Cloak Rooms, Telephone Room and a small Waiting Hall, fill the central area of the ground floor.

The remaining wing contains a Sisters' Sitting Room in addition to the suite for the Sister-in-charge before mentioned.

In addition to the usual Lavatory accommodation, small rooms are provided for Hair Washing and Laundry Work.

All floors are of concrete, covered in the case of the Bed Rooms with linoleum, the upper corridors with cork, the lower corridors with granwood and the Sitting Rooms, etc., on the ground floor, with wood blocks.

The exterior is faced with Buckley Junction rustic bricks with Storeton Stone dressings and the roof covered with Tyrch slates.

The windows are of the sliding sash type and all Bed Rooms are fitted with built-in furniture and basins with hot and cold water.

Heating is by low pressure hot water.

New Cubicle Block.

The block contains 12 cubicles each 12ft. x 10ft. x 10ft. high, divided by glazed partitions and all overlooked from a central Duty Room and approached by an open sided covered way.

The floors of the Cubicles are finished in granwood, and of the covered ways in asphalt.

The external facings are Buckley Junction rustic brick and the roof covered with Tyrch slates to match the new Home and heating is by low pressure hot water.

Pensby.—At Pensby there is a hospital with 12 beds for convalescent scarlet fever patients.

The CLATTERBRIDGE ISOLATION HOSPITAL is, in fact, an independent administrative unit interpreting its function as the admission to hospital of any persons suffering from certain diseases coming into the category of "notifiably infectious." No real harm arises from this interpretation if the hospital be adequate in normal times for the population which it serves, but as soon as the proportion of infected cases passes to what may be termed the epidemic level difficulties arise. Not so many years ago the view of the Isolation Hospital, both by the general public and the medical profession, or by the general public led by and in deference to medical opinion, was that of an institution where infectious cases could be segregated "to prevent spread of infection." To-day the position will be best elucidated by quoting the following from the recent edition of what is regarded as one of the most authoritative works on the subject:—

The policy of the isolation of sick persons within a community is based on a similar failure to realise that the clinical picture provides a very incomplete description of the true state of affairs. If isolation removed from the community the whole, or even the great majority of the infected individuals, it might be expected to exert a considerable influence on the prevalence of an infective disease, but if the ratio of latent or atypical infectious to clinically-recognisable cases is high, we cannot hope to effect any marked reduction in the morbidity rate by removing to hospital those cases which exhibit the typical stigmata of the disease. We may, indeed, effect a smaller reduction in the total infective material than the ratio of isolated to non-isolated among infected individuals would suggest; for the sick person would, in any case, move less freely among his fellows than the apparently healthy carrier. As in the case of quarantine, we should expect a policy of isolation to be successful only in exceptional circumstances, when the recognizable cases form a very high proportion of the total infected, and when the total mass of infection to be dealt with is small. Once a given infectious disease has assumed an endemic-epidemic prevalence within a herd, we should expect no appreciable result from the isolation hospital, so far as a reduction in morbidity is concerned. It is interesting to find that the expectations based on bacteriological and experimental findings are borne out by administrative experience. Thus an attempt has been made, by an analysis of the available records, to answer the question: Does hospital isolation have any effect upon the incidence of scarlet fever?— All applications of the calculus of correlations have wholly failed to bring out any connection whatever between the incidence rate of scarlet fever and the extent of isolation. The value of the isolation hospital must apparently be judged by the benefit which it confers on the sick within its walls; for it would seem to have little effect on the health of the community as a whole.

The 1937 outbreak of Diphtheria and Scarlet Fever in epidemic proportions very soon tried the capacity of the hospital to the utmost or beyond its available beds. It is to be congratulated on never having failed speedily to admit any diphtheria cases, but scarlet fever cases had to remain in many instances in their own homes. This latter condition was quite natural in the circumstances, but as the hospital is an independent entity, little discrimination could be exercised in choosing cases for admission. Selection of cases could have been made in accordance with the recognised conditions which make hospital isolation and treatment advisable, namely: Where the case is a serious one; when other members of the family are engaged either at home or outside at dairy work, shopkeeping, dress-making, laundry and other social occupations. Consideration should be given to the facilities for isolation at home, other children or over-crowding, availability of home nursing prior to the admission of Scarlet Fever patients in times of stress. In some instances much hardship was incurred owing to compulsory abstention from work under the regulations of certain firms, with consequent non-payment of wages.

The time has certainly arrived when a conclusion should be come to in the question of whether or not sums of public money are being wasted in the attempted treatment of all cases of Scarlet Fever in hospital. As long as ten years ago the Medical Officer of Health of a town with a quarter of a million inhabitants wrote:—"I regard removal of scarlet fever patients to hospitals as a convenience rather than as a public health measure of much public health importance."

Reports of medical officers show that in many districts removal has ceased to be a matter of routine.

The following extract is taken from the Report on "Some Administrative Aspects of Scarlet Fever," prepared by a Medical Officer of the Ministry of Health:—

The number of Scarlet Fever patients, however, who clinically now require the benefit of hospital treatment form a very small proportion of those attacked. Never was there less epidemiological evidence nor less clinical necessity for the hospital isolation and treatment of Scarlet Fever patients than there is to-day, and yet the general hospital isolating rate for the country as a whole was never so high as it is at the present time.

At a recent meeting of the Society of Medical Officers of Health the following resolution was unanimously carried:—
 “ That the Council of the Society should represent to the Board of Education and the Ministry of Health that the recommendations contained in their memorandum of 1927 on ‘ Closure and Exclusion from School ’ are no longer in accordance with recent advances in epidemiological knowledge, and that the memorandum be redrafted and revised accordingly.”

In at least one County Borough the return of “ Contacts to school has not produced any unhappy results, and has not precipitated an epidemic.”

The Medical Officer of that Borough writes concerning the Contact:—

“ Now if he goes back to school he mixes only with his peers, and that mixing takes place usually in a well-ventilated room, where infection is less likely to spread than in a stuffy home. After school he plays with the same children. Thus, whether he goes to school, or whether he stays at home, he will run the risk of infecting his own age-group. Only if he stays at home will he mix with the toddler group to any extent.”

The final report of the Departmental Committee on the Cost of Hospitals which was issued a few days ago deals, among other matters, with the subject of Isolation Hospitals. Avoidance of the erection of small isolation hospitals is emphasised, but no standard minimum is laid down. Consideration of the area served by the Clatterbridge Isolation Hospital and the number of beds provided leads me to the conclusion that the area is eminently suitable and the beds provided are commensurate with the requirements of conditions, not outside the ordinary. The site and lay-out of the hospital conform to modern requirements. Laundry, ambulance garage, boiler house and disinfector are provided. The cubicle block, as in the report, consists:—

of a number of entirely separate single-bed wards. A cubicle block is used for cases of double infection and doubtful diagnosis and for those diseases of which only small numbers of cases are admitted. Unlike the other ward blocks, a cubicle block may be used for the reception of patients suffering from different diseases.

It is anticipated that at an early date a resident assistant Medical Officer will be appointed and application will be made

to the General Nursing Council for recognition of the hospital as a training school for nurses in " Fevers." Ear and Throat troubles occurring in the patients are treated by the Consulting Aurist, whose close association with the hospital augurs well for good results.

For five years a " Schools Epidemics Committee" has been collecting data and analysing records of sickness in a large number of schools. That tentative conclusions only can be drawn from the limited experience in time and scope is a warning given in the published report.

The attack rate for influenza was identical for girls and boys, but the girls had a rate of 22.6 per cent. compared with 5.6 for the boys. Gastro-intestinal disorders showed their highest incidence in both sexes in the Christmas term. The influence of accidents among boys was heaviest in the Christmas term, whether " due to intensified activity as a result of good health, and how much to the fact that more football, particularly Rugby, is played at this season, it is impossible to say." Over 90 per cent. of all cases of infectious disease in boys occurred in the first two terms, and among girls the incidence was heaviest in the Lent term with 60 per cent.

Evidence is accumulating that it is possible to acquire an immunity to measles by exposure to infection during an epidemic without showing signs of clinical disease.

" In view of the fact that, even when left to its own devices, scarlet fever has never in our experience attacked more than 3.4 per cent. of the ' not-previously attacked ' in any outbreak, we do not believe that the advantages of artificial immunisation against scarlet fever in a public school are sufficient to compensate for the labour and disability incurred during the process."

" Examination of the record cards of our entire population at the beginning of the inquiry in 1930 revealed the fact that just over half the boys and rather under half the girls had had their tonsils removed; a yearly census thereafter showed that these proportions were rising slowly, until by the end of 1934 they had increased by nearly six and seven per cent. respectively."

It was obviously important, in the public interest, to discover, if possible, whether this mass attack upon one of the

normal structures of the body was justified. We studied the incidence of various nasopharyngeal infections such as influenza, colds, sore throats, etc., in boys and girls with and without tonsils, and found no significant difference in the attack rates on the two groups, and certainly no evidence that tonsillectomy resulted in a diminished incidence of the infections under discussion.

Though realizing the value of the operation in carefully selected cases, we have grave doubts as to whether the majority of tonsillectomies performed to-day are the result of true discrimination, rather than of routine ritual.

Boys suffered twice as frequently as the girls from Otitis Media; two and a half times as frequently from pneumonia; and eleven times as frequently from acute rheumatism. Girls suffered more severely than boys from Appendicitis, with 50 per cent. more cases and 10 per cent. more operations.

The summary of the observations in Scarlet Fever are of peculiar interest and importance in Wirral, with its present epidemic prevalence.

Only 22.4 per cent. of outbreaks among the boys and 16.7 per cent. among the girls give an attack rate of 1.0 per cent or over.

The disease showed little tendency to spread widely in any school, the largest attack rates ever reached being 3.5 per cent. and 4 per cent. Boys reported three times as many cases as girls.

COMPLICATIONS.—Only 6 cases of otitis media and 2 of pneumonia were reported among the boys, but this rate may be too low owing to lack of information about hospital cases; no complications were reported among the girls.

VACCINATION AGAINST SMALL POX.

A consideration of the number of children vaccinated in the area during three recent years shows that out of 2,933 births only 1426, i.e., less than half had been vaccinated. Conscientious objectors obtained certificates of exemption in 692 instances. Subtracting deaths, removals and postponements 291 were not accounted for and presumably should be added to the unvaccinated.

A question recently asked in Parliament elicited the information set forth in the following table:—

1. Public Vaccinations and Re-vaccinations (England and Wales).

Year ended	Public Vaccinations	Re-vaccinations.
30th September :		
1932	207,543	16,624
1933	189,857	9,628
1934	184,137	14,802
1935	183,917	9,267
1936	176,618	11,434

2. Net Expenditure on Vaccination of all local authorities (England and Wales).

	£
1931-32	146,714
1932-33	136,365
1933-34	128,339
1934-35	125,646
1935-36	126,775

3. Net Expenditure of Government Lymph Establishment.

	£
1932-33	12,583
1933-34	11,752
1934-35	11,492
1935-36	12,363
1936-37	12,069

CHILDREN.

No children's hospitals are provided or subsidised by the County Council, but some beds are maintained in the West Kirby Children's Convalescent Home. Bebington retains a bed in the West Kirby Convalescent Home for children from the Infant Welfare Centre.

Clatterbridge (County) General Hospital.

Classification of In-patients who were discharged from, or who died in the Hospital during the year ended 31st December, 1937.

Disease Groups	Children under 16		Men and Women	
	Dis- charged	Died	Dis- charged	Died
A. Acute Infectious Disease	16	2	2	—
B. Influenza	—	—	15	6
C. Tuberculosis. Pulmonary	1	—	14	4
Non-Pulmonary... ..	8	1	2	2
D. Malignant Disease	—	—	17	25
E. Rheumatism.				
(1) Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea	5	1	11	1
(2) Non-articular manifestations of so- called rheumatism (muscular rheu. fibrositis, lumbago and sciatica) ...	—	—	6	—
(3) Chronic arthritis	—	—	12	—
F. Venereal Disease	2	—	10	1
G. Puerperal Pyrexia	—	—	20	—
H. Puerperal Fever—				
(a) Women confined in hospital ...	—	—	—	1
(b) Other cases	—	—	1	3
I. Other Diseases and Accidents connected with pregnancy and childbirth ...	—	—	86	1
J. Mental Diseases—				
(a) Senile Dementia	—	—	5	—
(b) Other	—	—	25	—
K. Senile Decay	—	—	—	—
L. Accidental Injury and Violence ...	51	1	138	11
<i>In respect of cases not included above.</i>				
M. Disease of the Nervous System and Sense Organs	35	11	93	27
N. Disease of the Respiratory System ...	28	8	71	16
O. Disease of the Circulatory System ...	13	3	53	61
P. Disease of the Digestive System ...	68	6	186	34
Q. Disease of Genito-urinary System ...	22	1	124	21
R. Disease of the Skin	40	1	35	2
S. Other Diseases	16	1	14	4
T. Mothers and Infants discharged from Maternity wards and not included in the above figures			395	—
Mothers ...	—	—	—	—
Infants ...	347	10	—	—
U. Any person not falling under any of the above headings. Healthy Babies ...	27	—	—	—
Totals	683	46	1335	220
1936 Statistics	630	33	1268	199
1935 "	564	35	1151	185

MALIGNANT DISEASE.

Total number of patients admitted to hospital at Clatterbridge: 34.

SITES	I.		II.				III.	
	Patients admitted after previous advice or treatment at another hospital providing operative but not radiation treatment.		Patients admitted after previous advice or treatment at another hospital providing operative but not radiation treatment.		Patients admitted without previous advice or treatment at another hospital.		TOTAL 23.	
	TOTAL 9.		Treated at that hospital.		Not Treated at that hospital.		(a)	
	(a) Numbers treated at that hospital. (i)	(b) Numbers not treated at that hospital. (ii)	(a) Numbers retained in hospital. (iii)	(b) Nos. refd. for advice or trmmt. to hos. prov. radiation treatment. (iv)	(a) Numbers retained in hospital. (v)	(b) Nos. refd. for advice or trmmt. to hos. prov. radiation treatment. (vi)	(i) Hospital providing operative treatment. (viii)	(ii) Hospital providing radiation. (ix)
Uterus ...	1	—	—	—	—	3	—	
Tongue & Mouth	1	—	—	—	—	1	1	
Breast ...	1	—	—	—	—	1	—	
Lip ...	—	—	—	—	—	—	—	
Skin...	1	—	—	—	—	1	—	
Larynx ...	—	—	—	—	—	—	—	
Bladder ...	1	—	—	—	—	—	—	
Rectum ...	1	—	—	—	—	2	—	
Other Sites ...	2	1	2	—	—	13	1	
	8	1	2	—	—	21	2	

6. MATERNITY AND NURSING HOMES.—Supervised by the County Authority.

7. INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS AND HOMELESS CHILDREN.

Nil.

8. AMBULANCE FACILITIES.

(a) For Infectious Cases.—The Wirral Joint Hospital Board provides motor ambulances for the removal of infectious cases.

(b) Non-Infectious and Accident Cases.—Hoylake provides an ambulance; Bebington, Neston and Wirral have an arrangement whereby an ambulance is hired when required. The Clatterbridge (County) General Hospital has two motor ambulances. Ambulance facilities are adequate throughout the area.

Clinics and Treatment Centres.

9. MATERNITY AND CHILD WELFARE CENTRES.—The County Council provide a Centre at Hoylake, Heswall, and Neston; Bebington possesses three centres. These centres are advisory and do not undertake any treatment. “ We consider that the primary function of such centres should be to provide advice, and that as a general rule treatment should be provided rather by the general practitioner.” *Report of the Committee on Local Expenditure.*

An Orthopædic Clinic has been organised at New Ferry. Bebington has a pre-maternity clinic conducted by a Gynæcologist. At Bebington an Aural Clinic under the supervision of a specialist has been inaugurated and also an Eye Clinic.

DAY NURSERIES.—There is one day nursery which is situated in Hoylake and receives a subsidy from the County Council.

SCHOOL CLINICS.—There is a school clinic at Bebington. Dental and eye clinics are provided as part of the school medical service.

TUBERCULOSIS.—The County Council provide a dispensary at West Kirby, and has part use of the Birkenhead Tuberculosis Dispensary.

RIVER POLLUTION.

In 1927 the Mersey Docks and Harbour Board appointed a Scientific Committee to investigate the effects of the Discharge of Crude Sewage into the River Mersey, and issued the report of that Committee marked Private and Confidential. The final opinion was that "the continued discharge of crude sewage into the Mersey constitutes a grave danger to the conservancy of the River." Crude sewage draining into the tidal waters daily on the average amounted to 37,500,000 gallons. Untreated sewage discharging into the Estuary had increased greatly in the last fifty years, and it was claimed that the presence of the sewage increased the rate of sedimentation of solid matters and altered the character of the deposit so as to hinder and interfere with the efficacy of dredging operations. Merseyside authorities and companies concerned agreed to submit matters in controversy to the Department of Scientific and Industrial Research. Water Pollution Research Technical Paper Number 7 describes the work done in the investigation and the conclusions reached. Bebington and the now dissevered Wirral Rural District were two of the authorities which contributed to the expenses of the work. Mud deposits from estuaries of many rivers and bays in England, Scotland, Ireland and the Free State were examined for the purpose of comparison with Mersey mud. Erosion of the bed of the Irish Sea and the cliffs of Boulder Clay in the Upper Estuary and material carried by the streams entering the Estuary are the main sources of the mud. "Sewage in the concentration in which it is present in the Estuary of the Mersey has no appreciable effect on the composition of the mud and other solid matter deposited in the Estuary." "In direct answer to the terms of reference it is concluded that the crude sewage discharged into the Estuary of the River Mersey has no appreciable effect on the amount and hardness of the deposits in the Estuary." Investigation proceeded over a period of four years and the cost was £26,000.

Sale of Food and Drugs Acts.

Particulars of samples forwarded to the Public Analyst from the Area during the year ending 31st December, 1937,

Name of Sample	Number Analysed	Number of Samples not up to Standard or Certified as Adulterated	Name of Sample	Number Analysed	Number of Samples not up to Standard or Certified as Adulterated
Almonds, Ground ...	5	-	Honey	3	-
Arrowroot	1	-	Iodine, Tincture of ...	4	1
Aspirins	3	-	Iodised Throat Tablets	1	-
Baking Powder ...	1	-	Lard	3	-
Bicarbonate of Soda ...	1	-	Lemon Cheese	1	-
Boracic Ointment ...	2	-	Liquorice Powder ...	4	-
Boric Ointment ...	1	-	Milk	95	9
Butter	5	-	Milk, Condensed ...	1	-
Cascara Tablets ...	2	-	Oatmeal	2	-
Castor Oil	3	-	Olive Oil	2	-
Cheese	1	-	Parrish's Food	5	1
Cheese, Cheshire ...	10	-	Pearl Barley	1	-
Cinnamon and Quinine Tablets ...	1	-	Pepper	4	-
Coffee	6	-	Peroxide of Hydrogen ...	1	-
Fresh Cream	1	-	Rice, Ground	3	-
Cream, Tinned	4	-	Salicylic Acid Ointment	1	-
Curry Powder	2	-	Salmon and Shrimp Paste	1	-
Dried Apricots	1	-	Sardine and Tomato Paste	1	-
Epsom Salts	5	-	Seidlitz Powders	6	-
Fish Paste	3	-	Semolina	1	-
Flowers of Sulphur ...	1	-	Soda Mints... ..	1	-
Fullers Earth Cream ...	1	-	Strawberry Jam	1	-
Ginger, Ground	5	-	Sugar... ..	1	-
Glauber Salts	1	-	Tea	1	-
Glycerine	3	-	Whisky	3	-
Glycerine and Rose Water Jelly ...	1	-	Zinc Ointment	3	-
Gregory's Powder ...	1	-		221	11

Under each district report details are supplied.

In the Ministry of Health Report for 1936-37 it is recorded that 146,438 samples of food and drugs were examined during the year. This is the highest number ever recorded. 7,802 samples were reported against, a proportion of 5.3 per cent., as against 5.5 per cent. in 1935-36.

Housing.

House building has been active throughout the area. The following table shows the number of new houses erected and occupied from 1921 to the present time.

Year.			Houses Completed.	
1921	...	...	268
1922	...	...	501
1923	...	...	599
1924	...	...	938
1925	...	...	1,177
1926	...	...	1,294
1927	...	...	1,291
1928	...	...	1,105
1929	...	...	1,606
1930	...	...	995
1931	...	...	696
1932	...	...	689
1933	...	...	963
1934	...	...	1,667
1935	...	...	1,747
1936	...	...	1,958
*1937	{	Bebington	799	} 1,468
*Ellesmere Port now omitted.		Hoylake	397	
		Neston	54	
		Wirral	218	
	Total	...	18,962	

Prevalence of, and Control over, Infectious and other Diseases.

Table showing Total Cases (other than Tuberculosis) notified during the year 1937.

Notifiable Infectious Diseases.

Disease	Total Cases Notified	Total Cases Admitted to Hospital	Deaths
Smallpox	-	-	-
Scarlet Fever	186	165	1
Diphtheria	172	165 + 26 neg.	12
Enteric Fever	4	4	-
Puerperal Fever	-	-	-
Puerperal Pyrexia	19	15	-
Pneumonia	123	55	49
Erysipelas	34	16	-
Cerebro-spinal Fever	-	-	-
Acute Poliomyelitis	-	-	-
Acute Polio-encephalitis	-	-	-
Encephalitis Lethargica	1	1	3
Dysentery	-	-	-
Malaria	-	-	-
Chickenpox	81	-	-
Total ...	620	413 + 26 neg.	65

Statistics of Wirral Joint Hospital, 1937.

The admissions during the year were from :—

Disease	Bebington	Ellesmere Port	Hoylake	Neston	Wirral	Chester Rural	Other Areas	Totals
Scarlet Fever	76	103	71	1	13	13	2	279
	Neg 17	Neg 32	Neg 1	Neg 4	Neg 1	Neg 5		
Diphtheria	108	234	41	16	16	20	1	436
Erysipelas	11	2	5	-	-	3	-	21
Enteric Fever	1	-	2	-	-	-	-	3
Measles	-	-	4	-	3	-	1	8
Mumps	1	-	1	-	-	-	2	4
Chickenpox	-	1	1	-	7	-	2	11
Meningitis	-	-	1	-	-	-	-	1
Whooping Cough ...	2	-	1	1	-	-	1	5
" and S. Fever	-	2	-	-	-	-	-	2
" and Diphtheria	-	1	-	-	-	-	-	1
Typhoid and Diphtheria	-	2	-	-	-	-	-	2
Other Diseases... ..	7	2	-	-	2	1	-	12
	206	347	127	18	41	37	9	785
Deaths	6	11	6	1	-	1	1	26

13 patients from the R.L.C.H., Heswall.

32 from the Convalescent Home, West Kirby.

4 from the Babies' Hospital, Hoylake.

1 from The Ellen Gonner Home, Hoylake.

3 from The Children's Hospital,, Birkenhead. —

2 from The Cottage Hospital, Ellesmere Port.

34 from The County General Hospital, Clatterbridge.

2,527 Swabs taken; 83 positive; 2,489 negative.

Bacteriological Examinations.

Specimens examined at public expense:—

DISTRICT	SWABS EXAMINED		BLOOD EXAMINED				Sputa for T.B.	Faeces for T.B.	For Enteric	TOTAL	
	For B. diphtheria	For Haemolytic Streptococci	For Br Abortu	For Enteric Fever	For Gaertner						
	+	-	+	-	+	-	+	-			
Bebington, M.B.	23	12	1	1	1	7	1	-	261		
Hoylake, U.D....	13	-	-	1	-	-	-	1	78		
Neston	3	-	-	-	-	-	-	-	20		
Wirral	3	-	-	-	-	-	-	-	8		
	42	27	12	23	2	10	1	7	367		

DISINFECTION.

Steam disinfection is available for articles which have been in contact with infected persons and is insisted upon by the local authorities in all notified cases. Requests for steam disinfection of bed and bedding under circumstances which the owners think make it advisable are invariably acceded to. Increasing reliance is now being placed upon thorough cleanliness and fresh air in the disinfection of premises rather than upon the extremely hypothetical action of the exhibition of so-called disinfectants. This public service of fumigating houses is one of those to which the following extract from the Report of the Committee on Local Expenditure, 1932, applies:—There seems to us to be a few services which modern medical opinion considers to be obsolete or obsolescent either by change in the circumstances to which they were directed when they were instituted or by advances in medical knowledge. Such services tend to be continued out of habit and from pressure of public opinion. We suggest that these services should be terminated as soon as is compatible with a reasonable regard for public opinion.

TERMINAL DISINFECTION.—The question of disinfecting houses after scarlet fever is dealt with in the same Report, “and we have received independent evidence that both in scarlet fever and in diphtheria, if proper procedure is adopted during the course of the disease, the terminal disinfection has little medical value and is performed largely out of deference to public opinion.

We recommend that Sanitary Authorities, in consultation with their medical officers of health, should take steps to educate public opinion in this matter and discontinue such of their present expenditure on disinfection as has no medical value. The saving which would result from a general adoption of this recommendation is more difficult to estimate, but is not likely to be less than £100,000.” (Report of Committee on Local Expenditure, 1932).

All the districts make use of the Cultivation Officer of the County for the diminution of the rat population. With its brackish pools along the Dee Estuary, numerous ponds and streams a “slimie and full of mudde” Wirral affords excellent breeding grounds for the mosquito. The “complexion of the times” is shown in the number of complaints of annoyance from mosquito bites.

Tuberculosis, 1937.

Age Periods				NEW CASES				DEATHS			
				Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
				M.	F.	M.	F.	M.	F.	M.	F.
Years											
0-1	...	...	...	—	—	—	—	—	—	—	—
1-5	...	...	...	—	—	1	—	—	—	—	—
5-10	...	...	...	1	—	5	5	—	—	1	1
10-15	...	...	...	—	1	1	3	—	—	—	—
15-20	...	...	...	3	2	1	1	1	—	—	—
20-25	...	...	...	8	4	—	—	1	4	1	—
25-35	...	...	...	5	7	—	1	3	3	—	1
35-45	...	...	...	5	—	—	1	7	2	1	—
45-55	...	...	...	3	2	—	—	4	4	—	—
55-65	...	...	...	3	1	—	—	4	1	—	—
65 and up	...	...	...	2	1	—	1	1	1	—	—
Total ...				30	18	8	12	21	15	3	2

Tuberculosis Mortality in North-West Cheshire 1922-37 :—

Year.	No. of deaths.	Year.	No. of deaths.
1922	64	1930	57
1923	75	1931	68
1924	67	1932	62
1925	77	1933	62
1926	70	1934	50
1927	75	1935	63
1928	76	1936	47
1929	76	1937	42*

*Ellesmere Port omitted.

Tuberculosis Mortality in England and Wales 1920-36, is shown in the following table :—

Year.	Number of deaths.	Year.	Number of deaths.
1920	42,545	1929	37,990
1921	42,678	1930	35,745
1922	42,777	1931	35,818
1923	40,788	1932	33,658
1924	41,103	1933	33,259
1925	40,387	1934	30,882
1926	37,525	1935	29,201
1927	38,173	1936	28,268
1928	36,623		

166 Examinations of sputum from residents in North-West Cheshire, made to determine the presence of tubercle bacilli, at the County Tuberculosis office gave the following results:—

	Positive	Negative	Total
Bebington U.D. ...	14	58	72
Hoylake U.D. ...	11	41	52
Neston U.D. ...	1	22	23
Wirral U.D. ...	3	16	19
	29	137	166

1937.

OPHTHALMIA NEONATORUM	Cases			Vision unimpaired	Vision impaired	Total Blindness	Deaths
	Notified	Treated					
		At Home	In Hospital				
	2	2	—	2	Nil	Nil	Nil

BOROUGH OF BEBINGTON

The Urban District was formed on 1st April, 1922, by fusion of the Urban Districts of Higher and Lower Bebington and Bromborough.

On 1st April, 1933, the parishes of Poulton-cum-Spital, Storeton, and parts of the parishes of Brimstage, Eastham, Childer Thornton, Hooton, Thornton Hough, Raby, Willaston and Neston are included.

The Urban District received its Charter of Incorporation on 28th September, 1937.

Statistics and Social Conditions of the Area.

Area (acres)	...	...	...	...	...	...	12,234
Registrar-General's estimate of resident population, 1937	...	...	...	...	...	...	39,550
Number of inhabited houses end of 1937	...	...	...	...	...	...	11,500
Rateable value	...	...	...	...	...	...	£323,711
Sum represented by a penny rate	...	...	...	...	...	...	£1,210

The Natural Increase of the population, that is the excess of births over deaths is shown in the following table:—

Year.	Population.	Natural Increase per 1,000 population.
1922	19,600	9.0
1923	19,870	9.4
1924	20,230	8.6
1925	20,610	6.5
1926	22,350	8.3
1927	23,140	6.2
1928	23,720	8.8

Year.	Population.	Natural Increase per 1,000 population.
1929	24,900	8.9
1930	26,020	9.5
1931	26,950	9.2
1932	27,520	7.1
1933	32,410	5.7
1934	34,930	6.9
1935	35,340	6.6
1936	37,740	6.7
1937	39,550	6.9

Natural Increase of Population (i.e., excess of Births over Deaths) 1922-1935 (England and Wales).

Year.	per 1,000 population.	Year.	per 1,000 population.
1922	7.6	1930	4.9
1923	8.1	1931	3.5
1924	6.6	1932	3.3
1925	6.1	1933	2.1
1926	6.2	1934	3.0
1927	4.3	1935	2.9
1928	5.0	1936	2.5
1929	2.9		

Extracts from Vital Statistics of the Year 1937.

These statistics are calculated on the population of 39,550 supplied by the Registrar-General. This is an increase of 1,810 on the estimated population of the previous year, and it would strike an observer as considerably less than the actual increase. Calculating the population from the number of houses it is probably considerably over 40,000.

Live Births.

	Males.	Females.	Total.
Legitimate	345	331	676
Illegitimate	4	6	10
	<hr/>	<hr/>	<hr/>
	349	337	686

Birth Rate 17.3 per 1,000 of the population.

Live Births Rate per 1,000 estimated resident population (1937) in 148 smaller towns (population 25,000-50,000 Census 1931), 15.3.

Still Births.

		Males.	Females.	Total.
Legitimate	...	12	8	20
Illegitimate	...	1	0	1
		<hr/>	<hr/>	<hr/>
		13	8	21

Still-Birth Rate 29.7 per 1,000 total Live and Still-Births, or .5 per 1,000 of the total population.

Table of Number of Births and Birth Rates, 1922-36.

Year.	Number.	Birth Rate.
1922	375	19.1
1923	360	18.1
1924	341	16.8
1925	321	15.5
1926	367	16.4
1927	358	15.4
1928	419	17.7
1929	460	18.5
1930	475	18.3
1931	489	18.1
1932	439	16.0
1933	490	15.1
1934	565	16.2
1935	589	16.2
1936	620	16.4

The average number of births per annum in the years 1922-36 was 444.

Birth Rate England and Wales (1937), 14.9.

Birth Rate in the Administrative County of Chester (1936), 13.9.

Deaths.

Total, 412 ... Males, 225 ... Females, 187

Death Rate, 10.41. The corrected death rate was 11.5.

The death rate per 1,000 estimated resident population in the 148 smaller towns (25,000-50,000 Census 1931) was 14.9 (1937).

Table of Number of Deaths and Birth Rates, 1922-1936.

Year.	Number.	Death Rate.
1922	197	8.9
1923	172	8.6
1924	168	8.3
1925	185	8.9
1926	181	8.0
1927	215	9.2
1928	212	8.9
1929	238	9.6
1930	230	8.8
1931	241	8.9
1932	247	9.0
1933	305	9.4
1934	323	9.2
1935	349	9.6
1936	367	9.7

The average number of deaths per annum in the years 1922-1936 was 242.

Ratio of local adjusted death rate to National Rate was 0.89 (1936).

Death Rate in the Administrative County of Chester was 12, bearing a ratio of 1 to the National Rate (1936).

40% of the deaths took place in Public Institutions.

DEATHS FROM PUERPERAL CAUSES.

	Deaths.	Rate per 1,000 Total Live and Still Births.	Rate per 1000 Live Births.
Puerperal Sepsis ...	2	2.8	2.9
Other Puerperal Causes ...	0	—	—
	—	—	—
	2	2.8	2.9

The figures for England and Wales:—

Puerperal Sepsis ...	...	.94	0.97
Other Puerperal Causes ...	...	2.17	2.26
		—	—
Total ...	...	3.11	3.23

DEATH RATE OF INFANTS under 1 year of age.

	Number.	Rate.
All infants per 1,000 live births ...	34	49
Legitimate infants per 1,000 legitimate live births	34	50
Illegitimate infants per 1,000 illegitimate live births	0	0

Table of Infantile Mortality, 1922-1936.

Year.	Rate per 1,000 Births.
1922 ...	64.0
1923 ...	47.2
1924 ...	43.9
1925 ...	62.0
1926 ...	68.0
1927 ...	36.0
1928 ...	45.0
1929 ...	54.0
1930 ...	74.0
1931 ...	45.0
1932 ...	55.0
1933 ...	61.0
1934 ...	48.0
1935 ...	62.8
1936 ...	50.0

REGISTRAR-GENERAL'S TABLE (1937).

	Deaths under 1 Year per 1,000 Registered Live Births'	
England and Wales	58
125 county boroughs and great towns, including London	62
148 smaller towns (25,000-50,000 1931 Census)		55
London (Administrative County)	60
Deaths from Measles (all ages)	0
Deaths from Whooping Cough (all ages)	2
Deaths from Diarrhœa (under 2 years of age)	1
Deaths from Cancer (all ages)	42

The deaths from Measles in the preceding five years were 7, from Whooping Cough 5, and from Diarrhœa (under 2 years of age) 4.

Causes of Death.

All Causes.	M.	F.	Total.
1. Typhoid and Paratyphoid Fevers	0	0	0
2. Measles	0	0	0
3. Scarlet Fever	1	0	1
4. Whooping Cough... ..	0	2	2
5. Diphtheria	3	1	4
6. Influenza	9	8	17
7. Encephalitis Lethargica... ..	0	2	2
8. Cerebro-spinal Fever	0	0	0
9. Tuberculosis of Respiratory System	12	10	22
10. Other Tuberculous Diseases	0	1	1
11. Syphilis	1	0	1
12. General Paralysis of the Insane : Tabes Dorsalis	2	0	2
13. Cancer, Malignant Disease	21	21	42
14. Diabetes	4	4	8
15. Cerebral Haemorrhage	11	15	26
16. Heart Disease	64	52	116
17. Aneurysm... ..	0	0	0
18. Other Circulatory Diseases	12	9	21
19. Bronchitis... ..	3	2	5
20. Pneumonia (All forms)	13	7	20
21. Other Respiratory Diseases	1	1	2
22. Peptic Ulcer	5	3	8
23. Diarrhoea (under 2 years)	1	0	1
24. Appendicitis	5	4	9
25. Cirrhosis of Liver	0	0	0
26. Other Diseases of Liver, etc.	1	2	3
27. Other Digestive Diseases	6	4	10
28. Acute and Chronic Nephritis	11	6	17
29. Puerperal Sepsis	0	2	2
30. Other Puerperal Causes	0	0	0
31. Congenital Debility, Premature Birth, Malfor- mations, etc.	17	10	27
32. Senility	0	0	0
33. Suicide	2	2	4
34. Other Violence	6	6	12
35. Other Defined Diseases	13	12	25
36. Causes Ill-defined or Unknown... ..	1	1	2
Totals ...	225	187	412
<i>Special Causes (included in No. 35 above)</i>			
Smallpox	0	0	0
Poliomyelitis	0	0	0
Polio-encephalitis	0	0	0

General Provision of Health Services in the Area.

These are noted under North-West Cheshire, page 14.

List of Adopted Acts, Bye-Laws, Regulations.

Infectious Diseases (Prevention) Act	...	...	...	1890
Public Health Acts (Amendment) Act (Parts I., II., II.)				1896
Public Libraries Act	...	...	...	1892-1910
Private Street Works Act	...	...	...	1895
Small Dwelling Acquisition Act	...	...	...	1899
Notification of Births Acts	...	...	...	1907 & 1912
Public Health Acts (Amendment) Act	...	...	...	1907
Public Health Act	...	...	...	1925

Bye-Laws.

Relating to—

New Streets and Buildings	...	...	...	1930
Fish Frying	...	...	...	1930
Recreation Grounds	...	...	...	1927
Common Lodging Houses	...	...	...	1936
Cleansing of Cesspools	...	...	...	1936
Slaughter-houses	...	...	...	1936

Sanitary Circumstances of the Area.

WATER.

The West Cheshire Water Board Act of 1925 brought under the control of the Board the area of the West Cheshire Water Company and certain works of the Wirral Waterworks Company. Transfer took place to the new Board in 1925 of a population of 55,000, and in 1937 the population supplied was 95,000. Land for a new pumping station at Mouldsworth had been acquired in 1928, and in 1937 the work was completed and formally opened. A duplicate pumping plant has been provided. The bore holes, as for all the other Wirral supplies, are in the Bunter Sandstone (new Red Sandstone). Sand to the depth of 250 feet covers the site of the pumping station, and the bore hole passes to a depth of 1,000 feet. From this sandstone the waters are clear, bright, colourless, palatable and wholesome, according to the

authorities. Next to the chalk this pervious sandstone supplies the most abundant yield. "The sand granules of which the rocks are composed are cemented together by calcium sulphate and carbonate; hence the water is usually very hard, but much of the hardness is removable by boiling." Analyses of the waters as pumped from the bore hole during construction have not been supplied. Thresh, however, in "The Examination of Water and Water Supplies," gives an analysis of the water at a depth of 250 feet and again at 800 feet. He makes the comment that the top water was harder and contained more sodium chloride. As a matter of interest it may be noted that the figure for common salt at 250 feet was 77.95 and at 800 feet 29.98 parts per 100,000, contrasting with Hooton 5.5 and Prenton 6.15. The hardness of Mouldsworth water at 250 feet was 30.8 degrees, at 800 feet 18.2 degrees. Hooton water has a hardness of 18.9 degrees and Prenton 14.

Information is given that "Before leaving the vicinity of the Pumping Station, however, the water is first softened and the arrangement of the piping and valves is such that a proportion of the crude water, in its natural state, is passed through the softening plant, where its hardness is reduced to zero before it is returned to mix with the remaining water on its way to the Service Reservoir." The latter is situated on Simmonds' Hill, some two miles away, and 438 feet in height. Work still remains to be done by the sinking of a shaft and driving adits into the sandstone to connect with the two bore holes so as to augment the supply. Simmonds' Hill Service Reservoir has a capacity of 8,000,000 gallons, and is circular in outline, with an internal diameter of 262 feet, a depth of water of 25 feet, and top water level 450 feet above Ordnance Datum. Softening is accomplished by the Permutit Process which reduces a hardness of 16 degrees to 9.5 degrees. It is claimed that these works are unique in being the first fully automatic Zeolite Installation laid down in Europe by a public water undertaking.

All the water supplied to the Borough of Bebington, the Urban District of Wirral, and to parts of Hoylake and Neston Urban Districts is softened to under ten degrees of hardness.

Public attention has been drawn by the Croydon occurrences to the possibility of pollution of bore hole waters. Enteric fever had almost completely disappeared from England with the introduction of pure water supplies and improved disposal of sewage. Croydon's mishap has reawakened the need for caution, lulled by years of freedom from serious outbreaks.

Consecutive but unassociated epidemic outbreaks during the last three years in various parts of the country have now induced a state of public nervousness, and necessitated a circular from the Ministry of Health suggesting steps to be taken to ensure greater co-ordination between engineering and sanitary services. The geological formation from which the water at Croydon was derived is chalk, which, as is well known is apt to contain fissures and swallow holes, through which sewage may pass in and contaminate the water. Fissures are absent from the Bunter sandstone, or are closely packed with sand, which forms an excellent filtering medium.

West Cheshire Water Board (softened supply). The following analyses are typical of waters from Hooton and Prenton Wells.

HOOTON.

Chemical Results in Parts per 100,000.

- Appearance.—Clear and bright.
 Colour.—Normal. Odour, nil.
 Reaction pH.—Neutral 7.4. Free Carbonic Acid. Nil.
 Electric Conductivity at 20 degrees C., 700.
 Total Solids, 180 degrees C.—46.5.
 Chlorine in Chlorides.—9.6.
 Nitrogen in Nitrates.—Nil. Nitrites absent.
 Hardness: Permanent 0.0 grains per gallon.
 Temporary 8.5 do.
 Total 8.5 do.
 Metals.—Absent.
 Free Ammonia—nil. Ammoniacal Nitrogen—nil.
 Albuminoid Ammonia—0.0000. Albuminoid Nitrogen—0.
 Oxygen absorbed in 4 hrs. at 80 degrees F.—0.005.

BACTERIOLOGICAL RESULTS.

No. of Bacteria per cc. or ml.

On Agar in 3 days at 20 degrees C.—8.

On Agar in 1 day at 37 degrees C.—1.

On Agar in 2 days at 37 degrees C.—2.

The Bacillus Coli.—Present in.—Absent in 100 c.c.

Bacillus Welchii (B. Enteritidis Sporogenes).—Present in.—Absent in 100 cc.

REPORT.—This is a clear and bright water of normal colour, neutral reaction and fairly soft in character. The water contains no excess of saline matter, is free from metals, and is of the highest degree of organic quality.

Bacteriologically it is of a very high degree of purity.

It is pure and wholesome water, suitable for the purposes of public supply.

PRENTON.

Parts per 100,000.

Appearance.—Clear and bright.

Colour.—Normal. Odour nil.

Reaction pH.—Neutral 7.1. Free Carbonic Acid —.

Electric Conductivity at 20 degrees C.—530.

Total Solids, 180 degrees C.—35.

Chlorine in Chlorides.—5.8.

Nitrogen in Nitrates.—0.2. Nitrites absent.

Hardness: Permanent 0.0 grains per gallon.

Temporary 9.5 do.

Total 9.5 do.

Metals.—Absent.

Free Ammonia.—0.0000. Ammoniacal Nitrogen.—nil.

Albuminoid Ammonia.—0.0000. Albuminoid Nitrogen.—nil.

Oxygen absorbed in 4 hrs. at 80 degrees F.—0,005.

BACTERIOLOGICAL RESULTS.

No. of Bacteria per cc. or ml.

On Agar in 3 days at 20 degrees C. 9.

On Agar in 1 day at 37 degrees C. 7.

On Agar in 2 days at 37 degrees C. 7.

The Bacillus Coli. Present in.— Absent in 100 cc.

Bacillus Welchii (B Enteritidis Sporogenes). Present in—

Absent in 100 cc.

REPORT.—This a clear and bright water of normal colour, neutral reaction and fairly soft in character. The water contains no excess of saline matter, is free from metals and of the highest degree of bacterial purity.

We regard the water as pure and wholesome, suitable for the purposes of public supply.

DRAINAGE AND SEWERAGE.

The inadequacy of the sewerage and sewage disposal arrangements consequent upon the rapid growth of the Borough has been referred to in the Annual Reports of preceding years, and the detrimental influence exerted by the absence of sewers on parts of the area otherwise well adapted for the erection of houses has been mentioned. Over four years ago an enquiry was held by an Inspector of the Ministry into an application to borrow £112,384 to obtain satisfactory drainage. The Ministry advised that there should be a comprehensive scheme for the whole district, and consulting engineers were appointed to be associated with the Borough Engineer. The result of the collaboration came recently before an Inspector of the Ministry, but the Minister's findings have not yet been issued. Probably these findings are bound up with the Report on the Effects of Sewage in the Mersey. The plans before the Inspector contemplated the needs of the Borough if development proceed as anticipated during the next thirty years, and involved an expenditure at to-day's prices of £487,000. An expenditure in the first instance of £214,000 for

sewers and £141,000 for Disposal Works was advocated by the Borough Engineer to meet immediate requirements.

No better method is available to calculate the development of the Borough than to quote from the carefully compiled statistics given in evidence by the Engineer. From 1922 to 1937 houses and shops to the number of 7,293 were built and approval has been given for a further 7,011. Considerably more than half of these latter will be erected on sites not at present suitable owing to the lack of sewers.

Centralised disposal works at Eastham will obviate the need for the eight existing works. Fifty-three acres have been provisionally acquired in Eastham for disposal works, and these will have to be completed before the sewers are utilised. By 1944-45 it is estimated that the volume of sewage to reach the works will be 2,200,000 gallons per day.

Sedimentation tanks to secure an effluent of not more than 10 parts of suspended matter per 100,000 will be constructed. Storage tanks with a capacity equal to two days' dry weather flow plus a margin of 10 per cent. are provided for. These tanks can discharge their contents in three hours commencing three-quarters of an hour after high tide. At the same time they can discharge the maximum volume of storm water that may be passing at any time during the next thirty years.

The present position is that in the Bromborough area purification works were constructed a few years ago, but for the older sewered portions of the district there are two outfalls into the Mersey. At the southern outfall, the crude sewage is retained until the tide is at a level suitable for its discharge. Crude sewage from the northern outfall passes straight into the Mersey. western side of Eastham and the parishes of Childer Thornton,

Eastham Rake sewerage works receive drainage from the Hooton and part of Willaston. For some years these works have been overloaded and the unsatisfactory effluent is a considerable factor in the pollution of the Dibbin Brook which flows for about two miles through the district to fall into Brom-

borough Pool. In its course the Dibbin received crude sewage from overflowing cesspools and ineffective purification filters. Eastham Rake works have undergone considerable reconditioning and stringent action has been taken to remove and prevent further contamination of the stream. Industrial effluents from which large volumes of sulphur gases are evolved, to the annoyance of the neighbourhood, are discharged into the Pool.

Thornton Hough has sewage disposal works sufficient for its present needs. Brimstage and Raby have no system, but these are rural and have not been affected by building developments.

One chemical closet has been converted to a water closet.

There are still 51 earth closets, 57 pail closets, 8 chemical closets, 33 privies and 287 cesspools or septic tanks, the reason for their existence being the absence of sewers within reasonable distance of the premises.

There are only 25 fixed ashpits left in the district.

DISPOSAL OF THE DEAD.

The Bebington Council, aware that accommodation for the Disposal of the Dead was becoming limited in certain parts of the area under their control, gave instructions to the responsible officials some years ago to endeavour to find land suitable for a cemetery. A large number of sites was investigated but for varying reasons had to be rejected. Finally it was decided to purchase 48 acres in Eastham, if the Ministry of Health granted sanction. The difficulty of finding a site suitable from most points of view, and to which fewest valid objections could be offered, in the immediate vicinity of a rapidly-growing town can be readily understood. Other districts in Wirral, where the increase in population was much less marked, have met with similar difficulties. Many objectors have good grounds for the arguments they adduce against their Council representatives proceeding to acquire land for what, in the present state of public opinion, is admittedly necessary; but not infrequently an

element of contumaciousness exhibits itself. At the public inquiry conducted by an Inspector of the Ministry the policy of the Council was hotly traversed. The price was roughly £520 per acre, and evidence proved that this was a reasonable market value, considering current prices of land on Merseyside. If entirely used for a cemetery with the present population and death rate, it would serve for a century and a half. After a full investigation the necessary sanction was obtained.

That disease can be engendered by noxious odours from a properly-conducted cemetery or by germs present in the dead body is, if modern theories based on experimental evidence are accepted, a myth. A ready means of accomplishing the purpose of earth burial is obtained by cremation. It substitutes for months of decay, witness the process as exhibited in ghoulis sculpture in some cathedral monuments, a process in which complete destruction takes place in a few hours. Yet from a recent work dealing with this subject it may be learned that in England in 1935 only 9,164 bodies were cremated, or 1.6 per cent. of the number of deaths. In the same year in Germany probably not less than 10 per cent. was the proportion. Half a square mile of land is required for burials of the half million deceased every year in England, and 2,500 acres is the area serving Greater London. Cremations in Berlin now exceed earth burials.

Cremation and urbanisation go hand in hand. One-third of Great Britain's population is concentrated in six urban centres with a population exceeding a million: Greater London, Glasgow, Birmingham, Liverpool, Manchester, and Newcastle-on-Tyne. A further 5¼ million is accounted for by fourteen centres with populations between a quarter of a million and one million. There is no parallel elsewhere for this concentrative grouping of the population, but it favours the growth of cremation which in rural areas cannot for many years, if ever, compete with earth burial.

Funeral Reform and Burial Costs.

The authors are of opinion that the reasons for the slow development of cremation in England are "conservative adherence to personal habits and traditional beliefs which take the outward form of religious scruples" and erroneous assumption that cremation is costly. In Edinburgh persons insured under

the National Health Insurance Acts are entitled to cremation for £3 3s. 0d., inclusive of all charges. Any person on payment of £5 5s. 0d. down, or six consecutive annual subscriptions of £1 1s. 0d. can become a life member of the Cremation Society and as such entitled at death to free cremation at any crematorium in Great Britain.

At the present time a Bill has been introduced by Lord Horder into Parliament "to provide for the registration of funeral directors and for purposes connected therewith."

The whole book is a plea for drastic changes in the "organisation of burial and funeral."

The cry that "the people love to have it so" is frequently heard on the lips of those who derive commercial profit from things as they are. We were not long ago assured that miners would not use pithead baths, or safety helmets, that safety appliances would never be acceptable to workers in certain industries. That there is generally, at first, opposition to change is a commonplace, but it should not deter those who have the public welfare at heart. It is certain that much could be done to foster the desire by a careful scrutiny of the costs of sepulture, as to which, unlike any other commodity of importance, no information is at present available.

Many French, German and Italian cities have a "statutory monopoly of the undertaking business." In Frankfurt funerals are carefully graduated according to income-tax levels and up to an income of £60 there are no charges.

In Switzerland burial and cremation are communal services and are free to all persons holding certificates of residence.

In England the Ministry of Health, by the establishment of Ante-natal Clinics and Municipal Midwives has undertaken to make arrangements prior to and for the entrance of most of the citizens and it is quite logical that it should proceed to deal with them at and after their exits, as its activities now control them throughout the course of their lives.

Sanitary Inspection of the Area.

The following Inspections have been made and Notices served during the year 1937 :—

NUMBER OF, AND NATURE OF INSPECTIONS MADE		NUMBER OF NOTICES SERVED		RESULT OF SERVICE OF NOTICES	
		Informal	Statutory	Complied with	Remain in hand
Dwelling Houses (First Visits) ...	564	213	—	87	126
Dwelling Houses (Revisits) ...	1743	—	44	23	21
Overcrowding ...	1370	—	—	—	—
Tents, Vans, Sheds, etc. ...	8	—	—	—	—
Courts, Yards, Passages ...	281	96	6	15	81
House Drainage... ...	2750	152	15	97	55
Privies, Middens ...	611	194	35	171	23
Cesspools, Septic Tanks, etc. ...	120	19	1	17	2
Ditches, Watercourses ...	46	15	1	14	1
Offensive Accumulations ...	222	75	3	75	—
Keeping of Animals ...	38	4	2	4	—
Slaughter-houses ...	681	1	—	1	—
Butchers' Shops... ...	167	7	—	7	—
Ice Cream Premises ...	46	5	—	5	—
Other Food Premises ...	126	14	—	14	—
Offensive Trades ...	44	3	—	3	—
Piggeries ...	49	4	—	4	—
Dairies, Cowsheds, etc....	654	16	—	12	4
Factories and Workshops ...	92	18	3	13	5
Bakehouses ...	65	14	—	10	4
Smoke Observations ...	39	9	2	8	1
Public Schools ...	28	4	2	3	1
Public Conveniences ...	43	12	—	12	—
Places of Entertainment ...	12	3	—	3	—
Licensed Premises ...	47	4	1	4	—
Infectious Disease Enquiries ...	314	—	—	—	—
Infectious Disease Revisits ...	47	—	—	—	—
Verminous Premises ...	165	5	—	5	—
Rat Infestations ...	179	18	—	18	—
Appointments Outside Office ...	225	—	—	—	—
Miscellaneous ...	172	4	—	4	—
	10948	909	115	629	324

During the past year :—

909 Informal Notices have been served.

115 Statutory Notices have been served.

634 Complaints have been received.

245 Notices have been served in consequence of complaints received.

Thirty-two prosecutions were pursued in respect of offences against the Milk and Dairies Order.

Administration of Shops Acts, 1912-34.

In addition to routine patrol of the area, the following visits have been made to shops:—

- 1,096 Visits as a result of which—
- 195 Warnings given by Chief Inspector.
- 82 Offences reported to Committee.
- 14 Prosecutions.
- 13 Convictions.

Eradication of Bed Bugs.

1.—No. of houses found to be infested.				
(a) Council houses	...	...	...	7
(b) Other houses	...	...	...	38
2.—No. of houses disinfested.				
(a) Council houses	...	...	...	7
(b) Other houses	...	...	...	37

3.—Methods employed for freeing infested houses from bed bugs.

In all cases except two, rooms have been sprayed with "Zaldecide" and bedding steam disinfested. In the other two cases disinfestation which was carried out in empty houses was by Orthodichlorbenzene. In the first of these two cases two live bugs were found in the re-occupied house, seven days after the house had been treated; the room in which these bugs were found was sprayed with "Zaldecide" and no further evidence of their presence had been observed between that date and three months later. In the second case disinfestation was successful. In both cases fumes of O.D.C.B. were observed in adjoining houses. All cases sprayed with "Zaldecide" have been successful although in some cases two applications have been necessary. One experienced man is employed to carry out the spraying and this work is supervised by an Inspector.

4.—Methods employed for ensuring that the belongings of tenants are free from vermin before their removal to Council Houses.

The House Property Manager reports all doubtful cases. An inspection of the applicant's house and bedding, etc., is made. The furniture is sprayed with "Zaldecide" and bedding is removed to the steam disinfector for steam disinfection and returned to the Council House.

5.—Whether the work of disinfection is carried out by the local authority or by a contractor.

The Local Authority.

6.—The measures taken by way of supervision or education of tenants to prevent re-infestation after cleansing.

A pamphlet prepared by the Chief Sanitary Inspector is issued to all tenants where disinfection is carried out and tenants are notified to refer immediately any further infestation, to the Sanitary Inspector. The Sanitary Inspector advises all tenants of houses where disinfection is being or has been carried out, to place all bed-posts in tins on the floor. Disused floor-polish or boot-polish tins filled with paraffin or other insecticide are suggested. This procedure has trapped stray bugs which may cause further infestation.

Swimming Pools.

Bacteriological Report on samples of Water from the New Ferry Swimming Pool. (1936).

Description	Bacteria per c.c.		B. coli.
	37 deg C	22 deg C	
1. W. Bebington Baths. Shallow End. Filters working	0	1	Absent in 100 c.c.
2. W. Bebington Baths. Centre of bath. Filters working	0	0	Absent in 100 c.c.
3. W. Bebington Baths. Centre of bath. Filters working	6	0	Present in 100 c.c. Absent in 90 c.c.
4. W. Bebington Baths. Deep end. Filters working	6	0	Absent in 100 c.c.

1.—Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries) ...	9	3	Nil
Workshops (including Workshop Laundries) ...	140	27	Nil
Workplaces (other than Outworkers' premises)	8	2	Nil
Total	157	32	Nil

2.—Defects found in Factories, Workshops and Workplaces.

Particulars (1)	No. of Defects.			Number of offences in respect to which Prosecu- tions were instituted (5)
	Found (2)	Reme- died (3)	Ref'd to H.M. Inspect- or (4)	
<i>Nuisances under the Public Health Acts:—*</i>				
Want of cleanliness	15	15	...	...
Want of ventilation	1	1	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors	1	1	...	...
Other nuisances	14	12	...	...
Sanitary accommodation { insufficient	4	4	...	...
{ unsuitable or defective	19	17	...	...
{ not separate for sexes	1	1	...	...
<i>Offences under the Factory and Workshop Acts:—</i>				
Illegal occupation of underground bakehouse (s.101) ... ..	...	...	...	...
Other offences	2	...	2	...
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total	57	51	2	Nil

*—Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Inspection of Dwelling Houses during the Year 1937.

(1)	(a) Total number of houses inspected for housing defects (under Public Health or Housing Acts)...	564
	(b) Number of inspections made for the purpose ...	2,307
(2)	Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	128
(3)	Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	8
(4)	Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	120

2. Remedy of Defects during the Year without Service of Formal Notices.—

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers	88
--	----

3. Action under Statutory Powers during the Year.—

A. Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936.

(1)	Number of dwelling houses in respect of which notices were served requiring repairs	5
(2)	Number of dwelling houses which were rendered fit after service of formal notices:—	
	(a) By owners	1
	(b) By Local Authority in default	Nil

B. Proceedings under Public Health Acts.

(1)	Number of dwelling houses in respect of which notices were served requiring defects to be remedied	44
-----	---	----

(2) Number of dwelling houses in which defects were remedied after service of formal notices:—

(a) By owners	...	...	...	...	...	23
(b) By Local Authority in default	...	...	...	...	...	Nil

C. Proceedings under sections 11 and 13 of the Housing Act, 1936.

(1) Number of dwelling houses in respect of which Demolition Orders were made	...	...	...	5
(2) Number of dwelling houses demolished in pursuance of Demolition Orders	...	...	...	3

D. Proceedings under Section 12 of the Housing Act, 1936.

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	...	...	...	...	...	Nil
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...	...	...	...	...	Nil

4. Housing Act, 1936 (Overcrowding),

(a) i.	No. of dwellings overcrowded at end of year	...	92
ii.	No. of families dwelling therein	...	117
iii.	No. of persons dwelling therein	...	648½
(b) i.	No. of cases of overcrowding relieved during the year	...	24
	One where extra accommodation was provided.		
	Seven by tenants vacating their premises.		
	One by reduction by death.		
	One by rooms being vacated by sub-tenants.		
	Six by adult sons or daughters leaving home.		
	Three where the Council re-housed tenants.		
	Two by corrected information.		
	One by removal of lodgers.		
	One by child sleeping elsewhere.		
	One by caravan being removed from district.		
ii.	No. of persons concerned in such cases	...	147

- (c) No. of new cases of overcrowding reported 9
- (d) No. of cases in which houses have again become overcrowded after the local authority have taken steps for the abatement of overcrowding Nil
- (e) ANY OTHER PARTICULARS.

A tenant was found to have committed an offence by permitting overcrowding by sub-letting. She was fined 5/- for this offence.

Inspection and Supervision of Food.

MILK.—There are 48 purveyors of milk from outside districts, 38 retail dairymen, 21 cow keepers and retail purveyors, 34 cow keepers and wholesale purveyors. Four licences are granted for the sale of Accredited Milk, 2 for Tuberculin Tested, 2 for Tuberculin Tested Certified, and 2 for Pasteurised.

There are 40 registered producers of Accredited Milk.

MILK SAMPLES.

The following figures shown the number and result of examinations of samples taken during the year:—

	No.	T.B.	Remarks
Commercial Milk	74	3	19 M.B. Tests. 13 satisfactory 6 unsatisfactory
Accredited Milk... ..	179	17	36 M.B. Tests. 17 satisfactory 19 unsatisfactory
Tuberculin Tested	4	—	3 "counts" 3 satisfactory
" " (Certified)	8	—	4 " " 2 satisfactory 2 unsatisfactory
Pasteurised Milk	25	—	7 " " 7 satisfactory
Sterilized Milk	2	—	1 "count" 1 satisfactory
	292	20	

These figures show an increase of 14 samples over the previous year, and an increase of 2 positive tuberculous samples.

In the year 1936 the percentage of positive samples was 6.5. Last year the percentage of positive samples was 6.8.

SEDIMENT TESTS.

Continuous effort is made to ensure the production of clean milk, and your Inspectors make sediment tests regularly in the course of supervising milking methods. Where dirty results are recorded, advice is given to the producer with a view to eliminating the cause of the entrance of dirt into the milk. Last year 254 tests were made, and, allowing 5 points as the maximum for each test, the total points obtained were 794, which indicates a degree of cleanliness of 60%. This should be improved upon, and it is hoped that next year a higher percentage will be reported.

The following table shows the number of and percentage of T.B. samples during the last 7 years:—

	No.	T.B. Positive	% T.B.
Commercial Milk	787	44	5·5
Accredited Milk... .. *	435	46	10·5
Tuberculin Tested *	31	—	—
" " (Certified) *	22	—	—
Pasteurised Milk	58	—	—
Sterilized Milk	12	—	—
	1345	90	6·69

* These designations include previous designations of Grade A, Grade A (T.T.), and Certified respectively.

MEAT.—Private Slaughter Houses.

1 Registered 2 Licensed.

Carcases Inspected and Condemned.

	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	1682	3	36	7344	2673
Number Inspected	1682	3	36	7344	2673
All diseases except Tuberculosis:—					
Whole carcasses condemned ...	1	—	—	7	17
Carcases of which some part or organ was condemned ...	806	—	—	853	1145
Percentage of the number in- spected affected with disease other than Tuberculosis ...	48	—	—	10·3	45·4
Tuberculosis only:—					
Whole carcasses condemned ...	3	3	—	—	19
Carcases of which some part or organ was condemned ...	250	—	—	—	562
Percentage of the number in- spected affected with Tuberculosis	15	100	—	—	21·7

OTHER FOODS.—There are 27 bakehouses, one of which is in “underground bakehouse.” All are sanitary and subjected to frequent inspection. There are 17 fish shops and 18 fried fish premises—they are conducted in a cleanly fashion, but a few informal notices had to be served as the result of conditions found upon inspection.

FOOD POISONING.—No food poisoning is known to have occurred in 1937.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the District during the year ending 31st December, 1937:—

Name of Sample	Number Analysed	Number of Samples not up to Standard or Certified as Adulterated
Almonds, Ground	4	—
Baking Powder	1	—
Bicarbonate of Soda	1	—
Boric Ointment	1	—
Butter	3	—
Castor Oil	2	—
Cheese	1	—
Cheese, Cheshire	3	—
Coffee	3	—
Curry Powder	1	—
Dried Apricots	1	—
Flowers of Sulphur	1	—
Ginger, Ground	3	—
Glauber Salts	1	—
Glycerine	2	—
Gregory's Powder	1	—
Honey	1	— (1)
Iodine, Tincture of	2	1
Lard	1	—
Lemon Cheese	1	—
Liquorice Powder	2	— (2)
Milk... ..	50	6
Oatmeal	1	—
Olive Oil	1	— (3)
Parrish's Food	3	1
Pearl Barley	1	—
Pepper	3	—
Rice, Ground	2	—
Salicylic Acid Ointment	1	—
Salmon and Shrimp Paste	1	—
Seidlitz Powders	2	—
Semolina	1	—
Soda Mints... ..	1	—
Strawberry Jam	1	—
Sugar	1	—
Tea	1	—
Whisky	3	—
	109	8

- (1) 1% excess Potassium Iodide. Slightly deficient in Iodine. Manufacturers withdrew stock.
- (2) (a) 18% deficient in fat. Seller cautioned.
 (b) 26% deficient in fat. Appeal to cow.
 (c) 19% deficient in fat. See (d).
 (d) 6.6% deficient in fat. Appeal to cow re (c).
 (e) 1.2% extraneous water. Cautioned
 (f) 11.1 % extraneous water. Fined £1 and £1 1s. costs.
- (3) 40% excess Anhyd. Ferrous Phosphate. 50% deficient in Tricalcium Phosphate. Test sample. Formal sample proved genuine.

Prevalence of, and Control over, Infectious Disease.

INFECTIOUS DISEASES GENERALLY.

The prevalence of Infectious Disease of a notifiable character is shown in the following table which gives the case rate per 1,000 of the population 1921-1937.

Year	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.	Puerperal Pyrexia
1921	0.00	3.92	1.08	0.00	0.00	0.66	
1922	0.00	3.72	0.56	0.15	0.10	0.61	
1923	0.00	3.17	0.30	0.00	0.00	0.15	
1924	0.10	1.60	0.10	0.10	0.10	0.34	
1925	0.00	2.70	0.29	0.09	0.09	0.48	
1926	0.00	0.6	0.5	0.08	0.16	0.49	0.00
1927	0.00	1.33	1.38	0.00	0.00	0.30	0.12
1928	0.00	3.4	1.9	0.00	0.04	0.55	0.21
1929	0.00	2.9	1.3	0.00	0.04	0.08	0.16
1930	0.00	2.53	3.25	0.00	0.04	0.38	0.11
1931	0.00	3.2	1.97	0.03	0.03	0.3	0.06
1932	0.00	1.81	0.69	0.00	0.03	0.29	0.29
1933	0.00	2.15	0.64	0.03	0.00	0.21	0.29
1934	0.00	4.86	2.20	0.08	0.00	0.54	0.17
1935	0.00	4.6	2.5	0.00	0.00	0.49	0.05
1936	0.00	2.49	2.38	0.00	0.02	0.29	0.15
1937	0.00	2.1	2.4	0.05	0.00	0.38	0.43

Puerperal Pyrexia is now calculated on the total number of births, live and still, while other figures are calculated per 1,000 of population.

On the basis of live and still births registered during the year the rate is:—

Puerperal Pyrexia 24.

The General Hospital receiving Maternity Cases is within the district, and the reception of abnormal cases accounts for the excessive number of notifications of Pyrexia.

Registrar-General's Table for Notifications of Puerperal
Pyrexia.

	England & Wales.	125 County Boroughs & Great Towns inc. London.	148 Smaller Towns (resident pop. 25,000 - 50,000 at 1931 Census).	London Adminis- trative County.
Puerperal Pyrexia	13.93	17.59	11.52	18.49

The corresponding rates for England and Wales are as follows:—

Year	Smallpox	Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Pneu- monia
1921		3.64	1.76	0.10	0.35	
1922		2.85	1.37	0.06	0.35	
1923		2.24	1.05	0.08	0.32	
1924		2.16	1.07	0.11	0.33	
1925	0.14	2.36	1.23	0.07	0.39	
1926	0.26	2.10	1.31	0.07	0.38	
1927	0.38	2.16	1.33	0.09	0.38	
1928	0.32	2.61	1.55	0.09	0.42	
1929	0.28	3.05	1.59	0.07	0.45	
1930	0.29	2.76	1.84	0.07	0.45	
1931	0.14	2.05	1.27	0.06	0.38	
1932	0.05	2.12	1.08	0.06	0.36	
1933	0.02	3.21	1.18	0.04	0.05	
1934	0.04	3.76	1.70	0.03	0.51	
1935	0.00	2.96	1.60	0.04	0.42	
1936	0.00	2.53	1.39	0.06	0.40	
1937	0.00	2.33	1.49	0.05	0.37	1.36

Notifiable Infectious Diseases, 1937.

Disease	Total Cases Notified	Total Cases Admitted to Hospital	Deaths
Smallpox	—	—	—
Scarlet Fever	84	76	1
Diphtheria	100	89 + 16 neg.	4
Enteric Fever	2	2	—
Puerperal Fever	—	—	—
Puerperal Pyrexia	17	15	—
Pneumonia	75	33‡	20
Erysipelas	15	11	—
Cerebro-spinal Fever	—	—	—
Acute Poliomyelitis	—	—	—
Acute Polio-encephalitis	—	—	—
Encephalitis Lethargica	—	—	2
Dysentery	—	—	—
Malaria	—	—	—
Chickenpox	81	—	—
Total ...	374	226 + 16 neg.	27

‡ 28 Pneumonia cases were nursed at home under the Council's scheme for the domiciliary nursing of Pneumonia.

TABLE OF AGE GROUPS, SHOWING TOTAL CASES NOTIFIED AND DEATHS, 1931.

Disease	Total Cases		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up		
	Total	Deaths	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Total Cases ...	374	188	186	3	5	6	7	7	14	9	5	13	5	73	58	19	19	7	15	19	35	11	10	19	9	2	4
Total Deaths ...	27	17	10	-	1	-	-	-	1	1	-	-	-	3	1	1	-	-	-	1	-	-	1	1	6	3	3
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	84	38	46	-	-	-	1	1	3	4	2	3	2	21	21	2	5	2	5	4	5	-	2	1	-	-	-
Diphtheria	100	46	54	-	-	1	2	3	5	2	1	6	-	22	14	5	10	-	7	6	10	-	4	1	-	-	1
Enteric Fever	4	3	1	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	-	-	-	-	1	-	-	-	-
†Puerperal Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia	75	49	26	3	2	5	1	1	3	2	1	-	2	3	2	-	4	-	8	2	11	3	7	7	2	3	3
Erysipelas	20	13	7	-	1	-	1	1	1	-	-	-	1	1	-	1	-	1	1	1	-	-	1	6	1	3	3
Cerebro-spinal Fever	15	11	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	2	-	-
Acute Poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethargica	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
Puerperal Pyrexia	17	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-
Chickenpox	81	43	38	-	3	-	2	2	3	1	1	4	1	27	21	8	4	2	2	1	-	-	1	1	-	-	-
Dysentery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

† On 1st October, Puerperal Fever ceased to be a notifiable disease, subsequent cases are notified as Puerperal Pyrexia.

Table Showing Distribution of Total Cases of Notifiable Diseases, 1937.

Disease	Wards												Total				
	Higher Bevington	Woodhey	Lower Bevington	New Ferry	Park	Poolbank	Port Sunlight	North Bromborough	Central Bromborough	South Bromborough	Brimstage	Eastham		Spital	Raby	Storeton	Thornton Hough
Scarlet Fever ...	2	16	10	9	8	1	1	3	2	15	—	8	4	3	—	2	84
Diphtheria ...	5	10	14	10	10	—	5	5	5	2	—	5	28	—	1	1	100
Pneumonia ...	9	13	25	10	3	2	1	2	1	4	—	2	2	1	—	—	75
Erysipelas ...	—	3	4	—	3	1	—	—	—	1	—	—	2	—	1	1	15
Enteric Fever ...	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	2
Ophthalmia Neonatorum	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Chickenpox ...	5	14	11	13	12	3	—	5	4	4	—	3	4	—	—	—	81
Puerperal Pyrexia ...	—	—	—	—	—	—	—	1	—	1	—	1	14	—	—	—	17
	22	57	64	42	36	7	10	16	12	28	—	19	54	4	—	4	375

† The wards of the district were altered on 9th November, 1937, when the Urban District was elevated to Borough status. For convenience sake, the wards of the urban district have been retained in shewing the distribution of cases during the year.

Tuberculosis, 1937.

Age Periods	NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
0-1	—	—	—	—	—	—	—	—
1-5	—	—	—	—	—	—	—	—
5-10	—	—	2	2	—	—	—	—
10-15	—	1	1	1	—	—	—	—
15-20	2	1	—	—	—	—	—	—
20-25	2	3	—	—	1	3	—	—
25-35	5	5	—	1	2	2	—	1
35-45	3	—	—	—	3	1	—	—
45-55	3	2	—	—	3	3	—	—
55-65	1	1	—	—	3	1	—	—
65 and up	1	—	—	—	—	—	—	—
Total ...	17	13	3	4	12	10	—	1

The state of the Tuberculosis Register at the end of the year is shown below:—

	MALES		FEMALES		Total
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary	
Number of Cases remaining on the Register...	116	47	86	38	287

Immunisation Against Diphtheria.

An immunisation clinic has been inaugurated and it is hoped that when its establishment becomes known that there will be numerous applicants for its services. The principle underlying the saying that "when the devil was sick the devil a saint would be; when the devil got well the devil a saint was he" is well exemplified in the behaviour of many persons to the clinic. Before its establishment, when cases of Diphtheria were notified there were grumblings that there was no clinic, and it was constantly quoted that provision for immunisation was made in neighbouring boroughs, but now there seems no very intense or widespread desire to obtain immunisation. In Cork and Aberdeen 50 per cent of the children under 15 years of age have been immunised. Chester, of English towns, shows the highest proportion but it is only 10 per cent of the population, or about 45 per cent of those at risk. Birmingham has 36 per cent. and London 1.17.

It is probable that if we can continue and extend immunisation for a couple of generations we can eliminate diphtheria as a persistent menace and reduce it to a rare disease of little consequence to public health.

The toll in death at the present time is shown in the following table, and to it should be added the incalculable amount of damage often sustained by the sufferers.

DIPHtheria—ENGLAND AND WALES.

—	Deaths of children under 15 years of age.	Death-rate per 1,000 children living under 15 years of age.
1933	2,487	.261
1934	3,826	.402
1935	3,256	.351
1936	2,884	.318

The efficacy of immunisation is beyond question proved by the escape of immunised persons from natural infection. From numerous areas plentiful figures are now available to demonstrate without a shadow of doubt that in comparable groups of immunised and non-immunised children the immunised are protected against infection while the disease pursues its old, often

irreparably and frequently fatal, course among the non-immunised. Statistics from thousands of observations impress upon any open-minded observer that an enormous advance has been made in preventive medicine. Birmingham City Fever Hospital shows how, by immunisation, the nursing and domestic staffs exposed to constant risk now escape reinfection. The number of infections acquired was not lessened until immunisation was introduced, and then the diminution in reinfection occurred only in the sections of the staff which were immunised.

There is, then, no reasonable doubt that active immunisation, properly performed, is highly effective in protecting the individual against Diphtheria, and in eliminating Diphtheria from any small closed community in which all the inmates may be Schick tested and, if necessary, immunised. It may be noted that in the few instances in which Diphtheria in an immunised person, or in a fully immunised community, has been recorded, the infection has almost always been of the Gravis type, and even then the infection has not been severe.

The following note is self-explanatory:—

In a recent issue of the *Lancet* (February 12, 1938) there is a communication reporting experience of diphtheria immunisation in Canada, whereby it is shown that diphtheria is indubitably a preventable disease. For instance, in Toronto in 1927, ten years ago, there were 1,223 cases of diphtheria and 114 deaths. In that year only 80 persons were immunised. The following year 12,492 persons were immunised, and the numbers were rapidly increased until in 1936 the number of persons treated was 104,449. In this latter year there were only 48 cases of diphtheria and 2 deaths, a result which leaves no doubt that the decline is due to immunisation.

The latest available figures were given in answer to a question in Parliament:—

ENGLAND AND WALES.

Period.	Number of Diphtheria Notifications.	Number of deaths registered and classified as due to Diphtheria
October to December, 1931 inclusive	12,829 (13 weeks)	633
1932	43,399 (52 weeks)	2,339
1933	47,435 „	2,646
1934	68,759 „	4,085
1935	65,084 „	3,488
1936	57,795 (53 weeks)	3,081
Total	295,301	16,272

Maternity and Child Welfare Centre.

A new Maternity and Child Welfare Centre was completed in the New Ferry Recreation Ground early in 1935.

Extracts from the Senior Health Visitor's Reports.

THE PRE-MATERNITY CLINIC.

Number of Sessions attended by Gynæcologist, 51—

Number of new cases examined	275
Number of cases continuing from 1935... ..	67
	342

Births, 688. Percentage of mothers attending Clinic, 53 per cent.

Cases terminated during the year, 254 (88 still on registers).

It is to be regretted that only one or two midwives have attended with their cases, although several have advised their patients to attend.

The total attendances have been 1,418.

Record of Clinic attendances for 1937—

The Infant Welfare Clinics.

The New Ferry Clinic.

Number of Sessions held (Dr. J. B. Yeoman)	51
Number of Sessions (Nurses only)	51
Attendances of Mothers, Wednesdays	4414
,, Infants ,, 	2812
,, Children 1—5 ,, 	1968
,, Mothers, Fridays 	2404
,, Infants, ,, 	1821
,, Children 1—5 	889
	14308

The Bromborough Clinic.

Attendances of Mothers, Thursdays	3047
,, Infants, ,, 	2122
,, Children 1—5 	1498
	6667

The Higher Bebington Clinic.

Attendances of Mothers, Mondays	...	...	3046
„ Infants, „	...	...	2217
„ Children 1—5	...	...	1481
		—	6744
			—————
		Total ...	27719
			—————

Altogether a total of 1,113 children have attended the three Centres, 601 of them being under one year at their first attendance. This brings the percentage of the notified live births attending Clinics to 90 per cent.

Ages of children attending—391 born in 1937
 348 born in 1936
 208 born in 1935
 101 born in 1934
 65 born in 1932-33

Ear, Nose and Throat Clinic.

Number of Sessions (Surgeon, Mr. P. Garson)	...	...	11
Total number of cases (33 re-admissions)	...	..	138
Total number of attendances	...	...	197

Result of cases at the end of 1937:—

24 cases either had operations for Adenoids only, or for Tonsils and Adenoids.

1 case refused treatment.

22 cases were examined, advised and discharged.

2 cases were mothers, and after advice were discharged to their own Doctor's care.

4 cases were school children, and were discharged to School care.

44 cases were discharged (pro tem.) after home treatment to be supervised by the Health Visitors.

41 cases are to continue under observation.

Three cases from this Clinic have been admitted to the Nursery School, and improved at once. It is the Surgeon's opinion that a regular addition to the diet of cod liver oil emulsion will prevent trouble recurring, and about 25 of the poorest cases have had a supply provided by the Council.

The Eye Clinic.

Number of Sessions (Mr. Dunlop Hamilton, Surgeon Oculist)	4
Number of cases	31
Re-examinations	12
Referred to Hospital for Operation	2
Referred for Spectacles	4
Referred to Health Visitors for supervision of home treatment	22
To be recalled for further examination	22
Discharged	3

This group of children is one that is likely to have fairly large numbers requiring further examination right up to school age. The largest number of patients are those with squints, and these may vary from a very slight squint to one where complete blindness of the squinting eye is threatening. It would be of great help to these children to have closer supervision than is possible from a quarterly clinic.

The Toddlers' Clinic (3 to 5 years).

Medical Officer—Dr. J. B. Yeoman, Medical Officer of Health.	
Number of Sessions held (May to December) ...	29
Children Examined	327
Referred to Hospitals	0
Referred to Eye Clinic	11
Referred to Ear Clinic	35
Referred to Orthopædic Clinic	14
Found mentally defective	4
Referred to their own Doctor	7
Requiring dental treatment	50
Referred to Health Visitors for special home super- vision	45
Referred to District Nurses for treatment	5

The mothers have not quite got used to the idea of bringing their children for a special medical examination once a year, but for a new Clinic its present success is very gratifying. Most of the referred cases were of a minor character, but that is the purpose of the Clinic, to get minor defects remedied before they develop into major ones.

The large number of dental defects is rather disturbing in such young children, especially as these large numbers are general throughout the country.

The Orthopædic Clinic.

Dr. Hartley Martin always gives his own report of the work of this Clinic, and only the attendance total is given here (approximately):—

Visits by Surgeon	...	...	...	...	...	18
Attendances by Orthopædic Sister	...	...	...	...	...	29
New Cases examined	...	...	...	...	...	100
Re-examinations	...	...	...	...	...	413

Massage and Remedial Exercises Department

(Mrs. Cox, Masseuse).

Number of Patients treated	...	...	...	...	247
Number of attendances of cases	...	...	...	...	991
Number of new cases	...	...	...	...	13
Discharged	...	...	...	...	8

This is the oldest special Clinic we have (13 years), and the reduced number of cripples seen nowadays is the best advertisement of the invaluable work done.

Home Help Service.

Thirty-one cases have been under the care of the Home Help, and a total of 62 weeks' work has been done during the year.

Extra Home Helps have been engaged when necessary.

In addition the Senior Health Visitor is frequently asked to recommend a woman to better off mothers.

Where the fee charged would be high, it is only in exceptional cases that the Council's Home Help is sent, as otherwise the better off mothers would crowd out the poorer mothers in commanding her services, so that the Council's money is spent on providing a service to necessitous mothers who can only pay about one-fifth or one-sixth of what the Home Help receives,

consequently would have no help in their homes at the time of confinement except under this assisted scheme.

Child Life Protection (Nurse Children).

Nine children have been under the guardianship of the Council during 1937.

Two children have been removed by their mothers to their own addresses in other areas, and one has reached 9 years of age, and automatically passes from the care of the Council.

The children are visited by the Health Visitor in whose district they reside. Those under 5 years attend the Welfare Clinics, and one attended the Nursery School (at the foster mother's expense) until he reached 5 years.

All the children have very good homes, and have been very well looked after.

Six children remain on the Register for 1933, including one new case.

Deaths of Infants under 1 Year.

Infant Mortality is low in the district this year, unless the Registrar General has some unregistered cases to transfer later on. Causes of death are given as below:—

Prematurity	...	...	...	...	...	...	6
Maldevelopment and Atelectasis	...	...	...	...	...	...	9
Congenital Paraplegia	...	...	...	...	...	...	1
Congenital Hydrocephalus	...	...	...	...	...	...	1
Congenital Pyloric Stenosis	...	...	...	...	...	...	2
Marasmus	...	...	...	...	...	...	1
Bronchitis or Pneumonia	...	...	...	...	...	...	7
Whooping Cough	...	...	...	...	...	...	2
Instrumental Births	...	...	...	...	...	...	2
Hydrocephalus	...	...	...	...	...	...	1
							—
					Total	...	32
							—

This gives an infant mortality rate of 47.9—a low rate for the district.

Deaths of Children 1—5 Years.

Six children have been notified as having died during the year:—

- 1 from Convulsions.
- 1 from Strangulation, accidental (Inquest).
- 1 from T.B. Peritonitis following Scarlet Fever.
- 1 from Pneumonia and Meningitis.
- 2 from Pneumonia.

Statistics.

The total visits paid by the Health Visitors were:—

To Expectant Mothers (first visits 194) total visits	...	328
To Children under 1 year of age (first visits 611) total visits	...	2147
To Children between 1 and 5 years of age, total visits	...	4139
To Infant Life Protection Children, total visits	...	70
To Infants or Children suffering from Measles (first visits 33) total visits	...	99
To Infants or Children suffering from Whooping Cough (first visits 98) total visits	...	169
To following up Children attending the Special Clinics, total visits	...	2903
To Superintendent Nurse's visits to Home Helps and Free Milk Cases, Visits of Supervision	...	649
		10,504

Some Conditions Found when Health Visiting.

Unemployment generally appears to have been less in 1937. Only 43 fathers were noted as being unemployed when the new baby was visited for the first time, and on the second visit 29 of these were in regular employment. The irregularity of the work of some of the casual labourers must make budgetting by the mothers who have to lay out the money one of the most difficult jobs in the world. You can "cut your coat according to your cloth" if you know what the size of the cloth is, and the wife of an unemployed man who receives a regular and stated amount, has an easier job than a wife who has a different

amount for six or seven or even nine weeks running. She can only arrange for a day-to-day plan, the dearest way of all in making out budgets.

The average mother of this Borough is a very good mother, and an occasional poor one merely proves the rule. When once they are convinced it is for their child's good, they will do anything the Health Visitor asks them to do, but are a bit more difficult where it is for their own health and well-being that the Health Visitor is making suggestions.

ORTHOPÆDIC CLINIC.

DR. HARTLEY MARTIN reports as follows:—

I have the honour to report upon the work done at the Orthopædic Clinic held at New Ferry Child Welfare Centre during the twelve months ending December, 1937.

Eighteen monthly sessions have been held, at which 110 new cases have been seen and 423 re-examinations have been made (an average of 29.5 cases per session).

These figures are elaborated as follows:—

NEW CASES.				In relation to school age.		
				Under	Of	Over
Non-Tuberculous	...	...	...	92	17	—
Tuberculous	...	...	...	—	1	—
RE-EXAMINATIONS.						
Non-Tuberculous	...	...	...	242	158	6
Tuberculous	...	...	...	—	17	—

Table 1 shows all cases on the Register grouped into disease and age categories. The number of cases discharged, and the reason for discharge are also shown.

Of the 251 cases on the Register during the year, only one was admitted to hospital for treatment.

Congenital Deformity — One case (under school age)

Stay in hospital 21 days.

The work of the Masseuse in the twice weekly sessions is of great value in the prevention of deformity and the establishing of a cure. 990 treatments have been given to the 31 cases

on the register; 13 new cases were referred and eight discharged on termination of treatment.

In Table II the cases on the Massage register are shown, analysed into age groups and disease categories.

The co-operation of the staff of the Child Welfare Service in ascertainment is again gratefully acknowledged and as the number of New Cases show this Department provides 84 per cent. of Ascertainment for the Clinic.

The cases referred from Neston seem to resent the distance of the Clinic from their houses, and in almost every case find it financially impossible to attend twice weekly for Massage.

Visits by Surgeon	...	...	...	18
Attendances by Orthopædic Sister	...	...	...	31
New Cases Examined	...	...	...	110
Re-examinations	...	...	...	423

Analysis of Cases.

New Cases—	Under School Age		Of School Age		Over School Age	
	Boys	Girls	Boys	Girls	Boys	Girls
Non-Tuberculous	42	50	7	10	0	0
Tuberculous	0	0	1	0	0	0
Re-examinations—						
Non-Tuberculous	112	130	87	71	2	4
Tuberculous	0	0	12	5	0	0

Massage and Remedial Exercises Department.

		Boys.	Girls.	Total.
Number of Patients Treated	...	11	20	31
Do. Attendances of Cases	...	425	565	990
Do. New Cases Referred for Treatment		6	7	13
Do. Cases in which the Treatment has been Terminated	...	3	5	8

Analysis of Non-Tuberculous Cases included in above Return.

	Under School Age		Of School Age		Over School Age	
	Boys	Girls	Boys	Girls	Boys	Girls
Attending School	0	0	10	13	0	0
Not Attending School	1	6	0	0	0	1
Attending Special School	0	0	0	0	0	0

Table I.

DISEASE CATEGORIES	Remaining 1936 In Relation to School Age			New Cases 1937 In Relation to School Age			Remaining 1937 In Relation to School Age			Discharged, 1937						
	Under	Of	Over	Under	Of	Over	Under	Of	Over	Cured	Relieved	Over Age—Relieved	Left District	Refused Treatment	Unsuitable	Died
Infantile Paralysis ...	1	7	1	1	1	—	1	5	4	—	—	1	—	—	—	—
Spastic Paralysis ...	4	8	—	1	—	—	2	8	—	—	2	—	—	1	—	—
Rickets ...	8	3	—	1	—	—	5	4	—	1	—	—	1	1	—	—
Tuberculous—Osteitis and Arthritis ...	1	4	1	—	1	—	—	5	—	—	—	—	2	—	—	—
Non-Tuberculous Do. ...	—	1	—	—	1	—	—	2	—	—	—	—	—	—	—	—
Deformities—Congenital ...	11	7	—	7	2	—	16	9	—	1	—	—	1	—	—	—
Do. Acquired ...	51	25	—	48	7	—	68	30	—	26	—	1	2	4	—	—
Diagnosis ...	7	1	—	34	6	—	6	2	—	—	—	—	—	—	40	—
Totals ...	83	56	2	92	18	—	98	65	4	28	2	2	6	6	40	—

Message Return. Table 2.

DISEASE CATEGORIES	ATTENDANCES								CASES			
	Of School Age				Under School Age				Over School Age		Number of Cases	% of Total Cases
	Boys		Girls		Boys		Girls		Boys	Girls		
	Attending School	Not Attending School	Attending School	Not Attending School	Attending School	Not Attending School	Attending School	Not Attending School				
Infantile Paralysis ...	—	—	71	—	—	—	—	—	—	9	6	19.4
Spastic Paralysis ...	48	—	74	—	—	82	—	—	—	—	6	19.4
Rickets ...	52	—	—	—	—	—	—	—	—	—	1	3.2
T.B.—Osteitis and Arthritis ...	68	—	—	—	—	—	—	—	—	—	1	3.2
Non-T.B.—Do. ...	—	—	—	—	—	—	—	—	—	—	—	—
Congenital Deformities ...	—	—	34	—	—	—	—	101	—	—	3	9.7
Acquired Deformities ...	251	—	134	—	—	—	—	60	—	—	14	45.0
Totals ...	419	—	313	—	—	—	—	243	—	9	—	—
Totals ...	732				249				9		1%	
Percentages	74%				25%							

1937.

OPHTHALMIA NEONATURUM	Cases				Vision unimpaired	Vision impaired	Total Blindness	Deaths
	Notified	Treated		Vision unimpaired				
		At Home	In Hospital					
0	1	0	0	0	Nil	Nil	Nil	

HOYLAKE URBAN DISTRICT

The Urban District was constituted in 1889, and on 1st April, 1933, the Parishes of Caldy, Frankby, Greasby, Grange and part of Saughall Massie were added.

Statistics and Social Conditions of the Area.

Area (acres)	5,934
Registrar-General's Estimate of Resident Population (mid-1937)	22,600
Number of inhabited houses (1937)	7,000
Rateable value	£257,837
Sum represented by a penny rate	£1,007

The following table shows the Natural Increase (that is the excess of births over deaths) of population from 1921-1937.

Year.	Population.	Natural Increase per 1,000 Population.
1921	16,530	5.6
1922	16,560	3.1
1923	16,580	3.8
1924	16,880	1.2
1925	17,230	1.8
1926	17,950	Deaths exceeded Births,—0.3
1927	17,720	1.6
1928	17,790	Deaths exceeded Births,—1.2
1929	17,610	do. —2.3
1930	16,730	do. —.2
1931	16,100	.31
1932	16,780	Deaths exceeded Births,—3.4
1933	19,110	do. —1.9
1934	20,220	do. —1.8
1935	21,000	do. —1.5
1936	21,610	do. —3.05
1937	22,600	0.75 —

Natural increase of population (*i.e.*, excess of Births over Deaths) 1921-1936 (England and Wales).

Year	Natural increase per 1,000 Population	Year	Natural increase per 1,000 Population
1921	..... 10.3	1929	..... 2.9
1922	..... 7.6	1930	..... 4.9
1923	..... 8.1	1931	..... 3.5
1924	..... 6.6	1932	..... 3.3
1925	..... 6.1	1933	..... 2.1
1926	..... 6.2	1934	..... 3.0
1927	..... 4.3	1935	..... 2.9
1928	..... 5.0	1936	..... 2.5

Extracts from Vital Statistics for the Year 1937.

These statistics are calculated on the population of 22,600 supplied by the Registrar-General.

Live Births.

	Males.	Females	Total.
Legitimate	..... 143	121	264
Illegitimate	..... 6	2	8
	-----	-----	-----
	149	123	272

Birth Rate 12.01 per 1,000 of population.

Live Births Rate per 1,000 estimated resident population (1936) 148 smaller towns (population 25,000-50,000 census 1931) England and Wales 15.3.

Still Births.

	Males.	Females	Total.
Legitimate	..... 3	3	6
Illegitimate	..... 0	0	0
	-----	-----	-----
	3	3	6

Still Birth Rate 21.5 per 1,000 Live and Still Births or .26 per 1,000 of the population.

Table of Number of Births and Birth Rates, 1922-1936.

Year.	Number.	Birth Rate.	Year.	Number	Birth Rate.
1922	241	14.5	1929	164	9.3
1923	238	14.3	1930	163	9.7
1924	201	11.9	1931	182	11.3
1925	217	12.5	1932	141	8.4
1926	172	9.5	1933	205	10.7
1927	190	10.7	1934	188	9.3
1928	168	9.4	1935	224	10.7
			1936	224	10.4

The average number of births per annum in the years 1922-1936 was 194.

Birth Rate England and Wales (1937) 14.9.

Birth Rate in the Administrative County of Chester (1936) 13.9.

Deaths.

Total, 255 Males, 114 Females, 141

Death Rate 11.28. The corrected Death Rate was 10.37.

Table of Number of Deaths and Death Rates, 1922-1936.

Year.	Number	Death Rate.	Year.	Number.	Death Rate.
1922	191	11.5	1929	204	11.6
1923	176	10.6	1930	196	11.7
1924	180	10.6	1931	177	11.0
1925	185	10.7	1932	196	11.7
1926	177	9.8	1933	242	12.7
1927	161	9.0	1934	226	11.2
1928	188	10.6	1935	256	11.2
			1936	290	13.4

The Death Rate per 1,000 estimated resident population in the 148 smaller towns (25,000-50,000 census 1931) was 11.9 (1937).

The average number of deaths per annum during the period 1922-1936 was 205.

Ratio of local adjusted death rate to National Rate was 1.02 (1936).

Death Rate in the Administrative County of Chester was 12 bearing a ratio of 1 to the National Rate (1936).

Percentage of Deaths occurring in Public Institutions
24.7%.

Deaths from Puerperal causes:—

	Deaths.	Rate per 1,000 total (live and still) births.	Rate per 1,000 live births.
Puerperal sepsis	0	0.00	0.00
Other Puerperal causes	0	0.00	0.00
Total	0	0.00	0.00

The figures for England and Wales:—

Puerperal sepsis	0.94	0.94
Other puerperal causes	2.17	2.26
Total	3.11	3.23

Death Rate of Infants under 1 year of age:—

	Number	Rate
All infants per 1,000 live births	9	33.0
Legitimate infants per 1,000 legitimate live births	9	37.8
Illegitimate infants per 1,000 illegitimate live births	0	0

Table of Infantile Mortality, 1921-1936

Year	Rate per 1,000 Births	Year	Rate per 1,000 Births	Year	Rate per 1,000 Births
1921	57.0	1926	58.1	1931	49.0
1922	53.9	1927	36.7	1932	14.1
1923	54.6	1928	65.0	1933	49.0
1924	44.2	1929	49.0	1934	37.0
1925	50.7	1930	49.0	1935	40.1
				1936	54.0

Registrar- General's Table (1937):—

1,000 registered live births
Deaths under 1 years per

England and Wales	58
125 County Borough and great towns including London	62
148 smaller towns (25,000-50,000 census 1931)	55
London Administrative County	60
Deaths from Measles (all ages)	0
Deaths from Whooping Cough (all ages)	1
Deaths from Diarrhœa (under 2 years of age)	0
Deaths from Cancer (all ages)	35

In the preceding period of five years there were 7 deaths from Measles; 3 deaths from Whooping Cough; and 4 from Diarrhœa (under 2 years of age).

Causes of Death.

All Causes.	M.	F.	Total
1. Typhoid and Paratyphoid Fevers	—	—	—
2. Measles	0	0	0
3. Scarlet Fever	0	0	0
4. Whooping Cough... ..	—	1	1
5. Diphtheria	2	3	5
6. Influenza	9	6	15
7. Encephalitis Lethargica... ..	1	0	1
8. Cerebro-spinal Fever	0	0	0
9. Tuberculosis of Respiratory System	4	3	7
10. Other Tuberculous Diseases	2	—	2
11. Syphilis	0	0	0
12. General Paralysis of the Insane : Tabes Dorsalis	—	—	—
13. Cancer, Malignant Disease	15	20	35
14. Diabetes	1	3	4
15. Cerebral Haemorrhage	2	6	8
16. Heart Disease	33	42	75
17. Aneurysm... ..	0	0	0
18. Other Circulatory Diseases	9	14	23
19. Bronchitis... ..	2	1	3
20. Pneumonia (All forms)	7	9	16
21. Other Respiratory Diseases	3	2	5
22. Peptic Ulcer	0	0	0
23. Diarrhoea (under 2 years)	—	—	—
24. Appendicitis	0	1	1
25. Cirrhosis of Liver	0	2	2
26. Other Diseases of Liver, etc.	0	1	1
27. Other Digestive Diseases	3	3	6
28. Acute and Chronic Nephritis	3	3	6
29. Puerperal Sepsis	—	0	0
30. Other Puerperal Causes	—	—	—
31. Congenital Debility, Premature Birth, Malfor- mations, etc.	7	1	8
32. Senility	3	3	6
33. Suicide	0	1	1
34. Other Violence	3	4	7
35. Other Defined Diseases	5	12	17
36. Causes Ill-defined or Unknown... ..	0	—	0
Totals ...	114	141	255
<i>Special Causes (included in No. 35 above)</i>			
Smallpox	—	—	—
Poliomyelitis	—	—	—
Polio-encephalitis	—	—	—

General Provision of Health Services for the Area.

*Hospitals provided or subsidised by the Local Authority or
by the County Council.*

See under North-West Cheshire p. 27.

**List of Adoptive Acts, Bye-Laws, and Regulations.
Acts and Orders.**

The following is a list of the Local Acts of Parliament, Provisional and other Orders, and Adoptive Acts in force in the District:—

PRIVATE ACTS.

Hoylake and West Kirby Improvement Act, 1897	15th July, 1897
Hoylake and West Kirby Improvement Act, 1900	10th July, 1900
Hoylake and West Kirby Urban District Council Act, 1925	7th Aug., 1925
Hoylake Urban District Council Act, 1935.....	2nd Aug., 1935

PROVISIONAL ORDERS.

Hoylake and West Kirby Electric Lighting Order, 1897	15th July, 1897
Hoylake and West Kirby Order, 1906	8th March, 1906

ADOPTIVE ACTS.

- Baths and Washhouses Act, 1846.
- Public Health Acts Admendment Act, 1890, Parts II. to V.
- Infectious Disease (Prevention) Act, 1890.
- The Private Street Works Act, 1892.
- Small Dwellings Acquisition Acts, 1899-1923.
- Health Resorts and Watering Places Act, 1921.
- The Local Govt. and other Officers' Superannuation Act, 1922.
- The Public Health Act, 1925.

ORDERS OF THE COUNTY COUNCIL.

- 7th November, 1889—Constitution of the Urban District.
- 3rd December, 1914—Dividing the Hoylake and West Kirby Urban Sanitary District into four wards. Altering the boundaries between the Urban District and the Wirral Rural District.
- County of Chester Review Order, 1933, extension of District.

POWERS UNDER THE FOLLOWING SECTIONS
OF THE PUBLIC HEALTH ACTS (AMENDMENT
ACT, 1907).

Part 2—Sections 18, 19, 20, 21, 22, 24, 26, 27, 28, 29, 30 and 33	15th Dec.
Part 3.—The whole of	1909.
Part 4.—Sections 52, 53, 54, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66 and 68	22nd Nov. 1928.
Part 6.—The whole of	
Part 7.—Sections 79, 81 and 85	29th Dec.
Part 8.—The whole of	1908.
Part 9.—The whole of	15th Dec.
Part 10.—Sections 93 and 95	1909.

COUNCIL BYELAWS.

BYELAWS.	<i>Dates of Adoption.</i>
Bathing	Aug. 21, 1899
Seashore	Nov. 20, 1899
Horses, Ponies, Mules, or Asses	Dec. 17, 1900
Prevention of Nuisances	April 3, 1901
West Kirby Park	June 16, 1902
Fire Birgade	Dec. 19, 1911
New Streets and Buildings	{ April 20, 1914 Sep. 21, 1926

Grange Hill Recreation Ground	.....	.....	Dec. 15, 1914
Hackney Carriages	.....	.....	June 15, 1920
Meols Parade, North Parade and South Parade (Motoring)	.....	.....	Feb. 15, 1921
Pleasure Boats and Vessels	.....	.....	Dec. 18, 1923
Foreshores	.....	.....	{ July 17, 1923
			{ Oct. 16, 1923
Slaughterhouses	.....	.....	Oct. 21, 1924
Offensive Trades	.....	.....	June 15, 1925
Steam Organ, etc.	.....	.....	Nov. 17, 1925
Meols Parade, North Parade and South Parade (Sale and Hawking)	.....	.....	July 19, 1927
Wireless Installations	.....	.....	Jan. 17, 1928
Cemetery Regulations, Fees, etc.	.....	.....	Feb. 19, 1929
Driving Motor Vehicles on the Seashore	.....	.....	Oct. 14, 1930
Foreshores	.....	.....	Mar. 3, 1931
Hackney Carriages	.....	.....	Sept. 15, 1931
Advertisements	.....	.....	Oct. 20, 1931
New Streets and Buildings	.....	.....	Jan. 7, 1936

Sanitary Circumstances of the Area.

WATER.—District Council Supply (softened). The area added to the district in 1933 is supplied from the mains of the West Cheshire Water Board with softened water. The supply is satisfactory both in quality and quantity. Examinations are made annually of the Council's supply and four times a year of the West Cheshire Sources. Certificates of recent examinations are as follows:—

West Cheshire Water Board.

		<i>Chemical Results</i> <i>in parts per 100,000</i>	
Appearance	.....	Clear and bright	
Colour	.....	Normal. Odour, none	
Reaction pH	.....	Neutral 7.1	Free Carbonic Acid—
Electric Conductivity at 20 deg. C.	.....	530	
Total Solids, 180 deg. C.	.....	35.0	
Chlorine in Chlorides	.....	5.8	
Nitrogen in Nitrates	.....	0.2	Nitrites absent
Hardness: Permanent	.....	0.0	Grains per gallon
Temporary	.....	9.5	“ “ “
Total	.....	9.5	“ “ “
Metals	.....	Absent	
Free Ammonia	.....	0.0000	
Albuminoid Ammonia	.....	0.0000	
Oxygen absorbed in 4 hrs. at 80 deg. F.	.....	0.0050	
		<i>Bacteriological Results.</i>	
No. of Bacteria per c.c.	.....	
On Agar in 3 days at 20 deg. C.	.....	9	
On Agar in 1 day at 37 deg. C.	.....	7	
The Bacillus Coli	.....	Present in — Absent in 100 cc.	
Bacillus Welchii (B. Enteritidis Sporogenes)	.....	Present in — Absent in 100 cc.	

REPORT.—This is a clear and bright water of normal colour and neutral reaction. It is of moderate hardness, contains no excess of salinity, and is entirely free from metals.

The water is of a very high standard of organic and bacterial purity and is pure and wholesome, suitable for Public Supply purposes.

Mark and denomination of the sample.	Grange Hill Supply.	Newton Supply.	Town Mains.
Total solid matter in solution	47.28	29.52	41.36
Oxygen required to oxidise			
(in 15 mins.)	none	none	none
(in 3 hours)	none	none	none
Ammonia	none	none	none
Ammonia from Organic mat- ter (by distillation with alkaline permanganate).....	none	none	none
Nitrogen as Nitrates	0.54	0.34	0.48
Nitrogen as Nitrites	none	none	none
Combined Chlorine	12.20	3.80	10.90
Hardness (expressed in Degrees)			
Temporary	7.9	9.0	6.9
Permanent	9.2	5.0	2.5
.....
Total	17.1	14.0	9.4
.....

Observations.

Grange Hill Supply—pH value 7.1.

The water was clear, bright, colourless and odourless. It was free from Lead and Copper and from solid matters in suspension. The results of the analysis show that the very high state of organic purity remains unaltered.

Newton Supply—pH value 7.5.

The sample was clear, bright, colourless and odourless. It was free from Lead and Copper and from solid matter in suspension. The results of the analysis show that the very high state of organic purity remains unaltered.

Town Mains—pH value 7.1.

The water was clear, bright, colourless and odourless. It was free from Lead and Copper and from solid matters in suspension. The softening Process has not introduced anything of an objectionable nature into the supply and the water is in every way well suited for drinking and all domestic purposes.

BACTERIOLOGICAL REPORT.

(a) Newton Supply—

True B. Coli absent in 100 ccs.

Number of Organisms on Agar at 37 deg. C. = 4 per 1 cc.

Number of Organisms on Agar at 22 deg. C. = 316 per 1 cc.

(b) Town Main, The Quadrant.

True B. Coli absent in 100 ccs.

Number of Organisms present at 37 deg. C. = 10 per 1 cc.

Number of Organisms present at 22 deg. C. = 11 per 1 cc.

(c) Grange Hill Supply—

True B. Coli absent in 100 ccs.

Number of Organisms present at 37 deg. C. = 0 per 1 cc.

Number of Organisms present at 22 deg. C. = 2 per 1 cc.

Remarks.—All the samples of water from a bacteriological point of view are satisfactory and suitable for potable purposes.

RIVERS AND STREAMS.—Pollution of streams and water-courses by overflows from cesspools in connection with thirteen dwelling-houses has been abated. In six cases the drains were connected to the sewer and in the remaining seven the cesspools were re-conditioned.

DRAINAGE AND SEWERAGE.—It is a well sewered town and extensions are constructed as it grows. Disposal is into tidal waters. At Hoylake and Meols there are retention tanks with Penstock valves so that discharge takes place only on the ebb-tide. Surface water is carried off by the Birket, the Marine Lake West Kirby, and outlets into the Estuary of the Dee. Caldy drains to the Dee; Frankby, Greasby, Saughall Massie drain to the North Wirral Outfall Sewer, and part of Grange drains into West Kirby Sewers.

CLOSET ACCOMMODATION.—Water closets of a good type are the general rule. In the outlying areas many houses have more primitive arrangements, and during the year there were conversions of eight pail closets and privies to water closets.

SCAVENGING.—Scavenging is well carried out. Refuse is removed systematically by Council workmen and conveyed to the Pulverising Works. No accumulation of stable manure is permitted for a longer period than seven days. The Pagefield System of Collection is in use.

SANITARY INSPECTION OF THE AREA.—The following table submitted by the Inspector, gives a summary of the sanitary work :—

Summary of Work Done by the Sanitary Inspectors
in the Year, 1937.

Nature of Inspections made	Number of Inspections		Number of Notices Served		Result of Service of Notices	
	Number of Inspections	Informal	Statutory	Complied with	Remaining in hand	
Dwelling Houses (General) ...	733	332	48	329	51	
Re-inspections ...	844	—	—	—	—	
Housing Inspections ...	56	24	5	21	8	
Re-inspections ...	242	—	—	—	—	
Re-visits to Overcrowded Houses ...	98	26	—	26	—	
Houses Measured to Establish Permitted No. of Tents, Vans and Sheds ...	22	—	—	—	—	
Camps ...	51	7	—	7	—	
Privies, Earth and Pail Closets ...	103	6	—	6	—	
Cesspools ...	184	10	2	12	—	
Drainage—Tests 49, Obstructions 35	64	15	4	19	—	
Ditches, Watercourses, etc. ...	84	66	16	80	2	
Keeping of Animals ...	99	28	7	35	—	
Offensive Trades ...	83	10	—	10	—	
Slaughterhouses—15. Meat Inspection—174	19	2	—	1	1	
Butchers' Shops ...	189	4	—	4	—	
Other Food Premises ...	38	8	—	8	—	
Ice Cream Premises ...	62	20	—	17	—	
Bakehouses ...	34	3	—	3	—	
Factories, Workshops, Workplaces	56	17	1	18	—	
Shops' Act ...	127	28	—	25	—	
Dairies ...	74	51	—	51	—	
Cowsheds ...	137	11	—	11	—	
Schools ...	125	14	—	14	—	
Public Conveniences ...	22	4	—	4	—	
Infectious Disease Visits	32	—	—	—	—	
Premises Disinfected ...	165	—	—	—	—	
Milk Sampling—Ordinary 63, Designated 2	9	—	—	—	—	
Rat Infestations ...	65	—	—	—	—	
Vermineous Premises ...	67	23	—	23	—	
Smoke Observations ...	71	18	9	27	—	
Places of Entertainment ...	11	5	—	4	1	
Miscellaneous Visits, Interviews, etc. ...	12	3	—	3	—	
	161	13	—	13	—	
Total	4139	748	92	771	69	

1.—Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries) ...	35	3	—
Workshops (including Workshop Laundries) ...	83	23	—
Workplaces (other than Outworkers' premises)	9	2	—
Total	127	28	Nil

2.—Defects found in Factories, Workshops and Workplaces.

Particulars (1)	No. of Defects.			Number of offences in respect to which Prosecu- tions were instituted (5)
	Found (2)	Remedied (3)	Ref'd to H.M. Inspect- or (4)	
<i>Nuisances under the Public Health Acts:—*</i>				
Want of cleanliness	20	20	...	...
Want of ventilation	1	1	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors	2	2	...	...
Other nuisances	11	9	...	...
Sanitary accommodation { insufficient ... ..	...	...	...	...
{ unsuitable or defective	7	7	...	...
{ not separate for sexes	1	...	...	...
<i>Offences under the Factory and Workshop Acts:—</i>				
Illegal occupation of underground bakehouse (s.101) ... ..	...	...	...	...
Other offences ... ..	...	...	...	...
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total	42	39	Nil.	Nil

*—Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

SHOPS.—74 visits of inspection were paid. Fifty-one notices were served requesting the provision of suitable heating arrangements.

SWIMMING BATHS AND POOLS.—There are two open air public baths, viz. :—Hoylake Bath and West Kirby Marine Lake. Both of them attract large numbers of bathers. The sterilising apparatus at the Hoylake Bath is of the most modern type and if the standard of cleanliness is evidenced by the absence of *Bacillus Coli* it is perfect.

The Marine Lake is supplied from the waters of the Estuary which are not chlorinated.

Certificates of bacteriological examination is as follows:—

(1936) Hoylake Bath.

Bacteria per cc. at 22 deg. C.—20.

Bacteria per cc. at 37 deg. C.—15.

B. Coli present in 100 cc., absent in 90 cc.

SCHOOLS.—All the public elementary schools receive water from the public supply and are provided with water carriage sanitation. There is a secondary school for boys, one for girls and numerous private schools. All are modern and conform to a satisfactory hygienic standard.

ERADICATION OF BED BUGS.—

(1) The number of:—

(a) Council houses,

(i.) Infested	Nil
---------------	-------	-------	-------	-------	-------	-------	-----

(ii.) Disinfested	Nil
-------------------	-------	-------	-------	-------	-------	-------	-----

(b) Other Houses,

(i.) Infested	49
---------------	-------	-------	-------	-------	-------	-------	----

(ii) Disinfested	48
------------------	-------	-------	-------	-------	-------	-------	----

(2) The methods employed for freeing infested houses from bed bugs—

(a) 10 houses were treated with Hydrocyanic Acid Gas.

(b) 38 houses were treated with liquid insecticide after skirtings, etc., had been removed.

- (3) The methods employed for ensuring that the belongings of tenants are free from vermin before removal to Council houses :—

Fumigation with Hydrocyanic Acid Gas.

- (4) Whether the work of disinfestation is carried out by the Local Authority or by a contractor.

38 houses treated with liquid insecticide by the Local Authority.

10 houses treated with Hydrocyanic Acid Gas by a contractor

- (5) The measures taken by way of supervision or education of tenants to prevent infestation after cleansing :—

Tenants are instructed to report any re-appearance of vermin and where the walls have been stripped, to facilitate disinfestation, efforts are made to have the walls distempered and not re-papered. Disinfested houses are visited some time after disinfestation to see if further treatment is required.

1. Inspection of Dwelling-houses during the Year:—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	789
(b) Number of inspections made for the purpose	1875
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	56
(b) Number of inspections made for the purpose	298
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	3
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	356

2. Remedy of Defects during the Year without Service of formal Notices:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 244

3. Action under Statutory Powers during the Year:—

A. Proceedings under sections 9, 10, and 16 of the Housing Act, 1936:—

- (1) Number of dwelling-houses in respect of which notices were served requiring repairs 5
- (2) Number of dwelling-houses which were rendered fit after service of formal notices:
- (a) By owners 5
- (b) By Local Authority in default of owners Nil

B. Proceedings under Public Health Acts:

- (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 48
- (2) Number of dwelling-houses in which defects were remedied after service of formal notices:—
- (a) By owners 46
- (b) By Local Authority in default of owners 2

C. Proceedings under sections 11 and 13 of the Housing Act, 1936:

- (1) Number of dwelling-houses in respect of which Demolition Orders were made Nil
- (2) Number of dwelling-houses demolished in pursuance of Demolition Orders Nil

D. Proceedings under section 12 of the Housing Act, 1936:

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	1
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil

4. Housing Act, 1936—Part IV.—Overcrowding:—

(a) (1) Number of dwelling-houses overcrowded at the end of the year	15
(2) Number of families dwelling therein	15
(3) Number of persons dwelling therein	117
(b) Number of new cases of overcrowding reported during the year	2
(c) (1) Number of cases of overcrowding relieved during the year	10
(2) Number of persons concerned in such cases	71
(d) Particulars of any cases in which dwelling-houses have again become overcrowded during the year after the Local Authority have taken steps for the abatement of overcrowding	Nil
(e) Any other particulars with respect to overcrowding conditions upon which it may be desirable to report:—	

The above 15 houses are overcrowded to the following extent:—

	Excess over Permitted Number
1 house	3 persons
1 house	2½ persons
3 houses	2 persons
4 houses	1½ persons
5 houses	1 person
1 house	½ person

Milk Supply.

The registers show, 17 Wholesale Producers, 10 Retail Producers and 48 Retail Purveyors. 12 Producers are on the Accredited List. 9 of the retail purveyors come into the Urban District from other areas. Two new cowsheds have been erected and at five farms they have been reconditioned. In addition to frequent visits of inspection, the inspectors call at the hours of morning and evening milking to ensure that milk is obtained under cleanly conditions so as to comply with the Milk and Dairies Order.

Sedimentation tests in which the farmers take great interest are carried out for the purposes of instruction and invariably after inspection of dirty discs improvement is noted. Examination of 102 discs showed 78 clean, 18 moderate, and 6 dirty.

SPECIAL DESIGNATION MILKS.—The number of designated milk licences issued was 24:—16 to sell Tuberculin Tested, 2 to bottle Tuberculin Tested, and 6 to sell Accredited Milk.

One farm holds a licence from the Ministry of Health to produce and bottle Tuberculin Tested Milk.

Out of 65 samples examined for Tubercle Bacilli, 11 were found tuberculous and the diseased cows were traced and slaughtered.

Meat and Other Foods.

There are four licensed slaughter houses. Formerly there was, in addition, a registered slaughter house, but non-user terminated its employment.

Five slaughterers have their names on the register.

At the 174 visits paid by the inspectors 990 carcasses were examined and 390 lbs. of meat unfit for human food were condemned. Tuberculosis was the reason for condemning 209 lbs.,

Carcases Inspected and Condemned.

	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	—	—	46	797	147
Number Inspected	—	—	46	797	147
<i>All diseases except Tuberculosis :—</i>					
Whole carcasses condemned ...	—	—	1	—	—
Carcases of which some part or organ was condemned ...	—	—	2	34	56
Percentage of the number in- spected affected with disease other than Tuberculosis ...	—	—	6.5%	4.3%	38%
<i>Tuberculosis only ;—</i>					
Whole carcasses condemned ...	—	—	—	—	—
Carcases of which some part or organ was condemned ...	—	—	—	—	32
Percentage of the number in- spected affected with Tuberculosis	—	—	—	—	21.7%

Ice Cream.

The Hoylake Urban District Council Act, 1935, gives the Council power to register manufacturers and vendors of ice cream and other similar commodities, and also their respective premises.

The register shows 26 manufacturers and their premises, 53 vendors and 47 vendors' premises.

All ice cream premises are visited prior to registration and a report submitted to the Council for their consideration.

Periodical inspections are made during the season.

Bakehouses.

56 visits were paid to the 26 bakehouses on the list.

Other foods.—62 visits were paid to ensure cleanly production and storage of food.

Fish Friers.

The premises of 9 fish friers are registered. One application for permission to establish the trade was submitted to the Council and granted.

Camping Grounds.

Under the Hoylake Urban District Council Act, 1935, the consent of the Council is required before land in the district can be used as a camping ground.

In 9 instances the consent of the Council was refused. In 2 cases legal proceedings were necessary to enforce the closure of the camps.

Byelaws have been made under the above Act to control the condition of camping grounds. These came into operation on the 1st February, 1937.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the District during the year ending 31st December, 1937.

Name of Sample	Number Analysed	Number of Samples not up to Standard or Certified as Adulterated
Arrowroot	1	—
Aspirins... ..	3	—
Boracic Ointment	2	—
Butter	2	—
Cascara Tablets	2	—
Cheese, Cheshire	1	—
Cinnamon and Quinine Tablets	1	—
Coffee	1	—
Cream, Fresh	1	—
Cream, Tinned... ..	2	—
Curry Powder	1	—
Epsom Salts	1	—
Fish Paste	1	—
Fullers Earth Cream	1	—
Ginger, Ground	2	—
Glycerine and Rose Water Jelly	1	—
Iodine, Tincture of	1	—
Lard	2	—
Milk	26	1 (*)
Oatmeal	1	—
Peroxide of Hydrogen	1	—
Rice, Ground	1	—
Sardine and Tomato Paste	1	—
Seidlitz Powders	2	—
Zinc Ointment... ..	2	—
	60	1

(*) 10% deficient in fat. Seller cautioned.

Prevalence of, and Control over, Infectious Diseases.

The incidence of Infectious Diseases in the years 1921-37 is shown in the following table which gives the case rate per 1,000 of the population.

Year	Small Pox	Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Pneumonia
1921	0.00	1.57	2.90	0.12	0.12	0.00
1922	0.00	1.99	0.79	0.12	0.42	0.00
1923	0.00	4.28	0.66	0.18	0.36	0.00
1924	0.00	1.57	0.06	0.29	0.17	0.00
1925	0.00	1.27	0.17	0.11	0.23	0.00
1926	0.00	0.55	0.22*	0.05	0.00	0.00
1927	0.00	1.07	0.39*	0.05	0.05	0.00
1928	0.00	1.57*	0.39*	0.05	0.39	0.00
1929	0.00	1.7	0.4*	0.00	0.11	0.00
1930	0.00	1.41	1.53	0.12	0.18	0.00
1931	0.00	0.49	0.12	0.06	0.24	0.00
1932	0.00	0.71	0.83*	0.06	0.12	0.00
1933	0.00	1.3*	0.5*	0.00	0.15	0.00
1934	0.00	2.71*	0.64	0.00	0.29	0.00
1935	0.00	1.9*	0.76	0.00	2.8	0.00
1936	0.00	2.86*	2.17*	0.00	0.41	0.00
1937	0.00	3.1*	1.01*	0.08	0.72	0.79

*—The Convalescent Home Cases are excluded from this calculation

Case Rate per 1,000 of population in England and Wales.

Year	Small Pox	Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Pneumonia
1921	0.00	3.64	1.76	0.10	0.35	0.00
1922	0.00	2.85	1.37	0.06	0.35	0.00
1923	0.00	2.24	1.05	0.08	0.32	0.00
1924	0.00	2.16	1.07	1.11	0.33	0.00
1925	0.14	2.36	1.23	0.07	0.39	0.00
1926	0.26	2.10	1.31	0.07	0.38	0.00
1927	0.38	2.16	1.33	0.09	0.38	0.00
1928	0.32	2.61	1.55	0.09	0.42	0.00
1929	0.28	3.05	1.59	0.07	0.45	0.00
1930	0.29	2.76	1.84	0.07	0.45	0.00
1931	0.14	2.05	1.27	0.06	0.38	0.00
1932	0.05	2.12	1.08	0.06	0.36	0.00

Year	Small Pox	Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Pneumonia
1933	0.02	3.21	1.18	0.04	0.45	0.00
1934	0.04	3.76	1.70	0.03	0.51	0.00
1935	0.00	2.96	1.60	0.04	0.42	0.00
1936	0.00	2.53	1.39	0.06	0.40	0.00
1937	0.00	2.33	1.49	0.05	0.37	1.36

The Registrar-General states that "the rates for puerperal fever and for puerperal pyrexia are better expressed in relation to the number of births registered rather than to the population." When calculated on this basis the rate is 13.39 per 1,000 total births (*i.e.*, live and stillbirths), registered during the year. On the same basis the Hoylake rates would be puerperal fever 0.00, puerperal pyrexia 3.5.

Notifiable Diseases (other than Tuberculosis) during the year 1937.

Disease	Total Cases Notified	Total Cases Admitted to Hospital	Deaths
Smallpox	—	—	—
Scarlet Fever... ..	79	71	—
Diphtheria	44	42 + 13 neg.	5
Enteric Fever	2	2	—
Puerperal Fever	—	—	—
Puerperal Pyrexia	1	—	—
Pneumonia	18	7	16
Erysipelas	16	5	—
Cerebro-spinal Fever... ..	—	—	—
Acute Poliomyelitis	—	—	—
Acute Polio-encephalitis	—	—	—
Encephalitis Lethargica	1	1	1
Dysentery	—	—	—
Malaria	—	—	—
Chickenpox	—	—	—
Total ...	165	128 + 3 neg.	22

Diphtheria at the West Kirby Children's Convalescent Home accounted for 20 of the cases and does not seem to have been associated with the existence of any causal conditions in the Home, but to have been dependent upon carriers. 7 cases of Scarlet Fever were notified from the Home.

Table Showing Distribution of Total Cases of Notifiable Diseases, 1937.

Disease	Wards							Children's Convalescent Home	Ellen Gonner Home	Total
	North	Central	Park	South	Caldy and Frankby	Grange	Greasby			
Scarlet Fever	12	6	19	8	7	17	3	7	—	79
Diphtheria	11	—	2	2	2	5	1	20	1	44
Pneumonia	6	4	1	2	—	—	5	—	—	18
Erysipelas	5	3	1	—	1	2	4	—	—	16
Enteric Fever	1	—	—	—	1	—	—	—	—	2
Encephalitis lethargica ...	1	—	—	—	—	—	—	—	—	1
Puerperal Pyrexia... ..	—	—	—	—	—	1	—	—	—	1
	36	13	23	12	11	25	13	27	1	161

NESTON URBAN DISTRICT

Neston was constituted an Urban District in 1894 and was extended on 1st April, 1933, by the inclusion of the Parish of Ness and parts of the parishes of Burton, Puddington, Eastham, Willaston, Raby and Thornton Hough.

Statistics and Social Conditions of the Area.

Area (Acres)	8,495
Registrar-General's Estimate of Resident Population (1937)	8,527
Number of inhabited houses (1937)	2,376
Rateable value	£66,908
Sum represented by a penny rate	£258

The Natural Increase (excess of births over deaths) of the population in the years 1922-37 is shown in the following table:—

Year	Population	Natural Increase per 1,000 Population	Year	Population	Natural Increase per 1,000 Population
1922	5,193	12.4	1930	5,753	5.9
1923	5,232	10.0	1931	5,771	6.9
1924	5,397	9.8	1932	5,761	5.0
1925	5,407	6.1	1933	7,650	2.2
1926	5,448	5.9	1934	8,280	5.1
1927	5,586	5.3	1935	8,460	5.2
1928	5,485	3.8	1936	8,450	3.55
1929	5,742	8.9	1937	8,527	5.8

Natural Increase of Population (*i.e.*, excess of births over deaths) 1922-1936 (England and Wales).

Year	per 1,000 Population	Year	per 1,000 Population
1922	7.6	1929	2.9
1923	8.1	1930	4.9
1924	6.6	1931	3.5
1925	6.1	1932	3.3
1926	6.2	1933	2.1
1927	4.3	1934	3.0
1928	5.0	1935	2.9
		1936	2.5

Extracts from Vital Statistics of the year 1937.

These statistics are calculated on the population of 8,527 supplied by the Registrar-General.

Live Births.			
	Males.	Females	Total.
Legitimate	80	58	138
Illegitimate	3	1	4
	—	—	—
	83	59	142

Birth Rate 16.65 per 1,000 of the Population.

Live Births Rate per 1,000 estimated resident population (1937) 148 smaller towns (population 25,000-50,000 Census 1931) England and Wales 15.3.

Still Births.			
	Males.	Females	Total.
Legitimate	1	0	1
Illegitimate	1	0	1
	—	—	—
	2	0	2

Still Birth Rate 13.8 per 1,000 total Live and Still Births or .23 per 1,000 of the population.

Table of number of Births and Birth Rates, 1922-1936.

Year.	Number.	Birth Rate.	Year.	Number.	Birth Rate.
1922	113	21.7	1929	109	19.0
1923	105	20.0	1930	92	16.0
1924	113	20.9	1931	98	17.0
1925	106	19.6	1932	97	16.8
1926	90	16.5	1933	114	14.9
1927	92	16.4	1934	121	14.6
1928	90	16.4	1935	129	15.2
			1936	120	14.2

The average number of births per annum in the years 1922-1936 was 105.

Birth Rate England and Wales (1936) 14.8.

Birth Rate in the Administrative County of Chester (1936) 13.9.

Deaths.

Total, 92 Males, 49 Females, 43

Death Rate 10.78. Corrected Death Rate 11.1.

The death rate per 1,000 estimated resident population in the 148 smaller towns (25,000-50,000 Census 1931) was 11.9 (1937).

Table of Number of Deaths and Death Rates, 1922-1936.

Year.	Number.	Death Rate.	Year.	Number.	Death Rate.
1922	49	9.4	1929	58	10.1
1923	53	10.1	1930	58	10.1
1924	60	11.1	1931	58	10.1
1925	73	13.5	1932	68	11.8
1926	58	10.6	1933	97	12.7
1927	62	11.0	1934	78	9.4
1928	69	12.6	1935	85	10.04
			1936	90	10.7

The average number of deaths per annum in the years 1922-1936 was 68.

Ratio of local adjusted death rate to National Rate was 0.91 (1936).

Death Rate in the Administrative County of Chester 12, bearing a ratio of 1 to the National Rate.

Percentage of deaths in Public Institutions 30.

Deaths from Puerperal causes :—

	Deaths.	Rate per 1,000 total (live and still) births.	Rate per 1,000 live births.
Puerperal Sepsis	0	0.00	0.00
Other puerperal causes	0	0.0	0.00
	—	—	—
Total	0	0.0	0.00

The figures for England and Wales :—

Puerperal sepsis	0.94	0.97
Other puerperal causes	2.17	2.26
	—	—
Total	3.11	3.23

Death Rate of Infants under 1 year of age :—

	Number.	Rate.
All infants per 1,000 live births	6	42.
Legitimate infants per 1,000 legitimate live births	6	43.
Illegitimate infants per 1,000 illegitimate live births	0	0.

Table of Infantile Mortality, 1921-1936.

Year.	Rate per 1,000 Births.	Year	Rate per 1,000 Births.
1921	56.9	1929	28.0
1922	53.0	1930	43.5
1923	47.6	1931	31.0
1924	79.0	1932	82.0
1925	47.1	1933	88.0
1926	88.8	1934	8.0
1927	112.0	1935	46.4
1928	33.0	1936	50.0

Registrar-General's Table (1936) :—

	Deaths under 1 year per 1,000 registered live births
England and Wales	58
125 County Boroughs and great towns including London	62
148 smaller towns (25,000-50,000 Census 1931)	55
London (Administrative County)	60
Deaths from Measles (all ages)	0
Deaths from Whooping Cough (all ages)	2
Deaths from Diarrhoea (under 2 years of age)	0
Deaths from Cancer (all ages)	8

There were no deaths from Measles in the preceding 5 years, 1 from Whooping Cough and 1 from Diarrhoea (under 2 years of age).

Causes of Death.

All Causes.	M.	F.	Total.
1. Typhoid and Paratyphoid Fevers	—	—	—
2. Measles	—	—	—
3. Scarlet Fever	—	—	—
4. Whooping Cough... ..	—	2	2
5. Diphtheria	1	—	1
6. Influenza	2	2	4
7. Encephalitis Lethargica... ..	—	—	—
8. Cerebro-spinal Fever	—	—	—
9. Tuberculosis of Respiratory System	1	1	2
10. Other Tuberculous Diseases	—	2	2
11. Syphilis	—	—	—
12. General Paralysis of the Insane : Tabes Dorsalis	—	—	—
13. Cancer, Malignant Disease	4	4	8
14. Diabetes	2	1	3
15. Cerebral Haemorrhage	1	2	3
16. Heart Disease	15	9	24
17. Aneurysm... ..	—	—	—
18. Other Circulatory Diseases	5	9	14
19. Bronchitis... ..	—	—	—
20. Pneumonia (All forms)	5	1	6
21. Other Respiratory Diseases	—	—	—
22. Peptic Ulcer	1	—	1
23. Diarrhoea (under 2 years)	—	—	—
24. Appendicitis	—	—	—
25. Cirrhosis of Liver	1	—	1
26. Other Diseases of Liver, etc.	—	1	1
27. Other Digestive Diseases	1	—	1
28. Acute and Chronic Nephritis	—	2	2
29. Puerperal Sepsis	—	—	—
30. Other Puerperal Causes	—	—	—
31. Congenital Debility, Premature Birth, Malfor- mations, etc.	1	—	1
32. Senility	—	—	—
33. Suicide	3	—	3
34. Other Violence	3	3	6
35. Other Defined Diseases	2	4	6
36. Causes Ill-defined or Unknown... ..	—	—	—
Totals ...	49	43	92
<i>Special Causes (included in No. 35 above)</i>			
Smallpox	—	—	—
Poliomyelitis	—	—	—
Polio-encephalitis	—	—	—

General Provision of Health Services in the Area.*See under North-West Cheshire p. 27.***List of Adopted Acts, Bye-Laws, and Regulations.**

ADOPTED ACTS.

Infectious Disease (Prevention Act)	1890
Public Health Acts Amendment Act 1890 (Parts 3, 4)	1892
Public Health Acts Amendment Act	1907
Small Dwellings Acquisition Act	1900
Public Health Act 1925, Parts 2, 3, 4, 5, except ss., 21, 22, 44	1928

BYE-LAWS.

With respect to—

New Streets and Buildings—New Bye-Laws	1930
Offensive Trades	1929
Drainage of Buildings	1933

Bye-Law made by the Urban District Council of Neston with respect to new streets and buildings in the Urban District of Neston.

The bye-laws with respect to buildings and certain matters in connection therewith which were made on the seventeenth day of November, 1924, by the Rural District Council of Wirral and were confirmed on the twelfth day of January, 1925, by the Minister of Health, so far as they are in force in the Urban District of Neston are hereby repealed and the bye-laws described in the schedule hereto shall extend and apply to the whole of the Urban District of Neston.

Schedule.

Description of Byelaws	Date of Making	By whom made	Date of Confirmation	By whom confirmed
New Streets and Buildings	1st December, 1930	Urban District Council of Neston and Parkgate.	18th February, 1931.	Minister of Health
Drainage of Buildings	3rd August 1933	Urban District Council of Neston	29th September, 1933	

GIVEN under the Common Seal of the District Council for the District of Neston in the County of Chester at a Meeting held on the Fifth day of October, 1936.

(L.S.)

WM. LEES EVANS, Chairman.
F. R. POOLE,
Clerk of the Council.

THE foregoing Byelaw is hereby confirmed by the Minister of Health this first day of December, 1936, and shall come into operation on the first day of January, 1937.

(L.S.)

W. A. ROSS,
Assistant Secretary Minister of Health.

Sanitary Circumstances of the Area.

WATER.—Central area Council Supply (unsoftened) added areas West Cheshire (softened).

Certificate of Analysis of Supply provided by Neston Council.

Mark and denomination of the sample. District Water Supply
From Tap in Pumping House.

	Parts per 100,000
Total solid matter in solution	32.64
Oxygen required to oxidise (in 15 minutes)	none
(in 3 hours)	none
Ammonia	none
Ammonia from Organic matter by distillation with alkaline permanganate	none
Nitrogen as Nitrates	0.86
Nitrogen as Nitrites	none
Combined Chlorine	2.75
Total Hardness	21.0

The sample was clear, colourless and odourless. It contained only a minute trace of suspended matter which consisted of a few particles of siliceous matter.

Reaction to Litmus—Neutral. P.H. Value 7.1

The water is very pure and of medium Hardness. It is well suited for drinking and all domestic purposes.

Date.	Description.	Bacteria per c.c.		B. Coli
		at 37° C.	at 22° C.	
1.2.38	Tap in Town Hall	0	4	Absent in 100 cc.

Certificate of Analysis of Supply provided by West Cheshire Water Board.

		<i>Chemical Results in parts per 100,000.</i>			
Appearance	.....	Clear and bright.			
Colour	.....	Normal. Odour, Nil.			
Reaction pH	.....	Neutral 7.1. Free Carbonic Acid.			
Electricity Conductivity at 20° C.	.....	530.			
Total Solids, 180° C.	.....	35.0.			
Chlorine in Chlorides	.....	5.8.			
Nitrogen in Nitrates	.....	0.20. Nitrites absent.			
Hardness: Permanent	.....	0.0	0.0	grains per gallon.	
Temporary	.....	13.5	9.5	" " "	
Total	.....	13.5	9.5	" " "	
Metals	.....	Absent.			
Free Ammonia	.....	0.0000 Ammoniacal Nitrogen—			
Albuminoid Ammonia	.....	0.0000 Albuminoid Nitrogen—			
Oxygen absorbed in 4 hours at 80° F.	.....	0.005.			
		<i>Bacteriological Results.</i>			
No. of Bacteria per cc. or ml.—					
On Agar in 3 days at 20° C.	.....	9			
On Agar in 1 day at 37° C.	.....	7			
On Agar in 2 days at 37° C.	.....	7			
The Bacillus Coli	.....	Present in — Absent in 100 cc.			
Bacillus Welchi (B. Enteritidis Sporogenes)	.....	Present in — Absent in 100 cc.			

REPORT.—This is a clear and bright water, odourless and of normal colour. It is neutral in re-action, of moderate Hardness, contains no excess of salinity and is of the highest standard of organic and bacterial purity. We are of opinion, therefore, that the water is pure and wholesome and suitable for the purposes of public supply.

RIVERS AND STREAMS.—A stream polluted by the effluent of faulty disposal works and other matters receives active attention. The efforts to improve the effluent have not been successful up to the present time.

DRAINAGE AND SEWERAGE.—During the last five years, considerable modifications have been made to ensure an innocuous effluent and to minimise the amount of sewage passed into the Dee. The old disposal works have been modernised and enlarged, humus tanks and sludge lagoons are now supplied.

Parkgate Sewerage which was the subject of a Local Government Board Enquiry in 1911 has now been brought to the disposal works.

Ness has its own sewerage works consisting of settling tanks, rotatory filter and humus tanks.

Burton has a gravitation system to receiving tanks and filter for the old part of the village.

Willaston—part goes to an out-of-date works which are being re-conditioned and part to Eastham Rake works. The failure of the reconditioned works is indicated in the Analysis under Rivers and Streams.

SCAVENGING.—The Council has its own scavenging staff in Neston and the work is done systematically so that complaints are not now received. Disposal is by controlled tipping on an area purchased by the Council and at a distance of about a quarter of a mile from any dwellings. Galvanised iron bins are the rule at the new houses.

In the added areas, scavenging is by contract.

OPEN-AIR SWIMMING BATHS AT PARKGATE.—Bacteria per cc. at 22 deg. C., 6,400; at 37 deg. C., 32,000.

B. Coli absent in 100 cc.

SCHOOLS.—All the schools have the public water supply and satisfactory water closets, except Burton, which still has privies.

Sanitary Inspection of the Area.

The following Table is supplied by the Sanitary Inspector.

Number and Nature of Inspections made	Number of Notices Served.		Result of Service of Notices.	
	Informal	Statutory	Complied with	Rema ning in hand
Dwelling Houses (first Inspections 234	46	—	25	21
Dwelling Houses (Revisits)... 95	—	32	24	8
Houses Measured (Permitted No.) 64	1	—	1	—
Courts, Yards and Passages.. 23	1	—	1	—
Tents, Vans and Sheds ... 83	3	—	3	—
Infectious Disease Enquiries 29	—	—	—	—
Schools 4	—	—	—	—
Bakehouses 12	—	—	—	—
Slaughterhouses 304	1	—	1	—
Other Food Premises ... 44	1	—	1	—
Factories and Workshops ... 14	—	—	—	—
*Dairies and Cowsheds ... 198	5	2	4	3
Water Samples 2	—	—	—	—
Piggeries 9	1	—	—	1
Verminous Premises ... 12	1	—	1	—
Smoke Observations ... 6	3	—	3	—
Drains and W.C.'s. ... 54	15	3	15	3
*Cesspools and Septic Tanks . 38	1	—	1	—
*Privy Middens 57	6	—	6	—
Public Conveniences ... 4	—	—	—	—
Ditches and Watercourses ... 46	31	1	25	7
Offensive Accumulations ... 33	7	—	5	2
Rat Infestations 8	1	—	1	—
Rag Gatherers 3	1	—	1	—
Dust Bins 7	7	—	6	1
Total 1383	132	38	124	46

* In reference to these items :—

One new cowshed and dairy has been erected.

One septic tank abolished and drains connected to main sewer.

Six privy-middens abolished and water closets installed.

Permitted numbers of persons allowed to occupy houses
supplied on request to house-owners 356

1. Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries) ...	12	2	Nil
Workshops (including Workshop Laundries) ...	11	—	Nil
Workplaces (other than Outworkers' premises)	3	—	Nil
Total	26	2	Nil

2.—Defects found in Factories, Workshops and Workplaces.

Particulars (1)	No. of Defects.			Number of offences in respect to which Prosecu- tions were instituted (5)
	Found (2)	Remedied (3)	Ref'd to H.M. Inspect- or (4)	
<i>Nuisances under the Public Health Acts:—*</i>				
Want of cleanliness	1	1	...	...
Want of ventilation ... ..	...	...	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	2	2	...	...
Sanitary accommodation { insufficient ... ..	...	...	...	...
{ unsuitable or defective ... ..	...	...	...	...
{ not separate for sexes ... ..	...	...	...	...
<i>Offences under the Factory and Workshop Acts:—</i>				
Illegal occupation of underground bakehouse (s.101) ... ..	...	...	...	...
Other offences ... ..	...	...	...	...
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total	3	3	Nil.	Nil

*—Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Housing.

1. Inspection of Dwelling Houses during the Year:—

(1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	234
(b) Number of Inspections made for the purpose	329
(2) (a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	75
(b) Number of Inspections made for the purpose	150
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	31
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	43

2. Remedy of Defects during the Year without Service of Formal Notice:—

Number of defective houses rendered fit in consequence of informal action by the Local Authority or their Officers	24
--	----

3. Action under Statutory Powers during the Year:—

A. Proceedings under sections 9, 10 and 16 of the Housing Act, 1936.	
(1) Number of dwelling houses in respect of which notices were served requiring repairs	Nil
(2) Number of dwelling houses which were rendered fit after service of formal notices:—	
(a) By owners	Nil
(b) By Local Authority in default of owners	Nil

B. Proceedings under Public Health Acts.

- | | |
|--|-----|
| (1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied | Nil |
| (2) Number of dwelling houses in which defects were remedied after service of formal notices :— | |
| (a) By owners | Nil |
| (b) By Local Authority in default of owners | Nil |

C. Proceedings under sections 11 and 13 of the Housing Act, 1936.

- | | |
|---|-----|
| (1) Number of dwelling houses in respect of which Demolition Orders were made | 5 |
| (2) Number of dwelling houses demolished in pursuance of Demolition Orders | Nil |

D. Proceedings under section 12 of the Housing Act, 1936.

- | | |
|---|-----|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | Nil |
| (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit | Nil |

4. Housing Act, 1936 (Overcrowding).

- | | |
|---|-----|
| A. (1) Number of dwelling houses overcrowded at the end of the year | 22 |
| (2) Number of families dwelling therein | 23 |
| (3) Number of persons dwelling therein | 165 |
| B. Number of new cases of overcrowding reported during the year | 1 |

C. (1)	Number of cases of overcrowding relieved during the year	.....	.....	.....	.....	.....	.....	.....	.....	13
(2)	Number of persons concerned in such cases	.....								89
D.	Particulars of any case in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	.....	.....	.....	.....	.....	.....	.....	.....	Nil
E.	Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report :—									
(1)	Number of Council Houses overcrowded	.....								2
(2)	Number of Council House cases relieved	.....								2
(3)	Number of cases of overcrowding relieved by Slum Clearance	.....	.....	.....	.....	.....	.....	.....	.....	Nil

Eradication of Bed Bugs.

Number of Houses found to be infested Disinfested:—

(a)	Council Houses	.....	.....	3	3
(b)	Other Houses	.....	.....	5	5

In the former cases a proprietary insecticide and sulphur candles were used. The other houses were included in Clearance Areas and were dealt with by contractors using "Cimex." Furniture, bedding and soft furnishings were fumigated in the old houses prior to removal.

Tenants in Council Houses have been encouraged to report infestations of bugs. It has been pointed out that in the first instance every effort would be made to eradicate these pests without cost to themselves. The importance of cleanliness and the risks in obtaining second-hand furniture have been made known.

With regard to the tenants already assisted they have been given to understand that gross negligence on their part would probably result in ejection.

Inspection and Supervision of Food.

(a) MILK SUPPLY.—The Registers show 41 Cowkeepers and 38 Retail Purveyors (7 of whom are from outside districts).

Special Designations.—The following licences were issued during the year:—

To Bottle and Sell "Tuberculin Tested" Milk	1
To sell "Tuberculin Tested" Certified Milk	3
Supplementary Licence to sell "Accredited"	2
Supplementary Licence to sell "Pasteurised"	1
	—
Total	7
	—

There are 22 "Accredited" producers.

(b) MEAT.—There is one Registered Slaughter house in the Urban District, and during the year 304 visits were paid for the purpose of Meat Inspection, in accordance with the Public Health (Meat Regulations) 1924. The use of one slaughter house was discontinued.

Carcases Inspected and Condemned.

	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	98	182	314	1050	490
Number Inspected	90	168	284	675	474
<i>All diseases except Tuberculosis:—</i>					
Whole carcases condemned ...	—	—	4	1	—
Carcases of which some part or organ was condemned ...	8	37	—	45	40
Percentage of the number inspected affected with disease other than Tuberculosis ...	9	22	1·4	6·8	8·4
<i>Tuberculosis only:—</i>					
Whole carcases condemned ...	—	4	—	—	—
Carcases of which some part or organ was condemned ...	5	43	5	—	36
Percentage of the number inspected affected with Tuberculosis	5·5	28	1·7	—	7·6

Unsound Meat referred to in above table:—

			lbs.	Total lbs.
Beasts	.....	4 carcasses	.....2561	
		2 forequarters	..... 250	
		49 livers	..... 554	
		14 heads	..... 420	
		46 lungs	..... 364	4149
Calves	.....	4 carcasses	..... 209	
		5 livers	..... 18	
		1 lung	..... 4	231
Sheep and Lambs	.....	1 carcass	..... 40	
		1 shoulder	..... 4	
		24 livers	..... 43	
		29 lungs	..... 40	127
Pigs	.....	29 heads	..... 271	
		22 livers	..... 86	
		39 lungs	..... 119	476
				<hr/>
				4983
				<hr/>
Tuberculous Meat	.....		3,931 lbs.	
Other Diseased Meat	.....		1,052 lbs.	
			<hr/>	
			4,983	
			<hr/>	

(c) OTHER PREMISES WHERE FOOD IS PRODUCED OR SOLD.—There are 13 Butchers, 15 Provision Dealers, 11 Fruit and Vegetable Dealers, 7 Fresh Fish Dealers, 9 Confectioners, 5 Bakehouses, and 3 Fish Frying Premises, all of which have been subject to periodical inspections. There are several Greengrocers who only sell their goods from carts. One Meat Hawker with a properly constructed vehicle visits the District.

Sale of Food and Drugs Act.

Particulars of Samples forwarded to the Public Analyst from the district during the year ending 31st December, 1937.

Name of Sample.	Number Analysed	Number of samples not up to standard or certified as adulterated.
Almonds, ground	1	—
Cheese, Cheshire	2	—
Cream, tinned	1	—
Epsom Salts	1	—
Fish Paste	1	—
Honey	2	—
Iodine, Tincture of	1	—
Iodised Throat Tablets	1	—
Liquorice Powder	1	—
Milk	9	—
Parrish's Food	1	—
Seidlitz Powders	1	—
Zinc Ointment	1	—
	23	—

Prevalence of, and Control over, Infectious Diseases.

The prevalence of infectious diseases during the period 1921-37 is shown in the following table which gives the attack rate per 1,000 of the population.

Year.	Small Pox.	Scarlet Fever.	Enteric Diphtheria.	Enteric Fever.	Erysipelas.	Pneumonia
1921	0.00	1.55	1.75	0.19	0.00	0.00
1922	0.00	1.54	0.77	0.00	0.00	0.00
1923	0.00	1.72	2.68	0.00	0.00	0.00
1924	0.00	0.55	2.01	0.00	0.00	0.00
1925	0.00	0.55	0.00	0.00	0.00	0.00
1926	0.00	1.46	0.00	0.00	0.17	0.00
1927	0.00	0.895	0.18	0.00	0.00	0.00
1928	0.00	0.72	0.54	0.00	0.00	0.00
1929	0.00	3.3	0.34	0.00	0.00	0.00
1930	0.00	2.57	0.34	0.34	0.34	0.00
1931	0.00	0.17	0.00	0.00	0.00	0.00
1932	0.00	0.86	0.00	0.00	0.17	0.00
1933	0.00	1.17	2.74	0.00	0.13	0.00

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Pneumonia
1934	0.00	0.96	3.01	0.12	0.01	0.00
1935	0.00	0.94	0.59	0.00	0.00	0.00
1936	0.00	1.63	0.82	0.11	0.23	0.00
1937	0.00	1.1	1.2	0.00	0.35	1.4

The corresponding rates for England and Wales are as follows:—

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.	Pneumonia
1921	0.00	3.64	1.76	0.10	0.35	0.00
1922	0.00	2.85	1.37	0.06	0.35	0.00
1923	0.00	2.24	1.05	0.08	0.32	0.00
1924	0.00	2.16	1.07	0.11	0.33	0.00
1925	0.14	2.36	1.23	0.07	0.39	0.00
1926	0.26	2.10	1.31	0.07	0.38	0.00
1927	0.38	2.16	1.33	0.09	0.38	0.00
1928	0.32	2.61	1.55	0.09	0.42	0.00
1929	0.28	3.05	1.59	0.07	0.45	0.00
1930	0.29	2.76	1.84	0.35	0.45	0.00
1931	0.14	2.05	1.27	0.06	0.38	0.00
1932	0.05	2.12	1.08	0.06	0.36	0.00
1933	0.02	3.21	1.18	0.04	0.45	0.00
1934	0.04	3.76	1.70	0.03	0.51	0.00
1935	0.00	2.96	1.60	0.04	0.42	0.00
1936	0.00	2.53	1.39	0.06	0.40	0.00
1937	0.00	2.33	1.49	0.05	0.37	1.36

Puerperal Pyrexia rate is now expressed in terms of total births (live and still).

England and Wales	.....	.....	.....	.....	.....	13.39
Neston Rate was	.....	.....	.....	.....	.....	6.9

Notifiable Diseases during the Year 1937.

Disease	Total Cases Notified	Total Cases Admitted to Hospital	Deaths
Smallpox	—	—	—
Scarlet Fever	10	8	—
Diphtheria	11	11 + 3 neg.	1
Enteric Fever	—	—	—
Puerperal Fever	—	—	—
Puerperal Pyrexia	1	—	—
Pneumonia	12	6	6
Erysipelas	—	—	—
Cerebro-spinal Fever	—	—	—
Acute Poliomyelitis	—	—	—
Acute Polio-encephalitis	—	—	—
Encephalitis Lethargica	—	—	—
Dysentery	—	—	—
Malaria	—	—	—
Chickenpox	—	—	—
Total ...	34	25 + 3 neg.	7

Table Showing Distribution of Total Cases of Notifiable
Diseases, 1937.

Disease	District						Total Cases
	Burton	Little Neston	Parkgate	Ness	Neston	Willaston	
Scarlet Fever	1	2	—	—	3	4	10
Diphtheria	—	3	2	—	5	1	11
Enteric Fever	—	—	—	—	—	—	—
Pneumonia	—	1	2	—	8	1	12
Erysipelas	—	—	—	—	—	—	—
Puerperal Fever	—	—	—	—	—	1	1
Pulmonary Tuberculosis	—	—	—	—	—	—	—
Non-Pulmonary Tuberculosis	—	—	—	—	—	—	—
Totals	1	6	4	—	16	7	34

WIRRAL URBAN DISTRICT

This district was constituted under the Chester Review Order, 1st April, 1933. It includes the Parishes of Heswall, Barnston, Gayton, Irby, Pensby, Thurstaton and parts of Brimstage, Thornton Hough and Arrowe.

Statistics and Social Conditions of the Area.

Area (acres)	...	...	...	...	...	...	5,639
Registrar-General's Estimate of Resident Population (1937)	...	...	...	...	...	...	12,110
Number of inhabited houses (1937)	...	...	...	...	...	...	4,562
Rateable value	...	...	...	...	...	...	£127,561
Sum represented by a penny rate	...	...	...	...	...	...	£437

The Natural Increase that is the excess of births over deaths per 1,000 is shown in the following table:—

Year.	Population.	Natural Increase per 1,000 Population.
1934	10,570	5.
1935	10,920	2.19
1936	11,320	4.9
1937	12,110	5.7

Natural Increase of Population (i.e., excess of Births over Deaths) 1936, England and Wales, 2.5 per 1,000 population.

Extracts from Vital Statistics of the Year 1937.

These statistics are calculated on the population of 12,110 supplied by the Registrar-General.

Live Births.

		Males.	Females.	Total.
Legitimate	...	109	98	197
Illegitimate	...	4	3	7
		—	—	—
		113	101	214

Birth Rate 17.67 per 1,000 of the population.

Live Birth Rate per 1,000 estimated resident population (1937) in 148 smaller towns (population 25,000 - 50,000 Census 1931) England and Wales 15.3.

Still Births.

		Males.	Females.	Total.
Legitimate	...	9	4	13
Illegitimate	...	0	0	0
		—	—	—
		9	4	13

Still-Birth Rate 57.2 per 1,000 total live and still-births, or 1.06 per 1,000 of the population.

Number of Births and Birth Rate per 1,000 population.

Year.	Number.	Birth Rate.
1934	175	16.6
1935	176	16.11
1936	195	17.2

Birth Rate England and Wales (1937) 14.9.

Birth Rate in the Administrative County of Chester (1936) 113.9.

Deaths.

Total, 144 ... Males, 61 ... Females, 83

Death Rate 11.89. Corrected Death Rate 12.00.

The death rate per 1,000 estimated resident population in the 148 smaller towns (25,000-50,000 Census 1931) was 11.9 (1937).

Number of Deaths and Death Rate per 1,000 population :—

Year.	Number.	Death Rate.
1934	122	11.5
1935	152	14.04
1936	139	12.3

Ratio of local adjusted rate to National Rate was 1.03 (1936).

Death Rate in the Administrative County of Chester was 12.0, bearing a ratio of 1.00 to the National Rate (1936).

Percentage of total deaths occurring in Public Institutions, 21.5

Deaths from Puerperal causes :—

	Deaths.	Rate per 1,000 total (Live and Still) Births.	Rate per 1,000 Live Births.
Puerperal sepsis ...	0	0.00	0.00
Other puerperal causes	0	0	0

The figures for England and Wales :—

Puerperal sepsis ...	...	0.94	0.97
Other puerperal causes	...	2.71	2.26
Total	...	3.11	3.23

Death Rates of Infants under 1 year of age :—

All infants per 1,000 live births ...	...	No. 6	Rate. 28
Legitimate infants per 1,000 legitimate live births...	...	6	29
Illegitimate infants per 1,000 illegitimate live births	...	0	0

Infantile Mortality :—

Year.		Rate per 1,000 Live Births.
1934	...	17
1935	...	68
1936	...	46

Registrar-General's table 1937:—

	Deaths under 1 Year per 1,000 registered live births					
England and Wales	58
125 county boroughs and great towns, including London	62
148 smaller towns (25,000-50,000 Census 1931)	55
London (Administrative County)	60
Deaths from Measles (all ages)	0
Deaths from Whooping Cough (all ages)	1
Deaths from Diarrhœa (under 2 years of age)	1
Deaths from Cancer (all ages)	22

Since the Urban District was constituted in 1933 there has been one death from Measles, none from Whooping Cough or Diarrhœa (under 2 years of age).

Causes of Death.

All Causes.	M.	F.	Total.
1. Typhoid and Paratyphoid Fevers	—	—	—
2. Measles	—	—	—
3. Scarlet Fever	—	—	—
4. Whooping Cough... ..	1	—	1
5. Diphtheria	—	2	2
6. Influenza	4	4	8
7. Encephalitis Lethargica... ..	—	—	—
8. Cerebro-spinal Fever	—	—	—
9. Tuberculosis of Respiratory System	4	1	5
10. Other Tuberculous Diseases	1	—	1
11. Syphilis	—	—	—
12. General Paralysis of the Insane : Tabes Dorsalis	—	—	—
13. Cancer, Malignant Disease	8	14	22
14. Diabetes	—	1	1
15. Cerebral Haemorrhage, etc.	2	3	5
16. Heart Disease	18	30	48
17. Aneurysm... ..	—	—	—
18. Other Circulatory Diseases	5	5	10
19. Bronchitis... ..	1	2	3
20. Pneumonia (All forms)	2	5	7
21. Other Respiratory Diseases	—	—	—
22. Peptic Ulcer	—	—	—
23. Diarrhoea (under 2 years)	1	—	1
24. Appendicitis	—	—	—
25. Cirrhosis of Liver	—	—	—
26. Other Diseases of Liver, etc.	1	—	1
27. Other Digestive Diseases	—	1	1
28. Acute and Chronic Nephritis	3	3	6
29. Puerperal Sepsis	—	—	—
30. Other Puerperal Causes	—	—	—
31. Congenital Debility, Premature Birth, Malfor- mations, etc.	—	4	4
32. Senility	2	4	6
33. Suicide	2	—	2
34. Other Violence	2	2	4
35. Other Defined Diseases	4	2	6
36. Causes Ill-defined or Unknown... ..	—	—	—
Totals ...	61	83	144
<i>Special Causes (included in No. 35 above)</i>			
Smallpox	—	—	—
Poliomyelitis	—	—	—
Polio-encephalitis	—	—	—

Hospitals provided or subsidised by the Local Authority or by the County Council.—See under North-West Cheshire p. 27.

List of Adopted Acts, Bye-Laws and Regulations

ADOPTED ACTS AND CONFERRED POWERS.

1. The Council have all the powers and are subject to all the duties conferred or imposed upon an Urban District Council by the general law. (M. of H., 1st Aug., 1933).
2. The Private Street Works Act, 1892.
3. Infectious Diseases (Prevention) Act, 1890.
4. The Public Health Acts Amendment Act, 1890. (Parts III. and IV.)
5. The Public Health Acts Amendment Act, 1907—
 - Part II. (streets and buildings) other than sections 21, 24, 25, 30 and 31.
 - Part III. (sanitary Provisions) other than section 51.
 - Part IV. (infectious diseases) other than sections 61, 66, 67 and 68
 - Part V. (common lodging-houses).
 - Part VI. (recreation grounds); and
 - Sections 92 and 94 comprised in Part X (miscellaneous provisions).
 - (subject to certain conditions mentioned in Ministry of Health Order 79322 (1934).
6. The Public Health Act, 1925—
 - Parts II. (excluding Sections 21, 22 and 24)), III. and IV.; and
 - Part VI. (recreation grounds)).
7. Small Dwellings Acquisition Acts, 1899-1923.
8. Slaughter of Animals Act, 1933.
 - The Council have contracted into the Act (vide Min. 773, 4th Dec., 1933) so that the Act shall apply to all the animals designated therein.

Bye-Laws.

For the Regulation of Offensive Trades, made 8th January, 1925.

	Made	Confirmed	Commencement
New Streets and Buildings	7/10/35	20/1/36	1/5/36
Nuisances	7/10/35	9/1/36	1/3/36
Slaughterhouses	7/10/35	20/1/36	1/3/36
Smoke Abatement	7/10/35	9/1/36	1/3/36
Tents, Vans, sheds and similar Structures ...	Draft Bye-Laws informally approved by the Ministry of Health		

(8) With respect to Buildings and certain matters in connection therewith, made 12th January, 1925,

(9) For the Regulation of Offensive Trades, made 8th January, 1925.

Sanitary Circumstances of the Area.

WATER.—West Cheshire (softened) supply.

	<i>Chemical Results in parts per 100,000</i>
Appearance	Clear and bright
Colour	Normal. Odour, none
Reaction pH	Neutral 7.4. Free Carbonic Acid—2.4
Electric Conductivity at 20 deg. C.	529
Total Solids, 180 deg. C.	35.
Chlorine in Chlorides	5.4
Nitrogen in Nitrates	0.32 Nitrites absent
Hardness: Permanent	0.0 Grains per gallon
Temporary	10.0 " " "
Total	10.0 " " "
Metals	Absent
Free Ammonia	0.0004
Albuminoid Ammonia	0.0000
Oxygen absorbed in 4 hrs. at 80 deg. F. ...	0.0000
	<i>Bacteriological Results.</i>
No. of Bacteria per cc.	
On Agar in 3 days at 20 deg. C.	180
On Agar in 1 day at 37 deg. C.	6
The Bacillus Coli... ..	Present in—Absent in 100 cc.
Bacillus Welchii	Present in—Absent in 100 cc.
(B. Enteritidis Sporogenes)	

REPORT.—This is a clear and bright water of normal colour and neutral reaction. It is of moderate hardness, contains no excess of saline matter, and is entirely free from metals.

Both organically and bacteriologically, the water is of the highest standard of purity and is pure and wholesome, suitable therefore for Public Supply purposes.

RIVERS AND STREAMS.—There has been no marked fouling of streams.

PUBLIC CLEANSING.—The collection and disposal of refuse was taken over by the Sanitary Department in February last.

The collection is carried out by eight men with two Shelvoke and Drewry 10 cubic yard freighters. Since this service was taken over the collection has increased by more than 500 premises.

The district is divided into two separate collection areas, and is set out on the continuous system in one district, and partly on that system in the other..

Controlled tipping is carried on at Thurstaston Road, Irby, and at Brimstage Road, Barnston. The latter tip is becoming filled, and it will only be a matter of a few months before a new tip is required.

A system of waste paper collection and salvage of materials from the refuse was commenced in June. The revenue from these materials continued to be good until November, when the market dropped considerably.

DRAINAGE AND SEWERAGE.—Parts of Heswall, Irby, Pensby and Thurstaston are sewered to the North Wirral Outfall; parts of Heswall, Irby, Pensby and Barnston to the Fender Valley Sewer; Gayton and part of Heswall to the Dee.

The following extracts are specially worthy of note in this rapidly urbanising district:—

The building of houses outside the range of existing sewerage systems frequently results in insanitary conditions and compels the Authority either to extend their sewage

systems at a cost wholly disproportionate to the rateable value of the dwellings concerned or to undertake the regular emptying of cesspools. We call attention to the provisions, in sections 12 and 19 (1) (e) of the Town and Country Planning Act, 1932, under which provisions may be included in a planning scheme for the control of such building. (Report of Committee on Local Expenditure, 1932).

Under section 15 of the Public Health Act, 1875, it is the duty of every Local Authority to cause to be made such sewers as may be necessary for effectually draining their district for the purposes of the Act. This duty extends, however, only to the provision of sewers to serve existing houses. It has been held in the Courts that there is no legal obligation on a Local Authority to provide sewers in anticipation of or to facilitate building development. (Ministry of Health Report 1934-35).

In this connection attention may be drawn to the Romford Urban District Council Act, 1931, which provided that if the Urban District Council resolved that the construction of a sewer in a highway repairable by the inhabitants at large will increase the value of the premises fronting the street, they may recover the cost from the frontagers, following the procedure of the Private Street Works Act, 1892. Similar powers have been granted since to other Local Authorities.

SWIMMING BATHS AND POOLS.—There are no public baths. Some enthusiasts bathe in the Dee Estuary.

Eradication of Bed Bugs.

(1) The number of (a) Council houses	(I.) Infested	...	Nil.
	(II.) Disinfested	...	Nil.
(b) Other houses	(I.) Infested	...	Nil.
	(II.) Disinfested	...	Nil.

(2) The method employed for freeing infested houses from Bed Bugs:—

One case during the previous year successfully treated with "Cimex" blocks.

- (3) The methods employed for ensuring that the belongings of tenants are free from vermin before their removal to Council houses :—

Does not apply.

- (4) Whether the work of disinfection is carried out by the Local Authority or by a Contractor :—

Would be carried out by Local Authority.

- (5) The measures taken by way of supervision or education of tenants to prevent re-infestation after cleansing :—

Does not apply.

Sanitary Inspection of the Area.

The Inspector supplies the report:—

Tabular Summary of the Work of the Public Health Department
for the year ending 31st December, 1937.

A.		B.		C.				
		Notices Served		Result of Service of Notices				
Nature of Inspections		Number	Statutory	Informal	Complied with	Remaining in hand	Prosecutions	
							Instituted	Pending
Dwelling Houses (First Inspection) ...	196	—	55	46	22	—	1	
Dwelling Houses (Re-visit) ...	394	15	1	6	10	—	—	
Overcrowding Survey... ..	543	—	77	50	27	—	—	
Overcrowding Survey (Review) ...	160	—	13	—	13	—	—	
Tents, Vans and Sheds	54	—	4	4	—	—	—	
Courts, Yards and Passages ...	8	—	—	—	—	—	—	
Privy Middens, etc.	4	—	—	—	—	—	—	
Drainage	4	—	—	—	—	—	—	
Ditches and Watercourses ...	86	3	3	5	1	—	1	
Private Slaughterhouses	503	—	—	1	—	—	—	
Cowsheds and Dairies... ..	220	—	5	4	1	—	—	
Milk Sampling	34	—	—	—	—	—	—	
Shops	5	—	—	—	—	—	—	
Bakehouses	64	—	4	3	3	—	—	
Other Food Premises	38	—	—	—	—	—	—	
Factories, Workshops and Workplaces ...	10	—	—	3	—	—	—	
Theatres and Places of Entertainment ...	8	—	—	—	—	—	—	
Smoke Observations	10	—	1	—	1	—	—	
Keeping of Animals (including Piggeries) ...	7	—	—	—	—	—	—	
Offensive Accumulations	20	—	6	5	1	—	—	
Refuse Collection	62	—	—	—	—	—	—	
Refuse Disposal Sites	220	—	—	—	—	—	—	
Rats and Mice	9	—	—	—	—	—	—	
Infectious Disease Inquiries	30	—	—	—	—	—	—	
Ashpits demolished ; new Bins supplied ...	122	—	44	48	—	—	—	
Nuisances	24	—	—	—	—	—	—	
Miscellaneous Visits	2	—	—	—	—	—	—	
Total	2837	18	213	175	79	—	2	

SCHOOLS.—All the schools are on the main water supply, and are provided with lavatory basins and proper sanitary conveniences

1. Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries) ...	—	—	—
Workshops (including Workshop Laundries) ...	74	5	—
Workplaces (other than Outworkers' premises)	—	—	—
Total	74	5	Nil

2.—Defects found in Factories, Workshops and Workplaces.

Particulars (1)	No. of Defects.			Number of offences in respect to which Prosecutions were instituted (5)
	Found (2)	Remedied (3)	Ref'd to H.M. Inspector (4)	
<i>Nuisances under the Public Health Acts:—*</i>				
Want of cleanliness	2	...	...	...
Want of ventilation	5	3	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	3	2	...	...
Sanitary accommodation { insufficient ... ..	...	...	...	...
{ unsuitable or defective	3	...	...	...
{ not separate for sexes ... ..	...	...	...	...
<i>Offences under the Factory and Workshop Acts:—</i>				
Illegal occupation of underground bakehouse (s.101) ... ..	...	...	...	...
Other offences	2	...	2	...
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total	15	5	2	Nil

*—Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

**Number of Tents, Vans, Sheds and Similar Structures in the
District for the Year ending 31st December, 1937.**

Ward.	Vans, Sheds, etc.		Tents (April to Sept).
	Permanently Occupied	Occupied Casually	
Barnston	7	5	—
Gayton	1	1	—
Heswall	16	59	53
Irby	13	48	60
Pensby	—	—	—
Thurstaston ...	7	31	88
Total .	44	144	201

Houses Completed in 1937.

Heswall	Gayton.	Thurstaston.	Irby.	Barnston.	Pensby.	Total.
55	17	—	77	35	34	218.

Housing Statistics.

1. Inspections of Dwelling Houses during the year:—

(1) (a) Total number of houses inspected for housing defects (under Public Health or Housing Acts)	195
(b) Number of inspections made for the purpose	394
(2) (a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	125
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	119
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects fit for human habitation	69

2. **Remedy of Defects during the Year without Service of Formal Action:—**

Number of dwelling houses rendered fit in consequence of informal action	47
--	--------	----

3. **Action under Statutory Powers during the year:—**

A. Proceedings under sections 9, 10, and 16 of the Housing Act, 1936.

(1) Number of dwelling houses in respect of which notices were served requiring repairs	7
---	--------	---

(2) Number of dwelling houses which were rendered fit after service of formal notices:—

(a) By owners	3
---------------	--------	---

(b) By Local Authority in default	Nil
-----------------------------------	--------	-----

B. Proceedings under the Public Health Acts.

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	8
--	--------	---

(2) Number of dwelling houses in which defects were remedied after service of formal notices:—

(a) By owners	3
---------------	--------	---

(b) By Local Authority	Nil
------------------------	--------	-----

C. Proceedings under sections 11 and 13 of the Housing Act, 1936.

(1) Number of dwelling houses in respect of which Demolition Orders were made	Nil
---	--------	-----

(2) Number of dwelling houses demolished in pursuance of Demolition Orders	1
--	--------	---

D. Proceedings under section 12 of the Housing Act, 1936.

(1) Number of separate tenements and underground rooms in respect of which Closing Orders were made	Nil
---	--------	-----

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been made fit	Nil
---	-----	-----	-----	-----	-----	-----	-----

4. **Housing Act, 1936—Part IV. (Overcrowding).—**

A. (1) Number of dwellings overcrowded at the end of the year	...	...	...	...	...	...	11
(2) Number of families dwelling therein	...	...					11
(3) Number of persons dwelling therein	...	...					94
B. Number of new cases of overcrowding reported during the year	...	...	...	...	...	...	1
C. (1) Number of cases of overcrowding relieved during the year	...	...	...	...	...	...	10
(2) Number of persons concerned in such cases	...						53
D. Number of persons in such cases again overcrowded after L.A. abating them	...	...	...	...	...	...	Nil
E. Additional Information:—3 overcrowded premises, comprising 3 families, 16½ persons owner occupied.							

Inspection and Supervision of Food.

(a) **Milk Supply.**—There are 23 cowkeepers and 31 retail dairymen in the district. The latter include 4 dairymen whose premises are situate outside the district.

The reducing of the licence fees to one half of that which the Council are entitled to charge under the Milk (Special Designations) Order, 1936 did not have the desired effect of increasing the number of dairymen selling these milks. In an endeavour to encourage the sale of these milks the Council have decided to dispense with the charging of fees.

The following licences have been granted under the Order during the year:—

“ Tuberculin Tested ”—

Dealers Retailing Licence	...	...	6
Supplementary Retailing Licence	...	...	1
Dealers Bottling Licence	...	...	1

“ Accredited ”—

Dealers Bottling Licence	1
--------------------------	-----	-----	---

“ Pasteurised ”—

Supplementary Retailing Licence	3
---------------------------------	-----	-----	---

During the year early morning visits have been paid to the farms whilst milking was in progress, and there is a definite endeavour on the part of the farmers to produce a cleaner milk.

Samples of milk were taken from each producer and from each known source of supply of milk being retailed in the district during the year.

Each of the samples, whether of designated or of ordinary milks, were examined by means of the Methylene Blue reduction test, and the Coliform Organisms test, and for Tuberculosis by animal inoculation into two guinea pigs.

In addition, the Biological Institute which examined the samples, submitted reports on the number of bacteria present in each sample, and these are included in the table given below.

Description of Milk	Samples Produced		Methylene Blue Reduction Test		Coliform Organisms Test		Average Number of Bacteria per ml.	Positive Tuberculosis
	In District	Outside District	Passed	Failed	Passed	Failed		
"Tuberculin Tested" ...	—	—	—	—	—	—	—	—
"Accredited" ...	10	—	10	—	8	2	420	—
"Pasteurised" ...	—	12	11	1	12	—	70700	1
Ordinary ...	13	—	12	—	11	2	520	—
	—	1	1	1	—	1	41300	—
	—	—	—	—	—	—	125000	—
Total ...	23	15	36	2	33	5	42090	1

This gives 21 out of 24, or 87.5% which passed the prescribed tests of the Milk (Special Designations) Order, 1936, and 1 out of 24, or 4.13% which showed evidence of Tuberculosis.

(b) **Meat.**—The carcasses of all animals slaughtered for food are examined prior to sale to the public, in accordance with the Public Health (Meat) Regulations, 1924. A total of 7,550 lbs. was found to be unfit for human consumption and condemned. The condemnation was due to Tuberculosis in 5,909 lbs.

Carcases Inspected and Condemned.

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	276	9	130	1916	471
Number Inspected	277	9	133	1941	472
All Diseases except Tuberculosis:					
Whole Carcasses condemned...	1	—	3	1	2
Carcasses of which some part or organ was condemned ...	15	1	1	40	21
Percentage of the number inspected affected with disease other than Tuberculosis ...					
Generalised ...	0.36	—	2.25	0.05	0.42
Localised ...	5.42	11.11	0.76	2.06	4.45
Total ...	5.78	11.11	3.01	2.11	4.87

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number Killed	276	9	130	1916	471
Number Inspected	277	9	133	1941	472
Tuberculosis Only:					
Whole Carcasses condemned..	2	2	—	—	2
Carcasses of which some part or organ was condemned ...	37	4	1	—	45
Percentage of the number inspected affected with Tuberculosis—					
Generalised ...	0.72	22.22	—	—	0.42
Localised ...	13.36	44.44	0.76	—	9.53
Total ...	14.08	66.66	0.76	—	9.95

SLAUGHTERHOUSES—

Dec. 1937.

Registered	...	...	...	...	...	1
Licensed	...	...	...	...	...	—

There are twelve purveyors of meat in the district.

Meat is hawked from butchers' carts from neighbouring areas.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the district during the year ending 31st December, 1937.

Name of Sample	Number Analysed	Number of Samples not up to Standard or Certified as Adulterated
Castor Oil	1	—
Cheese, Cheshire	4	—
Coffee	2	—
Cream, Tinned	1	—
Epsom Salts	3	—
Fish Paste	1	—
Glycerine	1	—
Liquorice Powder	1	—
Milk	10	2 (1)
Milk, Condensed	1	—
Olive Oil	1	—
Parrish's Food	1	—
Pepper	1	—
Seidlitz Powders	1	—
	29	2

(1) (a) 26% deficient in fat. See (b).

(b) 20.6% deficient in fat. Appeal to cow re (a).

Prevalence of, and Control over, Infectious Diseases.

INFECTIOUS DISEASES GENERALLY.

The prevalence of infectious diseases in the years 1933-37 is shown in the following table which gives the case rate per 1,000 of the population.

Year.	Small	Scarlet	Diphtheria.	Enteric	Pneumonia.	Erysipelas.
	Pox.	Fever.		Fever.		
1933	0.00	*1.2	*0.25	0.00		0.40
1934	0.00	*1.7	*1.12	0.18		0.18
1935	0.00	*1.3	*1.1	0.00		6.4
1936	0.00	1.67	*0.44	0.00		0.44
1937	0.00	*0.90	*0.90	0.00	1.47	0.24

*—(This does not include the cases in Heswall Children's Hospital, or the Cleaver Sanatorium, or in Pensby Convalescent Home which were not connected with local conditions).

The following table shows the corresponding rates for England and Wales.

Year.	Small	Scarlet	Diphtheria.	Enteric	Pneumonia.	Erysipelas.
	Pox.	Fever.		Fever.		
1933	0.02	3.21	1.18	0.04		0.45
1934	0.04	3.76	1.70	0.03		0.51
1935	0.00	2.96	1.6	0.04		0.42
1936	0.00	2.53	1.39	0.06		0.40
1937	0.00	2.33	1.49	0.05	1.36	0.37

The Registrar-General states that the rate for puerperal pyrexia is better stated in relation to the number of births registered than to the population. On this basis the Puerperal Pyrexia rate for England and Wales is 13.93 per 1,000 Total Births. The Wirral Puerperal Pyrexia rate calculated on the same basis is 4.40.

**Distribution of Cases of Infectious Diseases notified
during the year.**

Disease.	District.									TOTAL
	Barnston	Gayton	Heswall	Irby	Pensby	Thurstaston	Royal Liverpool Children's Hospital	Cleaver Sanatorium	Convalescent Home Pensby	
Scarlet Fever ...	1	—	5	1	4	—	2	—	—	13
Diphtheria ...	—	—	6	2	2	1	2	1	3	17
Pneumonia ...	2	3	6	5	2	—	—	—	—	18
Erysipelas ...	—	—	1	1	—	1	—	—	—	3
Puerperal Pyrexia...	—	—	1	—	—	—	—	—	—	1
Totals	3	3	19	9	8	2	4	1	3	52

2 Diphtheria cases occurred in the Royal Liverpool Children's Hospital at Heswall, 1 Diphtheria in the Cleaver Sanatorium.

Notifiable Diseases during the Year 1937.

Disease	Total Cases Notified	Total Cases Admitted to Hospital	Deaths
Smallpox ...	—	—	—
Scarlet Fever ...	13	10	—
Diphtheria ...	17	15 + 4 neg.	2
Enteric Fever ...	—	—	—
Puerperal Fever ...	—	—	—
Puerperal Pyrexia ...	—	—	—
Pneumonia ...	18	9	7
Erysipelas ...	3	—	—
Cerebro-spinal Fever ...	—	—	—
Acute Poliomyelitis ...	—	—	—
Acute Polio-encephalitis ...	—	—	—
Encephalitis Lethargica ...	—	—	—
Dysentery ...	—	—	—
Malaria ...	—	—	—
Chickenpox ...	—	—	—
Total ...	51	34 + 4 neg.	9

Tuberculosis.

Age Periods	NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
0-1	—	—	—	—	—	—	—	—
1-5	—	—	—	—	—	—	—	—
5-10	—	—	—	—	—	—	—	—
10-15	—	—	—	1	—	—	—	—
15-20	—	—	—	—	—	—	—	—
20-25	—	—	1	—	—	—	—	—
25-35	—	1	—	—	1	1	—	—
35-45	1	—	—	—	2	—	1	—
45-55	—	—	—	—	—	—	—	—
55-65	—	—	—	—	—	—	—	—
65 and up	—	—	—	1	1	—	—	—
Total ...	1	1	1	2	4	1	1	

The state of the Tuberculosis Register at the end of the year is shown below:—

	MALES		FEMALES		Total
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary	
Number of Cases remaining on the Register...	32	17	28	16	93

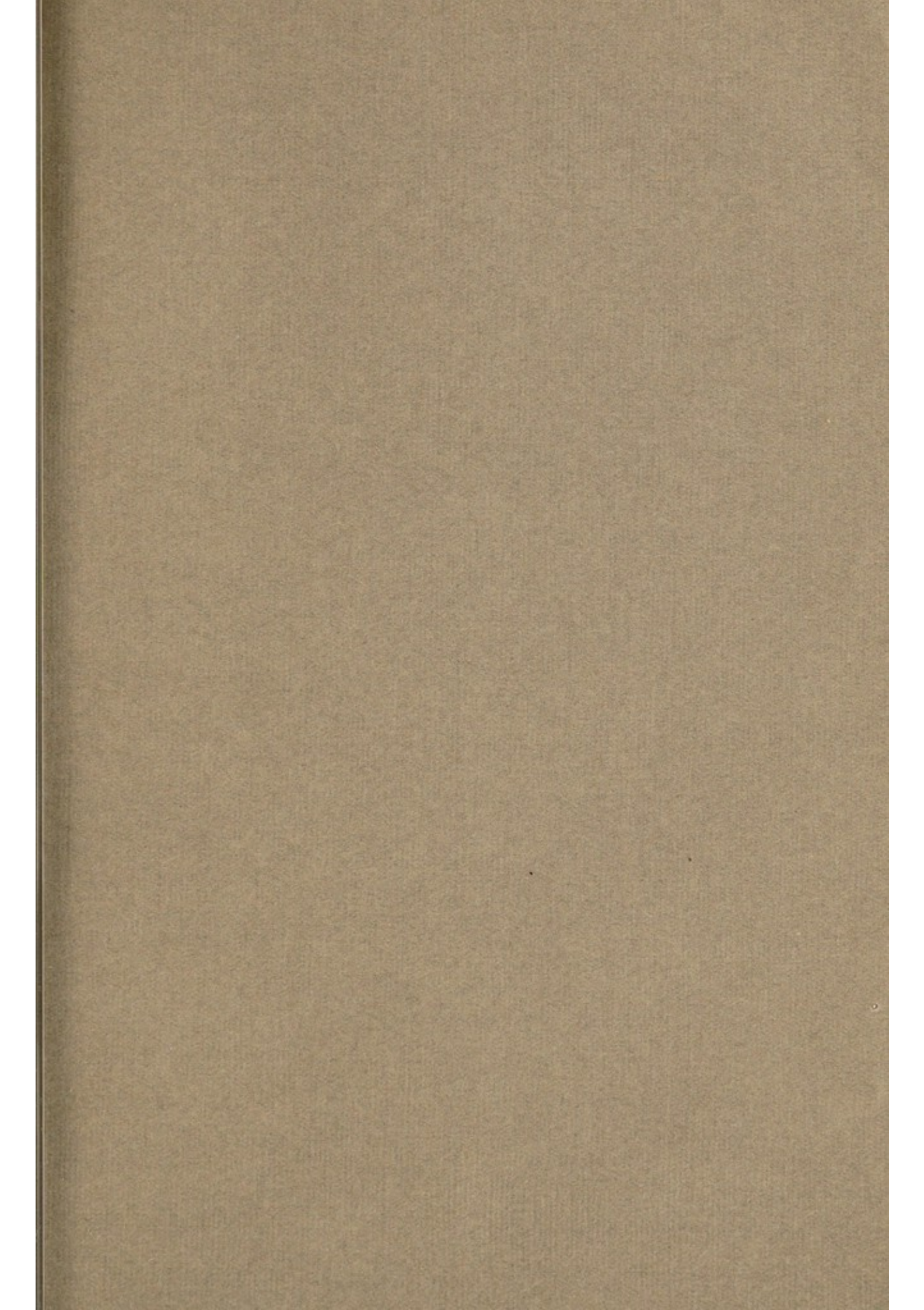
1937.

OPHTHALMIA NEONATORUM	Cases		Vision unimpaired	Vision impaired	Total Blindness	Deaths
	Notified	Treated				
		At Home	In Hospital			
	Nil	Nil	Nil	Nil	Nil	Nil



LIVERPOOL:

MEEK, THOMAS & Co. LTD.
PRINTING CONTRACTORS
9 TITHEBARN STREET



11111