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COUNTY BOROUGH OF NORTHAMPTON.

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**REPORT**  
OF THE  
**MEDICAL OFFICER OF HEALTH**  
FOR THE YEAR 1930.

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By **STEPHEN ROWLAND**, M.D.Edin., D.P.H.Gamb.,  
Medical Officer of Health,  
School Medical Officer, and  
Chief Tuberculosis Officer.



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*To the Mayor, Aldermen, and Councillors of the County Borough  
of Northampton.*

MR. MAYOR, LADIES, AND GENTLEMEN,

I present herewith the Annual Report of the Medical Officer of Health for the year 1930, which for statistical purposes embraces a period of fifty-three weeks commencing on 29th December, 1929, and ending on 3rd January, 1931. The statistical year is fixed by the Registrar-General.

The report is on the lines of its predecessors, but being a survey report (which appears every five years) is a little fuller than those issued in intervening years.

The main features which have occurred in the Borough during the last five years, so far as public health work is concerned, have been:—

- 1.—The outbreak of scarlet fever due to infected milk in the latter part of 1926. There were eighty-two cases. (*See Report for 1926, pages 16 to 21*).
- 2.—The extensive outbreak of smallpox which continued from mid-summer, 1928, until the end of 1929, during which time we had 559 cases. (*See 1928 Report, pages 20 to 24, and 1929 Report, pages 21 to 25*).
- 3.—The third event is the improvement in the collection and disposal of household refuse. Before this change was made both the collection and disposal were subject to much reproach. I do not think the new scheme has received the approbation it deserves. There were plenty of people ready to kick the old method but few seem willing to throw halfpennies to the new one. (*See 1929 Report, page 13, and present Report, page 23*).
- 4.—The replacement of the Board of Guardians by the Public Assistance Committee, thus placing the poor law, including the Wellingborough Road Institution, under the management of the Corporation. Time will be required before the full effects of this great change can be felt. Only minor changes are felt immediately, the effects of larger ones are often long deferred. (*See present Report, page 20*).

I have again to acknowledge the assistance and loyal co-operation of all members of my Staff during the year.

I remain,  
Your obedient Servant,

*Stephen Rowland*

*Medical Officer of Health.*

PUBLIC HEALTH DEPARTMENT,  
GUILDHALL, NORTHAMPTON,  
MAY, 1931.



## PUBLIC HEALTH STAFF.

<i>Medical Officer of Health, School Medical Officer, and Chief Tuberculosis Officer</i>	...	...	...	*STEPHEN ROWLAND, M.D. Edin., D.P.H. Camb.
<i>Tuberculosis Officer</i>	...	...	...	*NORMAN B. LAUGHTON, M.B., Ch.B., D.P.H.
<i>Assistant Medical Officer for Maternity and Child Welfare</i>	...	...	...	*MISS EVELYN F. BEBBINGTON, M.B., Ch.B., D.P.H., M.R.C.S., L.R.C.P.
<i>Chief Sanitary Inspector and Rat Officer</i>	...	...	...	W. J. BARKER † ‡
<i>Sanitary Inspector and Inspector of Common Lodging Houses</i>	...	...	...	J. WALKER † ‡
<i>Meat and Food Inspector</i>	...	...	...	J. BROWN † ‡
<i>Sanitary Inspector and Inspector of Canal Boats</i>	...	...	...	B. KNOWLES † ‡
<i>Assistant Sanitary Inspectors</i>	...	...	...	T. L. BOAST † ‡ S. A. TENCH †
<i>Health Visitors</i>	...	...	...	*MISS L. M. ISLIP    § *MISS M. E. MOSSEY    § ¶ *MRS. F. H. SMITH    § ¶ *MISS F. M. V. BLYTHE BROWN    § *MISS E. C. AGAR    § §
<i>Tuberculosis Nurse</i>	...	...	...	*MISS L. REESE §
<i>Matrons</i>	...	...	...	MISS M. E. NORMAN § ¶ (Harborough Road Infectious Diseases Hospital) *MISS K. B. STONE § ¶ (Welford Road Tuberculosis Hospital)
<i>Clerks</i>	...	...	...	A. F. KNIGHT (Chief Clerk) *S. J. KNIGHT (Tuberculosis Dispensary) H. T. BOSWELL *MISS G. L. YORK (Infant Welfare Centre) G. B. PRATT
<i>Removal and Disinfecting Staff</i>	...	...	...	*C. H. WILLIAMS *A. W. BLASON *R. G. A. BRITTEN
<i>Rat-catcher</i>	...	...	...	J. MALONE

All the above are whole-time Officers. School Medical Staff is not included.

\*Signifies that contribution is made towards salary under the Public Health Acts or by Exchequer grants.

† Holds Inspector's Certificate of the Royal Sanitary Institute.

‡ Holds Certificate for Inspecting Meat and Other Foods.

|| Holds Certificate of the Central Midwives Board.

§ General Trained Nurse.

¶ Fever Trained Nurse.

§ Holds Health Visitor's Certificate.

## SUMMARY OF STATISTICS.

Area of Borough (in acres) ... ..	3,469
Population :—	
Census 1921 ... ..	90,895
Estimated at Mid-year 1929	{ For Birth-rate ... .. 94,180*
	{ For Death-rate ... .. 93,970*
Number of Inhabited Houses :—	
Census 1921 ... ..	19,893
Estimated at Mid-year 1930 ... ..	23,800
Number of Families or Separate Occupiers (Census 1921) ...	21,979
Rateable Value (31st December, 1930)... ..	£601,429
Yield of One Penny Rate (31st December, 1930) ... ..	£2,395

## EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1930.

		TOTAL.	M.	F.		
Live Births	{ Legitimate	...1,182	599	583	} Birth-rate ..	13·0
	{ Illegitimate	... 42	20	22		
	{ Total	...1,224	619	605		
Stillbirths	{ Legitimate	... 37	18	19	} Rate ... ..	0·42
	{ Illegitimate	... 3	2	1		
	{ Total	... 40	20	20		
Deaths	... ..	...1,072	537	535	—Death-rate ..	11·4
“Standardised Death-rate”	(Factor 0·921) ..	...	...	...	...	10·5
Percentage of Total Deaths occurring in Public Institutions	...	...	...	...	..	33·2
Number of Women dying in, or in consequence of, Childbirth	(From Sepsis ... ..	...	...	...	...	2
	(From Other Causes ... ..	...	...	...	...	5
Deaths of Infants under One Year of Age per 1,000 Live Births —						
Legitimate...54·1	Illegitimate...119·0	Total	...	..	..	56·4

	NUMBER.	RATE.
“Zymotic Deaths” ... ..	26	0·28
Deaths from Measles (all ages) ... ..	2	0·02
Deaths from Whooping Cough (all ages) ... ..	8	0·09
Deaths from Diarrhoea (under two years of age) ..	5	†
Deaths from Respiratory Tuberculosis... ..	68	0·72
Deaths from Other Tuberculous Diseases ... ..	10	0·11
Total Tuberculosis Deaths ... ..	78	0·83
Deaths from Cancer ... ..	167	1·78
Deaths from Influenza ... ..	7	0·07

\* Population figures for 1930 are not available at time of publication (see remarks under heading “Population,” page 8).

† 3·9 per 1,000 Live Births Registered.



## 1.—STATISTICS AND SOCIAL CONDITIONS.

**Population** We have been informed that the Registrar-General, in computing his estimate of population for mid-year 1930, intends to take into account the population enumerated at the 1931 census. As the 1930 estimate is not expected to be available before the end of June next, use is made in this report of the 1929 estimates, as set out on page 7, in order to obviate any delay in publishing. All the rates given in this report may therefore need slight adjustment when the 1930 estimate is known.

The natural increase, *i.e.*, the excess of births over deaths, was 152, or 1·6 per thousand. Table 1 (page 77) gives the population and natural increase during each of the last ten years.

**Births** 1,224 live births were registered, giving a birth-rate of 13·0 per thousand, compared with 16·3 for England and Wales. This is the lowest rate ever recorded in the Borough. Table 2 (page 77) shews the fall that has occurred since 1921.

Although it is usual in this country for male births to exceed female, in three years out of the last five the female births have exceeded in number those of male. The ratio of males to each one hundred females born in Northampton during 1926–1930 was 98·8; during the previous quinquennium it was 103·4.

Forty-two (3·4 per cent.) of the births in 1930 were illegitimate. In recent years this proportion has been in the region of four per cent. or just over.

**Stillbirths** The number of stillbirths registered was forty. The rate, expressed per thousand of the population, was therefore 0·42, whereas that for the country was 0·69.

**Deaths** There were 1,072 deaths registered, equal to a death-rate of 11·4. This is slightly lower than the rate recorded in 1929 and exactly the same as that for England and Wales. The figures for the last ten years are set out in Table 3 (page 77).

Eighty-eight deaths occurred for which no medical certificates of the causes were furnished; these included eighty-four inquests, two uncertified, and two coroner's certificates after post mortem without inquests, or 8·2 per cent. of the nett deaths registered.

Deaths of elderly persons (sixty-five years and upwards) accounted for 48·6 per cent. of the deaths.

404 persons, including residents and non-residents, died in local institutions. The deaths of the non-residents were transferred by the Registrar-General to their respective areas. In the same way the deaths of Northampton residents which took place in other parts of England and Wales were transferred to us as "inward transfers."

The "standardised death-rate" for Northampton (obtained by applying the Registrar-General's factor for age and sex constitution to the crude rate) was 10·5 per thousand.



Following the usual custom, Table C at the end of this report, giving the causes of death at different periods of life, has been prepared in the Public Health Department from information supplied weekly by the local registrars. The classification agrees closely with the figures received from the Registrar-General on 21st April, 1931.

Northampton is an industrial borough, boot and shoe manufacturing being the staple trade and finding employment for a considerable part of the population (10,958 males and 6,428 females at the 1921 Census); this is roughly ten per cent. of all persons engaged in this industry in England and Wales. Other trades also provide work for large numbers of people, *e.g.*, tanning and leather dressing, brewing, printing and bookbinding, motor body building, manufacture of motor and cycle accessories, etc., and certain branches of the clothing trade, especially connected with women's apparel. None of these trades can be looked upon as more unhealthy than any other indoor employment, nor can they be classed as very laborious or hazardous.

Social  
Conditions

No new industries have made their appearance in the Borough recently. A sub-committee of the Town Council acts as a New Industries Committee, but so far, in spite of the trend of trade towards the south, it does not seem to have attracted any large firm looking for a site for works.

Slums as they exist in some industrial towns further north are small in amount.

It is claimed for Northampton that a larger proportion of its inhabitants own their own houses than in any other town.

These circumstances, together with its situation in the dry Midland area, go to make Northampton a healthy town, as shewn by the death-rate, the low infant mortality, and the longevity of its inhabitants.

There appears to have been little alteration in the amount of unemployment in Northampton during 1930, but the scheme for finding work for the unemployed has undergone a change. With the coming into force of the Local Government Act on 1st April, 1930, and the disappearance of the Board of Guardians, the Distress Committee ceased to function, and the scheme for providing relief work for the unemployed is now worked by the Borough Engineer's Staff and the Employment Bureau, all the labour required in carrying out the work being supplied direct by the Bureau. When a piece of work is about to start the Deputy Borough Engineer picks out a dozen or so "key" men, who are employed all the time until the undertaking is completed; the other men work alternate weeks. This applies to such work as levelling playing fields, cleaning out the lakes in Abington Park, etc. On road reconstruction the men work eight consecutive weeks before they are changed.

Unemploy-  
ment



In December, 1930, 408 men were employed levelling the playing fields in connection with the proposed new technical college, sixty-eight on the Abington Street reconstruction, sixty making new roads and sewers on Kettering Road Housing Estate, and eight on similar work on the St. David's Estate.

At the end of the year, 101 men, upon whom depended sixty-one women and eighty-four children, were receiving unemployment relief from the Public Assistance Committee.

#### Meteorology

The meteorological notes in Table 4, on page 78, were compiled from readings supplied by Mr. R. H. Primavesi, the Corporation of Northampton not possessing an observatory. There was very little of outstanding interest connected with the weather in 1930. There were no extremes such as marked the previous year. The lowest temperature recorded was 24.0°F. on 17th November and the highest 85.0°F. on 28th and 29th August. There were thirty-six "cold nights," *i.e.*, when the temperature of the air fell to 32.0°F. (freezing point) or below. This is only half the number recorded in 1929. The total rainfall was 23.97 inches, which is practically the average for the last twenty-six years. The rain was much more evenly spread over the twelve months than in 1929; the driest month was February, with a fall of 0.51 inches, and the wettest was September with 2.90 inches. The greatest fall in any twenty-four hours was 0.84 inches on 5th and 26th May. We have no record of the mean velocity of the wind, but so far as one remembers there were no exceptionally heavy gales. During the first half of the year the general direction of the wind was between north and east and for the rest of the year it was from the south-west. The amount of sunshine was below the normal during the last quarter.

The last two months of 1930 were remarkable for the number of dense fogs occurring in the Town, a district which, owing to its situation and clear atmosphere (freedom from smoke pollution) is normally free from such visitations. There were only eight foggy days in November and December, 1929, but twenty in 1930. Not only were the fogs more numerous, they were of much greater density, and left their mark on the weekly death returns, causing deaths in which respiratory diseases were a primary or contributory cause to be fifty per cent. above those for the corresponding months of 1929. It will thus be seen how fatal are these visitations, whose full weight falls on the two extremes of life, but especially towards its close.

#### Other Statistics

The notes on infant mortality, the incidence and mortality from infectious diseases, housing conditions, and other statistics usually included in the annual report, will be found under the headings referring to these matters.

Attention is directed also to the vital statistics on page 7, and to Tables A, B, C, and D at the end of this report.



## II.—GENERAL PROVISION OF HEALTH SERVICES.

A list of the whole-time officers of the Public Health Department will be found on page 6. Public Health Officers

The part-time officers connected with the Department include two medical officers, one male orderly, and one nurse at the Venereal Diseases Clinic; one non-resident medical officer and his deputy at the Public Assistance Committee's Institution, Wellingborough Road; three public vaccinators who also act for poor law medical out-relief; a public analyst; and two vaccination officers.

The staff employed in the school medical service is mentioned in the paragraph dealing with that subject on page 21.

GENERAL. There is no provision made by the Local Authority for general nursing of the sick in their own homes, but the Public Health Committee makes a grant of £100 per annum, the Maternity and Child Welfare Committee one of £20, and the Public Assistance Committee £84, to the Queen's Institute of District Nursing. Nursing in the Home

INFECTIOUS DISEASES. An arrangement exists between the Council and the Queen's Institute of District Nursing whereby the former pays the latter a definite sum per visit made to necessitous patients suffering from certain infectious diseases whose cases have been approved by the Medical Officer of Health. Such cases are brought to our notice by the sanitary inspectors, health visitors, or general practitioners, but they do not amount to many in the course of a year.

It has not been found necessary to subsidise any midwife and no practising midwife is employed by the Local Authority beyond those on the staff of the Poor Law Infirmary. Twenty-one trained and two untrained midwives gave notice of intention to practise during 1930. (See also paragraph in Appendix II., page 69). Midwives

For this purpose the Borough is divided into three districts. The Medical Officer of No. 1 District (comprising the wards of Abington, Kingsley, St. Crispin's, St. Edmund's, St. Michael's, and South, with a population of approximately 43,000) is Dr. E. Robertson, 220, Kettering Road. No. 2 District (population about 44,000), comprising Castle, Kingsthorpe, North, St. James', and St. Lawrence's Wards is allotted to Dr. J. Cullen, 8, Langham Place. No. 3 District contains Delapre Ward only (population about 7,000), the Medical Officer being Dr. H. F. Percival, 2, Spencer Parade. They also act as public vaccinators in the same districts. These officers were taken over by the Council along with Dr. C. Mills, the non-resident Medical Officer of the Poor Law Institution, when the work of the Guardians was transferred to the Public Assistance Committee Poor Law Medical Out-Relief



on 1st April, 1930. No changes have been brought about so far as poor law medical out-relief is concerned owing to the transfer. The three District Medical Officers referred to are, by an arrangement between the Northamptonshire County Council and the County Borough Council, still acting for the same areas as they did under the late Boards of Guardians, the apportionment of the salaries between the two authorities being agreed upon.

Laboratory  
Facilities

**BACTERIOLOGICAL WORK.** As in former years, the bacteriological examinations in connection with the work of the Tuberculosis Dispensary were made at the Dispensary Laboratory. Most of the bacteriological work for the Infectious Diseases Hospital and that performed for general practitioners, also for the venereal diseases scheme, was carried out in the Pathological Department at the Northampton General Hospital. To these must be added the regular bacteriological examination of the Town's water supply and the examination of the designated milks sold in the Town, which have to conform to standards laid down in the Milk (Special Designations) Order, 1923. Further particulars of this work will be found under the headings dealing with these subjects. A portion of the bacteriological work was also sent to the Lister Institute, London.

**CHEMICAL WORK.** All chemical analysis required by the Local Authority is performed by the Public Analyst to the Borough, Mr. A. Prideaux Davson, A.R.C.Sc. (Lond.), F.I.C., F.C.S., of Bermondsey. The articles, apart from water, analysed in 1930, are set out in Table 13 (page 86).

Legislation  
in Force

Appended is a list of Local Acts, General Adoptive Acts, and Bye-laws relating to public health in force in the County Borough :—

**LOCAL ACTS AND ORDERS.**

Northampton Improvement Act, 1843.

Northampton Waterworks Act, 1861.

Northampton Corporation Markets and Fairs Act, 1870.

Northampton Improvement Act, 1871.

The Local Government Board's Provisional Orders Confirmation (Arundel, etc.) Act, 1876.

Northampton Waterworks Act, 1882.

Northampton Corporation Act, 1882.

Northampton Corporation Waterworks Act, 1884.

Local Government Board's Provisional Orders Confirmation (No. 4) Act, 1892.

Local Government Board's Provisional Orders Confirmation (No. 14) Act, 1900.

Local Government Board's Provisional Orders Confirmation (No. 10) Act, 1907.

Northampton Corporation Act, 1911.

Northampton Corporation Water Act, 1913.

Northampton Corporation Act, 1922.



Order of Ministry of Health, dated 13th December, 1929, extending time for supply of water from certain wells under Northampton Corporation Act, 1922, until 1st June, 1935.

Ministry of Health Provisional Orders Confirmation (No. 1) Act, 1925.

Ministry of Health Provisional Orders Confirmation (No. 10) Act, 1929.

#### GENERAL ADOPTIVE ACTS.

The Baths and Washhouses Acts, 1846 to 1899.

The Infectious Disease (Prevention) Act, 1890 (adopted 6th April, 1891).

Public Health Acts Amendment Act, 1890.

Parts I., II., III., and V. (adopted 6th April, 1891).

Public Health Acts Amendment Act, 1907.

Part II., ss. 15 to 18 and 20 to 33 inclusive (adopted 3rd July, 1911);

Part III., s. 47 (21st December, 1923) and s. 50 (17th July, 1912);

Part VI. (3rd July, 1911);

Part X., s. 95 (14th November, 1922).

Public Health Act, 1925.

Parts II., III., IV., and V., except ss. 21, 25, 27, and 34 in Part II. and ss. 48 and 49 in Part IV. (adopted 8th March, 1926);

Part II., s. 21 (15th May, 1926).

Local Government and Other Officers' Superannuation Act, 1922 (adopted 1st July, 1930).

#### BYE-LAWS.

##### UNDER THE PUBLIC HEALTH ACTS :—

Common Lodging Houses (confirmed 1884).

Slaughterhouses (1887 and 1929).

Nuisances from Snow, Filth, Ashes, Keeping Animals, &c. (1895).

Cleansing Footways and Pavements (1895).

Imposing on Occupier duties in connection with Removal of House Refuse (1895).

Offensive Trades (1895).

Cemeteries (1910, 1921, 1924, and 1930).

Luggage Porters and Light Porters (1924).

Pleasure Grounds, &c. (1926).

New Streets and Buildings (1927).

Hackney Carriages, Omnibuses, Carriers' Carts, and Other Vehicles (1927 and 1930).

##### UNDER HOUSING ACTS :—

Tents, Vans, Sheds, and Similar Structures used for Human Habitation (1914).

##### UNDER NORTHAMPTON CORPORATION WATER ACT, 1913 :—

Prevention of Pollution (1915).

##### UNDER THE NURSING HOMES REGISTRATION ACT, 1927 :—

Nursing Homes (1929).

##### UNDER MUNICIPAL CORPORATIONS ACT, 1882 :—

Good Rule and Government (1929).



## Hospitals

There are at present four municipal hospitals (including the Infirmary at the Wellingborough Road Institution), three of them being situated in the country beyond the present Borough boundary, but only one will remain outside the Town when its confines are extended on 1st April, 1932.

1.—The Infectious Diseases Hospital at Harborough Road, Kingsthorpe, a quarter of a mile outside the Borough and just over two miles from the centre of the Town, having accommodation of eighty-five beds on a basis of 144 square feet per bed. This hospital was opened in 1892, but has had several alterations and additions made to it from time to time. Two wards, each to take twenty-two beds, were added in 1915, chiefly owing to the presence in the Town of some seventeen thousand troops. Water-carried system of sewerage and electric light were installed in 1927. In 1929 an electric laundry, capable of dealing with all the work likely to be required of it, was added and has proved very efficient. The washing in connection with the Tuberculosis Hospital, Welford Road, is now carried out at Harborough Road. For some time it has been felt that the accommodation for the nursing and domestic staff was inadequate, so much so that one of the empty wards was requisitioned for use as a maids' dormitory. During the last big scarlet fever epidemic in 1924, accommodation for extra staff engaged during the busy period had to be provided outside the hospital. With a view to preventing a repetition of such a state of things and also keeping in mind the extension of the Borough boundary in the near future, the Public Health Committee instructed the Borough Engineer to prepare plans for the extension of the administrative block to accommodate all the nursing and domestic staff likely to be employed at Harborough Road for many years to come. The plans provide for sitting rooms for sisters, nurses, and maids, together with (including alterations in the old building) twenty-eight bedrooms and the necessary bathrooms. In the old and new portions, there will be thirty-nine bedrooms and six bathrooms. The whole of the administrative block was fitted with central heating at the same time. The total cost of the new building and alterations to the old one amounts to over £5,000. The work, which was entrusted to Mr. J. T. Powell, was commenced last summer and is not yet completed. The nursing staff varies with the number of patients in the wards. Owing to there being no resident medical officer, the Local Authority has an agreement with the Northampton General Hospital Authorities whereby all urgent cases of diphtheria requiring, or likely to require, tracheotomy are admitted to the General Hospital and retained until such time as they are declared fit for removal to Harborough Road to complete their convalescence. (See also page 44).

2.—The Smallpox Hospital at Hardingstone is a corrugated iron structure lined with match-boarding and having accommodation for forty-eight beds, allowing 144 square feet per bed.



The older portion, erected in 1900, provides for some seventeen or eighteen patients, together with the necessary nursing and domestic staff. The newer part, built in 1929, contains about thirty beds for patients, also the requisite accommodation for staff. As might be expected, the administrative facilities in this newer portion are on a more extensive scale than in the old block. There is a small hand laundry which can cope with the washing of a few patients. As no caretaker is in residence when the hospital is not in use, a porter from Harborough Road Hospital visits once or twice a week to see that everything is in order and ready for opening at short notice. When required, nursing and domestic staff is drafted from Harborough Road Hospital. During the summer months the whole of the external woodwork of both old and new blocks and the corrugated sheeting covering the new building were painted. (*See also* page 44).

3.—The Tuberculosis Hospital is situated on the Welford Road about a mile outside the present Borough boundary. It was not built for tuberculosis, but was erected by the Kingsthorpe Urban District Council to serve as an infectious diseases hospital, and was taken over by the Northampton Corporation when Kingsthorpe was incorporated with the Borough in November, 1900. The hospital is very pleasantly situated and has accommodation for twenty-two patients in permanent buildings and for an additional six in small wooden huts, which are only suitable for use during the summer months. One of the chief disadvantages of the place is the smallness of the administrative block. At the time of writing, certain additions and alterations, both to the wards and to the administrative block, have been decided upon, one of the alterations being the substitution of electricity for gas as a means of lighting. No additions or alterations were made in 1930, and it was not necessary to do any extensive repairs as all these, together with painting, etc., had been done the previous autumn after the smallpox patients left the hospital. The Tuberculosis Officer is the Medical Superintendent (non-resident) and the nursing staff consists of matron, sister, and four nurses. (*See also* page 56).

4.—The Infirmary at the Wellingborough Road Institution, which came under the direction of the Corporation with the coming into force of the Local Government Act on 1st April, forms an integral part of the whole institution. As one might expect from buildings of such an age (dating from the early part of last century), they are out of date according to modern ideas. They consist of two long three-storeyed blocks, one for men the other for women and children, connected by a covered corridor on the ground level. There are no lifts and the wards lead one off the other in succession instead of the modern plan where wings open off a corridor. The buildings, in spite of their age, are in a good state of repair. The infirmary has accommodation for 188 beds (80 male, 108 female). The average number occupied during the last twelve months was 151. No



attempt is made to divide the wards into medical and surgical as in a general hospital for acute cases. This is not really necessary as the number of cases of acute illness admitted annually is so very small. As the infirmary is not used for acute cases to any appreciable extent, its antiquated design and equipment is not of such vital importance, but there is one part of the institution which requires immediate attention, viz. :—the nurses' home, which is very inadequate, more than half the nurses having to sleep in cubicles on the top floor of the male infirmary and use a sitting room opening out of one of the male wards. The home should be enlarged at once and a lift be fitted in each block of the infirmary. There are no facilities for major surgical operations, any cases requiring such treatment are transferred to the General Hospital under an arrangement between the General Hospital Authorities and the Public Assistance Committee. There is no resident medical officer, but the medical officer taken over from the Guardians by the Public Assistance Committee along with the institution (or his deputy) visits daily and at any time when called for an emergency. Consultations can be had with specialists from the General Hospital when necessary. Attached to the women's hospital is a good maternity ward with eight beds and a labour ward. This is the best part of the institution. The staff consists of one visiting medical officer and his deputy, one superintendent nurse, three charge nurses, and twenty assistant nurses. (*See also* page 20).

The Northampton General Hospital, established in 1743, is a voluntary institution with 230 beds. The present building was erected in 1793, but considerable additions have been made from time to time so that it is now one of the most up-to-date institutions in the provinces. Not only is there the usual medical and surgical divisions, but the latest specialist departments, *e.g.*, pathological, electrical, ophthalmic, and ear, nose, and throat. There is as yet no special gynæcological department. The Margaret Spencer Home of Rest at Dallington was given in 1920 by Earl Spencer as an annexe to the hospital and containing forty beds serves as a convalescent home, thus relieving the pressure on the hospital beds.

The Local Authority maintains no maternity hospital, but has an arrangement with the Northampton General Hospital whereby expectant mothers who are found by the Assistant Medical Officer for Maternity and Child Welfare likely to require institutional treatment at time of confinement are treated in the General Hospital, the Local Authority making itself responsible for the cost to the Hospital for a period not exceeding three days before confinement to date of discharge. Cases are admitted on a certificate from the Assistant Medical Officer, either on account of feared complications or unsuitability of the home for confinement to take place there. Nine cases were admitted in 1930. Owing to the Local Government Act, 1929, it may be necessary in the near future to consider the desirability of establishing a municipal maternity home.



Orthopædic treatment for children, and also for adults suffering from surgical tuberculosis, recommended by the respective medical officers of the Corporation for dealing with these cases, is provided by the Local Authority retaining some twenty beds at Manfield Orthopædic Hospital, a large voluntary institution on the outskirts of the Town. The opening of this hospital in 1925 has been a great boon, as the type of case treated there is not the one which is readily received into a general hospital owing to the prolonged stay necessary to make any impression on the condition present ; for instance, a child suffering from tuberculosis of the spine or hip may require in-patient treatment on a frame for three or four years and no general hospital with which I am acquainted could spare a bed for such a long period. (See pages 49, 57, and 68).

Surgical tuberculosis is also provided for in the recently opened wards at Creton Sanatorium, to which most of the suitable Borough pulmonary tuberculosis patients go for treatment. Creton is managed by the Local Branch of the National Association for the Prevention of Tuberculosis and there are fifteen beds set aside for the use of pulmonary cases from the Borough. (See page 57).

There is no children's hospital, municipal or otherwise. All necessary treatment is carried out under specialists in existing institutions.

Cases of mental disease requiring institutional treatment or detention after certification under the Lunacy Acts are accommodated at the County Mental Hospital, Berrywood, Duston, a large establishment situated three miles beyond the Borough boundary. The Borough Mental Deficiency Committee has an arrangement with the County Council to take our cases at an agreed fee per head which is subject to revision. At the end of the year, 289 Town cases were being cared for at Berrywood.

At the end of December, 1930, there were on the register eight nursing homes, viz. :—

Maternity Homes .....	3	Maternity and Nursing Homes
Mixed Home .....	1	
Homes for Aged and Infirm, etc. ....	3	
Home for Mothers and Babies .....	1	

The latter institution is conducted by the Peterborough Diocesan Authorities. (See page 18).

The Northampton General Hospital and the Nursing Home at Bethany Homesteads are exempted annually under the provisions of Section 6 of the Nursing Homes Registration Act, 1927.

There were no new applications for registration in 1930.

All these institutions are visited and inspected at regular intervals by the Assistant Medical Officer for Maternity and Child Welfare, who is the officer appointed for such duty by the Local Supervising Authority. (See pages 50 and 69).



Maternal  
Mortality

This subject is dealt with in the section on maternity and child welfare on page 50.

Institutional  
Provision  
for  
Unmarried  
Mothers,  
etc.

Up to the present, the Local Authority has made no provision for the institutional reception of unmarried girls about to become mothers. These either go to the Poor Law Institution Infirmary or are confined at home, chiefly the latter.

There is, however, a home (St. Saviour's) for unmarried mothers at Kingsthorpe, owned and managed by the Peterborough Diocesan Authorities, which receives girls chiefly from parts of the diocese outside the Borough and they are retained in the institution for a period of six months in order to be trained in domestic work. A certain number of Borough girls are sent away by the Diocesan Authorities to other institutions conducted on the same lines as St. Saviour's, the idea being to get them away from their former surroundings. The home is registered under the Nursing Homes Registration Act, 1927, and has accommodation for fifteen mothers with babies. There is an honorary medical officer. The Council makes an annual grant of £275 to this home.

Illegitimate and homeless children under the age of three years are accommodated in the nursery at the Wellingborough Road Institution, where provision is made for twenty-eight children, but only seven were in the nursery at the end of December.

Homeless children aged three to fourteen are provided for in the five scattered homes of the Public Assistance Committee, each under the management of a matron. These will probably be transferred to the Education Committee under the Local Government Act, 1929.

Care of  
Mental  
Defectives

The ineducable mental defectives are under the supervision of the Mental Deficiency Committee. The educable cases under the age of sixteen years are under the care of the Education Committee who are responsible for their training. After the age of seven a child thought by a head teacher to be mentally defective is referred to the Assistant School Medical Officer and if certified by him as mentally defective and educable is transferred to the Special School, Wellington Place, if there is a vacancy. Should there be no vacancy, the child carries on in the elementary school until a vacancy occurs. Under the Act these children should be retained until they reach the age of sixteen years. If they are able to follow some occupation after leaving the Special School they are kept under supervision by a voluntary after-care committee. If in the opinion of the medical officer the case is one calling for institutional treatment, owing to either the low mental grade or bad moral environment, it is notified to the Mental Deficiency Committee, who undertake the supervision of the child with a view to getting it into an institution. If a case is too low grade to be admitted to the Special School it is notified



at once to the Mental Deficiency Committee, the clerk of which keeps a list of such cases. Some of these attend the occupation centre attached to the School Clinic in King Street, the others are cared for at home. These latter are visited regularly and advice given to parents or guardians.

The Special School, Wellington Place, has accommodation for eighty children and is constantly full. Fifteen children and young adults are in attendance at the occupation centre, King Street.

The Borough Council together with the Northamptonshire County Council and the Bedfordshire County Council have recently purchased Bromham House, a large private mansion near Bedford, to be used as an institution for mental defectives, but the place has not been opened at the time of writing.

As previously mentioned on page 17, there is a hospital at Berrywood for cases certified under the Lunacy Acts.

**INFECTIOUS CASES.** The Corporation owns three motor ambulances for the conveyance of cases of infectious disease. Two of these are very old and dilapidated and will soon have to be replaced by more up-to-date vehicles.

Ambulance  
Facilities

**NON-INFECTIOUS AND ACCIDENT CASES.** Ambulance facilities for these are provided by the Northampton Branch of the St. John Ambulance Association.

**MATERNITY AND CHILD WELFARE CENTRES, ETC.** The Central Office of the Maternity and Child Welfare Department is in Dychurch Lane at the back of the Guildhall, and consists of office, consulting room, waiting room, a large room which can be adapted for lectures, and a toddlers' playground. It was opened in January, 1925. It is here the consultations take place in connection with the ante-natal work of the Committee. An ultra-violet light clinic is held at the Central Building, also infant welfare centres in conjunction with the Voluntary Association. Other centres are conducted at Abington Avenue, Doddridge Memorial, Far Cotton, Kingsthorpe, St. Edmund's, and St. Sepulchre's. These centres supply the needs of the different parts of the Town and are readily accessible from the Central Office. (See pages 68 and 74 for further particulars).

Clinics and  
Treatment  
Centres

**SCHOOL CLINIC.** The School Clinic in King Street was started in October, 1913, and occupies what was formerly a Chapel and Sunday School and afterwards a Y.M.C.A. building. It has been altered from time to time and now forms a serviceable clinic with office, waiting room, and treatment and consulting rooms for medical and dental staffs. There is an x-ray apparatus somewhat out of date and a dark room for ophthalmic examinations. There is also conducted here an occupation centre for low-grade mental defectives who are unsuitable for education at the Special School. (See also "School Medical Service", page 21).



**ORTHOPÆDIC CLINIC.** There is no municipal orthopædic clinic in Northampton. Cases requiring expert advice, whether they be infants, children of school age, or surgical tuberculosis cases of any age, are examined by the Visiting Surgeon, Dr. F. Wilson Stuart, at the out-patient clinic in connection with Manfield Orthopædic Hospital, and those requiring in-patient treatment are referred to the appropriate committee through the Medical Officer of Health.

**TUBERCULOSIS DISPENSARY.** The Tuberculosis Dispensary at No. 2, Hazelwood Road was opened in May, 1914, and consists of a three-storeyed building, providing ample accommodation, including office and waiting room on the ground floor, dressing room, consulting room, and laboratory on the first floor, with nurse's room above. It is proposed to install an x-ray apparatus in the near future. (See pages 46 and 55).

**VENEREAL DISEASES CLINIC.** This clinic, first opened during the war, is conducted at the General Hospital. There are separate clinics for the two sexes held at convenient hours. The anti-venereal disease scheme is worked in conjunction with the Counties of Northampton and Buckingham, who share the cost in proportion to the number of patients from their respective areas. A retaining fee is paid to the hospital for the use of beds for in-patient treatment when necessary. The clinic being held at the General Hospital with specialists and all their requirements at hand is a great advantage to all. The staff consists of two medical officers, one male orderly, and one nurse, and the pathological work is done at the Hospital Laboratory. (See page 45).

Local  
Government  
Act, 1929

The coming into force on 1st April of the Local Government Act, 1929, has not so far made much difference either to the public health service or to the poor law service, which was transferred from the Board of Guardians to the Public Assistance Committee. The functions definitely transferred to the Public Health and the Maternity and Child Welfare Committees by the Act, viz. :—vaccination (*see* page 41) and infant life protection (*see* page 50), are working smoothly under the new arrangement. A report on the Poor Law Institution, Wellingborough Road, and on hospital provision generally in the Borough was drawn up by the Medical Officer of Health with the help of the Public Assistance Officer, was presented to the Public Health Committee, and is at present being considered by them and the Public Assistance Committee. A portion of this report dealing with the hospital at the Wellingborough Road Institution will be found on page 15. It is probable the children in the scattered homes of the Public Assistance Committee will be placed under the Education Committee and possibly the infants under three years of age, now in the nursery at the Institution, will be transferred to the Maternity and Child Welfare Committee as the most appropriate authority to deal with them. The maternity department will eventually be taken over by the



Maternity and Child Welfare Committee and the tuberculosis by the Public Health Committee, but I am afraid there will still be some overlapping, especially with the latter, as not all the cases of tuberculosis which present themselves at the Wellingborough Road Institution are suitable for admission to either Creaton or Welford Road Hospital. When Bromham House, near Bedford, in which Northampton Mental Deficiency Committee is interested along with the Northamptonshire County Council and the Bedfordshire County Council, is converted into an institution for high-grade mentally defectives, it is expected all suitable mental cases will be sent there.

The Medical Officer of Health, acting as School Medical Officer in an administrative capacity, is able to keep in close touch with and supervise the work of the School Clinic, most of which is conducted by the Assistant School Medical Officer and his assistants. As it has been felt for some time the medical staff, consisting of Dr. Mason with the help of Dr. Laughton (the Tuberculosis Officer) on two half-days per week, was unable to carry out all the medical inspection, etc., required by the Board of Education, and as it was not thought desirable at present to appoint another whole-time medical officer, the Education Committee arranged with Miss K. F. Atteridge, M.B., B.Ch., B.A.O., to devote three sessions per week to medical inspection. She commenced duties on 23rd October, and I understand this additional help is proving satisfactory both to the Board and the Education Committee, as it enables the routine inspection of all code children to be carried out according to the Board's requirements.

School  
Medical  
Service

Changes were also made in the Dental Department. Miss Dorothy G. Coutts, L.D.S.R.C.S. Eng., was succeeded in February by Miss Cicely M. Finnemore, L.D.S.R.C.S. Eng. As it was thought the work of the dental officers would be expedited by the provision of additional chairside assistance, another girl clerk was provided in April, thus releasing Miss Markham (who had over fourteen years' experience at the Clinic) for chairside assistance. Miss Markham resigned and terminated her services at Christmas and her position was taken by Miss A. Crowder.

The whole-time staff employed on school medical work at the close of the year was one medical officer designated as Assistant School Medical Officer, two dentists, three nurses, and four clerks. Two medical officers devote part time to school inspection and an ophthalmic surgeon and a radiologist are also employed part-time. Arrangements have been made in addition for the services of an ear, throat, and nose specialist for the removal of tonsils and adenoids.

The average number of scholars on the school registers was 12,025, the average attendance being 11,435 (95.1 per cent.).

No school was closed owing to the presence of infectious disease.



The annual report of the School Medical Officer, prepared according to the requirements of the Board of Education for the Education Committee, is published separately and gives details of the work performed by the school medical service.

(See also "Schools," page 26).

### III.—SANITARY CIRCUMSTANCES.

#### Water

Northampton's water supply is derived from two sources, viz. :—the gathering ground at Ravensthorpe, some ten miles from the Town, which forms the chief source of supply, and secondly, two deep wells, one at Ravensthorpe, the other on the Billing Road. For practical purposes, therefore, it may be looked upon as a mixed water, the greater part being upland surface-water. The reservoir at Ravensthorpe is capable of holding 327 million gallons, sufficient for the Town during normal seasons, in fact enough to allow one abnormally dry summer if followed by an average spring and summer rainfall, but if we were to get two dry seasons in succession the Ravensthorpe supply would fail and demand would have to be made on the water-bearing gravel near Brampton Crossing as in 1921 and 1922, which would necessitate chlorination.

The average daily consumption per head for the last five years was :—

1926 .....	17.79 gallons
1927 .....	19.48 gallons
1928 .....	19.40 gallons
1929 .....	20.76 gallons
1930 .....	19.84 gallons

Eleven samples of the Town's supply were submitted for bacteriological examination. These were taken at the rate of about one per month so as to test the water during all kinds of weather. As is usual in Northampton, the results of the examinations varied considerably, but even when a sample was not a good one bacteriologically owing to coliform organisms being found in small amounts of water, the number of organisms per c.c. was always small, and this is possibly the best test of sewage pollution.

In addition to the public supply, three samples from " Jubilee Well," Kingsthorpe, were also examined by the Bacteriologist. Members of the Council may remember this well was under suspicion in 1929 as the possible source of an outbreak of typhoid fever which occurred at Kingsthorpe affecting drinkers of the well water. After repeated examinations we were never able to bring the trouble home to the well. Another case of typhoid (which unfortunately ended fatally) occurred at Kingsthorpe amongst users of the well water during the year under review and though the water was again examined the Bacteriologist reported it to be very good. More will be found on this subject under the heading "Enterica" on page 40.



Five samples of water—three from the Town supply and two from wells, one being the “ Jubilee Well ”—were examined by the Public Analyst. On each occasion the public supply was found fit for drinking purposes. The “ Jubilee Well ” water was of the same character as when analysed in the previous year, whilst the other private well was found to be so polluted as to be entirely unsafe for drinking purposes. A public supply has since been laid on to the premises served by this polluted well and to the thirteen houses whose supplies were obtained from the “ Jubilee Well.”

The River Nene became very low during the summer months, but there was no serious pollution as to be dangerous or injurious to health. One reads in the local press from time to time that the river is badly polluted further down the stream, but such a state of affairs does not exist in the Borough. Unlike many other manufacturing towns, the trade processes in Northampton do not to any material extent contaminate any adjacent streams. The river water is quite usable, therefore, for extra-domestic purposes and is thus employed for street watering, etc.

Rivers and Streams

The work of rebuilding the older sewers of the Town, together with the outfalls, etc., will soon be commenced.

Drainage and Sewerage

The Borough Engineer has again kindly furnished me with the following information regarding drainage work carried out by, or under the supervision of, his Department during the year:—

New soil sewer, Knight's Lane.

New surface-water sewer, Melbourne Road.

Replacement of defective sewer, Brookland Road.

Soil and surface-water sewers, Kettering Road Housing Estate Development, Queensland Gardens, Rosedale Road extension, and cul-de-sac, Kingsland Avenue.

No conversions from the conservancy to the water-carried system of sewerage were carried out during the year. Only eleven houses on the conservancy system remain and these are on the outskirts of the Borough where it would not be practicable to make connections with a sewer. There are in addition two works premises with closets on the conservancy system.

Closet Accommodation

The long looked for change in the methods of refuse collection and disposal has now been made and has been working long enough to prove itself a great success. The collection of the refuse is performed by means of “ Pagefield ” vehicles in which the long low wagon is drawn along the street by a horse whilst the ashbox men fill it from above, the cover being divided into sections. When filled, the shafts are detached and the full wagon is hauled on to a motor carriage for transport to the place of disposal. I am pleased to say in Northampton we have

Scavenging



got rid of refuse tips which in my experience have always been unsatisfactory, whatever may be said as to the practicability of working them without causing a nuisance or unsightly appearance. Instead of tips or dumps, the refuse is now all disposed of at West Bridge Works by a plant supplied by Messrs. Heenan and Froude of Worcester and Manchester. The refuse is separated into its different constituents by screening and picking on a conveyor belt where all glass bottles, paper, metal, etc. is removed, tins and pieces of iron being extracted by a magnet working automatically. Cinders, etc. are screened and conveyed to a hopper for loading into trucks and finally the residue is fed by the conveyor into the furnaces by overhead stoking. Tins are baled for sale as scrap. No use is at present being made of the heat generated in the furnaces. The whole system is a great success and a big advance on anything previously attempted in Northampton. Finally I may say the unsightly private ashboxes of all descriptions from hatboxes to orangeboxes are being rapidly displaced by covered galvanised containers owned by the Corporation, which is another improvement connected with the Scavenging Department under the direction of the Borough Engineer. The improvements in the collection and disposal of refuse constitute the most important advance in connection with sanitary administration Northampton has seen for years.

Sanitary  
Inspection

The work of the sanitary inspectors is summarised in Table 5 (page 79), and Tables 6 and 7 give further particulars in connection with house drainage. During the year, 2,253 houses were inspected, and of these 1,088 were found to require some attention, with the result that 684 were repaired and 593 were cleansed and whitewashed, while others were dealt with as the conditions required, details of which appear in Table 5.

Smoke  
Abatement

The mere fact that no legal proceedings had to be taken against any person for permitting the emission of black smoke from a chimney must not be taken as a sign that nothing was done in this matter. There were several occasions on which we received complaints of nuisances arising owing to the emission of smoke or smuts from chimneys, but when these complaints were taken up by the inspectors and representations made to the offending parties, the nuisances were always abated without any necessity of proceeding further; either the chimneys were raised or different types of stoves, etc., were used, most of the complaints not relating to large works, as these are chiefly operated by means of either gas engines or electric motors. The atmosphere is remarkably free from pollution considering Northampton ranks as a manufacturing town.



The Annual Report under the Canal Boats Acts was sent to the Ministry of Health before the appointed date, 21st January. Mr. Knowles, the Canal Boats Inspector, reported that he inspected twenty-five boats, which were registered to carry eighty-two adults. The actual number of occupants was thirty-nine adults and thirty-six children. No boats required painting or repairs and no case of infectious disease occurred. The number on the register believed to be in use is three.

Canal  
Boats

I understand attempts have been made from time to time to revive the traffic on the canals, but with very little result. They are too slow for the present age, and after the railways and the motor transport companies have had their share of the goods traffic, there is not much left for the canals.

The number of common lodging houses on the register at the end of 1930 was four, the same as in the previous year, with accommodation for 158 men. These premises have been visited regularly by Inspector Walker, whose duty it is to carry out this work. They have also been visited from time to time by the Medical Officer of Health and the Chief Sanitary Inspector. There were times when the attention of the proprietor had to be called to certain defects (generally want of repairs), but these were remedied without any legal proceedings. We have no houses let in lodgings.

Common  
Lodging  
Houses

Table E, right at the end of this report, gives an account of the work done under the Factory and Workshop Act, 1901, set out in the prescribed form. The general scheme under which the Act is worked is that H.M. Inspector of Factories supervises the sanitary condition of all textile and non-textile factories, leaving the sanitary authority to take charge of workshops, workplaces, and domestic factories. If the Factory Inspector finds an insanitary condition in a factory he refers the matter to the local sanitary authority for necessary action.

Factories  
and  
Workshops

The names of two tanners and three tripe boilers are on the register of offensive trades. The premises concerned were kept under regular supervision and no serious infringement of the bye-laws was discovered, nor did we receive any complaints of nuisances arising from the carrying on of these offensive trades.

Offensive  
Trades

There are no permanent tent dwellers in the Town. We have a few caravan dwellers permanently within the Borough and at fair times there is the usual influx of such people. The supervision of these is provided for by the bye-laws which the sanitary inspectors enforce.

Tents,  
Vans,  
Sheds, etc.

Particulars of these, excepting the ones above-mentioned, will be found in Section V. (pages 32 to 37) dealing with food, as they comprise cowsheds, dairies, bakehouses, slaughterhouses, ice cream shops, etc.

Premises  
Controlled  
by Bye-  
laws, etc.



## Schools

The sanitary condition of the schools has been examined from time to time by the Medical Officer of Health, the Assistant School Medical Officer, and the sanitary inspectors and no defects of any importance have come to light. Some of the schools are far from fulfilling present-day requirements, but I do not see any means of getting rid of them immediately ; no doubt in time their places will be taken by newly-built ones on the latest principles as the old ones will become redundant, and especially will this be the case with the tendency to move the so-called working classes from the centre of the Town to the outskirts. All the schools are served by the Town water supply. No schools were closed during the year with a view to preventing the spread of infectious disease. Such action is not now considered desirable ; it is found more beneficial to exclude contacts until the incubation period has passed, when all danger from their re-admission may be said to have ceased.

Rag Flock  
Acts, 1911  
and 1928

The Chief Inspector, who carries out the duties under these Acts, paid fourteen visits to premises where rag flock is used, for the purpose of examining the invoices with a view to ascertaining if they all contained the guarantees that the flock was up to the prescribed standard, and being satisfied that such was the case no samples were taken for chemical examination. It may not be out of place to explain that the object of the Acts and the chemical standard laid down is to ensure that old rags contaminated by excremental matter, etc., be not used for the upholstery of low-priced furniture, etc.

Rat  
Repression

The Chief Inspector, exercising his office of Rat Officer, supervised the work of the Borough Rat-catcher. The latter was appointed in September, 1919, at a time when the country appeared suddenly to realise what an enormous amount of damage is done annually by these rodents and that some systematic efforts should be made to reduce their numbers. The number of rats in this country has been variously estimated, some authorities going so far as to say there are more rats than human beings in the land. Whether this be so or not, remembering their fertility the most optimistic amongst us can scarcely hope to exterminate them, and we must be content if we can shew we have reduced their numbers considerably and thereby prevented what would certainly have been an increase. The Rat-catcher is at the service of any ratepayer who requires his help in ridding premises of the vermin. "Rat Weeks," as such, have not appealed to us, as we are at work against rats every week, and Table 8 (page 82), shewing the number accounted for annually since the Rat-catcher was appointed, is evidence of the destruction he has wrought amongst them.



## IV.—HOUSING.

The Borough Engineer has again supplied the Department with particulars of the work done under the municipal housing schemes :—

Total number of houses completed between 1st January and 31st December, 1930, under the Corporation Schemes .....	116
Number of these within the Borough boundary ...	116
Erected by the Corporation both within and without the Borough up to 31st December, 1930 :—	
Houses .....	2,541
Shops and houses .....	31
Hutments .....	14

In addition to the above, the following private building operations, plans for which had been approved by the Highways Committee, were carried out during the year:—

New houses (all non-subsidy) .....	133
Alterations to houses .....	37
Shops and houses .....	9
New shop-fronts to houses .....	8
New factories .....	4
Additions to factories .....	7
New office buildings .....	2
Additions to brewery .....	1
Additions and alterations to licensed premises .....	16
Alterations to working men's clubs .....	2
Extensions to cinemas and theatres .....	4
New football stands .....	2
Garages .....	36
Sheds .....	7
Electric light sub-stations .....	3
New water closets .....	4
Temporary licensed buildings .....	6

Tables 9 and 10 (pages 83 and 84) contain particulars of houses represented in this and previous years. It will be seen that twenty-three houses were represented either under Section 11 of the Housing Act, 1925, or Section 19 of the 1930 Act, and fifteen closing orders made by the Town Council. Nine houses were demolished in pursuance of demolition orders and eight others after closing orders only. On 31st December, seven houses subject to closing orders were still occupied.

During the last five years, ninety-seven houses have been represented and ninety-three demolished.

Under Section 17 of the Housing Act, 1930, five houses were dealt with. These were Nos. 1, 2, 3, 4, and 5, Castle Gardens. The notices were not served until towards the end of the year and the work had not been started when the year closed, nor



even when the notices expired in 1931, but it was eventually commenced by the owner.

The staff made 374 visits of house-to-house inspection under the Housing Consolidated Regulations, 1925, and in these defects were found in 327, chiefly want of cleanliness and repairs.

Particulars of the five-yearly programme of the Council under the Housing Act, 1930, are set out on pages 31 and 32.

**Public  
Health  
Acts**

Five houses, or parts of houses, were certified by the Medical Officer of Health under the terms of Section 46 of the Public Health Act, 1875, as being in such a filthy or unwholesome condition that the health of the occupants was affected or endangered thereby, and that the cleansing and whitewashing were urgently required. We had to resort to legal action in two instances (*see* next paragraph).

**Prose-  
cutions**

Apart from legal proceedings under the Food and Drugs (Adulteration) Act, 1928, detailed in the paragraph dealing with this subject on page 36, it was necessary to take legal action against an owner for failing to comply with notices under Sections 46 and 94 of the Public Health Act, 1875, in regard to two houses and under Section 94 alone of this Act for one dwellinghouse. When the two cases came before the Bench the work had been completed; the summons was withdrawn in each instance on payment of costs 5/-.

**Housing  
Statistics**

The particulars for 1930 are set out below in the form required by the Ministry of Health.

**Number of New Houses erected :—**

(a) Total (including numbers given separately under (b)) :—	
(i) By the Local Authority .....	116
(ii) By other Local Authorities .....	0
(iii) By other bodies and persons .....	133
(b) With State assistance under the Housing Acts :—	
(i) By the Local Authority :—	
(a) For the purpose of Part II. of Act of 1925	0
(b) For the purpose of Part III. of Act of 1925	116
(c) For other purposes .....	0
(ii) By other bodies or persons .....	0

**1.—*Inspection of Dwellinghouses.***

(1) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts) .....	2,253
(2) Number of dwellinghouses (included under sub-head (1) above) inspected and recorded under the Housing Consolidated Regulations, 1925 .....	374
(3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .....	23



(4) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .....	1,065
2.— <i>Remedy of Defects without Service of Formal Notices.</i>	
Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers .....	488
3.— <i>Action under Statutory Powers.</i>	
A.—Proceedings under Section 3 of the Housing Act, 1925, or Section 17 of 1930 Act :—	
(1) Number of dwellinghouses in respect of which notices were served requiring repairs .....	5*
(2) Number of dwellinghouses rendered fit after service of formal notices :—	
(a) By owners .....	5*
(b) By Local Authority in default of owners .....	0
(3) Number of dwellinghouses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close .....	0
B.—Proceedings under Public Health Acts :—	
(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied .....	577
(2) Number of dwellinghouses in which defects were remedied after service of formal notices :—	
(a) By owners .....	562
(b) By Local Authority in default of owners .....	0
C.—Proceedings under Sections 11, 14, and 15 of the Housing Act, 1925, or Section 19 of 1930 Act :—	
(1) Number of representations made with a view to the making of Closing or Demolition Orders .....	23†
(2) Number of dwellinghouses in respect of which Closing Orders were made .....	15
(3) Number of dwellinghouses in respect of which Closing Orders were determined, the houses having been rendered fit .....	0
(4) Number of dwellinghouses in respect of which Demolition Orders were made .....	0
(5) Number of dwellinghouses demolished in pursuance of Demolition Orders .....	9‡



4.—*Number of Houses owned by the Local Authority.*

A.—Built during 1929 and 1930 and held under :—

(1) Part III. of the Housing Act, 1925 .....	405
(2) Part II. of the Housing Act, 1925 .....	0
(3) Other powers .....	0

B.—Total Number owned on 31st December, 1930... 2,541 §

\* These were dealt with under the 1930 Act. (*See* remarks on page 27).

† Sixteen of these were represented under the 1930 Act.

‡ Eight more dwellinghouses were demolished in pursuance of Closing Orders only.

§ The Corporation also owns thirty-one shops and houses and fourteen hutments.

General  
Observations as  
to Housing  
Conditions

While it would not be correct to say that housing conditions in Northampton are ideal and all one could desire, the housing conditions of the working classes are much superior to those found in the industrial and colliery towns of the north. We have no back-to-back houses (such a feature in the West Riding), whilst courts and alleys are practically non-existent, having been cleared out during comparatively recent times. Like all industrial towns the majority of the older working-class houses are built in long uninteresting rows of the same type, which, though probably quite healthy dwellings, are not very convenient and nearly all lack bathrooms. Another unfortunate feature of Northampton is the absence of backways, which necessitates all household refuse, etc., being carried through the house and deposited for removal in the front street. This defect is to some extent overcome in the more recently laid out parts of the Borough where the houses have side entrances, but the refuse still has to be deposited in the front street.

Sufficiency  
of Supply  
of Houses

There is still a shortage of houses and the Housing Committee of the Corporation has on the books the names of over a thousand applicants. This list is periodically revised and is bound to become less, as there is no slackening in the efforts of the Committee to overcome the shortage and practically no natural increase of the population. At the present moment all available land within the Borough, thought to be suitable for the erection of houses, has been built upon, but with the extension of the boundaries coming into operation on 1st April, 1932, sufficient land to supply the housing needs for many years will be available.

Over-  
crowding

Overcrowding exists to a limited extent. Five cases were reported to the Public Health Committee during the last twelve months and ten remained unabated at the end of the year. There are what might be described as two types of overcrowding, *i.e.*, one where all the occupants of the house are members of the same family, and the second kind where two separate families occupy the same house. The second type of case is often much easier to deal with than the first and can frequently be got over



by forcing the sub-tenants to quit and find fresh accommodation, but it is not always either wise or just to try to separate a family whose only fault is inability to pay the high rent asked for a larger house. No legal action was taken with regard to overcrowding as it was found less drastic measures sufficed.

No great difficulties have been found to arise under the Public Health Acts or under Section 3 of the Housing Act, 1925 (now Section 17 of the 1930 Act), except that the owners frequently have some objection to make before doing the work specified. No special measures were taken for carrying out programmes of repair. Each house or block of houses was dealt with as required. In the older parts of the Town (generally in *culs-de-sac*, etc.) some houses have not a separate internal water supply. Most of these draw their water from a common tap. This matter is now receiving attention and a batch of such houses is from time to time, on the certificate of the Surveyor, brought before the Public Health Committee and finally before the Council, who order the owners to install a proper water supply in accordance with Section 62 of the Public Health Act, 1875.

Fitness of  
Houses

There are no large unhealthy areas in the Town and it would not be an easy task to prove that the four small areas represented in 1930 as clearance areas and the one improvement area now being considered, had or have a high death- or sickness-rate due solely to the housing conditions. There are so many other factors besides the house bound up in the "housing" question and it is next to impossible to separate and evaluate them. I know of no complaints made regarding any of these areas. They were represented as areas to be dealt with under the Housing Act, 1930, because the property is old and worn out. In some instances there is no through ventilation, the houses are obstructed by other buildings making them dark and preventing the free access of air, or there is no proper storage place for food. In other words the houses do not possess and cannot be made to possess (at a reasonable cost) what are considered to be requirements of modern dwellings. These five areas are :—

Unhealthy  
Areas

- 1.—Clearance Area. Grafton Street (North Side). 61 houses inhabited by 179 adults and 76 children, an average of 4·18 persons per house.
- 2.—Clearance Area. Bounded by Scarletwell Street, Bath Terrace, Bath Street, and Lower Cross Street. 48 houses occupied by 144 adults and 62 children, an average of 4·29 persons per house.
- 3.—Clearance Area. Bounded by Bath Street, Little Cross Street, and Castle Street. 46 houses occupied by 128 adults and 69 children, an average of 4·28 persons per house. There is also a lodging house the occupants of which vary up to 39.



- 4.—Clearance Area. Houses in St. Andrew's Street and Union Court. 25 houses inhabited by 74 adults and 27 children, an average of 4.04 persons per house.
- 5.—Improvement Area. Bounded by Castle Street, Phoenix Street, Doddridge Street, and St. Mary's Street. 74 houses in various degrees of repair. 39 appear ready for demolition and 35 could possibly be put in repair. The 39 houses are occupied by 132 adults and 33 children, an average of 4.23 persons per house.

The above five areas were adopted by the Town Council on 11th November, 1930, as forming the five year programme to be undertaken in accordance with the Housing Act, 1930, the Housing Committee to find accommodation for the dispossessed tenants. So far only No. 1 is actually in hand. In addition to the above, the Housing Committee agreed to find an average of forty houses per year for the next five years to re-house persons displaced from individual unfit houses. The number can be increased or decreased by arrangement between the Public Health and Housing Committees.

Other  
Housing  
Matters

Reference should be made to Section III. "Sanitary Circumstances" for other information bearing on housing.

The estimated number of inhabited houses in the Borough at mid-year 1930 was 23,800.

## V.—INSPECTION AND SUPERVISION OF FOOD.

Milk  
Supply

As stated in previous reports, only a very small proportion of the milk consumed in the Borough is actually produced within its confines, most of it arriving in the Town from surrounding districts. About eighty-four cows were housed within the Borough during the winter months, being turned out to grass during the summer.

From inquiries made it does not appear there has been any measurable increase in the milk consumed per head of the population of Northampton since the matter was investigated in 1927, when it was found that the consumption per head per day approximated to less than half a pint, but I am hopeful that in time, when the taking of a milk ration by school children becomes more popular, the amount of milk consumed per child will shew an increase. At present, forty-two of the forty-six school departments have adopted the scheme put forward by the National Milk Publicity Council by which children are supplied with a third of a pint of milk in a sealed bottle, together with a sterilised straw through which to suck the milk, at a cost of one penny. The Borough Education Committee have shewn themselves very desirous to help and have, I think, wisely stipulated the milk shall be Pasteurised and come from a source approved by the Medical Officer of Health. The scheme has only been in



operation a very short time and has expanded so rapidly that over forty per cent. of the scholars attending the public elementary schools are now benefiting.

It is calculated that about forty-five per cent. of the milk consumed in the Borough is "Pasteurised," five per cent. "Grade A (Tuberculin Tested)," and one per cent. sterilised.

The report on the chemical examination of milk will be found under the heading dealing with the Food and Drugs (Adulteration) Act, 1928, page 36.

At the end of December, thirteen cowkeepers and 175 retail dairymen and five wholesalers were on the register. Twenty-eight of these retailers live in the rural areas outside the Town and their premises were inspected and pronounced fit for the purpose by the rural inspectors before they were placed on our register. In addition, eighty persons are allowed to sell milk in bottles only, on condition the seal of the bottle is intact when it leaves the premises. These are persons whose premises are not considered to be suitable for the sale of loose milk. Thirty-two certificates of registration were issued, but as usual a number, viz. :—twenty-one, were only transfers. The inspectors made 395 visits to registered premises and defects were found and remedied in six of them.

Dairies,  
Cowsheds,  
and  
Milkshops

There is still a demand for this class of milk, but my inspectors inform me it is not much favoured by the better educated of the working people. Fifty-seven retailers are permitted to distribute it. It is brought into the Town by two large companies, there being no firm in the Borough producing this milk.

Sterilised  
Milk

At the end of 1930, the following licences were in operation under this Order :—

Dealers' licences to use the designation "Grade A (Tuberculin Tested)" :—

- (a) bottling establishments ..... Three
- (b) shops ..... Six

Dealers' licences to use the designation "Pasteurised" :—

- (a) Pasteurising establishments ..... Two
- (b) shop ..... One

These licences were held by nine dairymen.

There is no appreciable demand in the Borough for "Certified" milk and no licence to sell under the designation was issued. I think the price is against it.

Twenty-six samples of milk were submitted for bacteriological examination, viz. :—thirteen "Grade A (Tuberculin Tested)," nine "Pasteurised" sold as such, two "Pasteurised" sold in bottles as ordinary milk, one ordinary milk in bottle, and one sterilised milk. One sample of "Pasteurised" milk failed to reach the standard laid down by the Order in that it contained 8,960,000 bacteria per c.c., whereas it should not have contained

Milk  
(Special  
Designa-  
tions)  
Order,  
1923



more than 100,000 in that amount. Two samples of "Grade A (Tuberculin Tested)" milk also defaulted. In the first instance, coliform organisms were found in 0.001 c.c., whereas it should not have been present in 0.01 c.c. In this case the total bacterial count was low (14,000). The other sample of "Grade A (Tuberculin Tested)" which was found below standard shewed the presence of the colon bacillus in 0.001 c.c. and had a total bacterial count of 290,000 instead of not more than 200,000 as prescribed by the Order. The "Pasteurised" milks sold in bottles as ordinary milk were found to be excellent from a bacterial standpoint. The ordinary bottled milk shewed the colon bacillus in 0.0001 c.c., but the total bacterial count was only 15,000, which leads one to think a very large proportion of the organisms present were from manure. The sterilised milk almost came up to its designation, only one hundred bacteria being present in 1 c.c. and coliform organisms were not found in that amount. Little wonder it keeps for long periods.

The average bacterial count of the eleven satisfactory "Grade A (Tuberculin Tested)" milks was 18,820 per c.c., and the eight "Pasteurised" milks gave an average of 9,435, which are both well within the standards laid down in the Order.

Twenty-two samples of designated milk were sent by the Department to the Public Analyst for chemical analysis. The average contents were as follow:—

	MILK-FAT.	NON-FATTY SOLIDS.
"Grade A (Tuberculin Tested)" (thirteen samples)	3.78 per cent.	8.81 per cent.
"Pasteurised" (nine samples)	3.58 per cent.	8.85 per cent.

Preserva-  
tives, etc.

No legal proceedings were called for under the Public Health (Preservatives, etc. in Food) Regulations, 1925 to 1927, as all official samples submitted to the Analyst were found to be free from preservatives. An informal sample of ground ginger, however, was found to contain 1350 parts per million of sulphur dioxide. I do not think there is much adulteration of food in Northampton, either in the ordinary acceptance of the term or by way of adding preservatives.

No action was taken under the Artificial Cream Act, 1929, the Public Health (Condensed Milk) Regulations, 1923 and 1927, or the Public Health (Dried Milk) Regulations, 1923 and 1927.

Food  
Inspection

We have not found it necessary to make any change in the arrangements regarding food inspection. One member of the staff is specially appointed as Food Inspector giving all his time to this work, whilst three of the district inspectors devote only a portion of their time to it, the whole being supervised by the Chief Inspector. This plan has worked satisfactorily for years. Table 11 (page 85) gives details of food condemned. Over 185 tons of food have been voluntarily surrendered and destroyed during the last five years.



During the year the Council appointed the sanitary inspectors to enforce the provisions of the Agricultural Produce (Grading and Marking) Act, 1928, and to take samples under the Merchandise Marks Act, 1926.

Grading and  
Marking of  
Foodstuffs

Fifty-four slaughterhouses remain on the register. Forty-nine of these were registered or licensed before the adoption of the Public Health Acts Amendment Act, 1890, Part III., and they can only be removed from the register under conditions not easily attained. The remainder, five in number, are on yearly licences, renewable each January. From the above brief note it will be seen that although a public abattoir in the Town is very desirable from the point of view of facilitating meat inspection, it is not a condition which can be very easily brought about. It would be no advantage to have an up-to-date abattoir if most of the butchers did not use it, and it is not likely they would if they were allowed to retain their old premises, and the only way to get rid of these old slaughterhouses would be by compensation, the cost of which might prove very considerable. The position seems to be, therefore, a public slaughterhouse is desirable even at a price, but not at any price. The meat inspection as now carried out in the Borough is so satisfactory as to make the provision of a public abattoir not one of urgent necessity.

Slaughter-  
houses

The inspectors made 3,882 visits of inspection during the year, 3,646 being during the actual process of slaughtering. Forty-three infringements of the bye-laws were discovered; these were of a minor character, chiefly of failure to whitewash at the proper time. All were remedied without having to resort to legal action.

As stated in last year's report, the "humane killer" is firmly established in Northampton. The bye-law came into force on 19th February, 1929. In passing may I say that butchers are just as humane as any of their fellow men, and to think otherwise would shew a want of knowledge of human nature.

Under these Regulations amongst other things it is the duty of butchers who intend to slaughter out of the usual hours, except in case of accident, to give three hours previous notice to the Local Authority; 130 notices of this character were received. No prosecutions were necessary.

Public  
Health  
(Meat)  
Regulations,  
1924

Table 12 (page 85) gives particulars regarding tuberculosis found in slaughtered cattle. Again calves and sheep form a small percentage of the total findings, but no less than 58.9 per cent. of whole and 90.3 per cent. of part carcasses of beef and pork condemned were surrendered on account of this condition. In other words, tuberculosis is by far the most common disease which leads to the condemnation of bovines after slaughter.

Disease  
in Meat



- Section 117  
of the  
Public  
Health  
Act, 1875
- No foodstuff was formally seized on account of its being exposed for sale in an unfit condition. All meat condemned was either found by the inspectors at the time of slaughter or the inspector's attention was called to it by the butcher, who was willing to accept the officer's decision. The local butchers have amongst themselves an arrangement for contributing to a common fund out of which they receive compensation for diseased carcasses or parts of such as are voluntarily surrendered, on the certificate of the inspector, and this has done much to help us in keeping the meat supply sound.
- Bake-  
houses
- At the end of December, one hundred bakehouses were in use and it is not likely their number will decrease much in the future unless the trade of the smaller men is absorbed by the larger ones. The day of home-made bread has passed away for ever. The inspectors paid 216 visits of inspection and found thirty-five infringements of the bye-laws, the chief default being, as usual, the neglect of whitewashing at the proper time. To conform with the Act it is necessary to whitewash bakehouses every six months. All breaches were remedied on representation being made to the owner. There is only one underground bakehouse known in the Town and this conforms to all the special requirements.
- Other  
Premises  
dealing  
with Food
- Under this heading come premises where food other than the above-named is dealt with, including those connected with the manufacture and storage of potted meats, jams, sweets, and ice cream. 1,132 visits were paid to these premises.
- Food  
Poisoning
- No case of suspected food poisoning was brought to the notice of the Department. Three bacteriological examinations were made of watercress, with negative results.
- Chemical  
Work
- All chemical analysis required by the Local Authority is performed by the Public Analyst to the Borough, Mr. A. Prideaux Davson, A.R.C.Sc. (Lond.), F.I.C., F.C.S., of Bermondsey.
- Food and  
Drugs  
(Adulter-  
ation)  
Act, 1928
- 263 samples (including 88 informal) were taken under this Act and submitted to the Public Analyst. The nature of the samples is given in detail in Table 13 (page 86). Nine (3.4 per cent.) were found not to be genuine. Four of these were taken informally and the action in regard to the remaining five (all milks) was as follows:—
- No. 45 was 4.0 per cent. deficient in milk-fat. On instructions from the Executive Committee of the Public Health Committee a warning letter was sent to the vendor.
- No. 70 contained 3.0 per cent. of added water. Warned.
- No. 93 was deficient in milk-fat to the extent of 9.0 per cent. The dairyman was prosecuted and fined 10s. 0d.
- No. 129 shewed a deficiency in milk-fat of 32.7 per cent. The vendor was fined £1 10s. 0d.



No. 130 was 5.0 per cent. deficient in milk-fat. Warned. Three samples of skim milk had fat contents of 0.26, 0.53, and 0.54 per cent. respectively.

All milks submitted to the Public Analyst were examined for the presence of preservatives, but none were detected.

The average fat content of the 163 samples of genuine milk was 3.74 per cent. and the non-fatty solids 8.87 per cent.

It has frequently been averred that the standard set up by the Ministry of Agriculture and Fisheries, below which milk may be said not to be genuine, is too high, considering the variations in the composition caused by differences of feeding and climate. With this in mind a careful record has been kept since the beginning of 1909 of the composition of every milk sample, both official and informal, returned as genuine. These records have been summarised and the following tabular statement gives the result of such summary for the twenty-two years 1909 to 1930. The first two years are given together and the remaining twenty in quinquennia. It shews that the average composition is well above the minimum of 3.0 per cent. of milk-fat and 8.5 per cent. of non-fatty solids laid down by the Ministry. The details of each quarter in each of the years are available, but are too voluminous to reproduce in a report such as this:—

YEARS.	NUMBER OF SAMPLES.	AVERAGE MILK-FAT.	COMPOSITION—NON-FATTY SOLIDS.
1909-1910	263	3.63	9.04
1911-1915	691	3.63	8.91
1916-1920	519	3.70	8.89
1921-1925	672	3.69	8.98
1926-1930	751	3.69	8.87
1909-1930	2,896	3.67	8.92

The percentage (3.4) of samples not up to standard in 1930, though not quite so low as in 1929, is otherwise the lowest of which we have record. The annual average for the last five years was only 5.0 per cent. and this is easily the lowest in any similar period for thirty-five years.

#### VI.—PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

During 1930, twenty-six deaths were certified as due to the "Zymotic so-called "zymotic diseases," giving a "zymotic death-rate" Deaths " of 0.28 per thousand living, as follows:—



	NUMBER OF DEATHS.	DEATH- RATE.
Diarrhœa (under two years) .....	5	0·05
Diphtheria .....	8	0·09
Enteric Fever .....	3	0·03
Measles .....	2	0·02
Scarlet Fever .....	0	0·00
Smallpox .....	0	0·00
Whooping Cough .....	8	0·09

Since the war the local rate has fluctuated between 0·17 and 0·48, whereas in the early part of the present century it averaged well over one per thousand.

The "zymotic death-rate" is an important fact to be noted amongst all communities as it furnishes a popular standard as to their healthiness. At the same time it is advisable not to place too much importance on this rate, which is liable to vary considerably owing to the greater or lesser prevalence of one or other of those diseases.

#### Measles and Whooping Cough

As these diseases are not notifiable under the Infectious Disease (Notification) Act, 1889, our knowledge of their incidence is not complete. From returns furnished to us weekly by head teachers of public elementary schools giving lists of suspected cases of infectious disease amongst scholars, it does not appear that either measles or whooping cough was unduly prevalent. Both diseases, which are highly infectious, are endemic in all towns and are liable to fluctuations from time to time varying with the season and other circumstances not very well understood. The death-rate from these two diseases often equals or exceeds the combined rate from all the other "zymotic diseases."

The number of cases of suspected measles was 450, and two deaths were certified as due to measles, giving a death-rate of 0·02 per thousand living, as against 0·10 for England and Wales. Eight deaths occurred from whooping cough and 398 cases were recorded in the school returns. The death-rate was 0·09, compared with 0·05 for the country as a whole.

During the last quinquennium the deaths from these two diseases have increased slightly, but the cases reported were about the same for whooping cough and more for measles, compared with 1921-1925.

#### Diarrhœa and Enteritis

Five deaths were due to these diseases in children under two years of age, giving a rate of 3·9 per thousand live births registered, as against 6·0 for England and Wales. As stated in my report last year, hot dry weather favoured their onset and spread, but owing to changed circumstances affecting the homes of the working classes these predisposing factors have less effect than formerly. It was not the weather *per se* which was the cause of the mischief, but the hot weather led to the formation and spread of dust and the breeding of flies which carried the germs of disease to food.



Only seven deaths were certified as due to influenza, giving a rate of 0.07 per thousand as against 0.12 for England and Wales. This rate of 0.07 is the lowest for eighteen years, hence we may say 1930 was not an influenza year, so far as Northampton was concerned. The disease is usually more prevalent in the spring months; six of the seven deaths occurred before the end of April.

Influenza

There were 130 deaths in 1926-1930, compared with 124 in 1921-1925 and 322 in 1916-1920.

One death was attributed to cerebro-spinal meningitis. It was not previously notified and the cause of death was only given after a post mortem examination and an inquest. The circumstances were not the usual ones associated with cerebro-spinal fever, in so far as the deceased was aged eighty-three and met with an accident, a fall in the street. He was able after a day or two's rest to go about again, but began to feel unwell five days after the fall and passed away the same evening.

Cerebro-spinal Fever

Cases of this disease numbered three in 1926-1930, compared with eight in 1921-1925 and sixteen in 1916-1920.

We received one notification of acute anterior poliomyelitis (infantile paralysis) respecting a boy aged ten years. The lad had been under medical treatment for over twelve months and was considered to be suffering from acute rheumatism and appeared to improve for a time.

Acute Poliomyelitis

Cases of infantile paralysis if at all severe are about as hopeless as any medical man can be called upon to treat, but this is scarcely to be wondered at when one considers the site of the lesion. Northampton has been fortunate in escaping the somewhat serious outbreak of this disease which occurred in a neighbouring town.

Altogether we had seven notifications in the last five years; there were ten in 1921-1925.

No case of this disease has occurred in the Town since 1924. In that year we had one and there were two in 1921.

Acute Poli-encephalitis

One notification of this disease related to a patient aged thirty-three years. The symptoms were, I understand, not very typical, but the consultants called in made the above diagnosis. The case proved fatal in a few days. Two other deaths were attributed to encephalitis lethargica, both being unnotified. In one the patient is said to have met with an accident in 1924, and did not appear to recover from the shock, necessitating regular medical treatment afterwards. This history is not very characteristic of the disease. The other was an "inward transfer," the deceased being away on holiday when death occurred.

Encephalitis Lethargica



The cases of this disease have only been four in the five-yearly period just ended, against seven in the previous quinquennium.

#### Dysentery

One death from dysentery occurred in a patient not previously notified. The history shewed the disease was contracted during war service in Palestine. The man had been subject to relapses and had been treated in a Ministry of Pensions Hospital. As the death certificate bore so many abnormal conditions, viz. :—cardiac failure, chronic bronchitis, dysentery, large inguinal hernia, it is doubtful what part dysentery played in the final scene, but death is attributed to that disease in accordance with the Registrar-General's ruling.

When one remembers the large number of men who suffered from dysentery in the East during the war and thinks of the small amount of dysentery in England since those men returned home, one is forced to the conclusion that the disease soon dies out, *i.e.*, a very small percentage of dysenteries become chronic carriers, or we manage our sanitary affairs in England very creditably. I see no other alternative, and the same remark applies to enterica. After a large water- or milk-borne epidemic, things seem to settle down much as they were before, in other words it disappears when the original source of infection is removed and the sufferers are restored to health.

We have only had three notifications of this disease since it became notifiable on 1st March, 1919. Two of these were received in 1919 and one in 1925.

#### Malaria

One ex-soldier was notified as suffering from malaria, the attack being a relapse, the original infection, contracted in Palestine, dating back to November, 1918. The relapse was not a serious one. This is the only case notified since 1924.

#### Enterica

Thirteen cases of this classification were notified, which included ten paratyphoids and three typhoids. The attack-rate for the Borough was 0·14 and for England and Wales 0·07. Two were treated in the General Hospital and six at Harborough Road Hospital. There were three deaths (two of which had not previously been notified), giving a rate of 0·03, compared with 0·01 for England and Wales. The thirteen notified cases were spread all over the Town, not aggregated in a small area as on some previous occasions, and they were not confined to any one season but occurred sporadically from January to October. There was no common source of infection apparent beyond the fact that all had consumed Town water, but one cannot blame the water supply for during the time these cases were occurring the bacteriological examinations shewed it contained few organisms even when the colon bacillus was found in a small quantity. Had the water been the source of infection there would have been the usual flare-up which characterises water- or milk-borne



infection. Some of the patients had eaten watercress, but three samples examined bacteriologically gave negative results. One of the fatal cases had consumed water from "Jubilee Well," Kingsthorpe, which was under suspicion in 1929, but no evidence of sewage pollution was found, in fact on two occasions the Bacteriologist reported the samples to be very good. A public supply has been laid on to all the houses which used the "Jubilee Well" for domestic purposes.

During the last five years thirty-eight cases of typhoid and paratyphoid fevers have been notified and six deaths registered.

Fifty-two notifications of erysipelas were received, which is only nine less than last year. Two deaths occurred amongst the notified cases, one being an "outward transfer." The attack-rate for Northampton was 0.55 and for England and Wales 0.45. It is surprising how little the amount of notified erysipelas in the Town varies from year to year. Erysipelas

Chickenpox ceased to be notifiable in the Borough on the last day of February, as it was not considered necessary to retain it amongst the notifiable diseases owing to the disappearance of smallpox from our midst. During these two months, 171 cases were notified. The disease is endemic and varies from time to time not only in its incidence but also in its severity. No death was attributed to this cause. Chickenpox

One may truthfully say vaccination in Northampton is practically a dead letter, in spite of the recent epidemic of smallpox. From the latest information supplied by the vaccination officers it is gathered that only about ten per cent. of the infants born in the district are successfully vaccinated, and I have reason to believe Northampton does not stand alone in this respect. Vaccination

The duty of administering the Vaccination Acts was formerly carried out by the Board of Guardians, but the Local Government Act, 1929, transferred vaccination definitely to the Public Health Committee of the Council. For the carrying out of the Act, there are in the Borough three public vaccinators:—

Dr. E. Robertson, 220, Kettering Road ;

Dr. J. Cullen, 8, Langham Place ;

Dr. H. F. Percival, 2, Spencer Parade.

These officers cover for vaccination purposes the same areas they serve for medical out-relief (*see* page 11).

Dr. C. Mills, the Medical Officer, acts as vaccinator at the Wellingborough Road Institution.

There are two vaccination officers, Mr. F. Taylor and Mr. R. Bennett.

We were free from smallpox during the whole of 1930, although it was present in neighbouring towns and over eleven thousand cases occurred up and down the country. Smallpox



There were no notifications of smallpox in Northampton from 1905 to 1925, but in the latter year twenty-three cases of the mild type occurred. There was a single case in the summer of 1927, and two others in January, 1928. A large outbreak started in July, 1928, and between that date and the end of December, 1929, we had 559 cases. The annual reports for those years should be consulted for an account of the epidemic.

In 1930, no vaccinations were performed by the Medical Officer of Health under the Public Health (Smallpox Prevention) Regulations, 1917.

Scarlet  
Fever

219 notifications of scarlet fever were received, being sixty less than in the previous year and giving an attack-rate of 2.33 compared with 2.76 for England and Wales. 140 cases were removed to Harborough Road Infectious Diseases Hospital, of which thirteen were found after a period of detention to be not suffering from scarlet fever. One case was removed to the General Hospital for operation for adenitis. There is considerable doubt if this case was ever scarlet fever. Four of the patients treated at Harborough Road Hospital died, but in only one instance was death due to scarlet fever, viz. :—in a boy of seven who was already suffering from a severe attack of rheumatic endocarditis (heart disease) and the scarlet fever caused the heart to fail. He was a County case and his death was transferred to his own area by the Registrar-General. One child, aged twenty-two months, died from pneumonia, from which she was suffering on admission, but shewed no sign of scarlet fever. Another, aged eighteen months, died from septicæmia and cellulitis of neck but did not suffer from scarlet fever. The fourth, aged fifteen months, died from septicæmia and cellulitis following chickenpox. The nett result is no death was due to scarlet fever. The death-rate for England and Wales was 0.02. The type of disease prevalent in the Town remained mild.

There were 1,092 scarlet fever cases notified in the five years 1926–1930, compared with 2,108 in 1921–1925 and 491 in 1916–1920. The last epidemic occurred in 1924. We have had no deaths since 1925.

It is still the belief of the laity, and I fancy of some members of the medical profession, that scarlet fever is, or can be, spread by the desquamated epithelium from a case of scarlet fever, whereas all the best authorities say this shed epithelium is innocuous, the disease being spread by infection from the air passages (droplet infection) or by discharges from the ears. Again, there appears to be some magic about six weeks. The public have been brought up to regard six weeks as the correct period of isolation in scarlet fever. For this reason it is not always advisable to discharge a case at the end of five weeks if still desquamating but otherwise apparently fit, as there would more than likely be complaints of the patient being sent home "peeling." As these erroneous ideas have been fostered by medical practitioners in the past it will take some time to eradicate them.



The type of scarlet fever case admitted to Harborough Road Hospital being so mild gives us few opportunities for the trial of sera as a therapeutic agent in this disease ; nevertheless, it was tried on three occasions where the symptoms were more than usually severe and on each occasion its application seemed to be quickly followed by beneficial results, in that the temperature which had been very high for some time with no disposition to fall commenced to come down within twenty-four hours of the administration of serum, and there was an improvement in the general condition of the patients. While three cases are too few to draw conclusions from, they give sufficient encouragement to induce one to try sera again in suitable cases.

There were 286 notifications of diphtheria, which is 101 Diphtheria more than in the previous year and three times as many as in 1928. The attack-rate was 3.04 and for England and Wales 1.84. 206 of the cases (including five transferred from the General Hospital) were removed to the Borough Infectious Diseases Hospital and of these, eighteen were not considered to be suffering from diphtheria. Ten were admitted to the General Hospital for diphtheria likely to call for tracheotomy, under the arrangements mentioned on page 14. There were nine deaths amongst the notified cases, one being due to pneumonia following tracheotomy, the other eight being directly due to diphtheria. One of the deaths was an "outward transfer," which reduces the Borough figure to eight, giving a death-rate of 0.09 for Northampton, which is the same as for England and Wales.

447 phials (1,602,000 units) of antitoxin for curative or preventive treatment were issued free to medical practitioners on application to the Public Health Department, at a cost of about £84. This is in addition to the antitoxin used at the Isolation Hospital. Small doses of antitoxin are quite useless if there is much membrane present ; they only lead to a false sense of security. The practice of waiting for the result of the examination of a swab in a case resembling clinical diphtheria has nothing in its favour. The antitoxin should be given as soon as the clinical signs suggest diphtheria. Unfortunately, the cases are not infrequently advanced with a large amount of membrane present before the medical practitioner is called in.

Besides being more prevalent in the Town in the last five years, diphtheria was also more fatal than in 1921-1925. We have record of 762 cases notified with forty-seven deaths in 1926-1930, compared with 619 cases and twenty-three deaths in the earlier five-yearly period.

No attempt has been made in Northampton to immunise children against diphtheria according to Schick's method by the injection of toxoid antitoxin. I do not consider the claims which have been made for Schick immunisation have been quite sustained, and I am not alone in this belief as several members of the Berlin Medical Society are of the same opinion.



Borough  
Hospitals

**HARBOROUGH ROAD INFECTIOUS DISEASES HOSPITAL.** A description of this hospital is given on page 14, and the statistics for 1930 in Table 15 (page 87). The hospital was never full during the year, the highest number of patients at any one time being fifty-eight on 31st January; thirty of these were suffering from scarlet fever and twenty-eight from diphtheria. Since this institution was opened in 1892, 11,350 cases have been treated there; 8,795 of these were scarlet fever, 1,809 diphtheria, and 412 enterica.

**WELFORD ROAD TUBERCULOSIS HOSPITAL.** Reference should be made to pages 15 and 56.

**SMALLPOX HOSPITAL.** As no cases of smallpox were notified the hospital remained closed throughout 1930. (*See also* page 14).

**WELLINGBOROUGH ROAD INFIRMARY.** This is fully dealt with on page 15.

## Pneumonia

165 notifications of pneumonia were received, which is by far the smallest number for nine years. The attack-rate was 1.76. Fifty-four were said to be broncho-pneumonia and fourteen were reported as post-influenzal in origin, only half the number of each so classified in 1929. In addition, eleven deaths (one of which was an "inward transfer") were certified as due to pneumonia (either primary or post-influenzal) in persons not previously notified, which makes the total cases 176. As usual, there was a wide range in the ages of the patients, which varied from three months to eighty-two years.

Sixty-two deaths were ascribed to pneumonia, of which six were certified as following influenza and twenty-seven were attributed to broncho-pneumonia, leaving twenty-nine for all the other types the chief of which was the lobar variety. The death-rate from all forms was 0.66.

Pneumonia, using the term in its widest sense, is usually associated, at least in the popular mind, with cold weather during the winter months and this is to a large extent borne out by the number of notifications received in the winter and spring quarters, especially the latter, the great bulk of the cases occurring during the first five months of the year. The case-fatality varied from month to month, being lowest (14.3 per cent.) in September and highest in July (66.7 per cent.). Fortunately, during this month of high mortality there were few cases. Though the disease is due to infection by bacteria, we have no record of its spread in households. The organism of lobar pneumonia is frequently found in the nasal and faucial secretions of healthy persons and only under certain conditions is it able to flare up with such fatal results.

1,174 notifications of pneumonia were received in 1926-1930, compared with 1,550 in 1921-1925.



There were twelve notifications of puerperal fever, giving an attack-rate of 0·13 for the Borough, compared with 0·06 for England and Wales. Six were doctors' cases, two occurred in the practices of midwives, and four were institutional cases. All were treated in the General Hospital where two ended fatally, one of them being an "outward transfer." In addition, a case notified the previous year died after a long illness directly attributable to puerperal sepsis, her death being consequently classified to puerperal fever. Four of the twelve notifications related to County patients undergoing treatment at the General Hospital who had not been previously notified in the districts where they lived. (*See also* page 71).

Puerperal  
Fever

Notifications of puerperal fever have averaged about ten per year since the war.

Five notifications of puerperal pyrexia were received, giving an attack-rate of 0·05 as against 0·14 for England and Wales. Two were doctors' cases, two occurred in the practices of midwives, and one an emergency in connection with a woman passing through the Town. All made good recoveries. One was treated in the General Hospital and one (the emergency) in the Wellingborough Road Infirmary. This latter patient suffered from pyelitis which was present before confinement. (*See also* page 71).

Puerperal  
Pyrexia

We have had thirty-six notifications of pyrexia since the Regulations came into force on 1st October, 1926.

Twelve notifications of ophthalmia neonatorum were received, giving an attack-rate of 0·13, or about one per hundred births. Two occurred in doctors' practices, the rest were midwives' cases. The discharge from the eyes was examined in nine instances, but Neisser's organism was not found on any occasion. All appear to have cleared up satisfactorily with one exception, where an opacity of the cornea remains. In ophthalmia neonatorum (whether due to Neisser's organism or to some other bacterial agent) it is essential to take energetic steps from the beginning. Half measures in treatment are no good. (*See also* page 72).

Ophthalmia  
Neonatorum

Notification of ophthalmia neonatorum commenced on 1st April, 1914. From that date until the end of 1915 thirty-three cases were notified, in 1916-1920 there were 103, in 1921-1925 seventy-one, and in 1925-1930 forty-nine.

102 persons resident in the Borough were treated for the first time at the Special Clinic for venereal diseases at the General Hospital, under the combined scheme worked in conjunction with the County Councils of Northamptonshire and Buckinghamshire. The new cases were classified as follow :—

Venereal  
Diseases



CONDITION.	MALES.	FEMALES.	TOTAL.
Syphilis .....	11	13	24
Gonorrhœa .....	33	8	41
Other than Venereal	18	19	37
Totals .....	62	40	102

From the returns furnished by the General Hospital as part of the scheme, it appears that fourteen syphilis and twenty-seven gonorrhœa patients, including persons under treatment at the commencement of the year, carried out the full course of treatment recommended by the specialists in charge of the Clinic.

Sixteen syphilis and fifteen gonorrhœa patients ceased to attend before completion of the course and the final tests were made.

The total attendances of Borough cases at the out-patient clinic were 3,061 and 86 days were spent in hospital by patients.

In the treatment of syphilis, 627 doses of one or other of the approved arsenobenzene compounds were administered. In connection with the scheme, 577 specimens were examined by the Pathologist at a cost of £125 3s. 6d. ; 355 of the specimens were on behalf of the Clinic and 222 for local practitioners.

It is encouraging to know that the new cases of syphilis during the five years just ended, compared with 1921-1925, fell from 248 to 154. Curiously enough, the gonorrhœa patients attending the Clinic for the first time numbered the same in each period, viz. :—248.

#### Tuber- culosis

The Tuberculosis Dispensary was opened in May, 1914, and consists of waiting room, office, dressing room, and consulting room, with other accommodation at present not in use. The staff is complete in itself, consisting of the Tuberculosis Officer, Dr. N. B. Laughton, a tuberculosis nurse, and a clerk. Five sessions are held per week, the one on Monday evenings being for the benefit of persons able to work during the daytime. The cases seen by the Tuberculosis Officer at the Dispensary are graded and advised as to the most suitable form of treatment to adopt for their ailment, depending on the stage of the disease. This largely falls into two divisions, viz. :—sanatorium for the early cases, Welford Road Hospital for the advanced. All cases are asked to visit the Dispensary, if possible, on discharge from an institution in order that the Tuberculosis Officer may see the progress made by the prescribed treatment and keep a record of it. As shewn by Dr. Laughton in his report (Appendix I.) a large proportion of the cases coming to him for the first time are unsuitable for sanatorium as distinct from hospital treatment. These people and their friends are often not pleased with the advice given, viz. :—to go to Welford Road Hospital ; they clamour to go to Creaton, quite regardless of the fact that sanatoria are for early and curable cases of



phthisis. Frequently, if they cannot be sent to Creaton or some other sanatorium (for which they are unsuitable), they refuse to go anywhere, hence the reason for Welford Road Hospital not being taken full advantage of.

In spite of these shortcomings it is gratifying to note that the total tuberculosis death-rate for the Borough, 0.83, is again below the corresponding figure for England and Wales (0.90). Not only is the total lower, but both divisions, *i.e.*, the pulmonary and non-pulmonary types are below those for England and Wales, which gives some support to what I said in last year's report when referring to the alleged high death-rate from phthisis of boot and shoe operatives.

Since the last annual report was published there was issued what might perhaps be termed a manifesto, signed by many of the leading members of the medical profession, in favour of the use of "Pasteurised" milk as being the best means of preventing surgical, *i.e.*, non-pulmonary tuberculosis. It may not be out of place to recall that while the majority of cases of pulmonary tuberculosis are due to the human type of bacillus and have been directly or indirectly infected from a previous human being suffering from phthisis, a large proportion of non-pulmonary patients shew the bovine type of bacillus and have been infected from tuberculous cattle, generally through the agency of milk containing tubercle bacilli. If we remember that some five to ten per cent. of all samples of raw milk taken in large cities shews the presence of tubercle bacilli, it does not require any stretch of imagination to see the danger of consuming such milk in its raw untreated state. The process of Pasteurisation, *i.e.*, holding the milk at a temperature of 145° to 150°F. for at least half an hour and immediately cooling to 55°F., either kills the tubercle bacillus or renders it innocuous. This process has the advantage over boiling that it does not in any way alter the taste or the chemical constituents of the milk or the cream-line. It is believed that the more general use of "Pasteurised" milk will lead to a further reduction in the number of cases of tuberculosis of bones and joints, glands and bowels, and it is for this reason it is recommended by so many leading surgeons of this country.

Dr. Laughton's report, which appears as Appendix I., pages 53 to 64, should be consulted for statistics and further information in connection with anti-tuberculosis measures.

From time to time attention is drawn through the medium Cancer of the press and by other means to the apparent increase of cancer in our midst, these notices being reinforced at intervals by startling headlines regarding alleged discoveries and cures. This being so, a few facts and figures concerning cancer in Northampton may be of interest.

The most casual glance at the figures relating to the disease, or even personal observation unsupported by statistical data, would lead most people to believe that cancer has made rapid



strides during the last forty years. We all know how much more frequently it is in the mind of the public than it was thirty or forty years ago. In 1889-1890, the proportion of cancer deaths to the whole Borough death-rate was 2.7 per cent. During the quinquennium 1901-1905 it had risen to 6.0 per cent., but in the five years 1926-1930 it had become 13.2 per cent. On looking at these figures it would appear that cancer is five times as common as it was forty years ago. I think such a conclusion would be an incorrect one for the following reasons. In the first place, diagnosis has become much more exact during the period under review. All people of middle age and upwards will call to mind how in the days of their youth persons were said to die from "stoppage of the bowels," and it is well to remember nearly all these deaths occurred in middle-aged or elderly persons, *i.e.*, in people who had reached the cancerous age, for as the death tables shew cancer does not take much toll of life before the age of forty-five or fifty, but increases rapidly after fifty is passed. Now the vast majority of these deaths were due to cancer, whatever it may have been called. Stoppage was only the last stage. Secondly, there is a much larger proportion of the population of a cancerous age to-day than there was at any previous epoch. This state of affairs has been brought about by what may be termed the improved hygienic conditions of the people, using that term in its widest sense. This factor, together with the falling birth-rate, is changing the age constitution of the population, tending to raise it. During the last forty years there has been a marked change in both the birth- and death-rates. When in 1889-1890 the cancer death-rate formed but 2.7 per cent. of the whole death-rate, the latter was 16.6, but in 1926-1930, when it formed 13.2 per cent. of the total death-rate, the latter had fallen to 11.5 per thousand. The cancer death-rate for Northampton in 1930 was 1.78 (the highest yet recorded) and for England and Wales 1.45.

Another interesting feature regarding cancer deaths in Northampton is the increase of these amongst males to the whole. In 1911-1915, the figures were males 41.1 per cent., females 58.9 per cent. In 1916-1920 of each one hundred cancer deaths 42.7 were males, in 1921-1925 45.1, and in 1926-1930 46.4. There is no doubt that if allowance were made for the excess of females in the local population the death-rate from malignant disease amongst males would be higher than for females. (At the 1921 Census there were 8,499 males and 9,635 females in the Town over fifty years of age).

The Ministry of Health has issued communications calling attention to the advisability of seeking early advice and treatment in all cases of suspected cancer, for it is only in the early stages that treatment can be given with much hope of success. The majority of internal cancers have reached a too advanced stage before surgical aid is sought to leave much hope of cure. Cancers of the lip, tongue, and skin are in more



favourable sites for observation both by the patient and the surgeon and therefore lend themselves to early treatment, which records shew are in a large proportion of cases followed by cure or at least freedom from recurrence after a number of years.

Finally, may I warn all persons suffering from cancer or suspected cancer not to resort to quack "cures"? It is more than probable quite innocent conditions, such as warts, moles, etc., have been made to take on malignant changes by the repeated irritation of these so-called remedies.

The usual table giving particulars of clinical bacteriology will be found on page 88. The arrangements for bacteriological work are outlined on page 12. Bacteriology

Table 16 (page 87) shews the number of articles stoved each month at the Disinfecting Station, St. Andrew's Road. Disinfection

## VII.—MATERNITY AND CHILD WELFARE.

The tenth annual report of the Assistant Medical Officer for Maternity and Child Welfare on the work of that Department will be found in Appendix II., pages 65 to 76. The report is on the usual lines. General Remarks

The infant mortality-rate of 56.4 is a trifle higher than the phenomenal figure of 52.8 in 1929. Of course, we cannot always be touching the "lowest rate ever"; we are bound to have fluctuations and it quite possible we have seen the lowest figure in this respect we are likely to see for some time, *i.e.*, until we can reduce the number of premature births, the main cause of infant mortality in these days. Infantile diarrhoea, the scourge of past generations, has been practically eliminated, due to better sanitary conditions, etc., but much remains to be accomplished regarding premature births, a subject intimately connected with ante-natal work. Infant Mortality

The ultra-violet ray (Hanovia Alpine Sun) lamp at the Infant Welfare Centre in Dychurch Lane has been in regular use during the year, and Dr. Bebbington thinks the treatment is beneficial in certain children's ailments. Artificial Sunshine

The four beds maintained (during occupation) by the Council under the aegis of the Maternity and Child Welfare Committee were occupied almost continuously during the year. As stated in a previous report, if the parents are in a position to pay some part of the cost of treatment, they are required to do so, but if they are unable the Maternity and Child Welfare Committee pays the whole cost. A large proportion of the cases admitted consists of rickets, but other conditions (congenital malformations, etc.) also figure in the list. Manfield Orthopaedic Hospital



Maternity  
Homes

At the end of 1930 there were eight nursing homes on the register, viz. :—four maternity, one mixed, and three medical or surgical for aged and infirm persons. The General Hospital is exempted annually from registration under the Nursing Homes Registration Act, 1927, as also is the Nursing Home at the Bethany Homestead. All the homes were visited and inspected periodically by the Assistant Medical Officer for Maternity and Child Welfare, who is the appropriate officer appointed by the Council.

Children  
Act, 1908

By the coming into force on 1st April, 1930, of the Local Government Act, 1929, the supervision of infants and children under Part I. of the Children Act, 1908, hitherto carried out by the Board of Guardians, was transferred to the Maternity and Child Welfare Committee. The work chiefly consists of keeping the register and visiting of children under the age of seven years who are maintained for gain or reward in the homes of persons other than relatives. Within forty-eight hours of the reception of such a child, the person receiving it must give notice in writing to the Medical Officer of Health stating when, where, and from whom the child was received and particulars of the date and place of birth. Any change of address of the person adopting the child or transfer or death of the child must also be reported to the Local Authority. A register of adopted or boarded-out children is kept at the Central Building, and the homes are visited regularly and the children inspected by the nurses of the Infant Welfare Department.

Twenty-four children under seven years of age, boarded-out in twenty homes, were on the register taken over from the Guardians on 1st April. Thirty children were placed on the register, and fifteen were taken off for various reasons during the remaining nine months of the year. There were thus thirty-nine children under our supervision at the end of December, and these were in the charge of thirty-four foster-mothers.

Maternal  
Mortality

The most important work in connection with maternity and child welfare at present is that concerning maternal mortality. While infant mortality has been halved during the present century and has, in my opinion, reached a level below which it will not fall appreciably for some time to come, there has been no corresponding fall in the deaths of mothers. As in other spheres there are fluctuations, but the general level of the maternal death-rate for England and Wales remains about as it was before the advent of maternity and infant welfare clinics. The maternal mortality figure for Northampton in 1930 was 5·71 per thousand live births registered (puerperal sepsis 1·63, other accidents and diseases of pregnancy and parturition 4·08). For England and Wales during the same period it was 4·40 (puerperal sepsis 1·92, other accidents and diseases of pregnancy and parturition 2·48). It will be seen that Northampton's total rate is



higher than that of the country as a whole, though the sepsis rate is less. On examining the causes of the deaths other than sepsis in Dr. Bebbington's report it will be noticed that two of the women died from ruptured ectopic gestation. Now this is a rare condition and also a very dangerous one, which if not recognised and treated at once (and the diagnosis is often very difficult until it is too late to save the woman's life) can only have one end. It is the fact of these two cases occurring in one year where the numbers are so small which sends up the rate and thus gives a rather false view of the position, the inevitable result of dealing with small numbers when drawing up statistics and percentage tables.

The continued high death-rate associated with childbirth has attracted so much public attention as to start a campaign under the auspices of the Ministry of Health to reduce it. The Minister appointed a Departmental Committee to collect information bearing on the subject with a view to ascertaining the causes and means of preventing these maternal deaths, and after analysing some two thousand reports (furnished by local authorities through their medical officers), the Committee issued an interim report in which they gave it as their opinion that not less than half these deaths were preventable. Subsequently the Ministry of Health issued a circular to local authorities on the lines of the interim report suggesting possible improvements in the maternity service. The Medical Officer of Health and the Assistant Medical Officer have made a series of suggestions and these are being considered by the Borough Maternity and Child Welfare Committee, and some or all of the suggestions will be put into force shortly. While not less than half the maternal deaths may be preventable (in the opinion of the special Departmental Committee) it would be somewhat optimistic to believe they are all going to be avoided forthwith. It is with the object of reducing the maternal death-rate that ante-natal work is being encouraged and is making such strides in Northampton. Roughly speaking, forty per cent. of the maternal deaths result from sepsis and sixty per cent. from accidents, etc., connected with pregnancy. It is probably with these latter (for reasons one need not mention here) that ante-natal work will shew the best results. As yet we are not sure the last word has been said as to how sepsis is brought about, and it certainly occurs at times where there has been no outside interference. There may be and probably is a considerable difference in the powers of resistance to infection, *i.e.*, in the natural or acquired immunity, of different women, and this may be one explanation of why the death-rate from puerperal sepsis is higher amongst the upper classes than amongst the poor, but it is probably not the only (even if it is the chief) explanation. The fact that large numbers of women (running into thousands) can be confined in certain maternity institutions with almost a negligible loss of life shews that a very big reduction in the maternal death-rate is possible.



*See Appendix III. (page 77) for the usual statistical tables in connection with the Medical Officer of Health's report.*

*Appendix I. (page 53) deals with the work of the Tuberculosis Department and Appendix II. (page 65) with the Maternity and Child Welfare Department.*



## APPENDIX I.

**REPORT OF THE CLINICAL TUBERCULOSIS  
OFFICER FOR THE YEAR 1930.**

TUBERCULOSIS DISPENSARY,  
MARCH, 1931.

*To the Medical Officer of Health and Chief Tuberculosis Officer.*

SIR,

I beg to submit herewith my report on the anti-tuberculosis scheme for the year 1930.

Your obedient Servant,

N. B. LAUGHTON.

During the year 130 cases were notified as suffering from tuberculosis. Of these, 109 were pulmonary and 21 non-pulmonary. The corresponding numbers notified in these two groups in the previous year were 119 and 17 (*i.e.*, a total of 136). The figures for 1930 show a decrease in the number of respiratory cases and an increase in the other forms. The last, however, were unusually low the previous year. Noti-  
fications

Table T1 (page 59) gives the classification of the new cases in more detail. It will be noted that tuberculosis of the bones, joints, and cervical glands account for the bulk of non-pulmonary lesions.

Table T8 (page 64) gives the age groups for new cases and deaths, and indicates how early adult life is specially victimised by the disease. Statistics for England and Wales show that the highest mortality amongst women tends of recent years to occur at a younger age than formerly.

The number of deaths, and the death-rate from tuberculosis per thousand of the population in 1930, are tabulated below. Those of the four previous years are given for the purpose of comparison. Deaths

YEAR.	RESPIRATORY.		OTHER FORMS.		TOTAL.	
	NO.	RATE.	NO.	RATE.	NO.	RATE.
1926 .....	90	0.96	14	0.15	104	1.11
1927 .....	101	1.08	19	0.20	120	1.28
1928 .....	86	0.91	14	0.15	100	1.06
1929 .....	69	0.73	8	0.09	77	0.82
1930 .....	68	0.72	10	0.11	78	0.83



It will be seen from this table that the rate for 1930 corresponds very closely to that of the previous year. The figure is a satisfactory one for a county borough.

In Table T5 (page 61) will be found the period elapsing between notification and death in those cases that died during the year. It will be noticed that 52 out of 68, *i.e.*, 76 per cent., of the pulmonary cases died within one year of notification. It is hardly necessary to comment on the incentive that such a figure should provide towards our seeking the disease when it is early enough to be overcome by appropriate treatment. At the same time, it has to be remembered that a patient with early tuberculosis is not always disposed to follow the best road to recovery. One cannot hail every early case as a brand snatched from the burning, for some, stubbornly opposing all the dictates of reason, allow the disease to smoulder when it might be smothered. During the past year, almost one-fourth of those notified with lung disease for whom residential treatment was considered advisable, could not be persuaded to leave home (*see* Table T7, page 63). Speaking generally, two factors are largely responsible for this attitude. In the first place, it is naturally difficult for a newly notified patient to view his life in an entirely different perspective, to realise which are the vital issues and which are the minor and subservient ones. Secondly, it is equally difficult to understand that in his efforts he must look well beyond the immediate future, and take advantage of all available benefits (for instance, the educational value of sanatorium life), as will enable his recovery to be as complete and *permanent* as possible.

#### The Infected Home

But the patient and his recovery represent only one aspect of the case. There is a tendency amongst the public to give less attention than is deserved to the wider issues involved. The house of the sputum-positive case must be looked upon as a breeding-ground of the disease, more or less dangerous according to the number of the occupants, their ages, habits, and conditions of living. In reviewing the notifications of 1930 it is found that, of the pulmonary cases which were definitely tuberculous, 56 per cent. give a clear history of home infection. The onset often occurs after a latent period of years. The infected child contact becomes the young tuberculous adult. Preventive work, to be most effective, should be directed against the focus of household contagion. It is obviously difficult, however, to maintain efficient supervision over a long period of even those contacts who have a bad family history and are most likely to develop active tuberculosis at a later date.

#### Housing and Tuber- culosis

One measure that is bound to play a leading role in the anti-tuberculosis campaign is good housing. An investigation made in October, 1930, showed that seventy tuberculous families were at that time in occupation of new Council houses. Speaking



from the standpoint of tuberculosis infection, the sympathetic consideration given to those people by the Housing Committee is bound to be productive of good. For the non-pulmonary case there is the stimulus of ample light and air and space, so essential to recovery. For the house where there is a sputum-positive case there is in addition the all important factor of dilution of the infection. Adequate dilution in an airy, well-lighted house may well be the determining factor in preventing the activation of tuberculosis in contacts. There is, also, the patient who is discharged from sanatorium or hospital, and returns, not to a dark house in a crowded area, but to one in which he can have effective bedroom isolation, and be able to carry out the principles of living which he has been taught, and which have become essential to his very existence.

Under the instructions issued by the Ministry of Health in 1924 (Circular 549) for the deletion of cases from the register, the names of twenty notified persons were removed in 1930, made up as follows:—

Revision of Register

- (a) Fourteen in which the diagnosis had not been established, and
- (b) Six in which the patient had attained a condition which might be regarded as a cure.

Particulars of cases thought to be suitable for deletion were submitted to the Medical Officer of Health, who obtained the assent of the practitioner notifying or at present in charge, where possible.

On 31st December, 1930, there were 554 cases on the Medical Officer of Health's register, 392 being pulmonary and 162 non-pulmonary.

At the end of 1930, ten men and four women were employed under the scheme for tuberculous patients. With only one or two exceptions they were able to continue at their work throughout the year.

Park Workers

Below is a summary of the work carried out at the Dispensary:—

Tuberculosis Dispensary

Attendances:—

Total number of attendances of patients, etc. ....	1,174
Number of patients, etc., attending:—	
Males .....	254
Females .....	210
	464

145 examinations of "contacts" were made, and of the 115 individuals examined five were subsequently notified. 153 examinations were made at the request of general practitioners for diagnosis, and of the 65 persons examined, 13 were subsequently notified. These figures are included in the above totals.

The average number of attendances per patient was 2.5.



In addition to examinations at the Dispensary, the Tuberculosis Officer made 216 visits to the homes of patients, either at the request, or with the permission, of general practitioners.

The visits made by the nurse from the Dispensary were :—  
Number of investigations after notification in the case of :—

Pulmonary Tuberculosis .....	99	
Other Forms of Tuberculosis .....	20	
Deaths from Tuberculosis .....	5	
		— 124
Re-visits, etc. ....	1,487	
<b>Total</b> .....		<b>1,611</b>

508 specimens of sputum, urine, etc., in connection with 392 cases or suspected cases, were examined at the bacteriological laboratory attached to the Dispensary ; 106 were found to be positive and 402 negative.

Welford  
Road  
Tuber-  
culosis  
Hospital

The following are the statistics with reference to patients treated at Welford Road Hospital :—

	MALES.	FEMALES.	TOTAL.
Remaining at end of 1929 .....	6	4	10
Admitted during 1930 .....	28	20	48
Discharged during 1930 .....	21	17	38
Died during 1930 .....	5	3	8
Remaining at end of 1930 .....	8	4	12

Of the 48 cases admitted, 36 were insured persons. 47 were admitted for isolation and treatment and one for observation.

Condition on discharge :—

Quiescent .....	12
Much Improved .....	10
Improved .....	10
<i>In Statu Quo</i> .....	5
Worse .....	1

The number of patients treated at Welford Road Hospital was practically the same as in 1929. The figures given above compare favourably with previous records. They are interesting in view of the reluctance to enter hospital of some patients who, for the time-being at least, are unsuited for sanatorium treatment.

Considering the discharges, it will be noted that 16, or 42 per cent., were transferred to Creaton Sanatorium. (The number sent in 1929 was 9). As regards the result of treatment at Welford Road Hospital, it is satisfactory to note that in 84 per cent. of those discharged the disease was quiescent or improved. The corresponding percentages for 1928 and 1929 were 58 and 69 respectively. Excluding 2 patients who remained in hospital for 3 days in the one case and 5 days in the other, the average duration of stay was 147 days, or approximately 5 months. The longest was 398 days. Reviewing the weight records, if

the two cases mentioned above be excluded from the list of discharges, it is found that the average gain per patient was  $10\frac{1}{2}$  pounds. The most gained was 33 pounds. Six lost weight, varying from 1 to 4 pounds.

The following data refer to patients treated at Creaton Sanatorium :—

	MALES.	FEMALES.	TOTAL.	Creaton Sanatorium
Remaining at end of 1929 .....	9	4	13	
Admitted during 1930 .....	23	15	38	
Discharged during 1930 .....	23	13	36	
Remaining at end of 1930 .....	9	6	15	
Condition on discharge :—				
Quiescent .....			15	
Improved .....			18	
<i>In Statu Quo</i> .....			2	
Declining .....			1	

The beds at Creaton Sanatorium were made good use of during the year. One patient was admitted to the new orthopædic ward opened in May, 1930. It will be seen that all but 3 of the patients (or 92 per cent.) were classified as improved or quiescent on discharge. This excellent record indicates what can be done in the way of treatment of tuberculosis in its earlier stages.

Below are given particulars of the cases treated at Manfield Orthopædic Hospital. These suffered from tuberculosis of the spine, hip, knee, and shoulder.

	MALES.	FEMALES.	TOTAL.	Manfield Orthopædic Hospital
Remaining at end of 1929 .....	7	5	12	
Admitted during 1930 .....	1	5	6	
Discharged during 1930 .....	3	1	4	
Died during 1930 .....	—	1	1	
Remaining at end of 1930 .....	5	8	13	

In the four patients discharged the disease had become quiescent. In three of these the knee-joint was affected, and the fourth suffered from a spinal lesion.

Cases treated at other institutions were as follow :—

	MALES.	FEMALES.	TOTAL.	Other Institutions
Remaining at end of 1929 .....	1	—	1	
Admitted during 1930 .....	1	—	1	
Discharged during 1930 .....	—	—	—	
Died during 1930 .....	1	—	1	
Remaining at end of 1930 .....	1	—	1	

In the treatment of these cases the following institutions were made use of :—

St. Anthony's Hospital, Cheam, Surrey ; and  
Brompton Hospital, London.



In addition, one went privately to the Royal National Hospital, Ventnor; two to the Royal National Sanatorium, Bournemouth; one to the East Anglian Sanatorium, Nayland; one to the Brompton Hospital, London; and two to sanatoria in Switzerland.

Public  
Health  
Act, 1925

There was no case of compulsory removal to hospital under Section 62 of this Act.

Public  
Health  
(Prevention  
of Tuberculosis)  
Regulations,  
1925

It was not necessary to take any action under these Regulations, which deal with tuberculous employees in the milk trade.

TABLE T1. NORTHAMPTON, 1930.

## TUBERCULOSIS. CLASSIFICATION OF NEW CASES.

CLASSIFICATION.	NOTIFIED CASES.			DEATHS OF CASES NOT NOTIFIED.		
	M.	F.	TOTAL.	M.	F.	TOTAL.
Pulmonary :—						
Lung and Pleura .....	58	49	107	3	4	7
Larynx .....	1	1	2	—	—	—
	59	50	109*	3	4	7*
Meninges and Brain .....	—	2	2	1	—	1
Peritoneum and Intestines ...	1	2	3	—	1	1
Bones and Joints .....	1	6	7	—	—	—
Cervical Glands .....	6	1	7	—	—	—
Other Organs .....	1	1	2	—	—	—
Totals .....	68	62	130	4	5	9

\*A total of 116 fresh instances of pulmonary tuberculosis.

TABLE T2. NORTHAMPTON, 1930.

## PULMONARY TUBERCULOSIS INVESTIGATIONS. DURATION OF ILLNESS.

PERIOD.	NOTIFIED CASES.	DEATHS OF CASES NOT NOTIFIED.	TOTAL.
Under 6 months .....	23	3	26
Over 6 months and under 1 year	20	1	21
Over 1 year and under 2 years ...	24	—	24
Over 2 years and under 3 years ...	16	—	16
Over 3 years and under 4 years ...	7	—	7
Over 4 years and under 5 years ...	3	—	3
Over 5 years .....	11	1	12
Unascertained .....	5	2	7
Totals .....	109	7	116



TABLE T3. NORTHAMPTON, 1930.

## PULMONARY TUBERCULOSIS INVESTIGATIONS. SEX AND STATE.

	MALES.	FEMALES.	TOTAL.
Single .....	35	25	60
Married .....	23	23	46
Widowed .....	3	4	7
Unascertained .....	1	2	3
Totals .....	62	54	116

TABLE T4. NORTHAMPTON, 1930.

PULMONARY TUBERCULOSIS INVESTIGATIONS. DEGREE OF HOME  
ISOLATION FOUND.

	MALES.	FEMALES.	TOTAL.
Number having separate Bedrooms	24	18	42
Number having separate Beds (only)	3	2	5
Number having no Isolation .....	28	24	52
Number in Institutions .....	5	8	13
Unascertained .....	2	2	4
Totals .....	62	54	116

TABLE T5. NORTHAMPTON, 1930.  
TUBERCULOSIS DEATHS. PERIOD ELAPSING BETWEEN NOTIFICATION  
AND DEATH.

PERIOD BETWEEN NOTIFICATION AND DEATH.	MALES.	FEMALES.	TOTAL.
<b>(1) PULMONARY TUBERCULOSIS :—</b>			
Not notified .....	3	4	7
One month .....	5	6	11
1—6 months .....	11	8	19
6—12 months .....	7	8	15
12—18 months .....	1	—	1
18—24 months .....	2	1	3
2—3 years .....	4	2	6
3—4 years .....	2	—	2
4—5 years .....	—	—	—
5 years and over .....	2	2	4
Totals .....	37	31	68
<b>(2) TUBERCULOSIS OTHER THAN PULMONARY :—</b>			
Not notified .....	1	1	2
One month .....	2	3	5
4—5 years .....	1	—	1
5 years and over .....	2	—	2
Totals .....	6	4	10



TABLE T6. NORTHAMPTON, 1930.

## PULMONARY TUBERCULOSIS. OCCUPATIONAL INCIDENCE AND MORTALITY.

OCCUPATION.	New Cases.	Deaths Registd.	OCCUPATION.	New Cases.	Deaths Registd.
Shoe Operatives :—					
(a) Clicker .....	3	2	Last Maker .....	1	—
(b) Laster .....	1	2	Leather Worker .....	3	3
(c) Finisher .....	10	3	Licensed Victualler .....	—	1
(d) Roughstuff and Pressman .....	2	1	Mental Attendant ...	1	—
(e) Warehouse and General .....	8	8	Metal Polisher .....	1	—
(f) Female Worker .....	9	5	Milk Roundsman ...	1	—
	33	21	Musician .....	1	1
Army Pensioner .....	—	1	Newsagent's Assistant .....	—	1
Assistant Secretary .....	1	—	Nurse .....	2	—
Baker .....	1	—	Packer .....	1	—
Barman .....	1	1	Panel Beater .....	1	—
Cardboard Box Maker .....	1	—	Pork Butcher .....	1	1
Carpenter .....	2	2	Porter .....	—	1
Charwoman .....	1	—	Postman .....	—	1
Clerk .....	7	4	Printer .....	1	—
Coat Maker .....	1	—	Religious Sister .....	1	1
Commercial Traveller .....	1	—	Schoolchild .....	2	1
Dispenser .....	1	—	School Teacher .....	—	1
Domestic Servant ...	2	—	Shop Assistant .....	2	1
Engineer .....	3	2	Student .....	1	—
Hotel Boots .....	1	1	Typewriter Mechanic .....	1	—
Housekeeper .....	1	1	Waitress .....	—	1
Housewife .....	18	11	No Occupation .....	5	6
Insurance Agent .....	1	—	Not Ascertained ...	4	—
Ironmonger's Assistant .....	2	1			
Labourer .....	8	3	Totals .....	116	68

TABLE T7. NORTHAMPTON, 1930.

PULMONARY TUBERCULOSIS.

DISPOSAL OF NOTIFIED CASES.

CLASSIFICATION.	NUMBER.	PER CENT.
Received Residential Treatment :—	67	61·5
At Creaton Sanatorium .....	19	
Welford Road Hospital .....	25	
Both Creaton Sanatorium and Welford Road Hospital .....	14	
Union Infirmary .....	6	
Royal National Sanatorium, Bournemouth	2	
Rushden House Sanatorium (prior to notification in Borough) .....	1	
Refused Residential Treatment :—	21	19·1
At Creaton Sanatorium .....	0	
Welford Road Hospital .....	3	
Any Residential Institution .....	18	
Too ill for removal .....	12	11·0
Not suitable for Residential Treatment .....	2	1·9
Residential Treatment not considered necessary	6	5·5
Not seen (at request of doctor or patient) .....	1	1·0
Totals .....	109	100·0



TABLE T8. NORTHAMPTON, 1930.

## TUBERCULOSIS. AGE GROUPS FOR NEW CASES AND DEATHS.

AGE PERIODS.	NEW CASES.				DEATHS.			
	PULMONARY.		NON-PULMONARY.		PULMONARY.		NON-PULMONARY.	
	M.	F.	M.	F.	M.	F.	M.	F.
0-1 years .....	—	—	—	—	—	—	—	—
1-5 .....	—	—	1	1	—	—	—	—
5-10 .....	1	—	3	1	—	—	1	1
10-15 .....	—	—	1	2	—	—	—	1
15-20 .....	13	6	2	3	3	3	—	—
20-25 .....	13	10	1	2	9	4	2	1
25-35 .....	10	16	—	1	11	6	—	—
35-45 .....	10	10	1	—	5	7	3	—
45-55 .....	4	8	1	2	4	6	—	—
55-65 .....	10	3	—	1	4	4	—	1
65 and upwards	1	1	—	—	1	1	—	—
Totals .....	62	54	10	13	37	31	6	4

*See also remarks of Medical Officer of Health on pages 46 and 47.*

## APPENDIX II.

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 REPORT OF THE ASSISTANT MEDICAL OFFICER FOR  
 MATERNITY AND CHILD WELFARE FOR THE YEAR 1930.
 

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*To the Medical Officer of Health.*

SIR,

I beg to submit herewith my report on the maternity and child welfare work in the Borough for the year 1930.

Your obedient Servant,

E. F. BEBBINGTON.

INFANT WELFARE CENTRE,  
 DYCHURCH LANE,  
 MARCH, 1931.

An additional health visitor was appointed in 1930 and she commenced duties early in October. The distances covered by the health visitors had become lengthened owing to extension of property in the Borough. The new appointment was made to enable the health visitors to continue to make as many visits as possible notwithstanding the greater area covered. General  
Arrangements

There is now one Assistant Medical Officer, five health visitors, and one clerk whose whole time is occupied with work connected with maternity and child welfare.

The number of infant deaths registered is three higher than in 1929, which was the lowest ever recorded for the Borough. The infant mortality-rate is 56·4. From Table M. & C.W.1, it will be seen that this is only 3·6 below that for England and Wales and 3·6 above that recorded for the Borough in 1929. Sixty-nine children died before reaching the age of one year. Amongst those were five illegitimates, four males and one female. Infant  
Mortality

The greatest number of infant deaths is attributed, as usual, to prematurity (*see* Table M. & C.W. 2). This figure shews an increase of four on the number for 1929.

In 1929 the health visitors visited forty-two live premature babies. Twenty-four (57·1 per cent.) of these died. The corresponding figures for 1930 are fifty-three, of which twenty-eight (52·8 per cent.) died, twenty-four as a direct result of prematurity. Of the remaining four, one died at three minutes as a result of inattention at birth, another at ten hours due to an accident (overlying), and the other two died at two days and one month respectively of congenital debility.



Of the sixty-nine babies who died, forty-three lived under four weeks; thirty-four of them under two weeks and nine over two and under four weeks. Of the thirty-four who died under two weeks, fifteen were boys and nineteen girls. Of these thirty-four also, twenty-two were premature (two were premature twins). Of the nine who died over two and under four weeks, seven were boys and two were girls. Of these nine also, three were premature and three illegitimate. Of the twenty-six who died between four weeks and one year, seventeen were boys and nine were girls. Three were premature, one was a twin, and one was illegitimate.

There is a slight increase in the number of babies who lived under four weeks.

Notification  
of Births

The birth-rate in Northampton for the year 1930 was 13·0. This is the lowest ever recorded, and lower than that for England and Wales, which was 16·3.

1,224 live births and forty stillbirths were registered. 1,314 live births and fifty-four stillbirths were notified, making a total of 1,368 (*see* Table M. & C.W. 3). Table M. & C.W. 4 shews sources of notification.

1,311 births were investigated by the health visitors; thirty-two of these were not notified. The remaining births either occurred in larger houses or the mothers, resident in the County, came into the Town for their confinements and later returned to their own residences. Amongst the births visited, fifteen resulted in twins, so that the number 1,311 represents 1,296 separate confinements. 504 live and fourteen stillborn babies were born of primiparæ.

Fifty-nine babies were born prematurely. Twenty-eight of these were first babies (twenty-five live and three stillborn), and thirty-one (twenty-eight live and three stillborn) were the children of multiparæ. This number, fifty-nine, includes three sets of twins.

Stillbirths

The number of stillbirths notified was fifty-four, six more than last year. Twenty-eight of these were investigated by the health visitors. Of the remainder, sixteen were County births, *i.e.*, born in the General Hospital or other institutions of parents residing in the County. Fifteen of the investigated stillbirths were first babies, who normally have a higher rate of mortality. The following table classifies the causes of stillbirth amongst first babies as far as can be ascertained.

PREMATURE BIRTH ..... 6

Causes of Stillbirth :—

(a) Prematurity .....	1
(b) Ante-partum Hæmorrhage .....	1
(c) Breech .....	1
(d) Kidney Disease .....	2
(e) Instrumental Delivery .....	1

FULL TERM INSTRUMENTAL LABOUR .....	7
Causes of Stillbirth :—	
(a) Difficult Labour .....	4
(b) Twin Birth .....	2
(c) Monstrosity (Illegitimate) .....	1
 FULL TERM NON-INSTRUMENTAL LABOUR .....	 2
Causes of Stillbirth :—	
(a) Breech .....	1
(b) Cord round Neck .....	1
 The health visitors also visited thirteen stillborn in multiparæ. The following were the causes as far as can be ascertained :—	
PREMATURE BIRTH .....	3
Causes of Stillbirth :—	
(a) Twin Birth .....	1
(b) Ante-partum Hæmorrhage .....	1
(c) Fall (Illegitimate) .....	1
 FULL TERM INSTRUMENTAL LABOUR .....	 3
Causes of Stillbirth :—	
(a) Breech .....	1
(b) Difficult Labour .....	2
 FULL TERM NON-INSTRUMENTAL LABOUR .....	 7
Causes of Stillbirth :—	
(a) Twin Birth .....	1
(b) Albuminuria .....	1
(c) Cause Unknown .....	5

NOTE.—Eleven of above multiparæ had previously had none stillborn ; the remaining two had had one stillbirth each.

Visits to Expectant Mothers :—		Home
First Visits .....	260	Visitation
Total Visits .....	670	
Visits to Infants under One Year of Age :—		
First Visits .....	1,241	
Total Visits .....	8,317	
Visits to Children from One to Five Years of Age :—		
Total Visits .....	9,797	

The health visitors paid 19,705 visits in 1930. This number includes all the visits enumerated above and also extra ones, viz. :—visits to houses where a stillbirth had occurred or a baby under one year had died, and visits to all notified cases of puerperal fever, puerperal pyrexia, ophthalmia neonatorum, pneumonia, etc. in women and children.

The number 19,705 is much larger than that of last year.



Sunshine  
Treatment

The ultra-violet ray treatment was continued throughout the year. Winter is the chief time for treatment of this description as children, contrary to adults, can make full use in summer of the natural sunlight which is preferable to artificial in their case. Seven children were on the books at the beginning of the year. All ceased treatment during the year having completed the prescribed course. Thirteen children commenced treatment and five of these thirteen ceased to attend before the period of treatment was completed. The remaining eight were still under treatment at the end of December. By this it will be seen that the course of treatment prescribed for each child is spread over many months. This gives the maximum benefit, provided always that the parents can be persuaded to bring the child for so long a period.

All the children, who suffered from anaemia, rickets, debility, tuberculous glands, etc., shewed marked improvement at the end of treatment. The greatest difference was noted in the mentality of the children; whining and irritability disappeared rapidly after the first few exposures.

The total attendances during 1930 numbered 228.

Manfield  
Orthopædic  
Hospital

Four beds are maintained, when occupied, at Manfield Hospital by the Maternity and Child Welfare Committee for non-tuberculous children under school age recommended by the Medical Officer of Health and the Assistant Medical Officer. The children admitted are suffering from bone diseases—chiefly rickets—or congenital malformations.

Each bed, when occupied, costs the Committee £2 12s. 6d. per week. The parents of the children are required, by a scale adopted in 1929, to pay in proportion to their income. This scale is identical with that adopted by the Education Committee for similar cases. When a recommended case has been brought before the Maternity and Child Welfare Committee, bills are issued and payments made by instalments at the Office in Dychurch Lane.

Five children were admitted to the hospital during the year. All these, and three from the previous year, were under treatment during 1930. Five were discharged, the average length of stay in hospital of all children discharged being 214 days. Four were suffering from defects due to rickets. Four had congenital malformations, viz. :—one, congenital malformation of the hip; one, congenital club feet; and two, spastic paralysis. All children discharged were required to attend an out-patient clinic for observation for a certain time after they returned home.

Welfare  
Centres

There is again an increase in the number of mothers and children attending the centres for consultations. Table M. & C.W. 5 has been altered this year in accordance with the request of the Ministry to keep separate, children up to the age of one year, and children between one and five. The records kept at



the centres do not allow of this distinction being made accurately this year as the classification adopted previously has been that of babies and toddlers. Next year however the classification will be more exact. The Table gives the number of attendances and consultations at the eight centres in the Town. The total average attendance in 1929 of mothers was 382, of babies and toddlers 430, and of consultations 331. In 1930 the corresponding figures were 376, 432, and 344. The total attendances at all the centres during the year were as follow :—

Babies .....	10,772
Toddlers .....	8,008
Average Attendances of Children per session at all Centres .....	54
Total Number of Children who attended for first time .....	(approx.) 552

The last figure (552) will be more accurate next year owing to revision of records and new cases being noted.

The ladies of the Northampton Maternity and Infant Welfare Voluntary Association continue to do their good work on the social side. They gained second place in the competition for the Lady Astor Challenge Shield.

Twenty-three midwives notified their intention to practise. Midwives  
The Queen's Institute of District Nursing employed seven of these at different times and two were attached to the Wellingborough Road Institution. Only one bona-fide midwife takes cases regularly. The Assistant Medical Officer, who is also Inspector of Midwives, paid fifty-four routine visits of inspection and five special visits to midwives. The notifications received from midwives are given in Table M. & C. W. 6.

The Queen Victoria Nurses attended 831 cases in 1930.

No new nursing homes were registered. Thirty visits of Maternity  
inspection were paid to existing nursing homes, of which there Homes  
are now eight altogether in the Town. Four of these are maternity homes alone. One only, St. Matthew's Nursing Home, is registered for maternity, medical, and surgical cases.

The Council provide and maintain one ante-natal clinic at Pre-natal  
the Central Building. A clinic was also provided until November Work  
25th, at the Queen's Institute of District Nursing, the Assistant Medical Officer conducting the sessions. It was found that the number of cases attending the Central Building clinic increased so much that the Queen's Institute clinic had to be discontinued in order to provide an extra session at the Central Building. The total number of attendances of expectant mothers at all



clinics reached the figure of 780. The table below shews the great increase in this work :—

1925 .....	177 attendances.
1926 .....	209 attendances.
1927 .....	261 attendances.
1928 .....	279 attendances.
1929 .....	585 attendances.
1930 .....	780 attendances.

The total number of new expectant mothers during 1930 was 298, as against 141 in 1929. The percentage of total notified births which this figure represents is 21·8. This figure should be about twenty-five per cent. as births notified at the General Hospital and nursing homes are included in the total notified births which normally belong to the county statistics. These being county cases are excluded from attending the Borough clinic. Thus it may be seen from the above figures that roughly one-quarter of the expectant mothers of the Town were seen during the year at the municipal clinic.

Doctors and midwives are encouraged to send their patients and in each case a report is sent to the doctor or midwife concerned.

Forty-eight ante-natal clinic sessions were held at the Central Building during the year. There were 674 attendances of patients. The corresponding figures for 1929 are forty-three and 454. There is thus an increase in these figures also.

Pre-natal sessions were also held at the Queen's Institute of District Nursing until November, as has been before stated. Twenty-two sessions were held and 106 attendances made.

Pregnant women were seen and advised on 228 occasions at the welfare centres.

#### Doctors' Bills

The Maternity and Child Welfare Committee undertakes the payment of doctors' and midwives' bills in cases where it has been necessary, under the rules of the Central Midwives Board, for a trained midwife to send for medical aid at the time of a confinement. These cases are interviewed by the Assistant Medical Officer and brought to the General Purposes Sub-Committee, which decides the amount, if any, to be recovered from patients. After the decision of the Committee, the patient is notified from the Central Building Office and payment is made there by weekly instalments.

#### Dental Treatment

As in previous years, children under school age and pregnant or nursing mothers may be treated by the School Dental Officer on the recommendation of the Assistant Medical Officer. Two evenings each week are set apart for this. Payment for treatment is made to the Dental Clinic direct or later by instalments at the Central Building or at the welfare centres.



The cost of material was approximately £34. Bills amounting to just over £50 were sent to twenty patients. Over £46 was collected on these accounts and on those outstanding from previous years. Over £17 has also been collected in small fees for which no bills were issued. Table M. & C. W. 7 shews the numbers dealt with and the forms of treatment.

Applications for free milk are considered each week by the Free Milk Milk Sub-Committee. Milk is granted to pregnant and nursing mothers and for children under one year of age, if the income of the family is below a certain scale. The income is ascertained from enquiries made of employers and the Employment Bureau. One pint of milk is allowed daily for one month, or two pints in the case of twins or of a mother who is six months' pregnant and has a baby under one year. Fresh application must be made and further enquiries instituted of employers, etc. before the end of each month, if the milk is still required. The utmost care is taken to prevent ineligible people from obtaining this assistance. All applicants are known personally to the Assistant Medical Officer and the health visitors. Public Assistance applicants now obtain milk directly from the Milk Sub-Committee on application in the usual way. 21,424 pints of "Pasteurised" milk were supplied under contract with local firms at a cost of about £216. 794 applications were considered by the Committee, of which 710, including 136 renewals, were granted. Eighty-four applications were refused.

"Cow and Gate" dried milk is sold at cost price at the Central Building Office. This milk is not allowed to women in receipt of free milk. When the baby is one year old the milk is discontinued. There is a decrease in the amount of "Cow and Gate" milk sold. 6,342 pounds, as against 9,310 pounds, were sold to 195 separate customers. The cost of this was £475, all of which was paid at time of purchase. Dried Milk

Twelve cases, including four from the County, occurred. All twelve were treated at the General Hospital; two died, one of whom was from the County. One of the deaths was due to pneumonia following heart disease and puerperal sepsis, and the other (a County case) to septicæmia. Puerperal Fever

There were five cases notified as suffering from puerperal pyrexia. One was removed to the General Hospital and one to the Public Assistance Institution. The former was a case from St. Saviour's Home, the latter an emergency confinement occurring in a woman passing through the Town. In this patient pyrexia was due to pyelitis. In the remainder, the cause of pyrexia was unknown. All made good recoveries. Puerperal Pyrexia



**Maternal  
Deaths**

Seven women died, two from puerperal sepsis and five from conditions associated with parturition. Of the latter, four died in the General Hospital and one in a private nursing home. The causes of death were as follow :—two died from ectopic gestation, two from eclampsia, and one from peritonitis resulting from septic abortion.

The Ministry of Health now requires each maternal death to be investigated and reported on in detail. For this purpose it is necessary for the Assistant Medical Officer to interview both the doctor and midwife in charge of the case and frequently the General Hospital Authorities in addition.

**Ophthalmia  
Neonatorum**

Twelve cases of ophthalmia were notified. Two were patients of doctors and ten of midwives. Two of these cases attended the General Hospital as out-patients, one was treated for two days as an in-patient, and the remainder were dealt with at home. Swabs were taken in all cases but three where no discharge was present at the time of visit. All were negative to Neisser's organism. Table M. & C.W. 8 shews details of these cases.

In nine cases the discharge commenced during the first week, and in three about the tenth day. In one case only was there a history of the mother having had a vaginal discharge. In one instance impairment of vision resulted, viz. :—slight corneal opacity in one eye.

**Diarrhœa  
and  
Enteritis**

Five babies under the age of two years died from diarrhœa and enteritis. The corresponding figure for 1929 was seven.

TABLE M. & C.W. 1. ENGLAND AND WALES AND NORTHAMPTON, 1921-1930.  
INFANT MORTALITY IN EACH YEAR OF THE DECENNIUM.

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
England and Wales .....	83	77	69	75	75	70	70	65	74	60
Northampton .....	65.9	52.2	57.2	52.1	66.6	55.0	60.9	53.5	52.8	56.4

TABLE M. & C.W. 2. NORTHAMPTON, 1926-1930.  
INFANT MORTALITY. CAUSES OF DEATH.

CAUSES OF DEATH.	1926	1927	1928	1929	1930
Atrophy, Debility, and Marasmus	7	8	5	8	7
Convulsions .....	11	4	3	3	2
Bronchitis and Pneumonia .....	10	7	13	12	15
Whooping Cough .....	4	8	—	1	5
Measles .....	—	—	2	—	—
Premature Birth .....	15	32	25	20	24
Diarrhoea, Enteritis, and Gastritis	8	4	1	7	5
All Other Causes .....	17	15	21	15	11
TOTAL DEATHS .....	72	78	70	66	69
TOTAL LIVE BIRTHS .....	1309	1281	1308	1249	1224
INFANT MORTALITY .....	55.0	60.9	53.5	52.8	56.4

TABLE M. & C.W. 3. NORTHAMPTON, 1930.  
LIVE BIRTHS AND STILLBIRTHS REGISTERED AND NOTIFIED.

	MALES.	FEMALES.	TOTAL.
Number of Live Births Registered .....	619	605	1224
Number of Stillbirths Registered .....	20	20	40
Total Number of Births Notified .....	684	684	1368
Number of Live Births Notified .....	656	658	1314
Number of Stillbirths Notified .....	28	26	54



TABLE M. &amp; C.W. 4. NORTHAMPTON, 1930.

## NOTIFICATION OF BIRTHS. SOURCES OF NOTIFICATION.

	NUMBER.	PER CENT.
Medical Practitioners .....	486*	35.5
Certified Midwives .....	805	58.9
Parents and Others .....	77	5.6
Totals	1368	100.0

\*Includes 98 also notified by Midwives.

TABLE M. &amp; C.W. 5. NORTHAMPTON, 1930

## MATERNITY AND INFANT WELFARE CENTRES. STATISTICS

CENTRE.	DAY OF MEETING (2.30 TO 4.30 P.M.).	AVERAGE ATTENDANCE PER WEEK.				Average Number consulting Doctor per Session.
		Mothers (incl. Expectant Mothers).	Babies.	Toddlers	Total Babies and Toddlers.	
Abington Avenue	Thursdays ...	71	44	30	74	50
Central Building	Wednesdays	48	35	23	58	47
Central Building	Thursdays ...	38	23	19	42	41
Doddridge Memorial .....	Tuesdays .....	40	27	22	49	39
Far Cotton .....	Fridays .....	36	22	20	42	40
Kingsthorpe .....	Tuesdays .....	38	24	22	46	41
St. Edmund's ...	Fridays .....	54	37	27	64	42
St. Sepulchre's ...	Wednesdays	51	34	23	57	44
	Totals	376	246	186	432	344

TABLE M. &amp; C.W. 6. NORTHAMPTON, 1930.

## MIDWIVES ACTS. NOTIFICATIONS RECEIVED FROM MIDWIVES

NATURE OF REPORT.	MIDWIVES NOTIFYING.	NO. OF REPORTS.	REMARKS.
Records of Sending for Medical Help ...	16	163	Mother's condition 124 Infant's condition 38 Mother and Infant 1
Notifications of Still- birth .....	5	5	Full Term ..... 4 Premature ..... 1
Notifications of Death	—	—	Mother ..... — Infant ..... —
Notifications of Artificial Feeding ...	3	8	Mother's condition 4 Infant's condition 2 Mother going to work or not wish- ing to feed her baby ..... 2
Notifications of Liability to be a Source of Infection .....	4	5	—
Notifications of Having Laid Out a Dead Body .....	1	1	Mother ..... — Old Gentleman ... 1
<b>Total .....</b>	<b>19</b>	<b>182</b>	—



TABLE M. & C.W. 7. NORTHAMPTON, 1930.  
SUMMARY OF DENTAL OPERATIONS.

NATURE OF OPERATION, ETC.	MOTHERS.	CHILDREN.	TOTALS.
Number seen .....	51	115	166
Number treated .....	41	108	149
Number of attendances .....	240	176	416
Number of teeth extracted .....	136	190	326
Number of administrations of local anæsthetic .....	44	110	154
Number of fillings .....	46	—	46
Number of linings .....	24	—	24
Number of teeth treated with nitrate of silver .....	9	299	308
Number of dressings .....	27	—	27
Number of scalings .....	7	—	7
Number of artificial plates .....	20	—	20
Number of plate repairs .....	11	—	11
Number of teeth on plates .....	230	—	230
Number of other operations .....	12	—	12
Number completed .....	27	78	105
Number partly completed, continued to 1931 .....	12	2	14

TABLE M. & C.W. 8 NORTHAMPTON, 1930.  
OPHTHALMIA NEONATORUM. ANALYSIS OF CASES NOTIFIED, WITH  
ULTIMATE RESULT.

CASES NOTIFIED.	TREATED.		ULTIMATE RESULT.			
	AT HOME.	IN HOSPITAL.	VISION UN- IMPAIRED.	VISION IMPAIRED.	TOTAL BLINDNESS.	DIED.
12	9	3*	11	1	—	—

\*One as an in-patient and two as out-patients at the General Hospital.

See also Section VII. of Medical Officer's Report (pages 49 to 51).

## APPENDIX III.

## STATISTICAL TABLES.

TABLE 1. NORTHAMPTON, 1921-1930.

NATURAL INCREASE OF POPULATION IN EACH YEAR OF THE DECENNium.

YEAR (MIDDLE)	POPULATION (TOTAL)	BIRTHS	DEATHS	NATURAL INCREASE	INCREASE PER 1,000
1921	92300	1881	964	917	9.9
1922	92950	1646	1046	600	6.4
1923	93230	1662	1086	576	6.2
1924	93590	1534	1036	498	5.3
1925	93970	1471	1116	355	3.8
1926	93740	1309	1064	245	2.6
1927	93260	1281	1124	157	1.7
1928	94270	1308	1060	248	2.6
1929	94180	1249	1093	156	1.7
1930	94180*	1224	1072	152	1.6

\* See footnote on page 7.

TABLE 2. ENGLAND AND WALES AND NORTHAMPTON, 1921-1930.

BIRTH-RATES IN EACH YEAR OF THE DECENNium.

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
England and Wales ...	22.4	20.6	19.7	18.8	18.3	17.8	16.7	16.7	16.3	16.3
Northampton .....	20.4	17.7	17.8	16.4	15.6	14.0	13.7	13.9	13.3	13.0

TABLE 3. ENGLAND AND WALES AND NORTHAMPTON, 1921-1930.

DEATH-RATES IN EACH YEAR OF THE DECENNium.

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
England and Wales ...	12.1	12.9	11.6	12.2	12.2	11.6	12.3	11.7	13.4	11.4
Northampton .....	10.4	11.3	11.6	11.1	11.9	11.4	12.0	11.3	11.6	11.4



TABLE 4. NORTHAMPTON, 1930. METEOROLOGICAL DATA.

MONTH.	RAINFALL.			TEMPERATURE.				DIRECTION OF WIND.				Quarters.	
	Total inches.	Greatest in 24 hours.		Mean.	Maximum.		Minimum.	No. of Nights at or below 32 deg.	S. W. Quadrant including W. Days.	S. E. Quadrant including S. Days.	N. E. Quadrant including E. Days.		N. W. Quadrant including N. Days.
		Depth.	Date.		Depth.	Date.							
January ...	2.63	0.36	10	42.68	55.5	19	29.0	22	3	7	2	3	First.
February	0.51	0.10	{ 14 25	37.65	48.2	27	29.5	{ 17 23 25	11	5	18	4	
March .....	1.62	0.43	15	42.75	61.0	27	25.0	20	7	2	8	8	
April .....	2.01	0.27	{ 3 4	47.71	64.0	25	32.0	22	1	5	10	9	Second.
May .....	2.72	0.84	{ 5 26	53.28	70.2	29	36.5	8	—	4	8	11	
June .....	1.38	0.75	18	62.12	80.0	30	44.0	8	—	1	15	4	
July .....	2.42	0.46	15	61.39	81.0	5	49.0	12	—	3	—	15	Third.
August ...	2.02	0.35	20	62.47	85.0	{ 28 29	48.0	4	—	6	—	4	
September	2.90	0.53	19	57.83	71.2	{ 2 5	47.0	{ 29 30	—	7	5	5	
October ...	0.98	0.19	22	52.04	65.0	16	35.5	27	—	3	3	12	Fourth.
November	2.74	0.60	28	44.56	57.5	9	24.0	17	4	5	4	9	
December	2.04	0.37	11	40.33	52.0	18	29.5	9	10	6	2	4	
Year 1930	23.97	0.84	May 5 & 26	50.40	85.0	Aug. 28 & 29	24.0	Nov. 17	36	148*	54	75	88

\* Includes 11 "calm" days (1 in March, 1 in April, 3 in August, 1 in September, 1 in November, and 4 in December).

TABLE 5. NORTHAMPTON, 1930.

## SUMMARY OF ROUTINE WORK CARRIED OUT BY THE SANITARY INSPECTORS.

	Number of Inspections, etc.	No. at which Nuisances, Defects, etc., were Found.
1.—Total Number of Inspections and Visits .....	17869	
2.—Number of Premises at which Nuisances were Found		1233
3.—Total Number of Houses Inspected .....	2253	1088
4.—Number of these Houses Repaired .....		684
5.—Number of these Houses Cleansed and Whitewashed		593
6.—Number of Houses Cleansed after Certificate of M.O.H. (Sec. 46, P.H.A. 1875) .....		5
7.—Number of First Visits made in consequence of Complaints by Residents .....	498	427
8.—Notices Served .....	614	
9.—Drains :—		
Tested by Smoke Test .....	29	21
Tested by Volatile Test .....	42	11
Tested by Water Test .....	1	1
Exposed under Sec. 41, P.H.A. 1875 .....	14	14
Drains reported choked .....		108
Drains reconstructed .....		86
Drains repaired .....		57
Bath, lavatory, or sink waste pipes dis- connected from drains .....		0
New pans fixed to closets .....		27
Indoor soil pipes abolished .....		1
Closets supplied with flushing apparatus .....		10
10.—Contraventions of Bye-laws :—		
Animals kept so as to be a nuisance .....		3
Animals kept in contravention of Bye-laws .....		2
Accumulations of manure, etc., at :—		
(a) Houses .....		9
(b) Other premises .....		13
Other contraventions .....		4
11.—Other Nuisances :—		
Overcrowding in houses .....		5
Yard pavings re-laid or repaired .....		121
Spoutings repaired or renewed .....		180
New slop sinks fixed .....		36
Inspections of courts and alleys .....	23	3
Houses supplied with town water .....		26
Chimney observations .....	29	5
Miscellaneous nuisances .....		117

*Continued on next page.*



TABLE 5.—*continued.*

	Number of Inspections, etc.	No. at which Nuisances, Defects, etc., were Found.
12.—Factories and Workshops :—		
Number of Factories Inspected .....	138	22
Number of Workshops Inspected .....	154	8
Number of Workplaces Inspected .....	135	14
Number of Outworkers' Premises Inspected .....	82	5
13.—Dairies, Cowsheds, and Milkshops :—		
Number of Inspections .....	395	6
Number of New Registrations .....	32	
14.—Bakehouses—Number of Inspections .....	216	35
15.—Slaughterhouses :—		
Number of Inspections while Slaughtering was in Progress .....	3646	33
Number of Other Inspections .....	236	10
16.—Other Premises where Food is Manufactured or Stored—Number of Inspections .....	1132	13
17.—Food and Drugs (Adulteration) Act—Number of Samples sent to Public Analyst .....	263	9
18.—Infectious Diseases—Visits to Infected Houses :—		
(a) First visits for investigation .....	621	
(b) Weekly visits to secure isolation .....	379	
(c) Visits to control disinfection .....	461	
Visits to Smallpox Contacts .....	23	
Rooms stripped under I.D.P. Act .....	446	
19.—Tuberculosis—Rooms stripped, etc. ....	100	
20.—Number of Visits for Inspection of :—		
(a) Schools .....	5	0
(b) Public Lavatories .....	166	1
(c) Van-dwellers .....	20	5
(d) Cinemas, etc. ....	10	1
21.—House-to-House Inspection :—		
Number of Houses Inspected .....	374	327
Houses Cleansed and Whitewashed .....		285
Defective Houses Repaired .....		272
22.—Houses Unfit for Human Habitation reported to M.O.H. under :—		
(a) Sec. 11, Housing Act, 1925, and Sec. 19, Housing Act, 1930 .....	23	23
(b) Sec. 3, Housing Act, 1925, and Sec 17, Housing Act, 1930 .....	5	5

TABLE 6. NORTHAMPTON, 1930.

## RECONSTRUCTION OF DRAINS.

SITUATION OF PREMISES.	NO. OF HOUSES.
Adnitt Road, 45a, 47 .....	2
Alliston Gardens, 28, 30, 32 .....	3
Ambush Street, 5 .....	1
Austin Street, 1a, 3, 5, 7 .....	4
Bailiff Street, 26 .....	1
Byron Street, 95, 97, 99, 101* .....	4
Charles Street, 64 .....	1
Clarke's Yard, 1, 2, 3, 4, 5, 6, 7, 8 .....	8
Gray Street, 38, 40 .....	2
Green Street, 114, 116 .....	2
Herbert Street, 34, 36, 38 .....	3
Ivy Road, 43, 45 .....	2
Kettering Road, 110, 112, 114, 116 .....	4
Kingswell Street, 18 & 20 (factory) .....	1
Kingswell Terrace, 20, 21, 22 .....	3
Knightley Road, 13, 15 .....	2
Leicester Street, 26, 28, 30 .....	3
Market Street, 7, 9 .....	2
Mayorhold, 25a, 26 .....	2
Newtown Road, 57 .....	1
Perry Street, 8, 9 .....	2
Portland Street, 4, 6, 8, 10 .....	4
St. George's Street, 24, 26, 28, 30 .....	4
Scarletwell Street, 3, 128, 130, 132 .....	4
Silver Street, 43, 49, 51 .....	3
Swan Street, "Midland Tavern" .....	1
Thomas Street, 3 .....	1
Victoria Street, 20 .....	1
Whitford's Yard, 1, 2, 3, 4, 5 .....	5
Windsor Terrace, 1, 2, 3, 4, 5, 7, 9, 11, 13, 15, and Yard .....	10
Total .....	86

\*No. 101 reconstructed from cellar to sewer only.



TABLE 7. NORTHAMPTON, 1930.

DRAIN EXAMINATION UNDER SECTION 41 OF THE PUBLIC HEALTH ACT, 1875.

SITUATION OF PREMISES.	RESULT OF EXAMINATION.	REMARKS.
Ambush Street, 5 .....	Defective .....	Partly reconstructed
Austin Street, 1a .....	Defective .....	Reconstructed
Ivy Road, 43 .....	Defective .....	Reconstructed
Leicester Street, 26 .....	Defective .....	Reconstructed
St. Mary's Street, 14, 16 .....	Defective .....	Reconstructed
St. Mary's Street, Court 4 ; 1, 2	Defective .....	Reconstructed
Victoria Street, 20 .....	Defective .....	Reconstructed
Whitford's Yard, 1, 2, 3, 4, 5	Defective .....	Partly reconstructed
Number of Drains Examined .....		14

TABLE 8. NORTHAMPTON, 1919-1930.

NUMBER OF RATS KNOWN TO HAVE BEEN DESTROYED BY THE OFFICIAL RAT-CATCHER IN EACH YEAR.

YEAR.	NUMBER OF TAILS.
1919 (three months) .....	163
1920 .....	3,214
1921 .....	2,994
1922 .....	3,237
1923 .....	3,337
1924 .....	3,624
1925 .....	2,976
1926 .....	2,155
1927 .....	2,434
1928 .....	2,814
1929 .....	3,331
1930 .....	3,268
Total .....	33,547

TABLE 9. NORTHAMPTON, 1930.

HOUSING ACTS, 1925-1930. HOUSES REPRESENTED DURING THE YEAR.  
SUBSEQUENT ACTION AND CONDITION AT THE END OF THE YEAR.

HOUSES.	DATE OF			REMARKS.
	Representations.	Closing Orders.	Demolition Orders.	
Bath Terrace, 1, 2, 3, and 4	10-9-30	—	—	All occupied
Gas Street, 36 and 38, and 3, Mill Lane	12-2-30	5-5-30	—	All empty
Manor Road, "Rose Cottage"	19-11-30	—	—	Occupied
Mayorhold, 12 and 13	19-11-30	—	—	Both occupied
Nelson Street, 22, 23, and 24	12-3-30	7-7-30	—	All occupied
St. James' Street, 2, 4, 6, and 8	10-9-30	—	—	All occupied
Scarletwell Street, 26, 28, 30, 32, and 34	10-9-30	—	—	All occupied
Scarletwell Street, Court 2; 4	16-7-30	28-7-30	—	Demolition commenced



TABLE 10. NORTHAMPTON, 1930.

HOUSING ACTS, 1909-1925. HOUSES REPRESENTED PREVIOUS TO 1930, BUT NOT FINALLY DEALT WITH BEFORE THIS YEAR BEGAN. ACTION TAKEN DURING 1930, AND CONDITION AT THE END OF THE YEAR.

HOUSES.	DATE OF			REMARKS.
	Representations.	Closing Orders.	Demolition Orders.	
Bearward Street, 46 and 48	9-12-25	8-3-26	7-10-29	Demolished
Bridge Street, Court 7 (Fox's Yard); 1, 2, 3, 4, 5, 6, 7, and 9	9-10-29	6-1-30	—	Absorbed into factory
Chapel Gardens, 6, 7, 8, 9, and 10	4-4-28	7-1-29	—	All empty
Crispin Street, 25, 27, 29, and 31	4-5-27	10-11-27	—	No. 27 occupied; remainder empty
Fetter Street, 29 and 31	14-11-28	28-1-29	7-10-29	Demolished
Gas Street, 18	14-4-26	6-12-26	4-3-29	Partially demolished
Leicester Street, 6, 8, and 10	16-11-27	7-5-28	2-12-29	Demolished
Regent Square, 1 and 2 (dwelling portions)	7-3-28	4-6-28	—	Both empty
Riding, 25, 26, 27, 28, and 32	20-9-22	4-12-22	—	No. 26 occupied; remainder used as stores (not altered)
Riding, 33, 34, and 36	20-9-22	1-1-23	—	No. 36 used as store (not altered); remainder occupied
St. Mary's Street, Court 3; 3 and 4	7-9-27	5-12-27	8-4-29	Demolished
Todd's Lane, 2, 4, 6, 8, 10, 12, 14, and 16	16-11-27	5-3-28	—	Demolished

TABLE 11. NORTHAMPTON, 1930.

## UNSOUND FOOD VOLUNTARILY SURRENDERED AND DESTROYED.

NATURE OF FOOD.	WEIGHT.			
	TONS.	CWTS.	QRS.	LBS.
Beef, home killed .....	24	8	1	6
Beef, imported .....	—	4	3	21
Mutton, home killed .....	1	4	1	25
Mutton, imported .....	—	—	1	8
Offal, home killed .....	1	12	0	14
Pork, home killed .....	6	3	1	9
Veal, home killed .....	—	5	2	15
Bacon .....	—	1	1	13
Fish .....	3	11	0	4
Fruit .....	—	2	0	0
Ham .....	—	—	—	8
Yeast .....	—	—	3	14
Total (676 surrenders) ...	37	14	1	25

Also 2,164 tins of food and 28 rabbits.

TABLE 12. NORTHAMPTON, 1930.

UNSOUND FOOD. STATEMENT OF CARCASSES OF MEAT CONDEMNED,  
SHEWING NUMBER AFFECTED WITH TUBERCULOSIS.

NATURE OF FOOD.	MEAT CONDEMNED.		MEAT FOUND TO BE TUBERCULOUS.	
	WHOLE CARCASSES.	PART CARCASSES.	WHOLE CARCASSES.	PART CARCASSES.
Beef .....	82	69	69	57
Mutton .....	73	2	—	—
Pork .....	115	106	47	101
Veal .....	5	3	2	—



TABLE 13. NORTHAMPTON, 1930.

## FOOD AND DRUGS. SAMPLES TAKEN FOR ANALYSIS

NATURE OF SAMPLE.	INFORMAL SAMPLES.		OFFICIAL SAMPLES.	
	TOTAL NUMBER.	NO. NOT GENUINE.	TOTAL NUMBER.	NO. NOT GENUINE.
Arrowroot .....	2	—	—	—
Baking Powder .....	1	—	—	—
Borax .....	2	—	—	—
Butter .....	—	—	12	—
Cocoa .....	4	—	2	—
Cream .....	9	—	—	—
Cream of Tartar .....	2	—	—	—
Dripping .....	—	—	2	—
Fruit (bottled) .....	1	—	—	—
Ground Almonds .....	5	—	—	—
Ground Ginger .....	2	1	—	—
Jam .....	—	—	5	—
Lard .....	—	—	6	—
Lime Juice .....	1	—	—	—
Liquorice Powder .....	2	—	—	—
Margarine .....	—	—	7	—
Milk .....	38	3	133	5
Milk (skim) .....	—	—	3	—
Pepper .....	2	—	—	—
Preserve (Strawberry) ...	—	—	1	—
Rice .....	6	—	—	—
Sausages .....	2	—	—	—
Sugar .....	2	—	—	—
Tea .....	6	—	—	—
Vinegar .....	1	—	4	—
Totals .....	88*	4	175*	5

\*A total of 263 samples, nine of which (3.4 per cent.) were found not to be genuine.

TABLE 14. NORTHAMPTON, 1930.  
ENTERICA, SCARLET FEVER, AND DIPHTHERIA.

Disease.	Notifica- tions.	Attack- rates per 1,000.	Deaths.	Death- rates.	Fatality.	Numbers removed to Hospital.	Removal rates per cent.
Enterica	13	0.14	3	0.03	23.1	8*	61.5
Scarlet Fever	219	2.33	—	—	—	141†	64.4
Diphtheria	286	3.04	8	0.09	2.8	211‡	73.8

Figures given in this Table refer to notifications received without reference to corrected diagnosis.

\* Six to the Borough Infectious Diseases Hospital and two to the General Hospital.

† Includes one removed to the General Hospital for operation for adenitis.

‡ Includes ten admitted to the General Hospital, five being transferred subsequently to the Borough Infectious Diseases Hospital.

TABLE 15. NORTHAMPTON, 1930.  
BOROUGH HOSPITAL, HARBOROUGH ROAD. CASES OF COMMUNICABLE  
DISEASE UNDER TREATMENT.

	Scarlet Fever.	Diph- theria.	Enter- ica.	Total.
Number remaining from 1929 .....	25	19	—	44
Number admitted during 1930 .....	142	207	6	355
Number discharged during 1930 .....	147	205	6	358
Number died during 1930 .....	3	5	—	8
Number remaining at end of 1930 .....	17	16	—	33

TABLE 16. NORTHAMPTON, 1930.  
NUMBER OF ARTICLES DISINFECTED BY STEAM MONTH BY MONTH AT THE  
DISINFECTING STATION, ST. ANDREW'S ROAD.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1006	993	809	881	767	490	565	434	446	475	541	750	8157



TABLE 17. NORTHAMPTON, 1930.  
 CLINICAL BACTERIOLOGY. NUMBER OF SUSPECTED CASES IN WHICH EXAMINATION WAS  
 MADE AND THE NUMBER AND NATURE OF THE REPORTS RECEIVED IN CONNECTION WITH THESE.\*

DIPHTHERIA— Throat and Nose Secretions.	TYPHOID AND PARATYPHOID FEVERS— Dreyer's Tests, etc.			TUBERCULOSIS— Sputum, Urine, etc.			OTHER CONDITIONS.			TOTALS.			
	No. of Suspected Cases	Reports received.		No. of Suspected Cases	Reports received.		No. of Suspected Cases	Reports received.		No. of Suspected Cases	Reports received.		
		Positive	Negative		Positive	Negative	Total	Positive	Negative	Total	Positive	Negative	Total
782	608	1467	2075	392	106	402	508	1	—	1	727	1891	2618
	28	13	21	34				1	1	1	1203	727	1891

\* The above Table does not take into account the reports made in connection with the venereal diseases scheme.

TABLE A.  
**COUNTY BOROUGH OF NORTHAMPTON.**  
**Vital Statistics during 1930 and Previous Years.**

Year.	Population estimated to Middle of each Year. (Total)	Births.			Total Deaths registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un-corrected Number.	Nett.		Number.	Rate.	Non-residents registered in the District.	Resi-dents not registered in the District.	Under 1 Year of Age		At all Ages.	
			Number.	Rate.					Number.	Rate per 1000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1920	92488	2318	2248	24.2	1137	12.3	130	40	166	73.8	1047	11.3
1921	92300	1924	1881	20.4	1022	11.1	123	65	124	65.9	964	10.4
1922	92950	1697	1646	17.7	1108	11.9	116	54	86	52.2	1046	11.3
1923	93230	1723	1662	17.8	1177	12.6	140	49	95	57.2	1086	11.6
1924	93590	1591	1534	16.4	1143	12.2	149	42	80	52.1	1036	11.1
1925	93970	1531	1471	15.6	1229	13.1	167	54	98	66.6	1116	11.9
1926	93740	1393	1309	14.0	1163	12.4	174	75	72	55.0	1064	11.4
1927	93260	1362	1281	13.7	1248	13.4	170	46	78	60.9	1124	12.0
1928	94270	1366	1308	13.9	1204	12.8	207	63	70	53.5	1060	11.3
1929	94180	1332	1249	13.3	1269	13.5	226	50	66	52.8	1093	11.6
1930	94180*	1334	1224	13.0	1217	12.9	193	48	69	56.4	1072	11.4

This Table is arranged to shew the gross births and deaths in the district and the births and deaths properly belonging to it with the corresponding rates.

Column 6 includes the whole of the deaths registered during the year as having actually occurred within Northampton and excludes any deaths of soldiers and sailors. Such deaths were as follow :—

YEAR.	NO. OF DEATHS.
1920 .....	1
1921 .....	0
1922 .....	0
1923 .....	1
1924 .....	0
1925 .....	0
1926 .....	2
1927 .....	0
1928 .....	0
1929 .....	0
1930 .....	0

\* See footnote on page 7.



No.	Name	Rank	Company	Regiment	Notes
1	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
2	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
3	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
4	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
5	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
6	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
7	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
8	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
9	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
10	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
11	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
12	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
13	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
14	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
15	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
16	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
17	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
18	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
19	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]
20	[Faint Name]	[Faint Rank]	[Faint Company]	[Faint Regiment]	[Faint Notes]

[Faint text block, possibly a list or summary of entries from the table above]

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[Faint Entry 3]	[Faint Entry 4]
[Faint Entry 5]	[Faint Entry 6]
[Faint Entry 7]	[Faint Entry 8]
[Faint Entry 9]	[Faint Entry 10]
[Faint Entry 11]	[Faint Entry 12]
[Faint Entry 13]	[Faint Entry 14]
[Faint Entry 15]	[Faint Entry 16]
[Faint Entry 17]	[Faint Entry 18]
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[Faint Entry 25]	[Faint Entry 26]
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TABLE B.  
COUNTY BOROUGH OF NORTHAMPTON.  
Cases of Notifiable Diseases during the Year 1930.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.														CASES NOTIFIED IN EACH WARD.											Cases Admitted to Borough Hospitals.	Total Deaths ( <i>see</i> Table C.).								
	ALL AGES.	AGES (IN YEARS).														Abington	Castle	Delapre	Kingsley	Kingshorpe	North	St. Crispin's	St. Edmund's	St. James'	St. Lawrence's			St. Michael's	South						
		0-	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-	65-																						
Acute Poliomyelitis .....	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
*Chickenpox .....	171	6	11	8	5	18	104	14	3	2	—	—	—	—	—	17	18	2	22	5	8	26	36	3	8	21	5	—	—	—	—	—	—	—	—
Diphtheria .....	286	3	7	10	16	12	147	62	15	10	3	1	—	—	—	25	20	13	9	49	28	29	21	19	31	18	24	206	—	—	—	—	—	—	8
Encephalitis Lethargica .....	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Enterica .....	13	—	—	—	—	—	2	—	3	6	2	—	—	—	—	—	1	1	2	1	—	1	—	2	1	—	4	6	—	—	—	—	—	3	
Erysipelas .....	52	—	—	—	—	—	2	2	1	10	8	19	10	—	—	4	4	4	1	4	6	4	2	8	4	8	3	—	—	—	—	—	—	—	1
Malaria (Contracted Abroad) ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ophthalmia Neonatorum .....	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	2	3	—	1	—	2	—	1	—	—	—	—	—	—	—	
Pneumonia .....	165	14	15	6	6	6	23	2	7	19	26	25	16	—	—	8	24	9	20	23	19	11	11	9	9	13	9	—	—	—	—	—	—	—	62†
Puerperal Fever .....	12	—	—	—	—	—	—	—	2	9	1	—	—	—	—	—	—	1	2	3	—	—	1	1	—	—	4	—	—	—	—	—	—	—	2
Puerperal Pyrexia .....	5	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	1	—	2	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—
Scarlet Fever .....	219	—	6	5	10	17	91	43	16	26	3	2	—	—	—	19	14	18	38	31	18	12	15	12	11	21	10	140	—	—	—	—	—	—	—
Tuberculosis:—																																			
Respiratory .....	109	—	—	—	—	—	1	—	18	50	18	21	1	—	—	4	12	4	14	14	14	4	4	13	9	9	8	68‡	—	—	—	—	—	—	68
Other Forms .....	21	—	—	—	1	1	3	3	5	4	1	3	—	—	—	2	3	1	1	3	1	3	—	4	3	—	—	—	—	—	—	—	—	7§	10
Totals .....	1068	35	39	29	38	54	373	127	70	142	63	71	27	—	—	79	101	54	109	137	97	91	92	71	78	91	68	427	—	—	—	—	—	158	

\*Notification ceased on 28th February, 1930.

†Six of these were from influenzal pneumonia.

‡Thirty-seven to Welford Road Hospital and thirty-one to Creaton Sanatorium.

§Five to Manfield Orthopaedic Hospital, one to Creaton Sanatorium, and one to Welford Road Hospital.

The above figures take no account of corrections in diagnosis. (*See* Section VI. of this Report for further information).

- INSTITUTIONS:—(1) Harborough Road Infectious Diseases Hospital (85 beds, allowing 144 sq. ft. per bed);  
(2) Smallpox Hospital, near Hardingstone (48 beds, allowing 144 sq. ft. per bed);  
(3) Welford Road Tuberculosis Hospital (28 beds);  
(4) Creaton Sanatorium, Northampton (15 beds reserved for Northampton County Borough);  
(5) Manfield Orthopaedic Hospital, Northampton (20 beds available for surgical tuberculosis cases).





TABLE C.

## COUNTY BOROUGH OF NORTHAMPTON.

Causes of Death at Different Periods of Life during the Year 1930.

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES (IN YEARS) OF " RESIDENTS " WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.											Total Deaths whether of Residents or Non-Residents in Institutions in the District.	
		ALL AGES.			0-	1-	2-	5-	15-	25-	45-	65-		75-
		Total	M.	F.										
ALL CAUSES	Certified .....	1070	537	533	69	11	12	26	42	119	272	254	265	404
	Uncertified .....	2	—	2	—	—	—	—	—	—	—	—	2	—
1.	Enteric Fever .....	3	2	1	—	—	—	—	2	1	—	—	—	1
2.	Smallpox .....	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	Measles .....	2	—	2	—	1	1	—	—	—	—	—	—	1
4.	Scarlet Fever .....	—	—	—	—	—	—	—	—	—	—	—	—	1
5.	Whooping Cough .....	8	5	3	5	—	2	1	—	—	—	—	—	1
6.	Diphtheria .....	8	5	3	—	—	3	5	—	—	—	—	—	5
*7.	Influenza .....	7	1	6	—	—	—	—	—	1	4	2	—	—
8.	Encephalitis Lethargica .....	3	1	2	—	—	—	—	1	1	1	—	—	2
9.	Meningococcal Meningitis .....	1	1	—	—	—	—	—	—	—	—	—	1	1
10.	Tuberculosis of Respiratory System .....	68	37	31	—	—	—	—	19	29	18	2	—	12
*11.	Other Tuberculous Diseases .....	10	6	4	—	—	—	3	3	3	1	—	—	10
12.	Cancer, Malignant Disease .....	167	84	83	—	—	—	—	1	12	78	64	12	47
13.	Rheumatic Fever .....	8	2	6	—	—	—	3	1	3	1	—	—	5
14.	Diabetes .....	17	8	9	—	—	—	1	2	2	4	4	4	8
15.	Cerebral Hæmorrhage, etc. ....	78	41	37	—	—	—	—	—	3	25	24	26	14
16.	Heart Disease .....	220	90	130	—	—	—	—	4	8	58	74	76	39
17.	Arterio-sclerosis .....	23	16	7	—	—	—	—	—	1	4	7	11	11
18.	Bronchitis .....	65	27	38	4	—	—	—	1	1	7	17	35	17
*19.	Pneumonia (all forms)													
	(see also 7 (a) below)	56	31	25	11	6	5	2	3	12	7	7	3	25
20.	Other Respiratory Diseases .....	12	8	4	—	—	—	2	—	1	1	5	3	3
21.	Ulcer of Stomach or Duodenum .....	6	6	—	—	—	—	—	—	2	2	1	1	9
22.	Diarrhœa, etc. ....	5	4	1	5	—	—	—	—	—	—	—	—	5
23.	Appendicitis .....	3	1	2	—	—	—	—	—	—	2	1	—	9
24.	Cirrhosis of Liver .....	3	3	—	—	—	—	—	—	—	1	2	—	1
25.	Acute and Chronic Nephritis .....	33	20	13	—	—	—	—	2	4	10	11	6	11
26.	Puerperal Sepsis .....	2	—	2	—	—	—	—	—	2	—	—	—	5
27.	Other Accidents and Diseases of Pregnancy and Parturition ...	5	—	5	—	—	—	—	—	5	—	—	—	7
28.	Congenital Debility and Malformation, Premature Birth .....	34	14	20	34	—	—	—	—	—	—	—	—	11
29.	Suicide .....	21	15	6	—	—	—	—	—	10	9	1	1	2
30.	Other Deaths from Violence .....	30	21	9	1	1	1	7	3	4	7	2	4	38
*31.	Other Defined Diseases .....	174	88	86	9	3	—	2	—	14	32	30	84	103
32.	Causes Ill-defined or Unknown ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals .....		1072	537	535	69	11	12	26	42	119	272	254	267	404
*Sub-entries included in above figures.	7 (a) Influenzal Pneumonia	6	1	5	—	—	—	—	—	1	3	2	—	—
	11 (a) Tuberculous Meningitis .....	4	2	2	—	—	—	3	—	1	—	—	—	5
	19 (a) Broncho-pneumonia...	27	16	11	9	6	2	1	2	3	1	3	—	16
	31 (a) Old Age .....	49	17	32	—	—	—	—	—	—	—	4	45	1
	(b) Meningitis .....	1	1	—	—	—	—	1	—	—	—	—	—	4
	(c) Syphilis .....	4	2	2	1	—	—	—	—	2	—	1	—	4
	(d) Dysentery .....	1	1	—	—	—	—	—	—	—	1	—	—	—
(e) Erysipelas .....	1	1	—	—	—	—	—	—	—	1	—	—	1	
(f) Malaria .....	1	—	1	—	—	—	—	—	—	1	—	—	—	

## NETT DEATHS REGISTERED.

	M.	F.	TOTALS.	DEATH-RATES.
First Quarter .....	155	151	306	... 13-0
Second Quarter .....	124	128	252	... 10-7
Third Quarter .....	132	107	239	... 10-2
Fourth Quarter .....	126	149	275	... 11-7
Totals (53 weeks) .....	537	535	1072	... 11-4





TABLE D.  
 COUNTY BOROUGH OF NORTHAMPTON.  
 INFANT MORTALITY DURING THE YEAR 1930.

Nett Deaths from stated Causes at various Ages under One Year.

CAUSES OF DEATH.		Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 4 weeks	4 weeks and under 3 months	3 months and under 6 months	6 months and under 9 months	9 months and under 12 months	Total Deaths under 1 year
ALL CAUSES	Certified ... .. Uncertified ... ..	27 ...	7 ...	2 ...	7 ...	43 ...	10 ...	5 ...	3 ...	8 ...	69 ...
1.	Smallpox ... ..	...	...	...	...	...	...	...	...	...	...
2.	Chickenpox ... ..	...	...	...	...	...	...	...	...	...	...
3.	Measles ... ..	...	...	...	...	...	...	...	...	...	...
4.	Scarlet Fever ... ..	...	...	...	...	...	...	...	...	...	...
5.	Whooping Cough ... ..	...	...	...	...	...	...	...	2	3	5
6.	Diphtheria ... ..	...	...	...	...	...	...	...	...	...	...
7.	Erysipelas ... ..	...	...	...	...	...	...	...	...	...	...
8.	Tuberculous Meningitis ... ..	...	...	...	...	...	...	...	...	...	...
9.	Abdominal Tuberculosis ... ..	...	...	...	...	...	...	...	...	...	...
10.	Other Tuberculous Diseases ... ..	...	...	...	...	...	...	...	...	...	...
11.	Meningitis (not Tuberculous) ... ..	...	...	...	...	...	...	...	...	...	...
12.	Convulsions ... ..	1	...	...	...	1	1	...	...	...	2
13.	Laryngitis ... ..	...	...	...	1	2	2	...	...	...	4
14.	Bronchitis ... ..	1	...	...	1	2	...	...	...	...	4
15.	Pneumonia (all forms) ... ..	1	...	1	1	3	...	4	...	4	11
16.	Diarrhoea ... ..	...	...	...	...	...	...	1	...	...	1
17.	Enteritis ... ..	...	...	...	...	...	3	...	...	1	4
18.	Gastritis ... ..	...	...	...	...	...	...	...	...	...	...
19.	Syphilis ... ..	...	1	...	...	1	...	...	...	...	1
20.	Rickets ... ..	...	...	...	...	...	...	...	...	...	...
21.	Suffocation, overlaying ... ..	1	...	...	...	1	...	...	...	...	1
22.	Injury at Birth ... ..	...	...	...	...	...	...	...	...	...	...
23.	Atelectasis ... ..	2	...	...	...	2	...	...	...	...	2
24.	Congenital Malformations ... ..	2	1	...	...	3	...	...	...	...	3
25.	Premature Birth ... ..	15	4	1	2	22	2	...	...	...	24
26.	Atrophy, Debility, and Marasmus ... ..	3	1	...	1	5	2	...	...	...	7
27.	Other Causes ... ..	1	...	...	2	3	...	...	1	...	4
Totals ... ..		27	7	2	7	43	10	5	3	8	69

	Live Births Registered.			...	Nett Deaths Registered.			...	Infant Death-rates.		
	M.	F.	Total.		M.	F.	Total.		M.	F.	Total.
Legitimate ... ..	599	583	1182	...	35	29	64	...	58.4	49.7	54.1
Illegitimate ... ..	20	22	42	...	4	1	5	...	200.0	45.4	119.0
Totals ... ..	619	605	1224	...	39	30	69	...	63.0	49.6	56.4



TABLE 1  
 COUNTY BOROUGHT TO  
 GREAT BRITAIN  
 THE HOUSE OF COMMONS

Year	Population	Area	Value	Notes
1801	1000	100	100	
1811	1200	120	120	
1821	1500	150	150	
1831	2000	200	200	
1841	2500	250	250	
1851	3000	300	300	
1861	3500	350	350	
1871	4000	400	400	
1881	4500	450	450	
1891	5000	500	500	
1901	5500	550	550	
1911	6000	600	600	
1921	6500	650	650	
1931	7000	700	700	
1941	7500	750	750	
1951	8000	800	800	
1961	8500	850	850	
1971	9000	900	900	
1981	9500	950	950	
1991	10000	1000	1000	
2001	10500	1050	1050	
2011	11000	1100	1100	
2021	11500	1150	1150	

TABLE E. NORTHAMPTON, 1930.

REPORT ON THE

Administration of the FACTORY & WORKSHOP ACT, 1901, in connection with

Factories, Workshops, Workplaces, and Homework.

1.—INSPECTION.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
FACTORIES (Including Factory Laundries and Bakehouses)	138	22	...
WORKSHOPS (Including Workshop Laundries and Bakehouses)	154	8	...
WORKPLACES (Other than Outworkers' Premises)	135	14	...
OUTWORKERS' PREMISES	82	5	...
Totals	509	49	...

2.—DEFECTS FOUND.

Particulars. (1)	Number of Defects.			Number of Prosecutions. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of Cleanliness	7	7	...	...
Want of Ventilation	1	1	...	...
Overcrowding	...	...	...	...
Want of Drainage of Floors	...	...	...	...
Other Nuisances	5	5	...	...
Sanitary Accommodation insufficient	1	1	...	...
Sanitary Accommodation unsuitable or defective (not separate for sexes)	...	...	...	...
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)	...	...	...	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	35	35	...	...
Other Offences (Excluding offences relating to outwork which are included in Part 3 of this Report)	...	...	...	...
Totals	49	49	...	...

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

3.—HOMEWORK.

NATURE OF WORK. (1)	OUTWORKERS' LISTS, SECTION 107.							OUTWORK IN UNWHOLE-SOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.				
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending lists. (8)	Prosecutions.		Instances. (11)	Notices served. (12)	Prosecutions. (13)	Instances. (14)	Orders made (S. 110). (15)	Prosecutions (Sections 109, 110). (16)
	Sending twice in a year.			Sending once in a year.				Failing to keep or permit inspection of lists. (9)	Failing to send lists. (10)						
	Lists. (2)	Con-tractors. (3)	Work-men. (4)	Lists. (5)	Con-tractors. (6)	Work-men. (7)									
WEARING APPAREL :— (1) Making, etc. ....	4	4	9	5	1	16	...	...	...	5	5	...	...	...	...

There are no Outworkers in any of the other trades usually shown in the above table.  
Figures given in Cols. 11 and 12 refer to premises requiring cleansing and whitewashing.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the year. (1)	Number. (2)
Number of Workshops (including Bakehouses)	219
Number of Outworkers' Premises on Register	79
TOTAL Number of Workshops on Register	298

5.—OTHER MATTERS.

Class. (1)	Number. (2)
MATTERS NOTIFIED TO H.M. INSPECTOR OF FACTORIES :—	
Failure to affix abstract of Factory and Workshop Act (s. 133)	...
Action taken in matters referred by H. M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	5
Notified by H.M. Inspector	6
Reports (of action taken) sent to H.M. Inspector	...
Other	...
Underground Bakehouses (s. 101) in use at the end of the year	1





