

[Report 1916] / Medical Officer of Health, Southampton County Borough.

Contributors

Southampton (England). County Borough Council.

Publication/Creation

1916

Persistent URL

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

License and attribution

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

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

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



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

LIBRARY.
No. 28088.

County Borough of Southampton.



Annual Report

ON THE

Health of the County Borough
of Southampton

AND THE

Port of Southampton

FOR THE YEAR 1916,

BY

R. E. LAUDER, M.D., F.R.C.S. Ed., D.P.H.

*Medical Officer of Health for the County Borough and Port of
Southampton.*

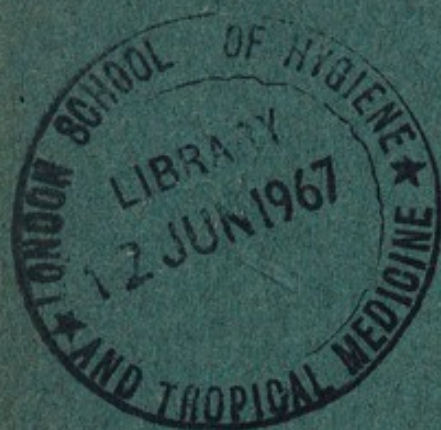
*Medical Superintendent of the Borough and Port Fever
Hospitals.*

SOUTHAMPTON :

The "Hampshire Advertiser" Company, Limited, 45, Above Bar.

MCMXVII.

65207



County Borough of Southampton,



Annual Report

ON THE

Health of the County Borough
of Southampton

AND THE

Port of Southampton

FOR THE YEAR 1916,

BY

R. E. LAUDER, M.D., F.R.C.S. Ed., D.P.H.


*Medical Officer of Health for the County Borough and Port of
Southampton.*

*Medical Superintendent of the Borough and Port Fever
Hospitals.*

SOUTHAMPTON :

The "Hampshire Advertiser" Company, Limited, 45, Above Bar.

MCMXVII.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30117951>

ANNUAL REPORT OF MEDICAL OFFICER OF HEALTH.

TO THE MAYOR, ALDERMEN, AND COUNCILLORS.

MR. MAYOR AND GENTLEMEN,

I have the honour to submit for your information, in accordance with the order of the Local Government Board, my Annual Report upon the condition of the public health, and a record of the administrative work carried out by the Health Department for the year 1916, together with the vital statistics of the Borough. A summary of the work done and action taken under the Factory and Workshops Act, 1907, the Midwives' Act, 1902, and the Housing, Town Planning, etc., Act, 1909, is also included in the Report.

Summaries are also included in the Report of the general public health work carried out in the Borough, and the action taken in respect of infectious disease and the measures adopted for the prevention and control of Tuberculosis.

The health of the Borough was satisfactory during the year, the death-rate being lower than in the previous year and a considerable decrease occurred in the number of cases of infectious diseases recorded.

A large amount of work was carried out during the year for the Military Authorities, chiefly in connection with the treatment of cases of infectious disease in the Isolation Hospital from neighbouring camps and of cases landed in the Port.

The Annual Report on the health of the Port of Southampton is appended to the Borough Report this year. This report is much abbreviated, as it is not possible to publish any detailed information owing to the Port being used for military purposes.

I am, Mr. Mayor and Gentlemen,

Your obedient Servant

R. E. LAUDER,

Medical Officer of Health.

REPORT.

STATISTICAL SUMMARY FOR THE COUNTY BOROUGH OF SOUTHAMPTON.

Acreage	4,604
„ (including tidal water and foreshore) ...	5,817
Civil Population (estimated 1st July, 1916) ...	116,391
Number of Persons per acre	25.3
Number of Inhabited Dwelling Houses (Census, 1911)	20,275
Rateable Value (October, 1916)	£658,760
Births	2,770
Birth Rate	21.95
Deaths	1,677
Death Rate	14.46
„ corrected for age and sex distribution	13.84
„ from Zymotic Diseases... ..	0.84
Average Death Rate (10 years, 1906—1915) ...	13.73

POPULATION.

The difficulties that always exist of obtaining a reliable estimate of the population at the end of the intercensal period are now much increased by the changes brought about by the War, especially in regard to the male population between the ages of 18 and 40.

The necessity of arriving at a fairly accurate estimate of the civil population is of much importance, as upon this population are based all the various rates of vital statistics which form the index of the health of the District.

Further, the question of using a different population for the calculation of the birth-rate has also to be considered, as the births registered are not only those of the children of civilians, and a birth-rate calculated on the estimate of the civil population would not be reliable.

The following estimates of the population of the County Borough of Southampton for the year 1916 have been adopted by the Registrar-General for the calculation of the death-rate and birth-rate:—

For the death-rate	..	...	116,391
„ birth-rate	..	...	126,635

The former is an estimate of the civilian population: the latter of the total population based on the assumption that the ratio between the total and the civilian population is the same in the Borough as in England and Wales as a whole. With a view to approximation to the population amongst which the births have occurred, the total population of England and Wales for this purpose has been calculated by adding to the published estimate for the year 1914 the natural increase up to the middle of 1916.

At the present time there are very few houses vacant at a low rental procurable in the Borough. An enumeration is made by the Health Department at the end of each year of the unoccupied dwelling-houses in the Borough. The total number returned as unoccupied on the 28th December amounted to 140, only 20 of which were under a rental of £26 a year.

The total number of houses enumerated as unoccupied at the Census in 1911 was 836.

METEOROLOGY.

The weather during the year 1916 was generally unsettled and cool.

January was very mild, the mean temperature being six degrees higher than in March. February and March were cold and stormy, with much rain and snow. April was fine, with an unsettled and snowy end. May was fine and dry. June cool and unsettled. July was dull at the beginning, with fine and warm ending. August was fine and warm, with unsettled weather at the end. September was fine and dry. November and December, wet, cold, and unsettled.

The mean temperature for the year was 50.6 degrees, the average being 51.

The rainfall was 35.4 inches, the average being 34 inches.

The sunshine recorded amounted to 1,562 hours, compared with an average for the past ten years of 1,641 hours.

In the annual summary for the year 1916 issued by the Meteorological Office, the mean temperature of towns on the South Coast is given as:—

Penzance ...	...	52.3	Brighton ...	...	50.8
Plymouth ...	...	51.1	Eastbourne ...	...	50.7
Falmouth ...	...	50.7	Worthing ...	...	50.5
Southampton ...	...	50.6	Dover ...	...	49.5
Bournemouth ...	...	50.3			

BIRTHS.

The birth-rate for the year amounted to 21.95 per 1,000, calculated upon an estimated population of 126,635, and compares favourably with the birth-rate for the previous year (21.91), calculated on a population of 123,948.

The number of births registered amounted to 2,770, being an increase of 63 compared with the previous year, when 2,707 were registered.

Increases in the number of births registered occurred in the following Wards: Trinity, All Saints, Bevois, Banister, Freemantle, and Portswood, and decreases in Town, St. Mary's, Northam, Newtown, Millbrook and Shirley; St. Denys being the same as in 1915.

The following are the birth-rates in each of the Municipal Wards:—

Shirley ...	...	26.7	Millbrook ...	...	21.9
Trinity ...	...	25.8	All Saints ...	...	20.9
Northam ...	...	24.9	St. Denys ...	...	20.9
Town ...	...	23.2	Bevois ...	...	18.7
Freemantle ...	...	22.2	Newtown ...	...	17.8
Portswood ...	...	22.0	Banister... ..	...	15.1
St. Mary's ...	...	21.9			

Of the 2,770 births registered, 1,430 were males and 1,340 females, the proportion of male births to female births being

1,067 males to every 1,000 females. The following is the proportion in each of the preceding 10 years:—

Year.	Proportion of Male to Female Births.			Year.	Proportion of Male to Female Births.		
1906	...	1054	...	...	1911	...	1008
1907	...	1090	...	...	1912	...	1059
1908	...	1072	...	...	1913	...	1023
1909	...	1059	...	...	1914	...	1034
1910	...	1120	...	...	1915	...	1022

The average for the ten years being 1,054, and the average for England and Wales 1,039.

The illegitimate births registered amounted to 155, compared with 116 in the previous year; this is equal to an increase of 33.6 per cent.

The number registered is equal to a rate of 1.22 per 1,000 of the population and to 56 illegitimate births to every 1,000 births registered. The average for England and Wales is 1.0 and 43 respectively.

DEATHS.

The death-rate of the Borough for the year 1916 amounted to 14.46 per 1,000 of the population, which is a decrease of 0.32 when compared with 1915, but an increase of 0.47 over the average of the previous five years.

The death-rate is calculated, after deducting the deaths of soldiers occurring in the Borough, on the estimated civil population of 116,391. This figure represents the total population after deducting the estimated number of men who have been called to the Army. The subtraction from the population of these men during the healthiest period of their lives is the chief cause of the increase shown in the death-rate for the last two years—1915 and 1916.

In comparing the death-rate with other towns and with England and Wales the age and sex constitution of the population has to be taken into account, and the Registrar-General supplies to each of the large towns a factor by which the general death-rate should be multiplied to make it comparable with that of England and Wales. This gives a corrected

death-rate for each town of what it would be if the age and sex distribution of the population were the same as that of England and Wales. The factor for correction for Southampton is 0.9574, which gives a death-rate corrected for age and sex distribution of 13.84.

The statistics for the year relate to the 52 weeks ended 30th December, 1916. During this period 1,801 deaths were registered in the Borough, being a decrease of 29 compared with 1915.

Of this total, 203 were deaths of non-residents, including 119 deaths of soldiers in the various military hospitals and camps in the Borough. Seventy-nine deaths of residents of the Borough occurred in other Districts. The corrected total of deaths belonging to the Borough is 1,677, which is 51 below the total of previous years.

The causes of death are given in various tables in the Report.

The deaths from infectious diseases were much below the average, but Influenza was very prevalent in the last two months of the year, and the number of deaths of old people and those suffering from chronic diseases was exceptionally high.

The death-rate in each of the Municipal Wards per 1,000 of the population was:—

Banister ...	...	10.3	Northam...	...	14.0
St. Denys ...	...	11.5	All Saints ...	...	14.1
Shirley ...	...	11.8	Newtown ...	...	14.5
Millbrook ...	...	13.1	St. Mary's ...	...	15.2
Freemantle ...	...	13.2	Trinity ...	...	15.9
Portswood ...	...	13.6	Bevois ...	...	16.0
			Town ...	...	22.4

The death-rate in each of the the old civil parishes of the Borough was:—

Town ...	...	...	...	...	16.2
Portswood ...	...	...	...	...	13.6
Shirley ...	...	...	...	...	12.0

The Borough is now united into one civil Parish, and is divided into two registration districts—east and west—the

dividing line being the main street from the Town Quay to the top of the Common.

The death-rate for England and Wales during the year 1916 was 14.0, and for the 96 great towns, 14.4 per 1,000 of the population.

Of the 1,677 deaths belonging to the Borough, 822 were males and 855 females.

The deaths which occurred in Public Institutions amounted to 540, not including deaths of soldiers in Military Hospitals. This number is equal to 30 per cent of the total deaths. The percentage in England and Wales was 24.2, and in the 96 large towns 29.6. The institutions in which the deaths occurred were: Isolation Hospital, 46; Royal South Hants and Southampton Hospital, 159; Parish Infirmary, 240; Workhouse, 67; Shirley Children's Hospital, 4; Free Eye Hospital, 1; Nursing Institutions, 23. Ninety-eight deaths also occurred in Military Hospitals in the Borough.

Inquests were held on 148 deaths registered in the Borough, which is equal to a percentage of 8.2, the percentage for England and Wales being 7.2.

TABLE A.

Showing Estimated Population, Birth Rates, Infantile Mortality, and Death Rates in each of the Municipal Wards for the year 1916, together with the Averages for the five years 1911-1915.

	Ward.	Esti- mated civil popu- lation Middle of 1916.	1916.					Averages, five Years 1911-1915.				
			Birth Rate	Infantile Mortality per 1,000 Births.	Death Rate from Zymotic Diseases.	Death Rate from Phthisis.	Death Rate from All Causes.	Birth Rate	Infantile Mortality per 1,000 Births.	Death Rate from Zymotic Diseases.	Death Rate from Phthisis.	Death Rate from All Causes.
1.	Town	10,712	23.2	115.2	1.59	2.90	22.4	24.1	125.4	1.18	2.48	18.5
2.	St. Mary's	11,653	21.9	93.9	1.37	1.72	15.2	23.7	121.4	1.57	1.64	16.0
3.	Northam	10,659	24.9	107.6	0.56	2.07	14.0	29.9	103.2	1.95	1.65	15.3
4.	Trinity	8,330	25.8	68.7	1.08	0.96	15.9	24.9	92.9	1.40	1.36	14.9
5.	Newtown	7,682	17.8	108.1	0.26	1.04	14.5	19.9	62.8	0.75	0.97	12.8
6.	All Saints	8,772	20.9	60.3	0.46	0.91	14.1	18.2	68.2	0.60	1.35	13.3
7.	Bevois	7,647	18.7	129.0	0.65	1.44	16.0	19.8	83.9	0.80	1.10	13.3
8.	Banister	7,278	15.1	67.2	0.41	1.24	10.3	15.0	75.3	0.30	0.72	11.2
9.	Freemantle	7,445	22.2	95.0	0.67	1.21	13.2	20.0	85.3	1.07	0.96	13.2
10.	Millbrook	9,290	21.9	72.4	0.97	1.72	13.1	27.2	110.0	1.68	1.43	13.3
11.	Shirley	9,889	26.7	55.9	0.61	0.51	11.8	29.1	87.1	1.51	1.14	13.2
12.	Portsmouth	8,733	22.0	67.3	0.92	0.80	13.6	23.1	87.4	1.23	1.51	12.3
13.	St. Deny's	8,301	20.9	69.1	0.96	0.84	11.5	23.6	90.8	1.26	1.07	12.0
Totals		116,391	21.95	85.2	0.84	1.39	14.46	23.36	95.6	1.22	1.39	13.99

INFANTILE MORTALITY.

The deaths of infants under one year of age recorded during the year amounted to 236, being one less than the number recorded in the previous year. The infantile mortality rate calculated on each 1,000 births registered during the same period was 85.2. This rate is lower than that of the previous year, which was 87.6. In 1914 the rate was 89.9, in 1913 81.5, and in 1912 84.4.

Grouped in periods of five years the infantile mortality rate in Southampton shows a gratifying decrease during the past twenty years, as will be seen from the following table:—

Period.		Infantile Mortality Rate.	
Average 5 years,	1897—1901	...	159
"	" 1902—1906	...	120
"	" 1907—1911	...	108
"	" 1912—1916	...	86

This reduction in the infantile mortality rate means a great saving of life. Had the mortality during the last five years (1912-1916) remained at the same level as it was in the five years 1897-1901 it would have resulted in the additional loss of no less than 1,035 infants.

The deaths of children over one year of age and under five also show a corresponding decrease, and if the five years 1912-1916 be compared with that of the five years 1897-1901, there has been a saving of over 1,350 lives of children under five years of age.

The infantile mortality rate in 1916 in England and Wales was 91, and in the 96 great towns, including London, 99.

The number of deaths of male infants amounted to 126, compared with 110 females. The sex mortality of infants under one year of age per 1,000 for the past five years is shown in the following table:—

	Males.	Females.	Both Sexes.
1912 ...	92.2	76.3	84.4
1913 ...	89.5	73.2	81.5
1914 ...	102.1	77.2	89.9
1915 ...	96.5	78.4	87.6
1916 ...	88.1	82.1	85.2

Eighty-one deaths of infants occurred during the first week of life, which is equal to 34.3 per cent of the total recorded under one year of age. In the previous year the percentage was much lower, 22.8. The cause of the increase in 1916 was due to the increase in the deaths from premature birth, the number recorded being 73, compared with 56 in 1915. Premature birth was responsible for 31 per cent. of the deaths under one year of age. The chief causes of deaths under one year during the past five years being:—

	1912.	1913.	1914.	1915	1916.
Diarrhoea and Enteritis ...	28	30	44	35	30
Premature Birth ...	55	64	69	56	73
Atrophy, Debility, and Maramus ...	27	25	34	15	20
Bronchitis and Pneumonia	42	45	33	48	37
Whooping Cough...	35	10	10	15	13

The deaths of illegitimate infants numbered 21, which, calculated upon the number of illegitimate births registered during the same period is equal to an infantile mortality rate of 135.5 the rate for legitimate infants being 82.2.

Similar rates for seven years are given for comparison:—

	Legitimate Infant Mortality Rate.	Illegitimate Infant Mortality Rate.
1910 ...	75	164
1911 ...	128	366
1912 ...	79	237
1913 ...	77	191
1914 ...	85	221
1915 ...	84	172
1916 ...	82	135

The infant mortality rate in the old civil parishes of the Borough per 1,000 births, was:—

Town proper ...	92.9
Portwood and Bitterne Park ...	83.6
Shirley, Freemantle, and Millbrook ...	72.6

The rate in Portwood increased by 10.6 compared with the previous year, the other two districts showing a decrease.

In the Municipal Wards the lowest rate was in Shirley Ward and the highest in Bevois Ward, in which area 60 per cent. of the deaths were due to premature birth.

The rates in the Municipal Wards are given below, the average rate in the preceding five years being shown for comparison:—

Ward.		1916.	Average 5 years, 1911—1915.
Shirley	... ..	55.9	87.1
All Saints	... ..	60.3	68.2
Banister	... ..	67.2	75.3
Portswood	... ..	67.3	87.4
Trinity	... ..	68.7	92.9
St. Denys	... ..	69.1	90.8
Millbrook	... ..	72.4	110.0
St. Mary's	... ..	93.9	121.4
Freemantle	... ..	95.0	85.3
Northam	... ..	107.6	103.2
Newtown	... ..	108.1	62.8
Town	... ..	115.2	125.4
Bevois	... ..	129.0	83.9

The Notification of Births Act came into operation in the Borough on the 9th March, 1908. This Act requires any person in attendance upon the mother within six hours after the time of birth, to notify the Medical Officer of Health of such birth in writing within thirty-six hours of the birth having occurred.

This Act (which was extended in 1915 and made compulsory) was passed in order that Health Authorities might obtain immediate notice of the occurrence of a birth, thus making it possible for Health Visitors to give early instruction and advice to the mother as to the feeding and treatment of the child. Under the Registration Act, which allows a limit of six weeks within which a birth may be registered, it frequently occurs that registration of a birth is only obtained after death has taken place. During the year 132 deaths occurred among infants under six weeks of age, being 56 per cent. of all those that occurred under one year of age.

The number of notifications received during the year under the Act amounted to 2,312.

The total notified is equal to a percentage of 83.5 of the births registered during the same period, the percentage being slightly slower than in the previous years.

The numbers notified and percentage during the last five years is shown in the following table:—

Notified by—

	1912.	1913.	1914.	1915.	1916.
Doctors	289	334	321	240	245
Midwives	1,790	1,836	1,733	1,880	1,811
Other persons present in the house at time of birth	490	322	261	163	256
	—	—	—	—	—
	2,569	2,492	2,315	2,283	2,312
	—	—	—	—	—
Percentage to births registered during the same period	91.1	84.3	78.5	84.5	83.5

During the year 2,608 births were investigated by the Health Visitors, and advice and instruction given in the management of infants. As a rule, these visits are appreciated by the parents, and where it is considered necessary for the welfare of the mother or infant, frequent re-visits are made. The number of re-visits made during 1916 amounted to 4,067.

Information was obtained as to the method of feeding of 2,379 infants under two months of age, of whom 1,996 were stated to be breast-fed, 57 partially breast-fed, and 326 hand-fed.

The method of feeding of those infants who died before reaching two months of age were also obtained, of whom 52 were stated to have been breast-fed, six partially breast-fed, and 20 hand-fed. Seventy-four infants died before being fed.

The percentage of deaths of infants under two months of age, in the groups under which they were classified, works out as follows:—

How fed.	Number	Deaths	Percentage
Breast-fed	1,996	52	2.61
Partially breast-fed...	57	6	10.53
Hand-fed	326	20	6.13

All premises visited in connection with the notification of Births Act were inspected at the time of visit, and resulted in 199 defects being remedied.

MATERNITY AND CHILD WELFARE.

During the year the work in connection with the important branch of Public Health work has been gradually extended.

HEALTH VISITORS.

The necessity for the provision of an adequate staff of Health Visitors has received consideration during the year, an additional Health Visitor being appointed in April. In December a report was made to the Council, pointing out the urgent need there was for augmenting the staff in order to promote the health and welfare of mothers and infants at the present time, also to extend their work to include ante-natal visiting of infants from birth to school age.

The Council decided to increase the staff by two additional health visitors, bringing the number up to four, one of whom carries out the duties of Inspector of Midwives.

This number is not up to the standard suggested by the Local Government Board of one whole-time Health Visitor to every 500 births, the average number of births during the last five years being 2,838.

CENTRE.

What is required now is the establishment of a suitable Maternity Centre and Clinic. The difficulty is to obtain a building suitable for this purpose near the middle of the town, as experience shows that a Centre can only be established satisfactorily where the mothers and infants have not to travel a long distance to reach it.

The Governors of the Royal South Hants and Southampton Hospital were approached with a view of starting a Maternity and Child Welfare Centre and Clinic in a portion of the Hospital buildings, also for providing beds for complicated maternity cases, but, unfortunately, the Hospital Committee, although desirous of assisting the Local Authority in the matter, are unable to provide the accommodation required.

VOLUNTARY AGENCY.

A voluntary agency, supervised by a Committee of Ladies, has three small centres at work in the Borough—(1) Holy Trinity Mission Hall, Winton Street; (2) Mission Hall, King Street; (3) Berrywood Mission Hall, Westwood Road, Millbrook—where baby weighings and consultations are held weekly by the Superintendent and voluntary workers; but only Centre No. 1 is under regular medical supervision. The Health Visitors regularly visit these centres, and letters for dispensary and hospital treatment supplied. Milk and other foods are provided for some infants, and for nursing mothers in necessitous cases. Health talks are given by a Doctor and by Health Visitors, and there are classes for cookery and making clothes.

Expectant mothers, also, are advised at the Winton Street Centre.

A small grant in aid of expenses is made by the Borough Council to these voluntary agencies.

RECORDS.

During the year complete records on the card index system were started, and are kept in the Health Department of every child born in the Borough. These records contain particulars of the health of mothers at time of child-birth; the health and weight of the child at birth; and home conditions as to overcrowding, ventilation, light, dampness, and general sanitary conditions of the premises. Subsequent attendance are also recorded as to the progress of the infant, the nature of feeding, illnesses, general condition, and nutrition, until the child arrives at school age, when the card is handed on to the School Medical Inspector.

INFANTILE MORTALITY, 1916.

CAUSES OF DEATH.				Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks & under 3 months.	3 months & under 6 months.	6 months & under 9 months.	9 months & under 12 months.	Total Deaths under 1 year.
All Causes—Certified	...	...	...	81	11	8	14	114	50	33	22	17	236
—Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	...	...	4	3	2	4	13
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	...	...	...	...	...	...	...	...	1	...	...	...	1
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	3	1	...	...	4
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous)	...	...	...	...	...	1	...	1	...	1	...	1	3
Convulsions	...	...	...	1	1	...	...	2	1	1	3	1	8
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	2	...	2	3	7	3	5	1	4	20
Pneumonia (all forms)	...	...	...	...	1	...	...	1	4	3	5	4	17
Diarrhoea	...	...	...	...	...	...	1	1	3	8	5	...	17
Enteritis	...	...	...	...	...	1	...	1	7	3	1	1	13
Gastritis	...	...	...	...	1	2	...	3	1	2	2	...	8
Syphilis	...	...	...	1	...	...	2	3	2	...	...	...	5
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at Birth	...	...	...	5	...	...	...	5	...	...	...	...	5
Atelectasis	...	...	...	4	1	...	...	5	...	...	...	...	5
Congenital Malformations	...	...	...	5	1	...	...	6	3	...	...	...	9
Premature Birth	...	...	...	55	5	2	4	66	6	1	...	...	73
Atrophy, Debility and Marasmus	...	...	...	5	...	...	3	8	8	2	1	1	20
Other Causes	...	...	...	3	1	...	1	5	4	3	2	1	15
Totals	...	...	...	81	11	8	14	114	50	33	22	17	236

Nett Births in the Year—Legitimate, 2,655 ; Illegitimate, 155.

Nett Deaths in the Year—Legitimate infants, 215 ; Illegitimate infants, 21.

BIRTH RATE, DEATH RATE, AND INFANTILE MORTALITY IN SOUTHAMPTON SINCE 1882.

Year.	Birth Rate.	Death Rate.	Infantile Mortality.	Average Five Years.		
				Birth Rate.	Death Rate.	Infantile Mortality.
1882	32.1	18.3	131	31.8	18.6	134
1883	34.6	20.9	137			
1884	31.7	16.9	114			
1885	30.5	19.0	146			
1886	30.1	18.0	140			
1887	31.3	18.7	145	30.6	17.5	128
1888	31.3	16.9	126			
1889	30.6	16.3	117			
1890	28.5	17.5	129			
1891	31.3	18.0	123			
1892	28.6	21.5	148	29.8	18.6	145
1893	29.5	19.5	157			
1894	30.2	16.0	119			
1895	30.4	18.7	155			
1896	30.4	17.2	146			
1897	30.4	17.3	156	29.6	17.6	159
1898	29.8	17.3	153			
1899	29.6	19.1	178			
1900	28.3	17.6	152			
1901	30.0	16.6	154			
1902	29.1	15.7	124	27.6	14.6	120
1903	29.4	14.1	114			
1904	27.5	14.2	114			
1905	26.0	15.1	133			
1906	26.0	13.8	113			
1907	24.3	13.6	108	24.8	13.7	108
1908	25.4	13.6	113			
1909	25.3	13.9	106			
1910	24.9	12.4	79			
1911	23.9	15.2	135			
1912	23.3	13.2	84	23.0	13.9	86
1913	23.8	12.9	82			
1914	23.9	13.9	90			
1915	21.9	14.8	88			
1916	22.0	14.5	85			

MORTALITY FROM ZYMOTIC DISEASES.

The death-rate from diseases usually classified as the chief epidemic diseases, namely: Small Pox, Scarlet Fever, Diphtheria, Enteric Fever, Measles, Whooping Cough, and Diarrhœa, and Enteritis, among children under two years of age, amounted to 0.84 per 1,000 of the population, which is lower than in the preceding year, when the rate was 1.33.

The death-rate per 1,000 of the population from the diseases specified above for the past five years is shown in the following table:—

	1912	1913	1914	1915	1916
Small Pox ...	.000	.000	.000	.000	.000
Scarlet Fever ...	.017	.016	.081	.017	.043
Diphtheria ...	.158	.241	.316	.333	.138
Enteric Fever ...	.066	.048	.048	.069	.043
Measles ...	.149	.241	.081	.257	.078
Whooping Cough ...	.291	.080	.081	.316	.232
Diarrhoea & Enteritis under 2 years of age	.257	.354	.389	.342	.310
Total Zymotic					
Death-rate ...	0.938	0.980	0.996	1.334	0.845

THE INCIDENCE OF NOTIFIABLE INFECTIOUS DISEASES.

The following is a total of the notifications received during the year:—

Small Pox	...	...	...	...	1
Cholera	...	...	...	...	0
Plague	...	...	...	...	0
Diphtheria	...	...	...	...	172
Erysipelas	...	...	...	...	49
Scarlet Fever	...	...	...	...	187
Typhus Fever	...	...	...	...	0
Enteric Fever	...	...	...	...	23
Relapsing Fever...	...	...	...	...	0
Continued Fever...	...	...	...	...	0
Puerperal Fever	...	...	...	...	8
Cerebro-Spinal Fever	...	...	...	...	5
Poliomyelitis	...	...	...	...	4
Ophthalmia Neonatorum	...	...	...	...	80
Pulmonary Tuberculosis	...	...	...	...	273
Other forms of Tuberculosis	...	...	...	...	49
Measles	...	...	...	...	802
German Measles...	...	...	...	...	174
					<hr/> 1,827 <hr/>

The following table shows the number of cases of notifiable disease recorded in the Borough during the past five years :—

DISEASE.	1912.	1913.	1914.	1915.	1916.
Small Pox	2	1	2	—	1
Scarlet Fever	288	177	344	430	187
Diphtheria	192	357	450	346	172
Enteric Fever	12	33	23	25	23
Continued Fever	1	—	—	—	—
Puerperal Fever	5	3	4	5	8
Erysipelas	72	51	67	63	49
Cerebro-Spinal Fever	1	—	—	14	5
Poliomyelitis	—	—	1	2	4
Ophthalmia Neonatorum	—	—	48	21	80
Pulmonary Tuberculosis	339	464	411	318	273
Other Forms of Tuberculosis	—	105	104	78	49
Measles	—	—	—	—	802
German Measles	—	—	—	—	174
Total	912	1191	1454	1302	1827

All cases of Pulmonary Tuberculosis were made compulsorily notifiable on the 1st January, 1912, other forms of Tuberculosis on the 1st February, 1913, Ophthalmia Neonatorum on 1st April, 1914, and Measles and German Measles on the 1st January, 1916.

Detailed information respecting Tuberculosis is given on pages 38 to 62.

The table which follows gives a comparison of the infectious sickness rates during the year 1916 in Southampton with the average for England, and for the County Boroughs of England per 1,000 of the population:—

	Southampton.	County Boroughs of England.	England.
Small Pox	0.01	0.00	0.00
Scarlet Fever	1.62	2.21	2.14
Diphtheria	1.46	1.45	1.51
Enteric Fever	0.20	0.16	0.16
Puerperal Fever... ..	0.07	0.08	0.06
Erysipelas	0.40	0.59	0.54
Cerebro-Spinal Fever	0.04	0.03	0.04
Poliomyelitis	0.03	0.01	0.02
Measles and German Measles	8.39	—	10.09

There were 3,507 visits and re-visits made to houses in which infectious diseases occurred, and inquiries were made relative to the probable source of infection, and the isolation of the patient. Information was also given concerning the precautions necessary to be taken to prevent the spread of disease, and in the case of measles advice as to treatment and nursing of patients where a medical man was not in attendance.

In connection with school absentees, 213 visits were made where non-notifiable infectious diseases occurred.

Of the cases notified in the Borough under the various Acts and Regulations, 402 were removed to the Isolation Hospital for treatment.

Sanitary defects were found in 97 houses in which cases occurred.

Particulars respecting each disease are appended:—

SMALL POX.

Two cases of Small Pox were landed in the Port, particulars of which are given in the Port Report.

One case occurred in the Borough—C. V. W., aged 26—the patient being a temporary caretaker on the Hospital Ship during the period a case transferred from the Port was under treatment. The case was of a mild discrete type. He was vaccinated in infancy and again after being in contact with Small Pox.

SCARLET FEVER.

The number of cases of Scarlet Fever notified during the year among the civilian population amounted to 187 cases, being a decrease of 243 cases compared with the total recorded in the previous year, and 157 less than in 1914.

The number of cases notified and deaths resulting from the disease for the past ten years were :—

			Cases.	Deaths.	Percentage.
1907	...	...	165	2	1.21
1908	...	...	536	4	0.75
1909	...	...	424	5	1.47
1910	...	...	219	2	0.92
1911	...	...	195	5	2.56
1912	...	...	288	2	0.69
1913	...	...	177	2	1.13
1914	...	...	344	10	2.91
1915	..	...	430	2	0.47
1916	...	...	187	5	2.67

The cases occurred most frequently in Shirley, St. Mary's, and St. Denys Wards.

The disease was not of such a mild type as in the previous year, the case mortality amounting to 2.67 per cent. compared with 0.47 in 1915.

One hundred and thirty of the cases notified were removed to the Isolation Hospital, which is equal to a percentage of 69.5, compared with 61.5 in 1915, and 68.3 in 1914.

In addition to the cases admitted to the Isolation Hospital from the Borough, one case was admitted from the Port, 5 from neighbouring districts, and 28 military cases were admitted for treatment.

Operations for the removal of tonsils and adenoids was performed on 8 cases, or 6.2 per cent. of the total number of cases admitted to Hospital from the Borough. The percentage last year was 1.8.

The number of cases admitted suffering with purulent nasal discharge amounted to 20. The number of cases suffering with purulent ear discharge was 3.

The methods of treatment and discharge which have been adopted at the Isolation Hospital since 1902 were again carried out during the year, no heed being taken of desquamation in regard to detention in Hospital, but particular

attention being given to **the** condition of the respiratory passages, ears, etc., by special isolation and treatment.

One "return" case occurred during the year. The particulars of this case are:—

B.A., age 4 years, was admitted on the 1st January, 1916, suffering with Scarlet Fever, and discharged on the 7th February. On February 14th, D.A., age 14, was notified to be suffering from Scarlet Fever.

The following table gives particulars of cases of Scarlet Fever notified in the Borough, showing the number treated in the Isolation Hospital, the period of detention and the number of "return" cases in each year:—

Year.	Cases notified.	Admitted to Hospital.	Average period in Hospital (days).	No. of "return" cases.	Cases treated at home.
1902	261	208	48	7	53
1903	427	353	34	7	74
1904	113	102	26.7	2	11
1905	140	123	29.3	2	17
1906	68	60	28.8	2	8
1907	165	151	32.6	3	14
1908	536	378	33.7	5	158
1909	424	331	38.8	3	93
1910	219	183	36.9	0	36
1911	195	171	34.0	0	24
1912	288	235	32.0	0	53
1913	177	136	34.0	4	41
1914	344	235	30.5	1	109
1915	430	262	32.3	2	168
1916	187	130	35.1	1	57

DIPHTHERIA.

The number of cases of Diphtheria again showed a marked decrease, and was the lowest number recorded since 1904. The total number of cases notified amounted to 172, and compared favourably with 346 recorded in 1915 and 450 in 1914, and the average for the 5 years 1911-1915 339.

The disease was most prevalent in the Freemantle Ward, 42 cases, or nearly one-fourth of the total notified, occurring in that district. The lowest number of cases were recorded in Town and Northam Wards, with a total of 4 cases each.

Sixteen deaths occurred among the cases notified to the Borough, compared with 39 deaths in each of the two preceding years, and the average of 30 for the five years 1911-1916.

The number of cases notified and deaths recorded during the past ten years are shown in the following table :—

				Cases.	Deaths.	Percentage.
1906	...	...	...	262	24	9.16
1907	...	...	...	204	22	10.78
1908	...	...	...	248	16	6.45
1909	...	...	...	202	19	8.56
1910	...	...	...	208	16	7.69
1911	...	...	...	352	23	6.53
1912	...	...	...	192	19	9.90
1913	...	...	...	357	30	8.40
1914	...	...	...	450	39	8.67
1915	...	...	...	346	39	11.27
1916	...	...	...	172	16	9.30

One hundred and twenty-four of the cases notified were admitted to the Isolation Hospital for treatment, which is equal to a percentage of 72.1 compared with 63.9 in 1915, and 64.9 in 1917.

In addition to the number specified above, 1 case among the crew of a vessel was admitted to the Isolation Hospital from the Port, 19 from neighbouring districts, and 80 military cases.

ENTERIC FEVER.

The cases of Enteric Fever notified in the Borough during the year amounted to 23. This is a decrease of 2 cases compared with those notified in 1915, and is equal to the average for the preceding 5 years.

The number of cases notified, and the deaths that occurred amongst cases notified in the Borough since 1901 are given in the following table :—

				Cases.	Deaths.	Percentage of Deaths amongst cases notified in the Borough.
1901	...	...	...	106	7	6.6
1902	...	...	...	123	15	12.2
1903	...	...	...	148	19	12.8
1904	...	...	...	19	1	5.3
1905	...	...	...	34	8	23.5
1906	...	...	...	15	5	33.3
1907	...	...	...	21	4	19.0
1908	...	...	...	37	4	10.8
1909	...	...	...	53	7	13.2
1910	...	...	...	55	9	16.4
1911	...	...	...	20	3	15.0
1912	...	...	...	13	3	23.1
1913	...	...	...	33	6	18.2
1914	...	...	...	23	4	17.4
1915	...	...	...	25	8	32.0
1916	...	...	...	23	3	13.0

The above table does not include the deaths of persons who were landed in the Port suffering from Enteric Fever and who subsequently died from the disease in Hospitals in the Borough.

One death of a resident of the Borough from Enteric Fever occurred at Margate, and one death of a Lascar landed in the Port are included in other mortality tables in this Report.

One case was that of a Steward who arrived home ill on a Hospital Ship, and another case had been working on the same ship in the Docks.

One case arrived home unwell from South Africa, and three cases arrived home ill a few days before notification from other towns in England.

Three Boy Scouts, who had been to an outing in the New Forest and had drank water from a stream, developed Enteric Fever.

In one case the evidence pointed to shellfish as the cause of infection, and one case had been in contact with a patient who died at Margate.

In eleven cases it was not possible to trace the source of the infection.

ENTERIC FEVER, 1916.

NO.	DATE.	NAME.	AGE.	SEX.	ADDRESS..	WHERE ISOLATED.	REMARKS.
1	Jan. 11	P.A.P.	16	M	North Road	Isolation Hospital	Returned home unwell from Reading
2	" 13	H.H.	18	M	Parsonage Road	Ditto	Patient was a Steward on the Hospital Ship Aquitania
3	Feb. 14	A.M.	28	M	Standford Street	Do.	Had been working on a Hospital Ship in the Docks.
4	Mch. 17	E.P.	31	F	Manchester Street...	Do.	Arrived unwell from Sheffield.
5	" 27	F.S.	42	M	Orchard Lane	Union Infirmary	Patient was employed as a horse-keeper at Swaythling Remount Depot
6	May 18	W.N.H.	14	M	St. Andrews Road...	Isolation Hospital	Patient was at an Outing in the New Forest and drank water from a stream.
7	" 26	F.R.G.K.	15	M	Graham Road	Do.	Do.
8	" 27	J.B.	15	M	Firgrove Road	Do.	Had eaten shell fish previous to illness.
9	June 2	E.R.	9	M	Clausentum Road	Home	See Cases Nos. 6 and 7.
10	" 11	B.E.F.	14	M	Northumberland Rd.	Isolation Hospital	
11	" 21	R.S.	42	F	Deal Street	Royal S.H. Hospital	
12	" 22	G.H.	51	M	Shakespeare Av.	At Home	
13	" 28	W.F.I.	36	M	Portswood Road	Do.	
14	July 14	M.S.	20	F	Exmouth Street	Royal S.H. Hospital...	Patient had been in contact with a case of Enteric Fever who died at Margate.
15	" 25	M.M.	30	M	Grove Street	Isolation Hospital	Ship's Carpenter returned home unwell after a voyage to South Africa.

ENTERIC FEVER—Continued.

NO.	DATE.	NAME.	AGE.	SEX.	ADDRESS.	WHERE ISOLATED.	REMARKS.
15	July 29	E.G.	13	M	Latimer Street	At Home	...
17	Sept. 5	R.F.	7	F	Princes Street	Isolation Hospital	...
18	" 21	E.C.	12	F	Princes Street	At Home	...
19	Oct. 13	H.B.	9	M	Bevois Valley Road	Isolation Hospital	...
20	" 19	W.B.	10	M	Mount Street	Do.	
21	Nov. 24	R.D.	12	F	Upper Bugle Street	Do.	
22	Dec. 21	A.M.T.	47	M	The Crescent, Shirley	Home	
23	" 25	F.A.D.	61	M	Archers Road	Do.	Returned home unwell from Devon

The following shows the Sanitary Defects found in Houses in which cases of Diphtheria and Enteric Fever occurred:—

WARD.	Number of cases notified during the year.		Water Closets inadequately supplied with water.		Defective guttering under roof of houses causing damp walls.		Defective drains		Dirty walls and ceilings of houses.		Defective paving in back yards.		No sanitary dustbins		Root of houses defective.		Back yards unpaved.		Total number of Nuisances abated.	
	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.	Diphtheria.	Enteric Fever.
Town ...	4	4	1	...	1	...	...	...	2	...	1	...	1	1	2	...	...	...	6	...
St. Marys ...	12	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Northam ...	15	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Trinity ...	4	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	4	...
Newtown ...	15	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
All Saints ...	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Bevois ...	15	2	2	1	...	...	...	...	1	...	2	...	...	...	...	...	...	...	3	...
Banister ...	11	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Freemantle... 42	42	1	1	...	...	...	...	...	3	...	2	...	...	...	3	...	...	...	9	...
Millbrook ...	13	...	...	...	...	...	...	...	9	...	3	...	2	...	4	...	...	...	28	...
Shirley ...	10	1	...	...	...	...	...	...	...	...	2	...	2	...	2	...	...	...	12	...
Portsmouth ...	15	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	3	...
St. Denys ...	10	1	...	...	...	...	...	...	3	...	...	...	...	...	3	...	...	...	7	...
Total ...	172	23	4	2	4	...	14	3	23	4	11	...	11	2	14	3	4	...	85	14

MEASLES AND GERMAN MEASLES.

By an Order dated 27th November, 1915, the Local Government Board made the diseases known as Measles and German Measles compulsorily notifiable throughout England and Wales.

The Regulations made under this Order are cited as the Public Health (Measles and German Measles) Regulation, 1915, and came into operation on the 1st January, 1916.

Under the Order the duty is thrown upon the parent or guardian of notifying each case or each suspected case of Measles to the Medical Officer of Health. It is the duty of the Medical Practitioner also to notify the first case of Measles or German Measles seen by him in a given household, if this case, or a previous case in the same household, has not already been notified by the parent, and if no case of the same disease has been notified to the same household within two months.

This Order has been issued owing to the fact that Measles accounts for a large proportion of the total deaths from all causes in the first five years of life. It is responsible also for a large amount of mischief, often permanent, in those who survive attacks.

Measles seldom occurs in the first six months after birth. With this exception, nearly everyone is susceptible to Measles unless protected by a previous attack, and commonly more than half the children in towns have suffered from it before they begin to attend school.

Measles, however, as a cause of death is confined chiefly to children under five years of age, and the number dying out of a given number attacked (case mortality) decreases rapidly with advancing age. The case mortality at the age-period 5-10 has been found to be one-ninth of that in the third year of life. In the fourth year of life the case mortality is less than half that in the third year of life.

If, therefore, it is possible to postpone the attack from Measles to the age of five years there will be a very large saving of life, as well as improved vigour and usefulness in those who will have escaped injury by the complications which are so frequent a connection with Measles.

The number of cases of Measles and German Measles notified in the Borough during the year amounted to 976 cases, 766 of which were notified during the first six months of the year.

This number is equal to a rate of 8.39 per 1,000 of the population. The rate for England and Wales was 10.09.

All the cases notified were visited by the Health Staff, but the cases were mostly of a very mild type, and beyond recommending the parent to send for a medical practitioner and giving instructions as to precautions to be adopted, it was not necessary to take further action.

Three cases of Measles from the Borough were admitted to the Isolation Hospital for treatment. Three cases were also admitted which occurred among crews of vessels to the Port, and 95 naval and military cases of Measles and German Measles, occurring in the Port and in various camps in the neighbourhood and in the Port were also admitted.

In the following tables details of the cases notified to the Borough are given:—

Number of cases of Measles and German Measles which came to the knowledge of the Medical Officer of Health during the year 1916:—

	Measles.		German Measles.		Measles and German Measles.	
	Civil	Military	Civil	Military	Civil	Military
Notified by Medical Practitioners ...	617	10	172	25	789	35
Notified by Parents, Guardians, and other persons... ..	185	...	2	...	187	...
Un-notified ... ..	...	...	...	...	...	...
Total	802	10	174	25	976	35

MEASLES AND GERMAN MEASLES.

Table showing the Age and Sex incidence of cases notified, and the Deaths recorded with case mortality.

Age Period.	Measles.						German Measles.		
	Males.			Females.			Total.		
	Cases	De'ths	Case Mort'lity	Cases	De'ths	Case Mort'lity	Cases	Case Mort'lity	Total
Under 1 year	25	...	...	8	...	...	33	...	...
1 and under 2	38	4	10.5	39	1	2.6	77	6.5	6
2	37	1	2.7	35	...	...	72	1.4	8
3	68	...	...	46	1	2.2	114	0.9	6
4	47	...	...	44	...	...	91	...	8
5	95	...	...	107	...	...	202	...	17
6	35	...	...	36	1	2.8	71	1.4	12
7	24	1	4.2	16	...	...	40	2.6	12
8	10	...	...	14	...	...	24	...	6
9	4	...	...	8	...	...	12	...	5
10	5	...	...	18	...	...	23	...	3
15	10	...	...	17	...	...	27	...	32
25 and upwards	4	...	...	12	...	...	16	...	37
Total	402	6	1.49	400	3	0.75	802	1.12	174

MEASLES AND GERMAN MEASLES.

Cases notified 1916 classified according to the Municipal Ward in which they occurred:—

Ward.					Measles.	German Measles.
Town	...	...	...	...	87	6
St. Marys	...	...	...	...	47	6
Northam	...	...	...	...	61	12
Trinity	...	...	...	...	96	5
Newtown	...	...	...	...	52	11
All Saints	...	...	...	...	44	7
Bevois	...	...	...	...	47	11
Banister	...	...	...	...	86	22
Freemantle	...	...	...	...	62	12
Millbrook	...	...	...	...	99	19
Shirley	...	...	...	...	94	22
Portswood	...	...	...	...	21	10
St. Denys	...	...	...	...	6	31
Total					802	174

**PUBLIC HEALTH (OPHTHALMIA NEONATORUM)
REGULATIONS, 1914.**

It has been estimated 25 per cent. of the cases of hope-blindness in this country are due to Ophthalmia Neonatorum. If early treatment is given the sight of the infant can generally be saved.

Under the Rules of the Central Midwives' Board, midwives are required to call in medical help for all cases of inflammation or discharge from the eyes, however slight, and under the Ophthalmia Neonatorum Regulations both midwives and medical practitioners have to notify the Medical Officer of Health of cases occurring in their practice.

All cases notified are immediately visited by one of the Health Visitors in order to secure efficient treatment being given.

There was a considerable increase in the number of cases recorded, the total received being 80, compared with 21 in the previous year. This number is equal to 28.9 per 1,000 births registered.

With regard to the distribution of the disease, the rates per 1,000 births in the Municipal Wards during the year were: Town 14.9, St. Mary 28.9, Northam 17.4, Trinity 38.6, Newtown 6.8, All Saints 40.2, Bevois 32.3, Banister 25.2, Freemantle 33.5, Millbrook 27.1, Shirley 59.4, Portswood 14.4, St. Denys 26.6.

CEREBRO-SPINAL FEVER.

Five cases of Cerebro-Spinal Fever were notified during the year among the civilian population of the Borough. This number is a decrease of nine cases compared with the previous year.

Three of the cases proved fatal, giving a mortality rate of 60 per cent.

In one of the cases the patient had visited a Military Hospital to see a patient, who was dying from Cerebro-Spinal Fever. The origin of the infection in the other four cases could not be traced.

The following Table gives particulars of the Cases Notified :—

CASES OF CEREBRO-SPINAL FEVER, 1916.

NO.	Date of Notification.	Name.	Age.	Sex.	Address	Where Isolated.	Bacteriological Examination.	Result of Case.
1	April 4	E.A.Q.	18	F	Belgrave Road	Isolation Hospital ...	Positive i contact also Positive.	... Recovered
2	April 9	S.K.	2	F	St. Denys Road	Ditto	Ditto	... Died 20th April
3	April 15	F.W.	9	M	Endle Street	Ditto	Negative	... Died 20th April
4	May 5	A.C.	2	F	King Street	Died before Notification. Inquest P.M.	Positive	... Died 2nd May
5	Sept. 29	W.A.W.	7	M	Romsey Road	Isolation Hospital ...	Negative	... Recovered

ACUTE POLIOMYELITIS.

Four cases of Acute Poliomyelitis were notified during the year. Details of the cases are appended:—

(1) F.D., aged 14 years, St. Mary's Place. Notified 26th April. This boy was injured by falling off his bicycle on the 17th April, and was removed to the Royal South Hants and Southampton Hospital for an operation. He was notified to be suffering from Acute Poliomyelitis on the 26th April, and died on the 4th May. An inquest was held, the following being the cause of death entered on the Coroner's certificate: "From Infantile Paralysis, caused by injuries sustained by deceased from his falling off his bicycle on the 17th April, 1916, and that the death was accidental (P.M)."

(2) W.S., aged 2 years, York Street. Notified September 30th. Out-patient at the Royal South Hants and Southampton Hospital. Paralysis of both legs—Atrophy—more pronounced on left side. Still attends at Hospital.

(3) D.B., aged 1 year, Spa Court. Notified October 4th. Out-patient at the Royal South Hants and Southampton Hospital. Paralysis left leg, from hip, but is improving.

(4) E.E., aged 7 years, Berkeley Road. Removed to Parish Infirmary. Notified December 14th. Died December 19th.

WHOOPIING COUGH.

The number of deaths from Whooping Cough amounted to 27, which is 10 below that of the previous year, but 5 above the average of the previous five years. The disease was most prevalent in Town and St. Mary's Wards.

DIARRHŒA AND ENTERITIS.

The deaths from Diarrhœa, Enteritis, and Gastro-Enteritis amounted to 48, compared with 44 in 1915. Of the number 36 were under 2 years of age, which is equal to a rate of 13.0 per 1,000 births registered during the year, which compares favourably with the rate of 16.24 in the 96 great towns in England and Wales.

MILITARY CASES OF INFECTIOUS DISEASE AND DEATHS OCCURRING IN THE BOROUGH DURING THE YEAR.

INFECTIOUS CASES.

The following notifications were received of cases occurring in Military Hospitals or Rest Camp in the Borough:—

Scarlet Fever	...	...	...	...	5
Diphtheria	...	...	...	...	11
Cerebro-Spinal Fever	...	...	...	...	1
Erysipelas	...	...	...	...	1
Measles	...	...	...	...	8
German Measles...	...	...	...	...	23
					<hr/> 49

Naval and Military cases of infectious disease admitted to the Isolation Hospital from various Camps and Hospitals in the neighbourhood, included Military cases landed in the Port:—

Small Pox	...	...	...	...	2
Scarlet Fever	...	...	...	...	28
Diphtheria	...	...	...	...	80
Enteric Fever	...	...	...	...	—
Measles and German Measles...	...	...	...	...	95
Cerebro-Spinal Fever	...	...	...	...	18
Chicken Pox	...	...	...	...	3
Mumps	...	...	...	...	6
Erysipelas	...	...	...	...	3
Cases for observation	...	...	...	...	5
					<hr/> 237

DEATHS OF SOLDIERS REGISTERED IN THE BOROUGH DURING THE YEAR.

Small Pox	...	...	...	...	2
Diphtheria	...	...	...	...	4
Enteric Fever	...	...	...	...	4
Paratyphoid Fever	...	...	...	...	2
Tetanus	...	...	...	...	1
Dysentery	...	...	...	...	9
Cerebro Spinal Fever	...	...	...	...	1
Cancer	...	...	...	...	1
Meningitis	...	...	...	...	1
Heart Diseases	...	...	...	...	3
Aneurysm	...	...	...	...	2
Bronchitis and Pneumonia	...	...	...	...	5
Nephritis	...	...	...	...	3
Other Diseases	...	...	...	...	4
Accidents	...	...	...	...	2
Suicide	...	...	...	...	1
Gunshot Wounds	...	...	...	...	74
					<hr/>
					119
					<hr/>

TUBERCULOSIS.

The total deaths from all forms of Tuberculosis among persons classified as residents of the Borough amounted to 190, from the following forms of the disease:—

Pulmonary Tuberculosis	...	...	161
Tuberculosis Meningitis	...	...	6
Tuberculosis of Peritoneum and Intestines	...	...	12
Tuberculosis of Spine	...	...	2
Tuberculosis of Hip	...	...	4
Tuberculous Pyosalpinx	...	...	1
Tuberculosis of the Skin	...	...	1
Disseminated Tuberculosis	...	...	3
			<hr/>
			190
			<hr/>

The total number of deaths recorded from all forms of the disease is 16 less than that of the previous years, Pulmonary Tuberculosis showing a decrease of nine deaths, and other forms of the disease a decrease of 7.

The death-rate from Pulmonary Tuberculosis amounted to 1.39 per 1,000 persons living. This rate is 0.06 lower than in 1915, and is the same as the average rate for the past five years.

The mortality amongst males was considerably lower than in the previous year—83 compared with 103—probably due to the war causing a large decrease in the male population at the susceptible age. The deaths of females, however showed an increase from 67 in 1915 to 78 in 1916; the death-rates calculated on the estimate male and female population were 1.56 and 1.19 respectively.

The death-rate for 1915 and 1916 is calculated on civil population as estimated by the Registrar-General.

DEATH-RATES FROM PULMONARY TUBERCULOSIS SINCE 1901.

			Males.	Females.	Both Sexes.
1901	...	...	1.76	1.01	1.37
1902	...	...	1.77	1.23	1.49
1903	...	...	1.50	0.83	1.15
1904	...	...	1.62	0.92	1.26
1905	...	...	1.59	0.87	1.22
1906	...	...	1.83	0.95	1.38
1907	...	...	1.41	0.84	1.11
1908	...	...	1.42	0.91	1.15
1909	...	...	1.85	0.91	1.36
1910	...	...	1.75	0.76	1.23
1911	...	...	2.01	1.17	1.58
1912	...	...	1.81	0.88	1.33
1913	...	...	1.52	0.92	1.21
1914	...	...	1.75	1.06	1.39
1915	...	...	1.94	1.05	1.45
1916	...	...	1.56	1.19	1.39

The percentage of deaths from Pulmonary Tuberculosis during the year to cases notified during the same period is appended with the comparative figures for 1912—1916 :—

				Males.	Females.	Both Sexes.
1912	...	...	...	52.5	39.6	47.2
1913	...	...	...	38.7	25.8	32.3
1914	...	...	...	45.6	37.2	41.8
1915	...	...	...	62.4	43.8	53.5
1916	...	...	...	53.2	66.7	59.0

Of the cases dying in 1916 the following table shows the years in which the primary notifications were received. Compulsory notification of all cases of Pulmonary Tuberculosis first came into operation on the 1st January, 1912 :—

1911	...	...	...	...	...	2
1912	...	...	...	...	...	4
1913	...	...	...	...	...	10
1914	...	...	...	...	...	15
1915	...	...	...	...	...	31
1916	...	...	...	...	...	59
Died before notification	...	...	...	...	...	40
						161

The mortality from tuberculous diseases other than pulmonary was equal to a rate of 0.25 per 1,000 of the population, which is slightly lower than in the previous year, and compares favourably with the average, 0.34 for the past five years.

Table showing death-rates, per 1000 of the population, from Tubercular Diseases, from 1873 to 1915, grouped in periods of five years :—

	Pulmonary.	Other Tubercular Diseases.	Total Tubercular Diseases.
1873-1876 (4 years) ...	—	—	2.79
1877-1880 (4 years) ...	2.11	0.68	2.79
1881-1885 (5 years) ...	1.86	0.63	2.49
1886-1890 (5 years) ...	1.72	0.50	2.22
1891-1895 (5 years) ...	1.56	0.68	2.24
1896-1900 (5 years) ...	1.49	0.57	2.06
1901-1905 (5 years) ...	1.30	0.51	1.81
1906-1910 (5 years) ...	1.25	0.41	1.66
1911-1915 (5 years) ...	1.39	0.34	1.73
1916	...	0.25	1.64

SUMMARY OF NOTIFICATIONS RECEIVED UNDER THE PUBLIC
HEALTH (TUBERCULOSIS) REGULATIONS, 1912, DURING
THE 52 WEEKS ENDED 1ST JANUARY, 1917.

Form A	...	...	...	...	337
„ B	...	...	...	...	11
„ C	...	...	...	...	167
„ D	...	...	...	...	159
					674

NUMBER OF PRIMARY NOTIFICATIONS RECEIVED
DURING THE YEAR 1916.

Localisation of Disease.					Males.	Females.	Total.
PULMONARY.							
Lungs	...	...	...	...	150	114	264
Lungs and Larynx	...	...	...	...	2	2	4
„ Pleuræ	...	...	...	...	1	...	1
„ Meninges	...	...	...	...	1	...	1
„ Glands of Neck	...	...	...	...	...	1	1
„ Neck and Ankle	...	...	...	...	1	...	1
Larynx	...	...	...	...	1	...	1
Total Pulmonary					156	117	273
NON-PULMONARY.							
Meninges of Brain	...	...	...	...	...	3	3
Peritoneum and Intestines	...	...	...	...	4	5	9
Cervical Glands	...	...	...	...	17	8	25
Spine	...	...	...	...	1	1	2
Hip	...	...	...	...	2	...	2
Knee	...	...	...	...	2	1	3
Ankle and Joint of Foot	...	...	...	...	1	1	2
Face and Foot	...	...	...	...	1	...	1
Skin	...	...	...	...	1	...	1
Spermatic Cord	...	...	...	...	1	...	1
Total Non-Pulmonary					30	19	49
Total of Primary Notifications :—							
Pulmonary	...	...	...	...	156	117	273
Non-Pulmonary	...	...	...	...	30	19	49
					186	136	322

The following table shows the age and sex incidence of the disease :—

PRIMARY CASES NOTIFIED DURING THE YEAR 1916
(52 WEEKS ENDED 30TH DECEMBER, 1916), TABULATED
ACCORDING TO AGES AND SEX.

	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and up- wards.	Total.
PULMONARY.												
Males ...	...	...	9	14	11	13	42	33	16	12	6	156
Females ...	...	1	8	10	18	17	30	20	8	3	2	117
Total of Pulmonary ...	...	1	17	24	29	30	72	53	24	15	8	273
NON-PULMONARY.												
Males ...	...	5	11	3	6	2	2	1	...	...	...	30
Females ...	1	9	6	...	1	1	...	1	...	...	...	19
Total of Non-Pulmonary ...	1	14	17	3	7	3	2	2	...	...	...	49
Total all forms of Tuberculosis ...	1	15	34	27	36	33	74	55	24	15	8	322

The following table has been drawn up in the form suggested by the Local Government Board :—

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM 2ND JANUARY, 1916, TO

THE 30TH DECEMBER, 1916.

13

Age Periods.	Notifications on Form A.													Total notifications on Form A.	Notifications on Form B.				Number of Notifications on Form C.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	Number of Primary Notifications.														Total notifications on Form B.	Poor Law Institutions.	Sanatori																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 & upwards	Total	Under 5					5 to 10		10 to 15	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Pulmonary—																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

TUBERCULOSIS.

SOCIAL POSITION OF NOTIFIED CASES.

Position in Life.	Males.	Females.		Son of	Daughter of	Total.
		Wife or Widow.	Single (Adults).			
Apprentice	1	—	—	—	—	1
Baker	1	—	—	1	—	2
Blacksmith	1	1	—	—	—	2
Boilermaker	2	—	—	—	—	2
Bookbinder	—	—	1	—	—	1
Boot Repairer	1	3	—	—	—	4
Bottle Washer	—	—	1	—	—	1
Builder & Decorator ...	2	—	—	2	—	4
Butcher... ..	1	—	—	1	—	2
Canteen Manager	3	—	—	—	—	3
Carpenter and Joiner ...	2	1	—	—	1	4
Carman	1	—	—	2	—	3
Charwoman	—	—	1	1	—	2
Chef	1	—	—	—	—	1
Clerk	6	3	4	2	2	17
Club Steward	—	—	1	—	—	1
Commercial Traveller...	1	—	—	—	—	1
Coal Porter	2	1	—	—	—	3
Collector	3	—	—	—	—	3
Customs Officer	—	—	—	1	—	1
Draughtsman	1	—	—	—	—	1
Dressmaker	—	—	3	—	—	3
Dustman	2	—	—	—	—	2
Domestic Servant	—	—	8	2	—	10
Electrician	2	1	—	—	—	3
Engineer	2	—	—	1	2	4
Errand Boy	1	—	—	—	—	2
Factory Worker	1	—	1	—	—	2
Fitter	1	1	—	2	—	4
Gardener	1	—	—	—	—	1
Hairdresser	2	1	—	—	—	3
Hawker	4	—	—	—	—	4
Housekeeper	—	2	—	—	—	2
Housewife	—	3	—	—	—	3
Insurance Agent	1	—	—	—	1	2
Journalist	1	—	—	—	—	1
Lamplighter	1	—	—	—	—	1
Lodging House Keeper ...	—	—	—	1	—	1
Labourer	22	11	—	7	11	51
Laundress	—	—	2	1	—	3
Licensed Victualler and Barmen	3	1	—	—	1	5
Machinist	—	—	—	—	1	1
Map Folder	—	—	—	1	—	1
Merchant	1	—	—	—	—	1
Metal Worker	2	—	—	—	—	2
Mission Worker	—	—	1	—	—	1
Munition Worker	—	—	1	—	1	2
Music Hall Attendant ...	1	—	—	—	—	1
Musician	2	—	—	—	—	2
Nurse	—	—	2	—	—	2
Painter	5	—	—	—	—	5
Plaster Moulder	1	—	—	—	—	1
Police Constable	1	—	—	—	1	2
Porter—Shop	—	—	—	2	—	2

SOCIAL POSITION OF NOTIFIED CASES—(Continued).

Position in Life.	Males.	Females.		Son of	Daughter of	Total.
		Wife or Widow.	Single (Adults).			
Porter—Railway ...	—	1	—	—	—	1
Printer ...	1	—	—	—	—	1
Sawyer ...	1	—	—	—	—	1
School Teacher ...	—	—	—	1	—	1
Seaman ...	8	7	—	—	4	19
Signalman ...	—	—	—	1	—	1
Ship's Barman ...	1	—	—	—	—	1
Ship's Cook ...	1	—	—	1	1	3
Ship's Fireman ...	6	1	—	1	—	8
Ship's Officer ...	2	—	—	—	—	2
Ship's Steward ...	5	1	—	4	4	14
Ship's Stoker ...	3	—	—	—	1	4
Shipwright ...	—	2	—	—	—	2
Shop Assistant...	3	1	6	—	—	10
Shopkeeper ...	3	2	—	2	—	7
Soldier ...	10	8	—	3	3	24
Stevedore ...	2	—	—	—	—	2
Stonemason ...	1	1	—	—	—	2
Surveyor ...	—	—	—	1	1	2
Tinsmith ...	1	—	—	—	—	1
Tram Driver ...	—	1	—	—	—	1
Tailor or Tailoress ...	—	3	1	1	—	5
Upholsterer ...	1	—	—	—	—	1
Waiter ...	1	—	—	1	—	2
Warehouseman ...	1	—	—	—	—	1
No Occupation...	2	—	6	—	—	8
Occupation unknown ...	4	5	—	—	—	9
Total ...	143	62	39	43	35	322

TUBERCULOSIS.

TABLE showing cases, case-rate, deaths, and death-rate from Pulmonary and Non-Pulmonary Tube culosis in each of the Municipal Wards during the year 1916 (52 weeks ended 30th December, 1916):—

WARD	CASES.						DEATHS.					
	Pulmonary.		Non-Pulmonary		Total.		Pulmonary.		Non-Pulmonary.		Total.	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1. Town	30	2.80	7	0.66	37	3.46	31	2.90	6	0.56	37	3.46
2. St. Marys	26	2.23	3	0.26	29	2.49	20	1.72	3	0.26	23	1.98
3. Northam	24	2.25	7	0.66	31	2.91	22	2.07	2	0.19	24	2.25
4. Trinity	21	2.52	6	0.72	27	3.24	8	0.96	1	0.12	9	1.08
5. Newtown	22	2.86	2	0.26	24	3.12	8	1.04	2	0.26	10	1.30
6. All Saints	20	2.28	2	0.23	22	2.51	8	0.91	1	0.12	9	1.03
7. Bevois	23	3.01	4	0.52	27	3.53	11	1.44	2	0.26	13	1.70
8. Banister	12	1.65	2	0.27	14	1.92	9	1.24	3	0.41	12	1.65
9. Freemantle	16	2.15	1	0.13	17	2.28	9	1.21	4	0.54	13	1.75
10. Millbrook	18	1.94	2	0.21	20	2.15	16	1.72	1	0.11	17	1.83
11. Shirley	12	1.21	5	0.51	17	1.72	5	0.51	3	0.30	8	0.81
12. Portswold	21	2.41	1	0.11	22	2.52	7	0.80	—	—	7	0.80
13. St. Denys	28	3.37	7	0.84	35	4.21	7	0.84	1	0.12	8	0.96
Borough	273	2.35	49	0.42	322	2.77	161	1.39	29	0.25	190	1.64

The compulsory notification of Pulmonary Tuberculosis has now been in operation for five years, 1912-1917, and of cases of Non-Pulmonary Tuberculosis for four years. The average case-rate for these periods in each of the Municipal Wards is shown in the appended table. The highest case-rates are in Town, St. Mary's, and Northam Wards, and the lowest in Banister and Freemantle Wards.

The average death-rates are also given in the same table for five years, 1912-1917, and again the highest rates are in Town, St. Mary's, and Northam Wards, and the lowest in Freemantle and Banister Wards.

TUBERCULOSIS.

Average case-rates and death-rates per 1,000 of the population from Tuberculosis in Municipal Wards during the five years 1912-1917.

WARD.	CASE-RATE.			DEATH RATE.		
	Pulmonary.	Non-Pulmonary.	Total.	Pulmonary.	Non-Pulmonary.	Total.
1. Town	4.63	1.06	5.69	2.56	0.60	3.16
2. St. Marys	3.39	0.89	4.28	1.65	0.45	2.10
3. Northam	3.29	0.96	4.25	1.70	0.33	2.03
4. Trinity	2.34	0.73	3.07	1.19	0.24	1.43
5. Newtown	2.68	0.72	3.40	0.89	0.29	1.18
6. All Saints	2.71	0.63	3.34	1.20	0.16	1.36
7. Bevois	3.16	0.77	3.93	1.15	0.32	1.47
8. Banister	1.82	0.27	2.09	0.92	0.19	1.11
9. Freemantle	2.24	0.31	2.55	0.84	0.21	1.05
10. Millbrook	2.93	0.37	3.30	1.51	0.21	1.72
11. Shirley	2.29	0.58	2.87	0.97	0.29	1.26
12. Portswood	3.39	0.50	3.89	1.34	0.30	1.64
13. St. Denys	3.06	1.11	4.17	0.99	0.14	1.13
Borough	2.99	0.71	3.70	1.35	0.31	1.66

DIAGNOSIS, TREATMENT, AND PREVENTION OF TUBERCULOSIS.

RECORD OF DISPENSARY WORK FOR THE YEAR 1916:—

New patients—

Insured ...	...	...	108
Dependents ...	...	...	201
Others ...	...	...	25
			<hr/>
			334
			<hr/>

Visits of Patients under Observation—

Insured ...	...	...	549
Dependents ...	...	...	1406
Others ...	...	...	117
			<hr/>
			2072
			<hr/>

Visits of Patients under Treatment—

Insured ...	...	...	5109
Dependents ...	...	...	6260
Others ...	...	...	1024
			<hr/>
			12393
			<hr/>

Visits paid by Health Nurses to Homes of Tubercular patients—

Insured ...	...	...	1372
Dependents ...	...	...	2154
Others ...	...	...	482
			<hr/>
			4008
			<hr/>

Consultations at Homes of Patients
between Tuberculosis Medical
Officer and Private Doctors ... 57

RECORD OF NUMBER OF PATIENTS UNDER DISPENSARY TREATMENT
DURING 1916:—

	Pulmonary.	Non- Pulmonary.	Pre- Tubercular.
Number of cases under treatment on January 1st, 1916	200	5	—
New Cases treated	158	13	42
Cases transferred from Sanatorium ...	103	5	2
Cases transferred from Domiciliary treatment	1	0	0
Cases transferred from General Super- vision	22	1	3
Cases transferred to Sanatorium ...	114	2	2
Cases transferred to Domiciliary treat- ment	34	0	0
Cases lost sight of (including removals from the Borough)	21	0	1
Cases who have finished treatment during the year and are now under General Supervision	41	12	13
Total under Dispensary treatment on January 1, 1917	274	10	31
Total number of notified cases under observation at the end of the year ... ..	...	...	748

Comparison with 1915 shows that there were 6 more new cases in 1916.

The number of visits paid by patients to the Dispensary was 14,465, or 746 more visits than in 1915.

The number of consultations at the patients' homes between the Tuberculosis Officer and the private practitioner was 57.

RECORD OF SANATORIUM WORK FOR 1916:—

	Insured.	Dependents.	Others.	Totals
Patients remaining in Sanato- rium, January 1st, 1916 ...	25	7	3	35
Patients admitted during 1916...	65	44	9	118
Patients discharged during 1916	68	34	8	110
Patients died in Sanatorium ...	6	5	3	14

Average duration of stay in Sanatorium
of each patient... .. 100 days

Number of Sputum examinations carried
out for Medical Practitioners in the
Borough 112 „

Whenever possible "Contacts" have been examined. Unfortunately, the time of the Dispensary Staff is very fully occupied in dealing with notified cases and those sent for diagnosis by practitioners.

DENTAL TREATMENT.

Number of patients seen	...	...	30
Extractions	...	...	21
Local Anæsthesias	...	...	12
Fillings	...	...	4
Dressings	...	...	3

DIAGNOSIS.

The routine method of examination detailed in the Report for 1915 has been carried out in 1916 in all cases where there has been no contraindication.

TABLE SHOWING THE NUMBER OF DIAGNOSIS MADE
DURING 1916, AND THE RESULTS OBTAINED.

	Found to be suffering from		Found to be		Totals.
	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Pre-tubercular.	Non-Tuberculous	
Previously notified cases ...	117	10	9	12	148
Sent by School Medical Officer for Diagnosis ...	17	3	28	26	74
Sent by Local Medical Practitioners for Diagnosis ...	55	3	3	26	87
House contacts	2	—	—	12	14
Suspected cases, other than house contacts	2	1	—	3	6
Totals	193	17	40	79	329

Six cases ceased to attend before the completion of diagnosis. Eighty-seven cases were sent by local Medical Practitioners.

The School Medical Officer submitted 74 cases for diagnosis during 1916. Of these 35 per cent, were found to be Non-Tubercular and 37 per cent. showed no active Tuberculosis, but were classed in the Pre-Tubercular group.

RESULTS OF SANATORIUM TREATMENT.

PULMONARY CASES.

Tables giving the results of treatment in patients suffering from Pulmonary Tuberculosis who were discharged from the Sanatorium during the year will be found on pages 55 to 62.

From these tables it will be seen that:—

19	patients	were	admitted	in	the	First	Stage	of	the	Disease.
37	„	„	„	„	„	Second	„	„	„	„
59	„	„	„	„	„	Third	„	„	„	„

In 24 patients the disease was of comparatively short duration; 49 were advanced, but showed prospects of considerable improvement; 34 were considered permanently incapable of work; and 8 were thought not to be likely to live longer than 6 months.

On discharge, in 36 cases the disease was arrested; 38 showed much improvement; 11 showed improvement; 6 showed no change; 8 were worse; and 16 died in the Sanatorium.

NON-PULMONARY CASES.

Four cases were admitted to the Sanatorium; 1 of these was discharged to the Royal South Hants Hospital for operation. The other 3 were discharged cured.

RESULTS OF TREATMENT IN PATIENTS DISCHARGED FROM THE MUNICIPAL SCHEME DURING 1916.

PULMONARY CASES.

Treatment was concluded under the Scheme in 86 cases during the year. This is a smaller number than in 1915, and

is due to a rather different scheme of treatment being followed out. The higher proportion of cases able to follow regular employment seems to justify the longer period of treatment, both at the Sanatorium and the Dispensary.

When the above 86 cases first came under observation 32 were in the first stage, 23 in the second stage, and 31 in the third stage.

Thirty-two of these cases were of recent onset, 32 were advanced, but showed prospects of considerable improvement, 18 were never likely to return to work, and 4 were not expected to live over 6 months.

On completion of treatment under the Corporation the disease was arrested in 45 cases, 16 showed improvement, 3 were the same, and 22 were worse.

Forty-six were able to return to full work, 23 could do light work, 11 were not able to work, and 5 were not expected to live 6 months.

NON-PULMONARY CASES.

Twenty-three cases completed treatment during the year, 19 were cured, 2 were considerably improved, 1 was the same, and 1 was worse.

TABULATED RESULTS OF TREATMENT IN PULMONARY CASES.

The tables which are appended show the results of treatment in those patients who were discharged from the Borough Sanatorium during the year 1916. A separate set of tables show the results for those patients who were discharged from active treatment under the Municipal Scheme during the same period.

The patients have been placed in three groups, and show in separate tables, those with:—

- (A) Tubercle Bacilli found in sputum.
- (B) Tubercle Bacilli not found in sputum.
- (C) Tubercle bacilli absent. Albumen present to the extent of 0.2 per cent. or more.

The patients in each group have been classified as to the stage of the disease at the time of coming under treatment ; males and females being shown separately. The classification adopted being the Turban-Gerhardt (Imperial Board of Health). They have further been classified according to the method adopted in the Astor Report.

On discharge they have been classified according to their economic condition (working capacity) and also as to their physical condition.

The following are the details of the classification adopted :—

*TURBAN-GERHARDT CLASSIFICATION (IMPERIAL BOARD OF
HEALTH).

STAGE I.—Disease of slight severity, limited to small areas of one lobe ; that, for instance, in case of infection of both apices, does not extend beyond the spine of scapula and the clavicle, or in the case of affection of one apex, frontal, beyond the second rib.

STAGE II.—Disease of slight severity, more extensive than I., but affecting at most the volume of one lobe ; or severe disease, extending at most to the volume of one half lobe.

STAGE III.—All cases extending beyond II., and all such with considerable cavities.

†CLASSIFICATION OF PATIENTS, ASTOR REPORT.

- (1) Cases in which the disease can be diagnosed or is strongly suspected, but in which there is no evident impairment of the working capacity.
- (2) Cases of recent onset with some impairment of the working capacity, but without marked evidence of ill-health.
- (3) Cases of recent onset with evidence of acute illness.
- (4) Cases of a longer history of illness. In some of these cases permanent arrest of the disease may be hoped for, but in the majority, restoration to full working capacity for more than a comparatively short period is not to be looked for.

- (5) Cases in which there is a permanent loss of working capacity. Many of these patients live for a considerable period in a condition of chronic ill-health.
- (6) Cases in which a fatal termination within six months is probable.

‡ECONOMIC CONDITION ON DISCHARGE FROM TREATMENT.

- (1) No evident impairment of working capacity.
- (2) Some impairment of working capacity.
- (3) Marked loss of working capacity.
- (4) Very marked loss of working capacity.
- (5) Very marked loss of working capacity and progress unfavourable.
- (6) Probable fatal termination within 6 months.

TABLE I.

CLASSIFICATION OF THE IMMEDIATE RESULTS OF TREATMENT IN THOSE PATIENTS SUFFERING FROM PULMONARY TUBERCULOSIS DISCHARGED FROM THE BOROUGH SANATORIUM DURING 1916.
(A) Tubercle Bacilli present.

Classification of Cases Turban- Gerhardt.	On Admission.						Total	On Discharge.						Total	
	Classification (Astor).							Total	Physical Condition.						
	Economic Condition.								Disease arrested.	Much improv'd	Im- proved.	No change.	Worse.		Died.
	1	2	3	4	5	6									
Stage I.—															
Males ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Females ...	1	...	1	...	...	...	2	1	...	1	...	...	1	...	2
Stage II.—															
Males ...	...	...	1	3	...	...	4	2	2	...	...	...	...	...	4
Females ...	2	1	4	...	...	...	7	2	1	2	1	...	...	...	7
Stage III.—															
Males ...	...	...	3	4	16	3	26	2	11	4	1	1	1	3	26
Females ...	...	...	3	3	10	3	19	...	5	6	1	2	...	5	19
Totals ...	3	8	15	26	6	6	58	7	19	12	4	3	1	12	58

(1) Tubercle Bacilli absent.

Classification of Cases Turban- Gerhardt.	On Admission.						Total	Economic Condition.	Total	On Discharge						Total
	Classification (Astor).									Physical Condition.						
	1	2	3	4	5	6				Disease arrested.	Much improv'd	Im- proved.	No change.	Worse.	Died.	
Stage I.—																
Males ...	3	2	...	...	...	...	5	4	1	...	...	...	...	...	...	5
Females ...	7	1	...	1	...	...	9	8	1	...	7	2	...	...	...	9
Stage II.—																
Males ...	2	2	1	1	...	...	6	2	2	1	...	3	...	...	1	6
Females ...	6	4	3	...	...	...	13	6	6	1	...	4	1	...	...	13
Stage III.—																
Males ...	1	1	...	3	...	...	5	2	2	...	4	...	...	...	1	5
Females ...	...	...	2	3	2	...	7	1	1	1	1	2	...	...	1	7
Totals ...	19	10	6	8	2	2	45	23	13	3	1	12	1	...	2	45

(B) Tubercle Bacilli absent.

Classification of Cases Turban- Gerhardt.	On Admission.							On Discharge.										Total			
	Classification (Astor).							Total	Economic Condition.					Total	Physical Condition.						
	1	2	3	4	5	6	1		2	3	4	5	6		Disease arrested.	Much improv'd	Im- proved.		No change.	Worse.	Died.
Stage I.—																					
Males ...	3	8	...	3	...	...	14	13	1	...	...	...	...	13	1	...	...	...	...	14
Females ...	5	8	...	...	...	...	13	13	...	...	...	...	12	1	...	...	...	...	13	
Stage II.—																					
Males ...	...	3	1	4	...	...	8	7	...	1	...	...	...	7	1	...	...	...	...	8
Females ...	...	3	4	2	...	...	9	6	2	1	...	...	8	...	1	...	...	...	9	
Stage III.—																					
Males ...	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	1	...	1
Females ...	...	...	...	1	2	...	3	1	...	...	1	1	...	...	1	...	2	...	3	
Totals ...	8	22	5	10	3	...	48	40	3	2	1	1	1	40	4	1	...	3	...	48	

(c) Tubercle Bacilli absent. Albumen present to the extent of 0.2 per cent. or more.

Classification of Cases Turban- Gerhardt.	On Admission.						Total	On Discharge.						Total			
	Classification (Astor).							Total	Physical Condition.								
	1	2	3	4	5	6			Disease arrested	Much improv'd	Im- proved	No change	Worse		Died		
Stage I.—																	
Males	...	1	1	...	...	...	2	2	...	...	...	...	1	...	...	...	2
Females
Stage II.	...																
Males
Females	1	...	...	...	1	...	1	...	...	...	1	...	...	...	1
Stage III.—																	
Males
Females
Totals	...	1	2	...	...	...	3	2	1	...	...	...	1	2	...	...	3

CANCER.

The deaths from Cancer amounted to 143 during the year. This is a slight decrease compared with the previous year, when the number of deaths recorded amounted to 150.

The death-rate from the disease was 1.25 per 1,000 of the population, the average for the previous 10 years being 1.03.

The number of deaths of males and females and the death-rate from this disease of residents of the Borough since 1905 is appended :—

			Males.	Females.	Total.	Death Rate.
1905	...	...	36	56	92	0.83
1906	...	...	35	67	102	0.91
1907	...	...	51	74	125	1.10
1908	...	...	38	69	107	0.91
1909	...	...	52	53	105	0.90
1910	...	...	61	74	135	1.15
1911	...	...	60	65	125	1.05
1912	...	...	54	55	109	0.90
1913	...	...	53	86	139	1.12
1914	...	...	60	65	125	1.01
1915	...	...	71	79	150	1.28
1916	...	...	63	80	143	1.23

The incidence of deaths from Cancer in the Municipal wards, since 1911, is shown in the following table :—

Table showing death-rate from Cancer in the Municipal wards for the year 1916, and the average death-rate for the five previous years, 1911 to 1915 :—

Ward.			Death-rate, 1916.	Average Death-rate, 5 years, 1911—1915.
1. Town	...	...	1.78	1.34
2. St. Marys	...	...	1.12	0.92
3. Northam	...	...	0.66	1.01
4. Trinity	...	...	1.44	1.16
5. Newtown	...	...	1.31	1.02
6. All Saints	...	...	1.72	1.10
7. Bevois	...	...	1.31	1.50
8. Banister	...	...	0.69	1.40
9. Freemantle	...	...	0.94	1.09
10. Millbrook	...	...	0.97	0.97
11. Shirley	...	...	1.83	0.92
12. Portswood	...	...	0.80	0.88
13. St. Denys	...	...	1.33	0.71
Borough	...	...	1.23	1.07

The localization of the disease in those persons who died from Cancer during 1916 is shown in the following table:—

				Males.	Females.	Total.
Mouth	...	...	...	1	—	1
Cheek	...	...	...	1	—	1
Tongue	...	...	...	8	—	8
Jaw ...	...	...	...	3	1	4
Pharynx	...	...	...	—	1	1
Œsophagus	...	...	...	4	1	5
Stomach	...	...	...	7	4	11
Pylorus	...	...	...	1	1	2
Liver	...	...	...	5	8	13
Intestines	...	...	...	5	2	7
Colon	...	...	...	—	3	3
Sigmoid	...	...	...	2	2	4
Rectum	...	...	...	4	6	10
Uterus	...	...	...	—	22	22
Ovary	...	...	...	—	5	5
Labia	...	...	...	—	1	1
Vulva	...	...	...	—	1	1
Breast	...	...	...	—	20	20
Throat	...	...	...	2	—	2
Larynx	...	...	...	5	1	6
Lung	...	...	...	2	—	2
Mediastinum	...	...	...	3	—	3
Pancreas	...	...	...	2	—	2
Pelvis	...	...	...	—	2	2
Bladder	...	...	...	1	—	1
Prostrate	...	...	...	1	—	1
Skull	...	...	...	1	—	1
Femur	...	...	...	—	1	1
Thigh	...	...	...	1	1	2
Great Toe	...	...	...	1	—	1
				—	—	—
				63	80	143
				—	—	—

ISOLATION HOSPITAL.

Six hundred and seventy-five patients were admitted to the Isolation Hospital and Hospital Ship. This is a decrease of 318 in the number of admissions, caused by the diminution in the number of cases of Scarlet Fever and Diphtheria occurring in the Borough during the year.

The number of admissions during the past six years is:—

1911	...	574	...	...	1915	...	799
1912	...	585	...	...	1915	...	993
1913	...	660	...	...	1916	...	675

The following table gives details respecting cases admitted during the year 1916:—

ISOLATION HOSPITAL.

Cases Isolated for Treatment.

THIS TABLE SHOWS ALL ADMISSIONS TO THE ISOLATION HOSPITAL AND HOSPITAL SHIP, AND INCLUDES ALL CASES REMOVED FROM VESSELS IN THE PORT, CASES ADMITTED FROM NEIGHBOURING DISTRICTS, AND NAVAL AND MILITARY CASES.

DISEASE NOTIFIED OR SUSPECTED.	Cases Remaining in Hospital, 1st January, 1916.	Total number of Admissions.	Diagnosis confirmed at Hospital.	Cases Admitted not proving to be disease notified or suspected.	Discharged.	Died.	Remaining in Hospital, 31st Dec., 1916.	Average number of days in Hospital (Civil Cases discharged)	Case Mortality (Actual cases).
Small Pox	—	2	2	—	1	1	—	—	—
Scarlet Fever	49	164	155	9	201	4	8	35.1	2.44
Diphtheria	37	224	213	11	222	19	20	43.2	8.49
Enteric Fever	6	27	24	3	29	2	2	39.9	7.41
Measles and German Measles	—	101	100	*1	98	*1	2	—	—
Tuberculosis	35	118	118	—	109	16	28	—	—
Cerebro-Spinal Fever	—	22	20	2	17	†5	—	—	—
Chicken Pox	—	3	3	—	3	—	—	—	—
Mumps...	—	6	6	—	6	—	—	—	—
Erysipelas	1	3	3	—	3	—	—	—	—
Cases for Observation	—	5	5	—	4	—	1	—	—
Total	128	675	649	26	693	48	62	—	—

* Small Pox. † Including one death from Pneumococcal Meningitis and one death from Cerebral Tumour.

SCARLET FEVER.

One hundred and sixty-four cases of Scarlet Fever were admitted, being a decrease of 174 cases compared with the year 1916. Of the total admitted 28 were military cases.

The cases admitted were of a more severe type than is usual in Southampton, four of the cases being fatal. Twenty-one cases were complicated with purulent discharges from nose or ear, necessitating prolonged detention in Hospital. Operations for the removal of Tonsils and Adenoids were performed on 8 cases, or 4.9 per cent. of the total number admitted, compared with 1.8 per cent. in 1915. One operation of mastoidotomy was also performed.

DIPHTHERIA.

One hundred and sixty-four cases were admitted, being a decrease of 125 cases compared with the previous year. Eighty of the cases admitted were military cases.

The fatal cases amounted to 19, a decrease of 15 compared with the year 1915. Several of the fatal cases were in a serious condition on admission, 6 of them dying within 24 hours of admission.

The operation of Tracheotomy was carried out in four cases.

The following is a list with details of fatal cases which occurred in the Hospital:—

Initials.	Age.	Day of Disease on Admission.		No. of days in Hospital.		Remarks.
W.J.H. ...	3	...	3	...	9	Purulent Adenitis and rhinorrhœa.
J.S. ...	20	...	?	...	19	Military case suffering from Dysentery.
A.S.H. ...	8	...	?	...	1	Toxæmia.
N.H. ...	5	...	—	...	11	Heart failure.
P.B. ...	5	...	—	...	12	Tracheotomy—Toxæmia
M.K. ...	2	...	3	...	2	Heart failure
T.S. ...	3	...	2	...	2 hours	Sudden Heart failure
A.F. ...	5	...	2	...	2	Paralysis, Heart failure
H.W. ...	8	...	6	...	3	Hæmorrhagic case (New Forest R.D. case)
L.P. ...	8	...	5	...	10	Heart failure
E.M. ...	3	...	3	...	1	Tracheotomy
E.M.P. ...	6	...	6	...	9 hours	Toxæmia—Moribund on admission

Initials.	Age.	Day of Disease on Admission.		No. of Days in Hospital.		Remarks.
R.A.H. ...	5	...	5	...	6 hours	Septic case—Moribund on admission
M.P. ...	8	...	5	...	3 hours	Tracheotomy, Heart failure
F.H.B. ...	6	...	6	...	6	Septic case
D.S. ...	7	...	2	...	2	Very Septic case
R.G.H. ...	7	...	2	...	2	Persistent Vomiting
W.N. ...	44	...	?	...	—	Military case, also suffering from Cancer
W.B. ...	22	...	?	...	—	Military case

MEASLES AND GERMAN MEASLES.

One hundred and one cases of Measles and German Measles were admitted during the year, 96 of which were naval or military cases.

One case which was admitted from a Transport from the Mediterranean proved to be a severe case of Hæmorrhagic Small Pox, and died four days after admission.

ISOLATION HOSPITAL AND HOSPITAL SHIP.

The following Table shows the Districts from which cases were admitted during the year 1916.

Disease. Notified or Suspected.	Boro'.	Port. (crew)	New Forest Rural.	Itchen Urban and South Stoneham Rural.	Lymington Rural.	Hursley Rural.	Naval and Milit'ry Cases.	Total.
Small Pox ...	1	...	...	...	...	...	1	2
Scarlet Fever ...	130	1	4	...	...	1	28	164
Diphtheria ...	124	1	12	6	1	...	80	224
Enteric Fever ...	20	7	...	...	...	...	...	27
Measles and German Measles	3	3	...	...	...	...	95	101
Tuberculosis ...	118	...	...	...	...	...	...	118
Cerebro - Spinal Fever ...	4	...	...	...	...	...	18	22
Chicken Pox ...	...	...	...	...	...	...	3	3
Mumps ...	...	...	...	...	...	...	6	6
Erysipelas ...	...	...	...	...	...	...	3	3
Cases for Observation ...	2	...	...	...	...	...	3	5
Total ...	402	12	16	6	1	1	237	67

Comparative Mortality of Cases, occurring **in the Borough,**
treated in the Isolation Hospital and outside.

Disease.	Whole Borough		Treated in the Isolation Hospital.		Treated at Home and in other Institutions.	
	Total Number of cases notified.	Case Mortality per cent.	Number of cases.	Case Mortality per cent.	Number of cases.	Case Mortality per cent.
Scarlet Fever ...	187	2.14	130	3.08	57	1.75
Diphtheria ...	172	9.30	124	11.29	48	4.17
Enteric Fever ...	23	13.04	13	13.08	10	10.0
Totals ...	382	6.02	267	7.49	115	3.48

LABORATORY REPORT.

At the end of the year 1915 all laboratory work was transferred from the Borough Isolation Hospital to the Municipal Dispensary. A properly equipped Laboratory was already provided when the Dispensary was first opened.

During the year all Laboratory work, including that from the Borough Isolation Hospital, has been done at 1, East Park Terrace.

A large amount of Bacteriological work has also been undertaken for the Reception Hospital, Rest Camp, Common, and various Military Hospitals in the Borough

The following is a resumé of the work done during the year:—

DIPHTHERIA (Swabs).

Civilian Cases ...	...	...	...	1134
Military Cases ...	...	...	...	590
Total ...				1724

EXAMINATION OF "CONTACTS."

Civilian Cases	32
Military Cases	127
Total	159

CEREBRO-SPINAL FEVER.

Swabs from cases suffering from the disease	49
Swabs from "Contacts."	72
Total	121

Examinations of Cerebro-Spinal Fluid	14
--------------------------------------	----

SPUTUM EXAMINATIONS.

Specimens sent by Practitioners ...	112
" " the Military ...	66
" from the Tuberculosis Department	258
Total	436

Estimations for the Albumen content of Sputum	140
--	-----

Examinations of Fæces for Typhoid group Bacilli	109
Widal Examinations	38
Bacteriological Examination of Urine	20
Blood Cultures	8
Malaria	7
Miscellaneous Examinations	17

Total Examinations made—2753

The amount of work done during 1916 was in excess of that in 1915. This is especially seen in the number of Sputum Examinations. During 1915 51 specimens of Sputum were sent by Medical Practitioners; in 1916 the number had risen to 112, exclusive of 66 specimens sent by Military Medical Officers.

Examinations for Pathological Organisms in fæces also showed an increase of 89 over 1915.

The presence of several cases of Cerebro-Spinal Fever in the Town and in Military Camps in the Borough introduced new work in the bacteriological routine.

A satisfactory feature of the work is the increasing number of Specimens for examination from Medical Practitioners, showing as it does an appreciation of the help given them in the diagnosis of doubtful or difficult cases.

The Laboratory has also been a source of considerable help to the Military.

The amount of work done during the year compares favourably with that done in some Laboratories employing a whole-time Bacteriologist.

OUTBATHING STATION AND AMBULANCE SHED, AND DISINFECTOR, WEST QUAY.

These premises are used for the purpose of disinfection and bathing of persons who have been in contact with infectious disease, particularly for contacts of cases of infectious disease landed by vessels arriving in the Port.

The buildings also contain an observation ward for suspicious cases of sickness arriving in the Port, and the premises are further used as a discharge block in connection with the Hospital Ship.

The following is a list of the contacts and the discharged cases from the Hospital Ship bathed and disinfected at West Quay during the year: —

Small Pox cases...	...	...	...	2
Scarlet Fever contacts	...	...	...	19
Measles contacts	...	...	...	19
Scabies cases	...	...	...	3

Owing to the School Clinic now being open to receive cases no children were treated at West Quay in connection with the Medical Inspection of School Children.

There was a large decrease in the amount of disinfection work done at the Disinfecting Station at West Quay during the year, owing to the fact that the disinfection of bedding, etc., is now carried out by the Admiralty and Military Authorities in steam disinfectors they have erected for this purpose.

The following is a list of articles disinfected in the Steam Disinfector at West Quay, including articles removed from the Port:—

Beds and Mattress ...	...	...	9,598
Bolsters and Pillows...	...	...	8,985
Blankets and Quilts ...	...	...	31,626
Sheets ...	...	...	4,046
Counterpanes ...	...	...	771
Books ...	...	...	526
Sundries ...	...	...	21,300
Total ...	...	...	76,852

MIDWIVES ACT, 1902.

The number of Midwives who notified their intention of practising in the Borough during the year amounted to 39, an increase of 6, compared with 1915.

Twenty-four of the Midwives were trained nurses, having obtained their certificates by reason of passing an examination in Midwifery, the remaining 15 were untrained, having obtained certificates owing to their having been in practice one year before the passing of the Act.

The number of women in childbirth who were delivered by Midwives during the year amounted to 1,970, of which 1,908 were live births and 62 still births. The total number of births registered during the same period was 2,770, the percentage of live births attended by Midwives was, therefore, 68.9.

The following table shows the percentage of women in childbirth attended by Midwives and the percentage of still births to total births attended during the last 7 years:—

Year.	Number of Live Births Registered.	Number of Live Births attended by Midwives.	Number of Still Births attended by Midwives.	Percentage of Live Births attended by Midwives to Births registered during same period.	Percentage of Still Births among Births attended by Midwives.
1910	2926	1960	58	67.0	2.9
1911	2849	1973	63	69.4	3.1
1912	2806	1906	65	71.1	3.2
1913	2957	2023	56	68.4	2.7
1914	2949	2008	70	68.1	3.4
1915	2707	1938	66	71.6	3.3
1916	2770	1908	62	68.9	3.1

The following notices were received and inspections made during the year:—

Notices received of intention to practice ...	39
„ „ sending for medical help	254
„ „ still births	43
Inspections and visits... ..	113

The following is a list of complications for which medical help was requisitioned during the year:—

MOTHER.

Abnormal Presentation	25
Prolonged Labour	26
Ruptured Perinæum	26
Ante or Post Partum Hæmorrhage ...	13
Retained Placenta or Membranes ...	5
Rise of Temperature	14
Abortion or Premature Birth	27
Still Birth	3
Eclampsia	2
Other causes	20
	<hr/>
	161

CHILD.

Opthalmia Neonatorum	55
Pemphigus... ..	4
Feebleness of Child	23
Talipes	1
Other Causes	11
	<hr/>
	92

Inspections were made during the year at the residences of the Midwives of registers, bags and appliances. As a rule these were found in good order; notice to comply with the Rules of the Central Midwives' Board was given in those cases in which neglect was found.

As in previous years lectures were occasionally given to Midwives in the Borough by members of the Medical Staff of the Health Department in connection with the Midwives' Association.

Eight cases of Puerperal Fever were notified, being an increase of four compared with the previous year. This number is equal to a rate of 0.07 per 1,000 of the population, the rate for England and Wales being 0.06 and for the County Boroughs of England 0.08.

The number of deaths recorded was two, this being exactly the same number as occurred in each of the previous seven years.

Two of the cases were removed to the Royal South Hants and Southampton Hospital for treatment, four were removed to the Parish Infirmary, and two were treated in their homes.

In all the above cases the Midwives and Nurses were given a disinfecting bath at the Isolation Hospital on ceasing attendance on the patient, and thorough disinfection of all articles likely to convey infection was carried out.

GENERAL ROUTINE WORK.

Summary of Inspections and of Work carried out.

General Inspection of Houses and re-visits	25,357
Inspections on complaint	275
„ under the Housing, Town Planning, &c., Act, including the supervision of work in progress	2,089
„ of Factories... ..	24
„ of Workshops and Workplaces	1,618
„ of Laundries..	91
„ of Bakehouses	548
„ under the Shops Act	1,646
„ of Slaughterhouses	3,032
„ of Butcher Shops	5,126
„ of Sausage Factories	1,009
„ of Wholesale Stores, Markets, etc	1,285
„ of Fish Shops	668
„ of Horse Flesh Shops	164
„ of Dairies, Cowsheds, and Milkshops	745
„ of Ice Cream Factories and Shops	102
„ of Common Lodging Houses	1,242
„ of Houses Let in Lodgings	518
„ of Courts and Alleys	1,245
„ of Stable Yards, Mews, etc.	1,390

Visits re Infectious Disease	3,507
„ re Non-notifiable Infectious Disease (School Absentees)	213
„ re Notification of Births... ..	486
„ re Void Houses	140
„ re Weekly Death Returns	66
„ to Schools	27
Houses and Premises Disinfected	629
Preliminary Notices served for the Abatement of Nuisances	978
Legal Notices served for the Abatement of Nuisances	475
Nuisances abated by Verbal Notice	1,224
Drains tested with Smoke	130
„ „ „ Water	157
„ found Defective	72
„ cleared and repaired	561
„ re-constructed	145
„ re-trapped	237
„ intercepted from sewer and ventilated ...	154
Inspection chambers provided to house drains ...	72
New soil pipes fixed on external walls of houses ...	29
Water-closets re-constructed	65
Urinals re-constructed and provided with means of flushing	12
New water-closet pans fixed	246
Water laid on to water-closets	113
Ventilating shafts of house drains repaired	43
Bath, sink waste-pipes, stack-pipes, &c., disconnected from drains	171
Sanitary sinks fixed in houses	102
Premises drained to sewer	1
Damp walls of houses remedied	245
Houses cleansed and whitewashed	483
Roofs of houses repaired	303
Eaves, guttering, and stack-pipes repaired	189
Rooms of houses efficiently ventilated	118
Window-sashes made to open	134
Flooring, windows, etc., repaired	191
Ground floor ventilation provided under rooms ...	117
Means of light and ventilation provided to water-closets	15
Yards paved and drained	150
Yard paving repaired	211
Sanitary dust-bins provided to houses... ..	42
Overcrowding in houses abated... ..	12
Courts re-limewashed	25
Nuisances from keeping animals, etc., abated ...	4

Manure vaults constructed	...	...	...	...	6
„ and offensive matter removed	...	...	...	...	160
Streams cleansed	...	...	...	...	1
Stables paved and drained	...	...	...	...	3
Pig-styes „ „ „	...	...	...	...	1
Cellar dwellings abolished	...	...	...	...	2
Privies abolished	...	...	...	...	1

SOUTHAMPTON CORPORATION ACT, 1910.

During the year 192 notifications were received with respect to the repair and alteration of drainage in compliance with Section 51 of the above Act.

The following works were carried out and supervised by the Department after notification:—

Premises drained to the sewer	...	...	...	...	1
Drains re-constructed	...	...	...	...	58
„ cleared	...	...	...	...	95
„ repaired	...	...	...	...	95
„ ventilated	...	...	...	...	34
Intercepting traps fixed	...	...	...	...	39
Inspection chambers constructed	...	...	...	...	39
New traps fixed	...	...	...	...	72
New soil pipes fixed	...	...	...	...	12
Bath, sink, waste pipes, &c., disconnected from drains	...	...	...	...	30
Sanitary sinks provided	...	...	...	...	18
Water-closets re-constructed	...	...	...	...	20
Water laid on to water-closets	...	...	...	...	21
New pans fixed to water-closets	...	...	...	...	81
Urinals re-constructed	...	...	...	...	2
External light and ventilation provided to water-closets	...	...	...	...	15
Stables paved and drained	...	...	...	...	1
Flushing apparatus provided to urinals	...	...	...	...	3

DRAINAGE UNDER THE NEW BUILDING BYE-LAWS.

During the year 97 plans were submitted, of which 87 were approved and 10 disapproved.

The approved plans comprise:—

Dwelling-houses	...	...	...	...	9
Alterations and additions	...	...	...	...	45
Miscellaneous buildings	...	...	...	...	38

Houses completed	...	...	...	...	...	37
Stables	...	...	...	...	...	1
Alterations and additions	...	...	...	...	...	12
Miscellaneous buildings	...	...	...	...	...	5
Number of inspections during progress of work	...	...	...	...	...	1,022
„ „ drains tested and re-tested	...	...	...	...	...	210

POLLUTED WELLS.

One sample of water was taken and submitted to the Public Analyst. The same was found on analysis to be polluted and unfit for drinking or domestic purposes.

The result of the analysis was forwarded to the Military Authorities (the occupiers of the premises) and a supply of water was laid on to the house from the public main.

OFFENSIVE TRADES.

The following offensive trades are carried on in the Borough: Gut Scraper 1, Tallow Melter 1, Tripe Boiler 1, Dealers in Rags, Bones, etc., 7, Fish Friers 23.

The premises are regularly inspected and were found during the past year generally in a satisfactory condition.

SLAUGHTERHOUSES.

There are 34 Slaughterhouses in the Borough, 32 of which are in use.

Three thousand and thirty-two visits were made, and the premises generally were kept in a satisfactory condition.

MEAT AFFECTED BY TUBERCULOSIS SEIZED OR SURRENDERED.

	In Slaughter-houses.	In Shops.	Weight.
Carcases of Beef	3	—	2,232 lbs.
„ Pork	4	1	610 lbs.
Part carcases of Beef	13	—	482 lbs.
„ „ Pork	4	5	80 l.s.

FOOD INSPECTION.

In the inspection of food the following visits were made to premises where food is prepared, stored, or sold:—

Slaughterhouses	...	...	...	3,032
Butcher Shops...	...	...	...	5,126
Sausage Factories	...	...	...	1,009
Wholesale Stores, Markets, etc	...	...	...	1,285
Fish Shops	...	...	...	668
Ice Cream Factories and Shops	...	...	...	102

The following is a summary of the diseased or unsound food destroyed during the year:—

BEEF.

Whole carcasses	...	...	...	3
Quarters	...	...	...	6
Livers	...	...	...	55
Lungs	...	...	...	30
Hearts	...	...	...	4
Tongues	...	...	...	3
Mesenteries	...	...	...	5
Stomachs	...	...	...	5
Heads	...	...	...	6
Tails	...	...	...	2
Sundry pieces of beef...	...	...	...	765 lbs.
Total weight of beef...	...	...	...	4,839 lbs.

PORK.

Whole carcasses...	...	...	...	5
Heads	...	...	...	7
Offals	...	...	...	3
Livers	...	...	...	3
Plucks	...	...	...	165
Sundry pieces of pork...	...	...	...	60 lbs.
Total weight of pork...	...	...	...	1,865 lbs.

MUTTON AND LAMB.

Whole carcasses...	...	...	...	33
Plucks	...	...	...	4
Lungs	...	...	...	18
Livers	...	...	...	19
Hearts	...	...	...	19
Heads	...	...	...	60
Sundry pieces of mutton	...	...	...	40 lbs.
Total weight of mutton	...	...	...	1,904 lbs.

FRUIT, VEGETABLES, ETC.

162 bags of Potatoes.
 4 barrels of Apples.
 1,568 lbs. of Tomatoes.
 1 bag of Chestnuts.
 2 cases of Oranges.
 2 crates of Gooseberries
 40 sieves of Plums.
 28 crates of Cherries.
 91 Rabbits.
 12 Chicken.
 1,344 lbs. of Celery.
 80 lbs. of Chestnuts.
 40 lbs. of Pears.
 Total weight ... 23,422 lbs.

FISH.

Haddock	...	...	...	...	12 boxes
Mackerel	...	...	...	...	89 „
Herrings	...	...	...	...	14 „
Whiting	...	...	...	...	4 „
Kippers	...	...	...	...	42 „
Whitebait	...	...	...	...	2 „
Pollack	...	...	...	...	1 case
Codling	...	...	...	...	23 boxes
Smelts	...	...	...	...	4 „
Escallops	...	...	...	...	4 cases
Fillets	...	...	...	...	2 boxes

192 lbs. of Bream.
 128 „ „ Monkfish.
 18 „ „ Hake.
 48 „ „ Lobsters.

Total weight of Fish ... 15,286 lbs.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER,**1885-1886.**

There are 224 purveyors of milk, including 8 cowkeepers, registered in the Borough. The total also includes 17 purveyors of milk who reside outside the Borough. During the year 5 purveyors of milk and 1 cowkeeper have ceased to sell milk, and their names have been removed from the Register.

One cowkeeper has been registered in accordance with the above orders.

One application for registration has been received from a purveyor of milk residing outside of the Borough. The cleansing of dairies, cowsheds, and milkshops has been carried out in accordance with the Regulations, and various nuisances abated.

PARTICULARS.	Town Proper.	Shirley, Freemantle, and Millbrook.	Portwood and Bitterne Park.	Outside the Borough.	Total.
Number of Cowkeepers on Register	...	5	3	...	8
Number of Purveyors of Milk on Register	108	53	38	17	216
Number of Purveyors of Milk registered during the year ...	...	3	2	1	6
Number of Cowkeepers registered during the year ... ..	...	...	1	...	1

COWKEEPERS IN THE COUNTY BOROUGH OF SOUTHAMPTON.

L. B.	...	...	...	Mill Farm, Oakley Road.
C. B.	...	...	...	Royal Mail, Millbrook.
W. P.	...	...	...	Highcrown Street.
W. H.	...	...	...	Manor Farm Road.
A. W. H.	...	...	...	Cockroads Farm, Hill Lane.
H. C.	...	...	...	The Nest, Lordswood.
W. J.	...	...	...	Park Street, Shirley.
A. N.	...	...	...	Portwood Road.

NUISANCES ABATED IN DAIRIES, COWSHEDS, AND MILKSHOPS.

PARTICULARS.	Town Proper.	Shirley, Freemantle and Millbrook.	Portswood and Bitterne Park.	Total.
Milkshops cleansed and limewashed	180	72	56	308
Dairies " " ...	40	38	18	96
Cowsheds " " ...	...	20	16	36
Drains repaired 	3	2	2	7
New pans fixed 	1	4	...	5
Water supply to waterclosets ... ...	...	1	...	1
New sinks fixed 	1	...	...	1
Roots repaired 	9	1	1	11
Yard paving repaired 	4	2	2	8
Dairies re-constructed ... ... ...	...	1	...	1
Totals	238	141	95	474

FOOD AND DRUGS ACT.

Four hundred and twenty-nine samples were taken by the Inspectors during the year and submitted to the Public Analyst.

One hundred and seventy-five were formally purchased in accordance with the Act and 254 were informal test samples, 31 of the latter being milk samples.

Eighteen, including 4 informal samples, were found to be adulterated.

Proceedings were taken in twelve cases, convictions being obtained in nine, three being dismissed on warranty.

ARTICLE.						Number of Samples.	Genuine.	Adulterated.
Milk ...	...	...	...	...	...	190	179	11
Cream	...	...	...	...	...	6	6	...
Butter	...	...	...	...	...	84	81	3
Margarine	...	...	...	...	...	6	6	...
Lard	...	...	...	...	...	41	41	...
Cheese	...	...	...	...	...	19	19	...
Coffee	...	...	...	...	...	13	12	1
Pepper	...	...	...	...	...	27	27	...
Mustard	...	...	...	...	...	6	6	...
Flour	...	...	...	...	...	14	14	...
Bread and Butter	...	...	...	...	...	9	6	3
Self Raising Flour	...	...	...	...	...	3	3	...
Arrowroot	...	...	...	...	...	1	1	...
Baking Powder	...	...	...	...	...	5	5	...
Egg Powder	...	...	...	...	...	5	5	...
Totals						429	411	18

The following Table shows the number of articles analysed which were found to be adulterated, and the result of proceedings taken:—

No. of sample	Date.	Article.	Adulteration.	Result of Proceedings.
87	Mch. 3	Milk	16.33% deficient in fat	Vendor cautioned.
102	" 9	do.	6.66% deficient in fat & 0.94% of added water	Case dismissed on warranty
114	" 11	Butter	100% margarine	Test sample; subsequent samples taken proved genuine
126	" 30	Bread & Butter	100% Bread & Margarine	Fined £1 including costs
129	" 31	do.	Ditto	Ditto
158	Apl. 14	do.	Ditto	Ditto
178	May 24	Milk	6.66% deficient in fat	Test sample.
229	J'ne 23	do.	6.66% deficient in fat	Vendor cautioned
240	" 23	Coffee	57% chicory	Test sample
245	" 29	Butter	100% margarine	Test sample, see sample No. 273
260	J'ly 13	Milk	6.33% deficient in fat	Case dismissed.
273	" 13	Butter	100% margarine	Fined £3.
276	" 20	Milk	18% deficient in fat	Fined £2
368	Oct. 16	do.	34% " "	Fined £20.
369	" 16	do.	42.33% " "	Fined £20.
370	" 18	do.	3.52% of added water	} Fined £2.
371	" 18	do.	8.24% " "	
383	" 26	do.	8% deficient in fat	Case dismissed on warranty

THE PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1913.

The following are particulars of work carried out under the above Regulations during the year 1916:—

1. Milk; and Cream not sold as Preserved Cream.

		(a) Number of samples examined for the presence of a preservative.	(b) Number in which a preservative was reported to be present.
Milk	...	190	Nil
Cream	...	4	4

The nature of the preservative in each case in column (b) was Boric Acid. Two were test and two were formal samples, both of the latter being unlabelled. Warning letters with respect to the same were sent to the vendors.

2. Cream sold as Preserved Cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct:—

(i)	Correct Statements made	2
(ii)	Statements incorrect ...	2
		—
		4
		—

(b) Determinations made of milk fat in cream sold as preserved cream:—

(i)	Above 35 per cent. ...	2
(ii)	Below 35 per cent. ...	Nil
		—
		2
		—

(c) Instances where (apart from analysis) the requirements as to the labelling or declaration of Preserved Cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed. Nil.

- (d) Particulars of each case in which the Regulations have not been complied with, and action taken.
Nil.

3. Thickening Substances.—Any evidence of their additions to cream or preserved cream. Action taken where found.
Nil.

REMARKS.—The Boric Acid preservative did not exceed 0.5 per cent.

HOUSES LET IN LODGINGS.

There are 42 houses in the Borough Registered under the Bye-Laws relating to Houses Let in Lodgings.

Of this number three were placed upon the Register during the year, on application being made to the Local Authority, and one closed voluntarily.

Five hundred and eighteen visits were made, and the houses generally were kept in conformity with the Bye-Laws.

COMMON LODGING HOUSES.

There are 14 common lodging houses in the Borough, with a registered accommodation for 511 persons.

Applications for the registration of all houses were made previous to the 31st December by the registered keepers in accordance with the provisions of the Southampton Corporation Act, 1910.

One thousand two hundred and forty-two visits were made during the year, and the premises generally were kept in a satisfactory condition.

HOUSING, TOWN PLANNING, &c., ACT., 1909.

During the year 624 houses were inspected under the provisions of the above Act.

The following is a list of Roads, Streets, etc., in which systematic inspection was continued, the number of houses inspected, and the number of notices served.

HOUSE-TO-HOUSE INSPECTION

Road or Street.	Number of Houses Inspected.	No. of Notices served.	
		Sec. 15, H.T.P. Act.	Public Health Act.
Ade'aide Road (part of)	20	...	2
Albert Road	92	...	67
Alfred Place	23	...	10
Beech Road	36	...	15
Blackberry Terrace	21	...	11
Fives Court	11	2	8
George Street	23	...	16
Kent Road	80	...	14
Kingsley Road	82	...	55
Marchwood Road	44	...	27
Millbank Street	81	...	60
Peel Street	29	...	7
Testwood Road	60	...	38
Violet Place	11	...	...
Total	613	2	330

Representations were made in respect of 6 houses as being in a state so dangerous to health as to be unfit for human habitation, and closing orders were made in each instance. There were also three closing orders determined.

REPRESENTATIONS MADE WITH REGARD TO DWELLING HOUSES.

The following is a list of the houses, giving the situation, number of orders made, dates, etc.:—

Situation of House.	Date.	Nature of Order made.	Further Action.
30, Bell Street	Jan. 6	Closing Order	Closing Order determined
10, Trafalgar Road	May 4	do.	do.
7, Salem Street	do.	do.	do.
1, Chapel Street	July 6	do.	do.
Appleton's Cottage, Spa Road ...	Nov. 2	do.	do.
55, French Street	do.	do.	do.

SUMMARY OF DEFECTS REMEDIED IN CONNECTION
WITH INSPECTIONS MADE UNDER THE HOUSING
TOWN PLANNING, &c., ACT, 1909.

Drains reconstructed	...	...	...	...	...	6
„ cleansed and repaired	...	...	...	...	...	31
„ retrapped	...	...	...	...	...	5
„ intercepted from sewer and ventilated	...	...	...	...	...	1
Inspection chambers provided to house drains	...	...	...	...	...	1
Water-closets reconstructed	...	...	...	...	...	7
New pans fixed in water-closets	...	...	...	...	...	16
Water laid on to water-closets	...	...	...	...	...	10
Ventilating shafts of house drains repaired	...	...	...	...	...	18
Bath, sink waste-pipes, stack-pipes, etc., disconnected from the drains	...	...	...	...	...	20
Sanitary sinks fixed	...	...	...	...	...	14
Dampness in dwelling-houses remedied	...	...	...	...	...	59
Houses cleansed and white-washed	...	...	...	...	...	91
Roofs of houses repaired	...	...	...	...	...	63
Flooring, walls, etc., of houses repaired	...	...	...	...	...	40
Window-sashes made to open	...	...	...	...	...	33
Lighting to rooms improved	...	...	...	...	...	5
Ground floor ventilation provided under rooms	...	...	...	...	...	19
Eaves, guttering, and stack-pipe repaired	...	...	...	...	...	34
Yards paved and drained	...	...	...	...	...	13
Yard paving repaired	...	...	...	...	...	59
Sanitary dustbins provided	...	...	...	...	...	16
Overcrowding in houses abated	1

THE RAG FLOCK ACT, 1911.

Five samples of rag flock were taken and submitted to the Public Analyst, the result being as follows:—

No. of Sample.	Result of Analysis.
1	Chlorine as Chlorides, 2.75 parts per 100,000
2	„ „ 1.62 „ „
3	„ „ 21.15 „ „
4	„ „ 13.75 „ „
5	„ „ 7.5 „ „

SHOPS ACT.

During the year 1,646 visits of inspection have been made under the Act and 9 letters of warning have been sent to shopkeepers for failing to post their Exemption Notices.

FACTORY AND WORKSHOPS ACT, 1901.

There are 808 Factories, Workshops and Workplaces, Bakehouses and Laundries on the Registers.

They give employment to 5,812 workers, 3,741 males, and 2,071 females, as compared with a total of 5,861 in 1915.

SUMMARY OF VISITS.

Factories	24
Workplaces and Workshops	1,618
Bakehouses (including Factory Bakehouses) ...	548
Laundries (including Factory Laundries) ...	91
Visits re Sanitary Matters	642
Total	<u>2,923</u>

FACTORIES.

TRADE.	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Antiseptic Factories	1	3	...	3	...
Bedding Factories	2	7	8	15	...
Blacksmiths and Coachbuilders	1	7	...	7	...
Boot and Shoe Repairers	20	59	...	59	1
Bottle Washing Factories	1	6	...	6	...
Brass and Iron Founders	4	48	...	48	...
Brickyards	1	20	...	20	...
Brush and Basket Makers	1	44	16	60	...
Building Trades	16	274	...	274	...
Cabinet Makers	5	19	...	19	...
Cement, Lime and Putty Works	3	45	...	45	...
Confectioners and Sugar Boilers	2	5	2	7	1
Cycle and Motor Works	7	48	...	48	...
Dressmakers	1	...	37	37	...
Dyeing and Cleaning Works	2	22	22	44	2
Engineers and Electricians	8	79	...	79	6
Flag and Banner Maker	1	1	11	12	...
Lead and Paint Factories	2	35	...	35	...
Margarine Factories	1	70	...	70	...
Mineral Water Factories	6	48	26	74	1
Oil Cake Factory	1	60	...	60	...
Photographers and Picture Framers	2	5	3	8	...
Sailmakers	2	11	...	11	...
Sausage Making Factories	12	34	...	34	12
Seedsmen	1	13	26	39	...
Ship and Yacht Builders	7	945	...	945	...
Steam Saw Mills and Joinery Works	3	99	...	99	1
Stonemasons	2	32	...	32	...
Tobacco Factories	1	70	410	480	...
Wholesale Packers and Dealers	2	19	4	23	...
Wine and Beer Bottlers	8	45	2	47	...
Totals	126	2173	567	2740	24

NUISANCES ABATED IN FACTORIES.

Drains cleared and repaired	1
Water-closets re-constructed	2
Extra Sanitary Conveniences provided	3
„ „ „ „ (separate for sexes)	2
Water-closets lighted and ventilated	2
„ cleansed and lime-washed	3
„ defective roof repaired	1

WORKSHOPS.

TRADE.	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Billiard Table Maker	1	3	...	3	...
Blacksmiths and Coachbuilders ...	41	137	...	137	70
Bedding Works	1	1	3	4	...
Blind Makers	1	8	...	8	2
Boot Repairers... ..	39	83	...	83	59
Brass Founders	1	2	...	2	2
Brick Makers	2	14	...	14	...
Brush and Basket Makers	3	7	...	7	7
Building Trades	36	156	...	156	43
Cabinet Makers and Upholsterers ...	25	94	7	101	45
Carpet Planners and Upholstery Needleworkers	4	5	20	25	7
Confectioners and Sugar Boilers ...	4	8	4	12	10
Coopers	1	2	...	2	2
Cycle Makers and Repairers... ..	17	41	...	41	31
Dressmakers and Milliners	96	...	648	648	221
Dyers and Cleaners	2	...	5	5	2
Electricians and Engineers	5	17	...	17	3
Feather Dressers and Furriers	2	3	4	7	6
Hearth Stone Cutter	1	1	...	1	1
Iron and Steel Merchant	1	9	...	9	2
Marine Store Dealer	8	14	18	32	317
Metal Polish Works	1	1	...	1	1
Mineral Water Works	1	1	...	1	2
Modellers	1	3	...	3	1
Offensive Trades	3	22	4	26	130
Organ Builder	1	5	...	5	2
Perfumers	2	3	9	12	2
Photographers	12	20	32	52	24
Piano Repairers	3	9	...	9	5
Picture Framers and Gilders	4	17	...	17	7
Restaurant Kitchens	37	69	60	129	195
Sack Repairers... ..	1	3	7	10	5
Saddlers and Harness Makers	11	29	...	29	16
Sailmakers	1	18	...	18	2
Sauce and Pickle Works	1	1	1	2	5
Stonemasons	5	17	...	17	6
Tailors	94	151	223	374	311
Ticket Writers and Engravers	8	12	...	12	8
Tin Plate Workers	11	37	...	37	16
Trunk and Bag Makers	2	4	...	4	2
Umbrella Makers	1	2	2	4	2
Undertakers	5	11	...	11	6
Watchmakers and Opticians	12	33	...	33	20
Weight and Scale Makers	2	12	...	12	2
Wholesale Packers and Dealers	4	26	23	49	6
Wine and Beer Bottlers	5	31	...	31	8
Yacht and Boat Builders	4	32	...	32	4
Totals	523	1174	1070	2244	1618

NUISANCES ABATED IN WORKSHOPS.

Insanitary drain abolished	1
Drains cleared and repaired	1
Sanitary conveniences provided (separate for sexes) ...	1
Water-closets re-constructed	1
,, impervious floors laid	1
,, lighted and ventilated	3
,, cleansed and lime-washed... ..	2
,, new cisterns and flush-pipes fixed ...	3
,, floors, roofs, etc., repaired	1
Workrooms ventilated	1
,, roofs repaired	3
,, damp walls remedied	1
,, cleansed and lime-washed	27
Yard paving relaid or repaired	4
Dirty yards cleansed	3
Eaves, guttering, and stack-pipes repaired	2
Refuse vaults constructed or repaired	2
Nuisance caused by keeping fowls abated	1
Accumulation of refuse, etc., removed	1
Total	59

REPORTS RECEIVED FROM H.M. FACTORY INSPECTOR.

Nine reports were received from H.M. Factory Inspector during the year, viz:—

Nature of Report.	No. sent in.	Action Taken.
New Workrooms or Change of Address	Nil	
Workshops Notified (already on L.A. Register or re-notified after Notice from Local Authority)	Nil	
Sanitary Defects	9	Defects remedied.
Total	9	

NOTIFICATIONS SENT TO H.M. FACTORY INSPECTOR.

Ten notifications have been sent to H.M. Factory Inspector during the year respecting new workshops, change of address, or infringements of the Factory and Workshops Act.

HOME WORK.

During February 51 lists were sent in containing names and addresss of 128 outworkers, and during August 50 lists containing names and addresses of 128 outworkers.

They are situated as follows:—

	February.	August.
Town District	82	84
Northam and Chapel	5	4
Bevois Town, Portswood and St. Denys	22	20
Freemantle and Shirley	15	16
Outside District	4	4
Totals	128	128

Of the 128 names received in August, 41 occupy premises registered as workshops employing labour, and of the remainder residing in the Borough 64 carry on tailoring work, 5 bootmaking, and 14 upholstery, needlework, underwear, etc.

The names and addresses of the outworkers living outside the Borough have, in accordance with Section 107 of the Factory and Workshops Act, been forwarded to the Authorities of the District in which they reside.

One hundred and eighty-two visits of inspection have been made during the year to outworkers' premises, resulting in the detection and abatement of 14 nuisances, as follows:—

Workrooms lime-washed	6
Roofs repaired	2
Damp walls remedied	1

Water-closet cisterns repaired ...	...	...	...	...	1
„ impervious floors laid	...	...	...	...	1
Eaves guttering repaired ...	...	...	...	...	1
Yard paving repaired ...	...	...	...	...	1
Ground floor ventilation provided ...	...	...	...	...	1
					—
					14
					—

BAKEHOUSES.

There are 124 Bakehouses on the Register, 19 being factories (i.e., using mechanical power) and 105 workshops.

Eighty-seven of these were in use at the end of the year, and 37 unoccupied.

They give employment to 324 men and 10 females.

Five hundred and forty-eight visits of inspection have been made during the year and 20 nuisances abated.

All occupied Bakehouses were re-lime-washed during the months of April and October, in accordance with the Regulations, and at one premises the ovens have been demolished.

TABLE C.—Bakehouses.

	No. on Register.	No. in Use.	Employees.		Total.	No. of Visits
			Male.	Female.		
Factories	19	19	113	10	123	61
Workshops	105	68	211	...	211	487
Totals	124	87	324	10	334	548

NUISANCES ABATED IN BAKEHOUSES.

Sanitary conveniences provided (separate for sexes) ...	...	...	...	...	1
Water-closets repaired ...	...	...	...	...	1
Roofs repaired ...	...	...	...	...	4
Eaves guttering repaired ...	...	...	...	...	2
Floors relaid or repaired ...	...	...	...	...	1

Yards paved or repaired	3
Extra ventilation provided	1
New sill and weatherboard fixed	1
New sinks and waste-pipes fixed	1
Bakehouses cleansed and lime-washed after notice ...	2
Stable floor repaired	1
Manure vault repaired	1
Accumulation of refuse removed	1
	—
	20
	—

LAUNDRIES.

There are 35 Laundries on the Register, one lapsed during the year and 2 others have been added.

Eleven of these use mechanical power and 24 manual.

They employ 76 male and 424 female workers.

Ninety-one visits of inspection have been made during the year and 5 nuisances abated, as follows:—

NUISANCES ABATED.

Workrooms lime-washed 5

TABLE D.—Laundries.

	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Factories	11	55	291	346	2
Workshops	24	15	133	148	89
Totals	35	70	424	494	91

In addition to the foregoing, 642 visits have been made during the year, comprising re-visits to Factories, Workshops, Bakehouses, and Laundries, serving notices, investigating complaints of nuisances, overcrowding, and various other matters.

CASES OF INFECTIOUS DISEASE OCCURRING ON WORKSHOP PREMISES.

Date.	Disease.	Address.	Trade.	Action taken.
Feb. 2	Measles	New Road	Tailoring	Patient isolated at home and premises, bedding, &c., disinfected after recovery
Feb. 3	do.	Bridge Road	Tailoring	Patient isolated at home and premises, bedding, &c., disinfected after recovery
Feb. 12	do.	Milton Road	Tailoring	Patient isolated at home and premises, bedding, &c., disinfected after recovery
April 26	Diphtheria	Above Bar	Blouse & Under-wear	Patient removed to Isolation Hospital and premises, bedding, &c., disinfected
May 3	Measles	New Road	Tailoring	Patient isolated at home and premises, bedding, &c., disinfected after recovery
July 28	Scarlet Fever	Chantry Road	Boot Repairing	Patient isolated at home and premises, bedding, &c., disinfected after recovery
Sept. 15	Diphtheria	Millbrook Road	Baker	Patient removed to Isolation Hospital and premises, bedding, &c., disinfected
Dec. 23	do.	Pound Tree Road	Watch-maker	Patient removed to Isolation Hospital and premises, bedding, &c., disinfected

CASES OF INFECTIOUS DISEASE OCCURRING IN HOMES OF EMPLOYEES OF FACTORIES AND WORKSHOPS.

Three cases of Scarlet Fever, four cases of Diphtheria, and three cases of Measles occurred in the homes of employees of Factories and Workshops during the year.

Seven of these cases were removed to the Isolation Hospital, and three were isolated at home.

All premises in which cases occurred were disinfected, and bedding, etc., removed for disinfection after removal of patients to Hospital, or on recovery when isolated at home.

The workers living in the houses in which Scarlet Fever occurred received a disinfecting bath and had their clothes disinfected before resuming duties.

The five following tables are inserted by request of the Secretary of State.

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	26	2	...
Workshops (Including Workshop Laundries)	1512	9	...
Workplaces (Other than Outworkers' premises in- cluded in Part 3 of this Report) ...	195	7	...
Total	1733	18	...

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
NUISANCES UNDER THE PUBLIC HEALTH ACTS :—				
Want of Cleanliness	34	34	..	..
Want of Ventilation	2	2	..	..
Overcrowding .. ..	..	..	..	..
Want of drainage of floors ..	..	..	..	..
Other nuisances	51	51	..	..
Sanitary accommodation { insufficient ..	3	3	..	..
{ unsuitable or ..	4	4	..	..
{ defective ..	4	4	..	..
{ not separate for ..	4	4	..	..
OFFENCES UNDER THE FACTORY AND WORKSHOP ACT :—				
Illegal occupation of underground bakehouses (s. 101) .. ..	..	..	..	..
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) .. ..	..	..	..	..
Other Offences (Excluding offences relating to outwork which are included in Part 3 of this Report) ..	..	.. ..	..	..
Total	98	98	..	..

OUTWORKERS' LISTS, SECTION 107.																OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.				OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.			
NATURE OF WORK.	Lists received from Employers.										Prosecutions.												
	Sending twice in the year.				Sending once in the year.						Notices served on Occupiers as to keeping or sending Lists.		Failing to keep or permit inspection of Lists.		Failing to send Lists.		Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S. 110).	Prosecutions (Sections 109, 110).	
	Lists.	Outworkers (Contractors)	Outworkers (Workmen)	Lists.	Outworkers (Contractors)	Outworkers (Workmen)	Outworkers (Contractors)	Outworkers (Workmen)															
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)							
Wearing Apparel— (1) making, &c.	96	..	245	3	..	3	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Furniture and upholstery	2	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	98	..	253	3	..	3	5	..	..	..	3	5	..	..	..	..	..	..	..	..	..

97

4.—REGISTERED WORKSHOPS.

5.—OTHER MATTERS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)	
Workshops .. .. .	..	523
Bakehouses .. .. .	..	105
Laundries .. .. .	..	24
Total number of Workshops on Register ..	652	

Class. (1)	Number. (2)	
Matters notified to H.M. Inspector of Factories :— Failure to affix Abstract of the Factory and Workshop Act (s. 133, 1901)	5
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, 1901): Notified by H.M. Inspector	9
Reports (of action taken) sent to H.M. Inspector	10
Other
Underground Bakehouses (s. 101) :— Certificates granted during the year
In use at the end of the year	6

SYNOPSIS OF TABLES.

TABLE 1.—Showing births and birth-rates for the whole Borough and various Districts for eleven years, 1906-1916.

- 2.—Showing deaths and death-rates for the whole Borough and various Districts for eleven years, 1906-1916.
- 3.—Deaths from all causes at subjoined ages in the Borough of Southampton, from 1907-1916.
- 4.—Causes of death in Southampton for ten years, 1907-1916.
- 5.—Showing population, birth-rates, death-rates, zymotic death-rates, infantile mortality, and marriage rates in Southampton and England and Wales for twenty years, 1897-1916.
- 6.—Table prepared in accordance with Local Government Board's instructions. Showing population, births, and deaths for ten years.
- 7.—Ditto. Showing cases of infectious diseases notified during 1915, classified according to ages and localities, and the number removed to Hospital.
- 8.—Ditto. Showing deaths occurring in 1916. Classified according to diseases and ages.
- 9.—Causes of deaths in Municipal Wards during the year 1916.
- 10.—Showing in detail causes of, and ages of all deaths of persons belonging to the Borough of Southampton during the year 1916.
- 11.—Vaccination returns for the Borough.
- 12.—Abstract from the Meteorological Register kept at the Ordnance Survey Office, Southampton, during the year 1916, together with averages for ten years.

TABLE 1.

SHOWING BIRTHS AND BIRTH RATES FOR WHOLE BOROUGH, AND THE OLD CIVIL PARISHES OF THE BOROUGH, FOR 10 YEARS—1906-1915, COMPARED WITH THE YEAR 1916.

Year.	Whole Borough.				Town Proper.		Portswood.		Shirley, Freemantle and Millbrook.	
	Males.	Females	Total Births.	Birth Rate.	Total Births.	Birth Rate.	Total Births.	Birth Rate.	Total Births.	Birth Rate.
1906	1495	1418	2913	26.03	1589	25.6	550	27.1	774	26.3
1907	1438	1319	2757	24.33	1506	24.1	480	23.2	771	25.5
*1908	1537	1434	2971	25.41	1646	25.8	553	26.1	772	24.5
1909	1511	1427	2938	25.30	1584	25.2	524	24.2	830	26.2
1910	1546	1380	2926	24.89	1581	25.1	561	25.4	784	24.1
1911	1430	1419	2849	23.94	1536	24.3	545	24.2	768	23.1
1912	1443	1363	2806	23.29	1493	23.5	511	22.1	803	23.7
*1913	1495	1462	2957	25.78	1543	23.7	579	24.1	835	23.7
1914	1499	1450	2949	23.87	1541	24.0	564	23.6	844	23.8
1915	1368	1339	2707	21.91	1444	22.5	466	19.5	797	22.4
Average 10 years.	1476	1401	2877	24.48	1546	24.4	533	23.9	798	24.3
1916	1430	1340	2770	21.95	1431	22.2	526	21.3	813	22.0

*53 weeks.

TABLE 2.

SHOWING DEATHS AND DEATH RATES FOR THE WHOLE BOROUGH, AND THE OLD CIVIL PARISHES OF THE BOROUGH, FOR 10 YEARS—1906-1915, COMPARED WITH THE YEAR 1916.

Year.	Whole Borough.				Town Proper.		Portswood.		Shirley, Freemantle and Millbrook.	
	Males.	Females	Total Deaths	Death Rate.	Deaths	Death Rate.	Deaths	Death Rate.	Deaths	Death Rate.
1906	796	748	1544	13.80	926	14.9	242	11.9	376	12.8
1907	793	752	1545	13.63	961	15.4	208	10.0	376	12.4
*1908	819	771	1590	13.60	991	15.5	237	11.2	362	11.5
1909	848	764	1612	13.88	988	15.7	229	10.6	395	12.4
1910	764	693	1457	12.39	875	13.9	215	9.7	367	11.3
1911	986	837	1823	15.23	1046	16.6	276	12.2	491	14.8
1912	842	745	1587	13.17	937	14.7	269	11.6	381	11.3
*1913	845	759	1604	12.90	928	14.2	274	11.4	402	11.4
1914	944	772	1716	13.89	1014	15.8	275	11.5	427	12.0
1915	919	809	1728	14.78	991	16.5	284	12.5	453	13.3
Average 10 years	856	765	1621	13.73	968	15.3	251	11.3	403	12.3
1916	822	855	1677	14.46	960	16.2	308	13.6	409	12.0

*53 weeks.

TABLE 3.

TABLE SHOWING DEATHS OF PERSONS BELONGING TO SOUTHAMPTON,
CLASSIFIED ACCORDING TO AGES FOR 10 YEARS.

Year.	At all Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
1907	1545	298	98	59	41	556	493
1908	1590	336	112	40	59	557	486
1909	1612	312	113	51	59	564	513
1910	1457	231	100	61	48	535	482
1911	1823	384	124	62	46	643	564
1912	1587	237	120	58	66	607	499
1913	1604	241	101	71	52	609	530
1914	1716	264	96	91	46	657	562
1915	1728	237	147	86	52	628	578
1916	1677	236	100	47	55	620	619

TABLE 4.

CAUSES OF DEATHS IN SOUTHAMPTON FOR 10 YEARS, 1907 TO 1916.

CAUSE OF DEATH.	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
Enteric Fever	4	4	10	10	3	8	6	6	8	5
Small Pox	2	...	...	...	...	...	...	...	...	...
Measles	5	22	...	17	13	18	30	10	30	9
Scarlet Fever	2	4	5	2	5	2	2	10	2	5
Whooping Cough	18	35	42	11	18	35	10	10	37	27
Diphtheria and Croup	22	16	19	16	23	19	30	39	39	16
Influenza	26	11	19	19	17	17	20	16	29	36
Erysipelas	6	1	2	4	3	3	...	2	3	1
Phthisis (Pulmonary Tuberculosis)	126	135	158	145	188	160	150	172	170	161
Tuberculous Meningitis	13	10	23	23	24	18	19	16	14	6
Other Tuberculous Disease	37	29	20	30	27	24	17	23	22	23
Cancer, malignant disease	125	108	105	135	125	109	139	125	150	143
Rheumatic Fever	5	3	7	4	3	6	2	4	6	7
Meningitis	18	14	21	10	14	14	14	15	24	17
Organic Heart Disease	151	153	129	120	158	137	158	176	156	178
Bronchitis	141	143	135	108	126	144	137	133	163	182
Pneumonia (all forms)	96	85	112	83	129	103	88	121	118	98
Other Diseases of Respiratory Organs	23	22	17	14	23	27	27	19	33	15
Diarrhoea and Enteritis	59	75	63	38	178	39	55	61	47	52
Appendicitis and Typhlitis	6	5	8	6	9	13	12	12	12	10
Cirrhosis of Liver	10	11	14	7	17	15	16	14	14	18
Alcoholism	9	6	4	4	8	2	1	7	2	1
Nephritis and Bright's Disease	37	35	50	43	50	56	52	52	44	66
Puerperal Fever	2	4	2	2	2	2	2	2	2	2
Other accidents and Diseases of Pregnancy and Parturition	3	7	5	5	4	10	8	4	9	4
Congenital Debility and Malformation, including Premature Birth	134	130	125	110	127	88	113	137	88	102
Violent Deaths, excluding Suicide	35	38	44	42	49	34	49	41	53	32
Suicide	13	17	11	12	11	13	7	12	5	7
Other Diseases	417	467	462	437	469	471	440	477	448	454
Totals	1545	1590	1612	1457	1823	1587	1604	1716	1728	1677

TABLE 5.

SHOWING POPULATION, BIRTH RATES, DEATH RATES, ZYMOTIC DEATH RATES, INFANTILE MORTALITY, AND MARRIAGE RATES IN SOUTHAMPTON AND ENGLAND AND WALES FOR TWENTY YEARS, 1897—1916.

Year.	Births.		Deaths.		Zymotic Deaths.		Infantile Mortality.		Marriages.		
	Popu- lation.	Total Births.	Birth Rate. England and Wales.	Total Deaths.	Death Rate. England and Wales.	Total Zymotic Deaths.	Zymotic Death Rate.	Deaths under 1 year per 1000 Births Registered	Total Marri- ages.	Marri- age Rate	Marriage Rate England and Wales.
1897	96,500	2,937	30.4	1,711	17.3	217	2.24	156	848	17.6	16.0
*1898	98,950	2,945	29.8	1,756	17.3	267	2.63	153	791	16.0	16.2
1899	101,350	2,995	29.6	1,992	19.1	297	2.88	178	896	17.7	16.4
1900	103,500	2,929	28.3	1,881	17.6	163	1.51	152	846	16.3	15.9
1901	105,179	3,141	30.0	1,789	16.6	173	1.64	154	918	17.5	15.9
1902	106,601	3,152	29.1	1,726	15.7	174	1.64	124	966	18.1	15.8
*1903	108,022	3,165	29.4	1,557	14.1	165	1.50	114	883	16.3	15.6
1904	109,444	3,003	27.5	1,590	14.2	123	1.13	114	859	15.7	14.6
1905	110,865	2,868	26.0	1,735	15.1	275	2.49	133	827	14.9	15.3
1906	112,287	2,913	26.0	1,611	13.8	169	1.51	113	805	14.3	15.6
1907	113,708	2,757	24.3	1,572	13.6	112	0.99	108	827	14.5	15.8
*1908	115,130	2,971	25.4	1,642	13.6	156	1.33	113	867	15.1	14.9
1909	116,551	2,938	25.3	1,694	13.9	139	1.20	106	928	15.9	14.6
1910	117,973	2,926	24.9	1,554	12.4	94	0.80	79	773	13.1	14.8
1911	119,394	2,849	23.9	1,847	15.2	220	1.85	135	914	15.4	15.2
1912	120,891	2,806	23.3	1,587	13.2	113	0.94	84	990	16.4	15.5
*1913	122,412	2,957	23.8	1,604	12.9	122	0.98	82	1032	16.9	15.5
1914	123,948	2,949	23.9	1,716	13.9	123	1.00	90	1080	17.4	15.9
†1915	117,349	2,707	21.9	1,728	14.8	156	1.33	88	1199	19.4	19.3
†1916	116,391	2,770	22.0	1,677	14.5	98	0.84	85	1052	16.6	15.4

*53 Weeks. † Estimated Civil Population.

NOTE.—The Zymotic Deaths and Death Rates include the seven principal Zymotic Diseases, viz.—Whooping Cough, Measles, Diarrhoea, Diphtheria, Scarlet Fever, Typhoid Fever and Small Pox.

TABLE 6.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1916 AND PREVIOUS YEARS.

Year.	Population estimated to middle of each Year.	Births.		Total Deaths registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.				
		Un-corrected Number.	Nett.	Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 year of age.		At all ages.		
								Number.	Rate.			
											Number.	Rate per 1000 Nett Births.
1	2	3	4	5	6	7	8	9	10	11	12	13
1911	119,394	2,849	2,849	23.94	1,847	15.52	70	46	384	135	1,823	15.23
1912	120,891	2,801	2,806	23.29	1,629	13.52	96	54	237	84	1,587	13.17
1913	122,412	2,951	2,957	23.78	1,650	13.27	91	45	241	82	1 604	12.90
1914	123,948	2,942	2,949	23.87	1,792	14.51	*139	63	263	90	1,716	13.89
1915	117,349	2,693	2,707	21.91	1,830	15.56	†154	52	237	88	1,728	14.78
1916	116,391	2,764	2,770	21.95	1,801	15.53	‡203	79	236	85	1,677	14.46

* Including 25 deaths of Soldiers.

†

67

"

"

"

"

TABLE 7.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1916.

NOTIFIABLE DISEASE.	Number of Cases notified.								Total Cases Notified in each Municipal Ward.											Total cases re-moved to Hospital.			
	At Ages—Years.								Town.	St. Mary's.	Northam.	Trinity.	Newtown.	All Saints.	Bevois.	Banister.	Freemantle.	Millbrook.	Shirley.		Portswood.	St. Deny's.	
	At all Ages.	Under 1.	1 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 and upwards.															
Small-pox	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	172	1	36	105	22	8	..	..	4	12	4	15	6	15	15	11	42	13	10	15	10	10	124
Erysipelas	49	..	3	4	5	12	19	6	8	9	4	2	3	3	2	1	3	4	5	3	2	2	..
Scarlet Fever	187	1	26	110	32	17	1	..	15	24	12	12	14	17	11	6	6	13	25	12	20	20	130
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	23	..	..	10	4	6	3	..	4	4	2	1	1	3	2	1	1	..	1	2	1	1	20
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	8	..	..	..	1	7	..	..	..	1	1	..	..	..	1	..	1	..	4	..	..	..	..
Cerebro-spinal Meningitis	5	..	2	2	1	..	..	..	1	1	..	..	..	..	..	..	..	..	1	2	..	..	4
Poliomyelitis	4	..	2	2	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum	80	80	..	..	..	..	..	..	4	8	5	9	1	8	5	3	6	6	17	3	5	5	..
Pulmonary Tuberculosis	273	..	1	41	58	126	39	8	30	26	24	21	22	20	23	12	16	18	12	21	28	118	
Other Forms of Tuberculosis	49	1	14	20	10	4	..	..	7	3	7	6	2	2	4	2	1	2	5	1	7	7	..
Measles	802	33	354	372	27	16	..	..	87	47	61	96	52	44	47	86	62	99	94	21	6	3	..
German Measles	174	6	39	70	37	22	..	..	6	6	12	5	11	7	11	22	12	19	22	10	31	..	..
Totals	1827	122	477	736	197	219	62	14	166	142	133	167	112	120	121	145	150	175	196	90	110	400	..

TABLE 8.

CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1916.

CAUSE OF DEATH.	Nett Deaths at the subjoined Ages of "Residents," whether occurring within or without the District.									Total Deaths in Institu- tions in the District.
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
All Causes—Certified	1676	236	43	57	47	55	212	408	618	638
—Uncertified	1	..	..	..	..	..	..	..	1	..
Enteric Fever	5	..	..	..	..	1	3	1	..	7
Small Pox	..	..	..	..	..	..	..	..	..	2
Measles	9	..	5	2	2	..	..	..	..	..
Scarlet Fever	5	..	..	1	2	1	1	..	..	4
Whooping Cough	27	13	4	10	..	..	..	..	..	..
Diphtheria and Croup	16	..	1	5	10	..	..	..	..	20
Influenza	36	2	..	1	..	1	2	9	21	1
Erysipelas	1	..	..	..	..	..	..	1	..	1
Phthisis (Pulmonary Tuberculosis)	161	..	..	1	3	25	74	48	10	58
Tuberculous Meningitis	6	1	..	2	1	..	..	2	..	3
Other Tuberculous Diseases	23	4	1	4	3	3	4	3	1	4
Cancer, malignant disease	143	..	..	..	..	..	18	66	59	54
Rheumatic Fever	7	..	..	..	1	..	2	3	1	2
Meningitis	17	3	5	3	2	1	1	2	..	8
Organic Heart Disease	178	..	1	1	4	1	18	59	94	35
Bronchitis	182	20	7	5	..	..	7	24	119	39
Pneumonia (all forms)	98	17	11	6	4	5	12	23	20	26
Other diseases of Respiratory Organs	15	1	..	1	3	..	..	7	3	3
Diarrhœa and Enteritis	52	30	6	1	2	..	3	6	4	21
Appendicitis and Typhlitis	10	..	..	..	1	3	2	4	..	12
Cirrhosis of Liver	18	..	..	..	..	..	1	12	5	4
Alcoholism	1	..	..	..	..	..	1	..	..	..
Nephritis and Bright's Disease	66	..	..	..	..	1	5	35	25	13
Puerperal Fever	2	..	..	..	..	..	2	..	..	4
Other accidents and diseases of Pregnancy and Parturition	4	..	..	..	..	..	4	..	..	2
Congenital Debility and Mal- formation, including Pre- mature Birth	102	102	..	..	..	..	..	..	..	10
Violent Deaths, excluding Suicide	32	..	..	7	4	2	3	8	8	103
Suicide	7	..	..	..	..	1	4	2	..	3
Other Defined Diseases	445	42	2	7	5	9	43	90	247	196
Diseases ill-defined or unknown	9	1	..	..	..	1	2	3	2	3
	1677	236	43	57	47	55	212	408	619	638
SUB-ENTRIES—										
Cerebro-spinal Meningitis	3	..	1	..	1	1	..	..	..	3
Poliomyelitis	1	..	..	..	1	..	..	..	..	1
Pneumonia (other than Broncho-pneumonia)	64	6	4	4	2	5	8	20	15	16

TABLE 9.

CAUSES OF DEATH IN THE MUNICIPAL WARDS DURING
THE YEAR 1916.

CAUSES OF DEATH.	MUNICIPAL WARD.													*No settled residence in Boro'.	Total Deaths.
	Town.	St. Marys.	Northam.	Trinity.	Newtown.	All Saints.	Bevois.	Banister.	Freemantle.	Millbrook.	Shirley.	Portswood.	St. Denys.		
Enteric Fever ..	..	..	..	..	..	1	..	..	..	2	..	1	..	1	5
Small Pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	4	1	..	3	..	..	..	..	..	..	1	..	..	..	9
Scarlet Fever ..	..	4	..	..	..	1	..	..	..	..	..	..	..	..	5
Whooping Cough ..	6	6	1	2	1	1	..	..	1	..	3	3	3	..	27
Diphtheria & Croup ..	1	3	1	1	..	..	1	1	2	2	1	1	2	..	16
Influenza ..	2	..	2	1	4	3	3	4	2	6	5	2	2	..	36
Erysipelas ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Phthisis ..	30	20	22	8	8	8	11	9	9	16	5	7	7	1	161
Tuberculous Meningitis ..	1	1	1	..	..	..	1	1	..	..	1	..	..	..	6
Other Tuberculous Diseases ..	4	2	1	1	2	1	1	2	4	1	2	..	1	1	23
Cancer ..	19	13	7	12	10	15	10	5	7	9	18	7	11	..	143
Rheumatic Fever ..	2	..	..	..	..	..	1	1	..	1	1	1	..	..	7
Meningitis ..	4	4	2	..	..	..	1	1	2	..	1	1	1	..	17
Organic Heart Disease ..	22	24	11	14	6	15	17	6	8	17	11	17	9	1	178
Bronchitis ..	29	23	28	24	16	9	6	6	9	7	7	7	9	2	182
Pneumonia (all forms)	14	11	10	8	6	7	8	4	3	7	9	3	6	2	98
Other diseases of Respiratory Organs ..	1	1	1	1	2	2	2	..	2	2	1	1	..	..	15
Diarrhoea & Enteritis ..	9	4	5	3	2	2	5	2	3	6	1	5	4	1	52
Appendicitis and Typhlitis ..	3	1	2	..	..	..	1	1	1	..	..	1	..	..	10
Cirrhosis of Liver ..	1	1	4	2	..	1	3	..	..	..	2	2	1	1	18
Alcoholism ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Nephritis & Bright's Disease ..	5	3	4	6	7	5	2	2	2	2	3	18	7	..	66
Puerperal Fever ..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	2
Other accidents and Diseases of Pregnancy & Parturition ..	1	..	1	..	..	..	..	..	..	1	1	..	..	..	4
Congenital Debility & Malformation (including Premature Birth) ..	15	7	12	3	8	7	13	2	8	5	11	6	5	..	102
Violent Death (excluding Suicide) ..	6	4	1	6	1	3	..	1	1	2	..	..	5	2	32
Suicide ..	1	..	2	..	..	..	1	..	2	1	..	..	..	..	7
Other Diseases ..	56	41	29	35	37	39	33	26	30	32	30	34	21	11	454
Totals ..	236	175	147	130	110	121	120	74	97	119	114	117	94	23	1677

* In calculating death rates, the deaths in this column are allocated over the various Wards.

TABLE 10.—Continued.

DISEASES CLASSIFIED.	AGES.											SEX.		Totals.		
												Males.	Females.			
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and up- w'ds			
Rheumatic Fever	1	...	1	1	1	2	1	...	...	...	3	4	7
Rheumatism	1	1	1	...	...	...	1	1	2
Rheumatoid Arthritis	2	1	...	...	...	1	1	2
Rheumatic Gout	1	...	...	...	1	...	1
Diabetes	2	1	2	...	2	8	...	...	...	10	6	16
Exophthalmic Goitre	1	...	...	...	...	...	...	...	1	1
Addison's Disease...	2	...	...	...	...	...	...	1	1	2
Leucocythæmia	1	...	...	...	...	...	1	1
Anæmia	1	...	1	...	...	2	...	...	...	3	4	7
Purpura	1	...	...	...	...	...	...	1	1
Alcoholism	1	...	...	...	...	...	...	...	1	1
Industrial Poisoning	1	...	...	...	...	...	1	1
II. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.																
Encephalitis	1	...	...	...	...	...	2
Cerebro-spinal Fever	1	...	1	...	...	...	...	...	...	...	...	...	1	2	3
Meningitis ...	3	4	3	1	...	...	1	2	...	...	...	...	...	10	4	14
Locomotor Ataxy	2	1	...	...	...	6	...	6
Disseminated Sclerosis	1	...	...	...	...	...	...	...	2	...	2
Bulbar Paralysis	1	...	...	...	1	...	2	1	...	...	...	2	2	3
Paralysis Agitans	1	2	3
Acute Anterior Poliomyelitis	1	...	...	...	...	...	...	...	...	...	1	...	1
Ascending Paralysis	1	1
Cerebral Hæmorrhage	4	9	18	21	20	9	47	34	81	81
Cerebral Softening	1	1	4	5	8	...	7	12	19	19
Hemiplegia	1	1	2	2	...	4	2	4	6
Paraplegia	1	...	1	...	1	1
General Paralysis of the Insane	1	7	3	2	...	...	...	2	11	2	13

TABLE 10.—Continued.

DISEASES CLASSIFIED.	AGES.										SEX.		Totals.			
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95		95 and upwards	Males.	Females.
Confusional Insanity	1	...	...	...	...	...	1	1
Dementia	1	1	...	...	...	...	2	...	2
Melancholia	1	...	1	1	...	...	...	...	2	1	3
Acute Mania	2	1	...	...	...	...	...	2	...	3
Epilepsy	2	2	1	4	2	2	...	...	...	8	5	13
Convulsions	...	1	1	...	...	...	...	...	...	...	...	...	...	6	4	10
Sclerosis of Brain	1	...	...	...	...	...	...	...	1	1
Otitis Media	1	1	2	...	...	...	...	...	...	...	...	1	3	4
III. DISEASES OF THE CIRCULATORY SYSTEM.																
Pericarditis	1
Myocarditis	1	...	...	...	...	...	...	1	1	2	1	1	...	3	4	7
Valvular Disease of Heart	...	1	1	3	1	2	12	13	19	28	19	3	...	37	65	102
Fatty Degeneration of Heart	1	5	2	...	...	...	4	4	8
Other Organic Disease of Heart	1	...	...	4	7	14	25	14	3	...	34	34	68
Angina Pectoris	1	1	...	...	...	1	1
Aneurysm	2	4	...	1	1	...	...	6	2	8
Arterial Sclerosis	1	5	7	4	...	13	4	17
Phlebitis	1	...	...	...	...	...	1	...	1
Embolism and Thrombosis	1	1	2	...	1	...	...	2	3	5
Status Lymphaticus	2	...	...	2	...	...	...	...	...	...	...	...	...	2	2	4
IV DISEASES OF THE RESPIRATORY SYSTEM.																
Laryngitis	1	1	...	...	...	...	...	...	...	...	...	1	1	2
Laryngeal obstruction	1	...	...	...	...	...	...	...	...	...	1	...	1
Papilloma of Larynx	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1	2
Bronchocele	1	...	...	...	...	...	...	1	1
Bronchitis	20	7	5	...	...	1	6	9	15	41	55	22	1	81	101	182

TABLE 10.—Continued.

DISEASES CLASSIFIED.	AGES.										SEX.		Totals.			
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95		95 and up- w'ds	Males.	Females.
Broncho-Pneumonia	...	7	2	2	...	...	4	3	...	3	1	1	...	14	20	34
Pneumonia	...	6	4	2	5	3	5	13	7	10	3	2	...	35	29	64
Pleurisy	1	1	...	...	...	1	1	2
Empyema	1	...	...	...	...	1	...	1
Asthma	3	1	1	...	...	2	1	3
Emphysema	1	...	...	1	1	2
Hæmoptysis	1	...	...	...	...	1	...	1
V. DISEASES OF THE DIGESTIVE SYSTEM.																
Ulcer of Stomach	1	1	3	...	1	...	...	...	...	3	3	6
Gastritis	1	...	...	5	4	9
Diarrhoea and Infective Enteritis	...	17	3	1	...	1	...	1	3	...	1	...	...	9	19	28
Enteritis	...	7	2	1	...	...	...	...	1	...	...	...	...	5	6	11
Gastro-Enteritis	...	6	...	1	...	...	...	...	...	1	...	...	...	3	6	9
Duodenal Ulcer	1	...	1	...	...	1	...	...	1	2	3
Colitis	1	...	...	...	...	...	...	1	...	1
Appendicitis	1	3	...	2	2	2	...	...	...	...	9	1	10
Hernia	1	...	...	...	...	1	...	3	...	1	...	5	1	6
Intestinal Obstruction	1	1	1	...	...	...	2	1	3
Intussusception	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Volvulus	1	...	...	...	...	...	...	1	1
Abdominal Tumour	1
Hepatitis	...	1	...	...	...	...	...	...	1	...	...	...	...	1	...	2
Cirrhosis of Liver	...	1	...	...	...	...	1	7	5	4	1	...	...	2	11	18
Gall Stones...	1	...	...	...	...	7	1	1
Rupture of Gall Bladder	1	...	...	...	...	1

TABLE 10.—Continued.

DISEASES CLASSIFIED.	AGES.												SEX.		Totals.	
													Males.	Females.		
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95				95 and up-w'ds.
IX. DISEASES OF THE OSSEOUS SYSTEM.																
Osteo-Myelitis ... ..	...	...	...	...	I	...	...	...	...	...	...	...	...	I	...	I
X. MALFORMATION.																
Malformation of Heart	7	...	...	...	...	...	...	...	...	...	...	...	...	3	4	7
Spina Bifida	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
XI. DISEASES OF EARLY INFANCY.																
Premature Birth	73	...	...	...	...	...	...	...	...	...	...	...	...	38	35	73
Atrophy, Debility and Marasmus	20	...	...	...	...	...	...	...	...	...	...	...	...	12	8	20
Icterus Neonatorum	2	...	...	...	...	...	...	...	...	...	...	...	...	I	I	2
Hæmorrhage of Umbilicus	I	...	...	...	...	...	...	...	...	...	...	...	...	I	...	I
Atelectasis	5	...	...	...	...	...	...	...	...	...	...	...	...	3	2	5
Injuries at Birth	4	...	...	...	...	...	...	...	...	...	...	...	...	3	I	4
Inattention at Birth	I	...	...	...	...	...	...	...	...	...	...	...	...	...	I	I
XII. OLD AGE.																
Senile Decay ... ..	...	...	...	...	...	...	...	...	...	10	65	33	7	44	71	115
XIII. AFFECTIONS PRODUCED BY EXTERNAL CAUSES.																
Suicide by—																
Poison ... ..	...	...	...	...	...	I	...	...	...	...	...	...	...	...	I	I
Drowning ... ..	...	...	...	...	...	...	I	...	...	...	...	...	...	...	I	I
Hanging ... ..	...	...	...	...	...	...	I	I	I	...	...	...	...	2	I	3
Cutting Throat ... ..	...	...	...	...	...	I	...	...	...	...	...	...	...	...	I	I
Railway Train ... ..	...	...	...	...	I	...	...	...	...	...	...	...	...	I	...	I

TABLE 10.—Continued.

DISEASES CLASSIFIED.	AGES.											SEX.		Totals.		
												Males.	Females.			
	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85				85 to 95	95 and up- w'ds
Accident—	3	...	1	...	...	...	...	1	...	...	...	2	3	5
By Burns or Scalds	1	...	...	...	...	1	1	...	...	...	3	5	7
" Injuries from Falling	2	...	1	1	...	...	...	...	4	1	...	5	2	1
" Drowning	1	...	3
" Kick at Football	3	...	1
On Ships, Boats, Docks	1	1	...	...	...	...	...	1	...	1
Railways	1	...	1
" In Vehicular Traffic	2	1	...	...	1	1	...	...	...	1	...	4	1	5
" Building Operations	2	...	2
XIV. ILL-DEFINED OR NOT SPECIFIED CASES.																
General Debility	2	...	...	...	...	...	...	2	2
Heart Failure	1	1	...	...	...	1	...	...	...	2	2	4
" Found Dead " ...	1	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
" Natural Causes "	1	...	...	...	1	...	1
Totals ...	236	43	57	47	55	64	148	190	218	267	259	85	8	822	855	1677

TABLE 11.

VACCINATION RETURNS.

Year.	Births.	Success- fully Vaccin- ated.	Died Unvaccin- ated.	Insus- ceptible to Vaccin- ation.	Declar- ations of Cons- cientious objection	Postponed and where- abouts unknown or removed to other districts.	Percentage success- fully Vac- cinated.
1893	1701	1407	180	16	...	98	82.7
1894	1796	1496	185	28	...	87	83.3
1895	1874	1560	207	16	...	91	83.2
1896	1912	1577	231	18	...	86	82.5
1897	1886	1580	195	15	...	96	83.8
1898	1847	1491	218	19	...	119	80.7
1899	1802	1425	245	12	...	120	79.1
1900	1751	1414	217	7	...	113	80.7
1901	1821	1502	202	6	...	101	82.5
1902	1739	1466	163	3	...	107	84.3
1903	1697	1459	152	6	...	80	86.0
1904	1683	1435	167	9	...	72	85.3
1905	1543	1319	153	4	...	67	85.5
1906	1570	1312	150	6	...	102	83.6
1907	1504	1240	149	3	...	112	82.4
1908	1585	1203	134	9	...	239	75.9
1909	*2681	1889	197	14	...	581	70.5
1910	*2931	1863	187	5	651	225	63.6
1911	*2851	1630	263	9	771	178	57.2
1912	*2823	1524	164	8	908	219	54.0
1913	*2886	1364	187	6	1055	274	47.3
1914	*2972	1294	209	7	1176	286	43.5
1915	*2559	1230	157	8	961	303	48.7

* Returns for whole Borough.

TABLE 12.

ABSTRACT FROM THE METEOROLOGICAL REGISTER KEPT AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON,
DURING THE YEAR 1916.

Month.	BAROMETER.						TEMPERATURE.										RAINFALL.				SUNSHINE.		
	Mean at		Maximum Reading.	Date.	Minimum Reading.	Date	Mean at		Mean.		Approx. Mean.	Highest Maximum.	Date.	Lowest Minimum.	Date.	Greatest quantity in 24 hours.	Date.	No. of days on which 2 or more fell.	Total No. of hours.	Maximum No. of hours.	Date.		
							9 a.m.	9 p.m.	Max. in Air.	Min. in Air.													
	9 a.m.	9 p.m.																					
Jan. ...	30.24	30.25	30.59	31st	29.63	1st	46.0	46.2	50.9	41.8	46.4	55	1st & 6th	29	23rd	34.7	7.0	2nd	17	42.1	6.5	24th	
Feb. ...	29.79	29.80	30.48	1st	29.03	4th	39.8	39.5	45.2	35.0	40.1	53	13th & 18th	23	25th	141.4	27.0	3rd	24	80.35	8.95	17th	
March ...	29.66	29.68	30.48	31st	28.86	28th	39.3	37.5	45.5	35.3	40.4	56	14th	27	5th & 24th	97.1	28.0	27th	23	77.5	9.6	26th	
April ...	29.94	29.93	30.40	1st	29.30	19th & 20th	49.6	48.0	57.7	40.1	48.9	75	27th	32	8th	19.0	4.7	20th	11	214.7	13.45	29th	
May ...	29.94	29.95	30.45	19th	29.26	5th	56.3	53.9	64.1	47.3	55.7	76	21st	36	10th	37.9	6.5	9th	15	195.5	14.2	19th	
June ...	29.96	29.96	30.29	16th	29.40	5th	55.8	54.2	62.2	48.0	55.1	69	17th & 18th	39	8th	41.8	10.3	4th	14	191.05	14.7	17th	
July ...	30.07	30.06	30.39	29th	29.55	7th	61.1	60.9	70.4	53.2	61.8	85	31st	47	2nd & 9th	32.9	13.2	6th	8	227.65	13.65	25th	
August ...	29.96	29.95	30.38	3rd & 5th	29.23	29th	63.4	62.5	71.9	56.4	64.2	83	2nd & 3rd	46	31st	82.1	33.0	29th	14	195.05	13.4	3rd	
Sept. ...	30.05	30.06	30.36	7th	29.57	19th	57.9	56.3	64.8	50.8	57.8	72	1st	37	15th	46.7	10.5	1st	9	142.6	10.75	14th	
Oct. ...	29.90	29.90	30.30	20th	29.20	27th	54.6	53.2	59.0	49.6	54.3	67	5th	35	21st	140.1	20.2	3rd	22	92.2	7.6	7th	
Nov. ...	29.79	29.78	30.46	28th	28.57	18th	44.9	44.3	50.1	40.0	45.1	58	11th	25	28th	123.2	23.1	7th	16	59.85	6.85	6th	
Dec. ...	29.65	29.70	30.28	27th	28.79	21st	37.2	36.7	42.1	32.5	37.3	54	31st	23	17th	103.9	33.5	20th	16	43.65	6.55	4th	
For the year ...	29.912	29.918	30.59	31/1/16	28.57	18th Nov.	50.5	49.4	57.0	44.2	50.6	85	31/7/16	23	25/2/16 17/12/16	900.8	33.5	20th Dec.	189	1562.2	14.7	17th June	
For 10 years, 1907-1916	29.937	29.934	30.797	23/1/07	28.57	18th Nov. 1916	51.1	49.8	57.7	44.3	51.0	89	22/7/11	11	3/3/09	865.5	51.0	24/9/15	178	1640.7	15.5	14/6/10	

This Table has been supplied by the courtesy of the Director-General of Ordnance Survey.

Analyst's Department.

Sale of Food and Drugs Acts, 1875 to 1899,
and General Analyses.

ANNUAL REPORT

For the Year ending 31st December, 1916.

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

GENTLEMEN,

I have the honour to submit for your information an account of the work done in this Department during the past year.

Section I.—Food and Drugs Act.

The number of samples submitted under the above Acts during the year 1916 was 548, being 26 more than in the previous year.

Of this number 429 samples were submitted by Inspectors, 52 by residents in the Borough, 22 by residents outside the Borough, and 45 by the Borough of Newbury.

In the following tables the samples received from outside the Borough and from the Borough of Newbury are not included.

The character of the samples, the number of each article submitted, and the percentage of Adulterated Samples are given in Table I.

TABLE I.

Nature of Article.				Number on Register.	Number of Samples Adulterated.	Percentage Adulterated Samples.
Arrowroot	...	...	...	1	...	...
Baking Powder	...	...	...	5	...	...
Bread and Butter	...	...	...	9	3	33.33
Butter	...	...	...	84	3	3.57
Cheese	...	...	...	19	...	...
Coffee	...	...	...	13	1	7.69
Cream	...	...	...	6	2	33.33
Egg Powder	...	...	...	5	...	...
Flour...	...	...	...	20	...	...
Lard ...	...	...	...	41	...	...
Margarine	...	...	...	9	...	...
Milk ...	...	...	...	236	28	11.86
Mustard	...	...	...	6	...	...
Pepper	...	...	...	27	...	...
Totals	...	...	...	481	37	7.71

The adulterated samples, amount of adulteration, prosecutions, and results of proceedings are given in Table II.

TABLE II.

Article Analysed.	No. on Register.	Nature and Amount of Adulteration.	Action taken.	Result.
Bread and Butter	126	100% bread & margarine	Summoned	£1 fine.
"	129	100% " "	"	£1 fine.
"	158	100% " "	"	£1 fine.
Butter	114	100% margarine	Test sample	
"	245	100% "	"	
"	273	100% "	Summoned	£3 fine.
Coffee	240	57% chicory	Test sample	
Cream	289	100% "preserved cream" }	Vendor asked	
"	290	100% " " }	for explana'n.	
Milk	87	16.33% fat deficient	Vndr.cautioned	
"	102	6.66% " "	Summoned	Dismissed on Warranty.
"	178	6.66% " "	Test sample	
"	229	6.66% " "	Vndr.cautioned	
"	260	6.33% " "	Summoned	Dismissed, proved contrary as required.
"	276	18.0% " "	"	£2 fine.
"	368	34.0% " "	"	£20 fine.
"	369	42.33% " "	"	£20 fine.
"	370	3.52% added water	"	
"	371	8.24% " "	"	£2 fine jointly.
"	383	8.0% fat deficient	"	Dismissed on Warranty.
"	p9	3.7% added water	Private	
"	p13	10.0% fat deficient	"	
"	p15	15.26% " "	"	
"	p16	13.34% " "	"	
"	p17	33.34% " "	"	
"	p18	19.23% " "	"	
"	p19	33.24% " "	"	
"	p21	70.0% fat deficient and 35.34% added water	"	
"	p26	6.66% fat deficient	"	
"	p27	10.0% " "	"	
"	p38	7.25% " "	"	
"	p39	4.19% fat deficient and 2.47% added water	"	
"	p40	10.0% fat deficient	"	
"	p45	9.4% fat deficient and 22.25 % added water	"	
"	p46	10.0% fat deficient and 1.05% added water	"	
"	p48	13.35% fat deficient	"	
"	p62	33.66% " "	"	

The total fines for the year amounted to £50.

The number of samples analysed is 12 more than in 1915.

MONTHLY AVERAGES.

			Fat	Non-fatty solids.	Total solids.
January	...	...	3.44	8.76	12.20
February	...	...	3.55	8.83	12.38
March	...	...	3.56	8.83	12.39
April	...	...	3.60	8.75	12.35
May	...	...	3.28	8.89	12.17
June	...	...	3.49	8.80	12.29
July	...	...	3.19	8.69	11.88
August	...	...	3.75	8.55	12.30
September	...	...	3.97	8.61	12.58
October	...	...	3.74	8.81	12.55
November	...	...	3.81	8.78	12.59
December	...	...	3.88	8.68	12.56

The month of July showed the lowest fat, and September the highest; the month of August showed the lowest non-fatty solids; and May the highest; the month of July showed the lowest total solids and November the highest.

COMPOSITION OF MILK SUPPLY.

Table III shows the average composition of genuine samples for the past seven years:—

TABLE III.

Year	1910.		1911.		1912.		1913.		1914.		1915.		1916.	
Source	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private
Total Solids	12.61	12.62	12.48	12.60	12.48	12.54	12.62	13.19	12.53	12.74	12.43	12.83	12.38	12.35
Fat ...	3.71	3.76	3.72	3.77	3.63	3.64	3.71	4.33	3.66	3.73	3.58	3.90	3.63	3.57

The general averages of genuine samples were:—

	1910	1911	1912	1913	1914	1915	1916
Total Solids ...	12.61%	12.49%	12.48%	12.73%	12.54%	12.47%	12.36%
Fat ...	3.75%	3.73%	3.63%	3.83%	3.83%	3.61%	3.61%

The general averages for the year 1916 shown above are 12.36 per cent. total solids and 3.61 per cent. of fat.

The quality is lower than for 1915, which was lower than usual.

REMAINING ARTICLES.

These present no features of interest or requiring comment.

SUPPLEMENTARY REPORT.

Public Health (First Series, Unsound Food) Regulations, 1908.

As requested by the Local Government Board, these articles are dealt with separately.

The number of samples received under these Regulations was 14 samples of butter, all genuine and containing boric acid.

The amount present varied from 0.07 to 0.62 per cent.

RAG FLOCK ACT.

Five samples of Rag Flock were submitted, and they all complied with the requirements of the Act.

SECTION II.—GENERAL.

The samples received were:—

Borough Engineer's Department	...	1
Medical Officer's	„	23
Police	... ..	10
Private	... ..	19
Waterworks Department	... ..	1
Water for hardness	... ..	1,045
		<hr/>
Total	... ..	1,099
		<hr/>

BOROUGH ENGINEER'S DEPARTMENT.

A sample of boiler composition was examined and reported upon.

MEDICAL OFFICER'S DEPARTMENT.

One sample was water from a well, and was unfit for drinking. The other samples were water from the Borough supplies, and in all cases the water was of excellent quality.

POLICE.

These were various, but all requiring Toxicological examination.

PRIVATE.

The samples submitted privately and duties performed were:—

Beef stearine analysis	...	...	...	1 sample
Beverage	...	...	...	1 „
Boiler Explosion Enquiry, Board of Trade	1	attendance		
Cotton seed oil analysis	...	...	...	3 samples
County Police Court attendance	...	...	1	attendance
Cream of tartar analysis...	...	...	1	sample
Disinfectant	„	...	...	1 „
Mutton fat	„	...	...	1 „
“ Oleo ”	„	...	...	2 „
Palm kernel oil	„	...	...	2 „
Taking sample of water at Government Mills	...	...	...	1 „
Water analysis	...	...	...	4 samples

WATERWORKS DEPARTMENT.

This consisted in the preparation and standardising of special soap solution for use at Otterbourne.

WATER FOR HARDNESS.

These have been reported upon monthly, and a summary only is given in the following table:—

SUMMARY OF HARDNESS FOR THE YEAR 1916.

Source.	Hardness.		
	Highest.	Lowest.	Average.
Otterbourne—Oxford Avenue ...	16.70°	4.72°	9.06°
South Hants—Bitterne Park ...	14.43°	6.05°	8.92°
„ Albany Road ...	14.65°	3.00°	9.30°

Fees received during the year 1916 ...	£38 17 6
Fees outstanding on December 31st, 1916 ...	£21 14 0

SUMMARY OF SAMPLES FOR YEAR 1916.

Food and Drugs ...	548
Public Health Regulations ...	14
Rag Flock Act ...	5
General ...	1,099
	<u>1,666</u>

I am, Gentlemen,

Your Obedient Servant,

J. BRIERLEY,

Public Analyst.



SOUTHAMPTON
Port Sanitary Authority.

ANNUAL REPORT

For the Year ended 31st December, 1916.

STATISTICS RELATING TO THE TRADE AND THE HEALTH OF THE SHIPPING POPULATION OF THE PORT OF SOUTHAMPTON.

The Port of Southampton continued throughout the year 1916 to be practically closed to all commercial traffic. Statistics relating to the number, tonnage, and passengers and crews of vessels entering the Port are not officially available; nor is it possible to publish any detailed information as to the infectious diseases landed.

A large number of cases of infectious disease were landed from Hospital ships arriving at the port during the year. Many of these cases were convalescent on arrival and were removed to various Hospitals for discharge.

The number of vessels visited and inspected by the Port Sanitary Staff amounted to 4,407 compared with 4,798 in the previous year.

The total number of crews and passengers and troops landed in the Port on the vessels that were inspected amounted to 956,672, namely :—

Crews from Foreign	...	...	187,619
Passengers „	...	...	710,944
Crews Coastwise	...	...	25,793
Passengers „	...	...	32,316
Total	...	...	<u>956,672</u>

Owing to the large number of vessels using the Port it was not possible to visit all of them, and no record could be obtained as to the number of crews and passengers on same.

The undermentioned Tables in which it has been usual to give detailed information relating to number of vessels using the Port, tonnage, passengers, crews, and infectious sickness are not published this year. The shipping using the Port is engaged almost entirely in connection with the Expeditionary Forces, and the Statistics are therefore, at the present time of Military importance only, but will be summarised at the end of the War.

The Tables referred to are :—

Table A.—Showing number of passengers who left for places out of Europe, etc.

Table B.—Showing number of passengers who arrived at various Ports in England.

Table C.—Return of number of ships, tonnage, etc., entering the Port.

Table D.—Detailed return of infectious disease imported by vessels and action taken.

Table E.—Statistical Summary of ships, tonnage, passengers and crews entering the Port for 20 years.

Table F.—Cases of infectious disease landed in the Port during the year.

Table G.—Table showing the number of cases of infectious disease which occurred in the Port, or were reported to have occurred on vessels which arrived in the Port of Southampton during the year, and particulars as to how they were dealt with.

Table H.—Infectious diseases reported to have existed on vessels bound for Southampton for 10 years.

Table I.—Deaths at sea.

PRECAUTIONS ADOPTED TO PREVENT THE IMPORTATION OF INFECTIOUS DISEASES.

VESSELS FROM PORTS INFECTED WITH CHOLERA, PLAGUE, OR YELLOW FEVER.

The Customs are notified from time to time by the Port Medical Officer, in accordance with the regulations, as to ports considered to be infected with Cholera, Plague, or Yellow Fever.

Every vessel coming from a port notified as infected with any of these diseases is visited on arrival at the Boarding Station (between the Hamble Spit Buoy and the Weston Shelf Gas Buoy) by an officer of the Customs. It is the duty of that officer to detain the vessel for examination by the Port Medical Officer, but, to prevent delay, the Medical Officer or one of the Staff accompanies the Customs.

When the vessel discharges passengers by tender off Hamble, the Medical Officer accompanies the tender and makes his examination of the ship before the passengers are transferred to the tender.

In the case of vessels carrying no surgeon, the crew and passengers are medically inspected. On other ships examinations of persons on board are made whenever it is considered advisable. Each passenger and member of the crew of vessels from infected or suspected ports has to satisfy the Medical Officer as to his destination and intended address at such place before he is allowed to leave the ship.

By the courtesy and co-operation of the Shipping Companies and Transport Authorities, the names and addresses of all persons landing at Southampton from infected ports are obtained during the voyage and handed to the Port Sanitary Authority on arrival. This is done in order to prevent any vessel which has had a dangerous infectious disease on board during the voyage being detained while such information is being obtained. This practice has been of valuable assistance to the Port Sanitary Authority, particularly in the case of vessels which have had Small Pox on board during the voyage.

VESSELS FROM PORTS NOT INFECTED WITH CHOLERA, PLAGUE OR YELLOW FEVER.

Passengers or cargo vessels, other than those from infected ports, are boarded immediately they arrive alongside the quays, except when the officers of the Port Sanitary Authority are engaged on other important work.

Cases of sickness are examined by the Port Medical Officer if no Surgeon is on Board ; on other ships examinations are made when consultation with the Surgeon indicates the necessity.

Homeward bound vessels which discharge passengers off Hamble are waited on by tenders. The Medical Officer of Health accompanies the tender and receives a report as to the health of the persons on board, and more particularly of those who are to be landed at Southampton. Where circumstances indicate, the Steam Ambulance goes down the River to the vessel in readiness to remove any infectious disease that may exist on board, so as to avoid any delay to shipping.

PLAGUE.

The fact that Plague may exist in rats, and from them be transmitted by certain means to human beings, renders it necessary to adopt special precautions with regard to ships coming from plague-infected ports. A rat order (issued under the Cholera, Yellow Fever, and Plague Regulations of 1907), setting forth the measures to be taken for preventing access of rats from the ship to the shore, is served upon the masters of vessels coming from plague-infected ports, and such ships are visited by the Inspectors at irregular times to ascertain that the necessary precautions are being carried out.

The officers of the Port Sanitary Authority visit ships during the discharge of cargo to ascertain if any dead rats are found. When any are discovered they are submitted to post-mortem examination by the Port Medical Officer, and if any suspicious signs of Plague are found, a bacteriological examination is made. In addition, the rat-catcher periodically provides batches of rats caught on ships and in various parts of the docks. These are submitted to post-mortem examination.

The number of rats captured during the year on vessels and in the Docks and destroyed was 2,290.

The rats were destroyed by burning, either in the ship's furnaces, or the furnaces at the Pumping Station in the Docks, or the furnaces at the Disinfecting Chamber, West Quay.

TABLE J.

VESSELS ARRIVING IN THE PORT OF SOUTHAMPTON FROM PLAGUE-INFECTED PORTS.

The following table gives particulars of vessels arriving from Plague-infected ports during the past seven years.

YEAR.	No. of Vessels.			Arrived at Docks.	Landed by tender. Vessels proceeding to other Ports.	Rat Orders served.	Number of Rats killed.
	Infected.	Suspected.	From Infected Ports.				
1910	Nil	Nil	140	51	89	10	7,047
1911	Nil	Nil	135	59	78	13	6,172
1912	Nil	1	264	120	144	57	7,292
1913	Nil	Nil	235	104	131	10	5,911
1914	Nil	Nil	164	100	64	27	1,330
1915	Nil	Nil	89	89	Nil.	86	Nil.
1916	Nil	Nil	49	49	Nil.	49	Nil.

INFECTIOUS DISEASE.

CHOLERA, YELLOW FEVER, AND PLAGUE.

No case of either of these diseases was reported as having occurred on any vessel which arrived here during the year.

SMALL POX.

Two cases of Small Pox were landed in the Port, both of which were fatal. They were both Military cases. One was admitted to the Isolation Hospital as Measles, but proved to be a case of hæmorrhagic Small Pox, the other case was removed to the Hospital Ship for isolation.

ENTERIC FEVER.

Several cases were reported during the year nearly all of which were landed in the Port. The majority of the cases were convalescent on arrival and were removed to various Military and other Hospitals for observation and discharge. In addition to the foregoing several cases of Paratyphoid Fever were reported and landed, the cases being dealt with in the same manner as the Enteric Fever. Cases which occurred among the crew were admitted to the Borough Isolation Hospital for treatment. Eight cases were reported among the crews of vessels entering the Port. Seven of these were removed to the Isolation Hospital for treatment. The other case was convalescent on arrival.

SCARLET FEVER.

A few cases of Scarlet Fever were reported, all of which were landed here. Cases in the acute stage were removed to the Borough Isolation Hospital. Convalescent cases were removed to various Hospitals for discharge. One case occurred among the crew of a vessel and was removed to the Isolation Hospital for treatment.

DIPHTHERIA.

Several cases were reported, most of which were landed here. The majority of cases were convalescent on arrival and were removed to various Military Hospitals for observation and discharge. Cases in an infectious condition were admitted to the Borough Isolation Hospital. One case occurred among the crew of a vessel and was removed to the Isolation Hospital for treatment.

CEREBRO-SPINAL FEVER.

Most of the cases landed here were convalescent on arrival, those cases requiring further isolation and treatment being removed to the Borough Isolation Hospital.

TUBERCULOSIS.

A large number of cases were landed and transferred to various Military establishments.

DYSENTERY.

A large number of cases were landed here. The majority of the cases were convalescent on arrival. All the cases were removed to various Military Hospitals.

MEASLES.

Several cases occurred among Naval men quartered in the Port. These cases were all removed to the Isolation Hospital for treatment.

Three cases among the crews of vessels were also admitted to the Isolation Hospital.

GENERAL SUMMARY OF INSPECTIONS, ETC., CARRIED
OUT BY THE PORT SANITARY STAFF DURING
THE YEAR 1916.

Steamers (from foreign)	...	...	...	...	3,127
Sailing vessels (from Foreign)	...	...	...	...	1
Motor vessels (from Foreign)	...	...	...	...	—
Fishing vessels (from Foreign)	...	...	...	...	—
Steamers (Coastwise)	...	...	...	...	1,188
Sailing vessels (Coastwise)	...	...	...	...	81
Motor vessels (Coastwise)	...	...	...	...	10
Fishing vessels (Coastwise)	...	...	...	...	—
Total Steam, Sail, Motor, and Fishing vessels					4,407

Crews (from Foreign)	187,619
Passengers (from Foreign)	710,944
Crews (Coastwise)	25,793
Passengers (Coastwise)	32,316

Total Crews and Passengers	956,672
-----------------------------------	---------

British vessels inspected	4,079
Foreign vessels inspected	57
Satisfactory sanitary conditions	4,369
Defective	38
Re-visits	425
Number of passengers landed by tenders	2,753
„ rats captured and destroyed	2,290
„ vessels where disinfection was carried out	35
„ articles of bedding, etc., including 61 parcels of bedding and effects removed for disinfection from 70 vessels, 78 trains and R.A.M.C. Depots, etc., in the Docks	28,354
„ vessels from Plague-infected Ports	49

TABLE K.

Showing number of Vessels inspected, including re-visits, with percentage of defects.

YEAR.	Vessels from Foreign visited.	Coasting Vessels visited.	Total Inspections.	Number found defective.	Percentage defective.
1893	2,976	2,513	5,489	162	2.95
1894	2,196	4,190	6,386	239	3.74
1895	2,212	3,822	6,034	111	1.83
1896	2,312	3,196	5,508	105	1.9
1897	1,692	3,345	5,037	105	2.1
1898	1,766	3,136	4,902	48	0.97
1899	1,786	2,585	4,371	42	0.96
1900	1,666	1,795	3,461	52	1.5
1901	3,586	2,549	6,135	73	1.2
1902	2,191	3,464	5,655	175	3.1
1903	1,534	3,453	4,987	208	4.17
1904	1,618	3,555	5,173	140	2.67
1905	1,514	3,070	4,584	94	2.05
1906	1,559	2,750	4,309	71	1.65
1907	1,695	2,898	4,593	88	1.92
1908	1,729	2,593	4,322	60	1.38
1909	1,454	1,998	3,452	48	1.39
1910	1,797	3,052	4,849	80	1.65
1911	1,677	3,125	4,802	81	1.09
1912	1,625	3,562	5,187	93	1.79
1913	1,705	2,060	3,765	82	2.18
1914	1,844	2,354	4,198	61	1.45
1915	2,737	2,061	4,798	50	1.04
1916	3,128	1,279	4,407	38	0.86

TABLE L.

Table showing the total number of vessels visited, showing nationality, description and number defective, from 1st January to 31st December, 1916, inclusive (not including re-visits):—

Nationality.	Steam.	Sail.	Motor.	Total.	Defective.
British	3,988	81	10	4,079	38
Belgian	44	...	...	44	...
Dutch	1	...	...	1	...
French ... ..	...	1	...	1	...
Italian	3	...	...	3	...
Norwegian	1	...	...	1	...
Russian	1	1	...	2	...
Swedish	4	...	...	4	...
Spanish	1	...	...	1	...
Total	4,043	83	10	4,136	38

GENERAL SANITARY CONDITION OF VESSELS.

The general sanitary condition of vessels using this Port is, on the whole, satisfactory. Most vessels, either on arrival or during their stay, are inspected, and any defect found reported at the time to the officer in charge. As a rule the defect is at once seen to, but should there be any delay or refusal on the part of the officer an official notice is served forthwith, and the master ordered to abate the nuisance within a given time.

In 51 instances insanitary conditions were discovered on vessels. They were principally of an unimportant character, and in the majority of cases were remedied after verbal notice had been given.

In those cases where the vessel sailed before notice could be complied with—if the vessel was proceeding to a home port—information as to the non-compliance was forwarded to the Port Medical Officer of the district to which such vessel was proceeding.

The insanitary conditions discovered consisted of the following :—

Defective stoves and stove pipes in crew's quarters ...	6
Leaky and defective ports in crew's quarters	12
Defective, foul, and choked condition of w.c.'s and urinals in crew's quarters	5
Uncleanly food lockers in crew's quarters	1
Leaky condition of crew's quarters	14
Uncleanly crew's quarters	6
Defective bulkheads in crew's quarters	4
Uncleanly bedding in crew's quarters	2
Decomposing vegetable matter on deck	1

DISINFECTION.

Disinfection was carried out by the Port Sanitary Authority on 35 vessels, 20 Hospital trains and R.A.M.C. Depots, etc., in the Docks.

The number of articles of bedding removed to West Quay amounted to 28,354, including 98 parcels containing quantities of small articles of clothing. The number of articles disinfected is a decrease of 147,214 compared with the total for the previous year, the Admiralty having erected their own Steam Disinfectors in the Docks.

WATER SUPPLY TO VESSELS.

The water barges supplying vessels and yachts in the Harbour with drinking water were frequently inspected, and found in a satisfactory condition.

These barges obtain their water from the Town supply.

**REPORT AS TO THE WORKING OF THE PUBLIC HEALTH
(REGULATIONS AS TO FOOD) ACT, 1907, FOR THE
YEAR 1916.**

The regulations are :—

1. Unsound Food Regulations (First Series,) 1908.
2. Foreign Meat Regulations, 1908.
3. Foreign Meat Regulations (Amendment 1909.)

The Regulations were carried out in this Port on the lines adopted in previous years and the supervision now exercised under the Regulations has improved the condition of the food imported.

The Officers of H.M. Customs and Excise willingly give every assistance and co-operation.

The Official forms recommended by the Local Government Board have been in use and are found to meet all requirements.

Notices were issued under the Unsound Food Regulations, and with one exception, voluntary surrender was made for the destruction of the articles detained.

During the year no export notice was served.

Experience has shown that it is more convenient to deal with the condemnation of Foreign Meat under the Unsound Food Regulations, except in those cases where disease is found, or when it would come under the heading of Class 1 or Class 2 of the Foreign Meat Regulations. By dealing with meat under the Unsound Meat Regulations, it permits of trimming, etc., thereby causing the condemnation of the unsound portions only.

Owing to the continuation of War, and the Docks being closed by the Naval Authorities to practically all the regular trading vessels, a considerable decrease in the quantity of food stuffs landed here has again to be recorded.

BEEF (Chilled.).

During 1916 importations amounting to 1,872,090 cwts. were imported into the United Kingdom from the following countries :—United States 388,611 cwts., Argentina 1,275,647

cwts., Uruguay 171,117 cwts., Brazil 36,715 cwts., compared with 2,660,366 cwts. in 1915, being a decrease of 788,276 cwts.

There has been no chilled beef landed at this port during the year.

BEEF (Frozen).

A decreased importation of frozen beef into the United Kingdom has to be recorded, the total landed being 3,346,188 quarters as compared with 4,113,265 quarters imported during 1915, being a decrease of 767,077 quarters.

Decreases are recorded from Australia 551,781 quarters, Argentina 475,671 quarters and 8,875 quarters from Uruguay.

On the other hand there were increases from New Zealand 157,452 quarters and 111,798 quarters from United States, Brazil, Canada and South Africa.

There were 380,762 quarters landed at this Port, compared with 224,323 landed in 1915, being an increase of 156,439 quarters.

MUTTON AND LAMB.

Arrivals during the year amounted to 4,192,298 carcasses of mutton and 4,280,438 lambs, being a decrease of 2,271,070, and 1,447,555 respectively on the total of 1915.

Decreased supplies were received from Australia, and New Zealand, whilst South America and United States increased their shipments. Of the totals received, 145,246 carcasses of mutton and lamb were landed at this Port.

It will be seen from the summary that over 15 tons of meat were condemned during the year, compared with 11 tons condemned during 1915.

The particulars relating to the importations of Meat into the United Kingdom are taken from Messrs. Weddell and Co's Annual Summary.

OFFAL.

A small quantity of offal was landed during the year amounting to 1,802 packages, which were well packed and in good condition.

The usual procedure of thawing out a portion of each consignment has been adopted and if found satisfactory the consignment was passed.

On the other hand, if unsatisfactory, the whole consignment would be defrosted for examination at the inspection chamber.

PORK AND SCRAP MEAT.

There has been no Pork or Scrap Meat landed during the year.

CEREALS.

A reduced number of consignments have been discharged during the year, which on inspection have been found in good condition.

BUTTER AND CHEESE.

Inspection has been made of these articles and they were found in good condition.

CANNED MEATS.

There has been a small quantity of canned meats landed at this Port during the year.

The usual practice of examining 5 per cent. is still adopted, and if the condition is considered unsatisfactory the whole consignment is examined.

FRESH FRUIT.

The importation of fruit has greatly decreased, only consignments from France and the Channel Islands have been discharged here.

GOOSEBERRIES.

Under the American Gooseberry Mildew (Fruit) Order 1914, all imported gooseberries were inspected and in several instances disease was detected.

When infected consignments were in transit, the Board of Agriculture and Fisheries were notified, but if consigned to local salesmen the Food Inspector in the Town was notified who at once dealt with same as directed by the Order.

On June 19th, 1916 the Board of Agriculture issued an Order prohibiting the landing of Gooseberries from any place outside Great Britain (except the Channel Islands.)

Proceedings before a Magistrate.

With the one exception below mentioned, no difficulty has been experienced in obtaining the voluntary surrender of the condemned articles.

On October 25th, one case containing one hundred and twelve packages of suet, ex S.S. "Normandy" from Guernsey, was inspected and condemned by a Magistrate.

Samples.

Under Article 8, Public Health (First Series) Unsound Food Regulations, 1908, fourteen samples of Butter have been taken and submitted to the Public Analyst.

The following are the results of the analyses of the samples :—

Butter.—All the samples were genuine and contained Boric Acid varying from .07 per cent. to .62 per cent.

TABLE M.

SUMMARY OF FOODSTUFFS CONDEMNED UNDER THE
PUBLIC HEALTH (REGULATIONS AS TO FOOD)
ACT, 1907, DURING THE YEAR 1916.

Description.	Original Packages.		Loose Articles.		Approximate Total Weight of Goods Condemned.			
	No.	Description	No.	Description	Tons.	Cwts.	Qrs.	Lbs.
Beef (chilled and frozen) ...	14	Quarters &	quantity of pieces	5	9	3	27	
Mutton and Lamb	49	Carcases &	" " "	2	19	2	5	
Veal ...	...	...	" " "	...	2	3	8	
Pork ...	...	...	" " "	...	5	0	15	
OFFAL, ETC.—								
Sheeps Kidneys ...	2	Bags and	quantity of loose	}	8	3	27	
" Tongues ...	...	...	" " "			
Ox Hearts ...	...	...	" " "			
" Livers ...	...	...	" " "			
" Sweet Breads	...	...	" " "	}	1	3	22	
Sausages ...	2	Cases and	quantity of loose					
Rabbits ...	...	...	" " "			
Fowls ...	...	...	" " "			
Geese ...	...	...	" " "	}	3	1	16	
Suet (shredded) ...	1	Case	...					
Hams ...	10	Cases and	quantity of loose					
CANNED MEAT—								
Hams (cooked) ...	1	Case	" "	...	...	2	7	
FISH—								
Plaice ...	...	...	quantity of loose	}	1	5	3	3
Soles ...	...	...	" " "			
Halibut ...	...	...	" " "			
Brill ...	...	...	" " "			
Turbot ...	...	...	" " "	}	...	...	...	27
Hake ...	...	...	" " "			
Cod ...	...	...	" " "			
Haddock ...	29	Boxes and	" " "					
Herrings ...	2	"	...	}	...	...	...	7
Salmon ...	1	Case	...					
VEGETABLES, ETC.								
Lettuce and En-	57	Crates	...	...	4	0	24	
dive ...	...	...	...	...	...	...	...	...
Potatoes ...	195	Sacks	...	...	9	15	0	0
Egg Yolks ...	1	Can	...	...	...	...	27	
Jam ...	285	Tins	...	...	17	3	7	
TOTAL ...					28	4	3	25

TABLE N.

Table showing for comparison the foodstuffs condemned during the years 1909 to 1916:—

Year.		Tons.	Cwts.	Qrs.	Lbs.
1909	...	90	14	3	8
1910	...	137	6	2	25
1911	...	115	4	0	25
1912	...	96	15	3	25
1913	...	99	15	1	5
1914	...	53	11	0	19
1915	...	22	18	1	4
1916	...	28	4	3	25
		—	—	—	—
Total	...	644	11	1	24
		—	—	—	—



