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County Borough of Southampton.

Annual Report

ON THE

Health of Southampton

FOR THE YEAR 1913,

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:
Hampshire Advertiser Company, Limited, 29, High Street.
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COUNTY BOROUGH OF SOUTHAMPTON.

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 1913, together with the vital statistics of the Borough. A summary of the work done and action taken under the Factory and Workshop Act, 1907, the Midwives' Act, 1902, and the Housing, Town Planning, etc., Act, 1909, is also included in the Report.

The Report also includes particulars as to the incidence of, and action taken respecting infectious disease. The prevalence of, and control over, Tuberculosis during the year is specially dealt with in this Report.

The health of the Borough was again of a satisfactory nature, the death-rate, and infantile mortality rate being lower than in the previous year.

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
Population (estimated 1st July, 1913)	122,412
Number of Persons per acre	26.6
Number of Inhabited Dwelling Houses (Census, 1911)	20,275
Rateable Value (October, 1913)	£645,885
Births	2,957
Birth Rate	23.8
Deaths	1,604
Death Rate	12.90
,, corrected for age and sex distribution ...	12.35
,, from Zymotic Diseases	0.98
Average Death Rate (10 years, 1903–1912)	13.91

POPULATION.

The population of the Borough on the 1st July, 1913, was estimated by the Registrar-General to amount to 122,412, which is an increase of 3,400 since the Census of April, 1911. This estimate is based on the assumption of an annual rate of increase equal to the mean rate in the period 1901–1911.

This estimate is probably less than the actual, as other methods than that adopted by the Registrar-General point to the rate of increase at the present time being greater than during the previous intercensal period.

The total number of buildings used as dwellings at the Census amounted to 23,401, of which 836 were returned by the enumerators as uninhabited. This number is equal to 3.6 per cent. of the total.

At the end of December, 1913, the number of buildings used as dwellings upon the Rate Books was 24,764. An enumeration made at the same date by the staff of the Health Department of void premises in the Borough amounted to only 226, which is a considerable decrease when compared with the Census, and shows that less than one per cent. of the inhabitable buildings in the Borough were empty on that date.

The average number of persons in ordinary dwelling houses at the Census was 5.08. Therefore, at the end of the year 1913, if the number of dwellings on the rate books are taken and the void houses deducted the estimate of the population amounts to 124,653.

The method of adding the estimated population occupying the houses completed for occupation since the Census gives a population of 123,558 at the middle of the year, without taking into account the reduction in the number of void houses.

A third method of adding the natural increase of births over deaths, 3,461, gives a population of 122,473.

The estimate of the Registrar-General is adopted for all statistical purposes.

METEOROLOGY.

"A dull year, an open winter, a wet spring, a summer very dry but neither sunny nor warm, and a uniformly mild autumn," is the description given by the Meteorological Office of the climatic conditions of the year 1913 in the British Isles.

This description also applies to the weather experienced in Southampton. It was a healthy year without any extremes of temperature, the mean of the minimum temperatures being as much as 1.5 degrees above the average, and the approximate mean temperature 51.9 degrees, was 0.9 above the average of the previous ten years.

The three summer months—June, July and August—were very dry, only 2.6 inches of rain falling in the three months ending 30th August. These three months, therefore, were practically as dry as the hot summer of 1911 but there were nearly 330 hours of sunshine less.

The spring and autumn were wet, the rainfall for the year being only one inch below the average.

In the Annual Summary for the year 1913 issued by the Meteorological Office, Greenwich, the mean temperature of towns along the South Coast is given as :—

Penzance ...	... 53.2	Falmouth	... 51.7
Plymouth ...	... 52.1	Worthing	... 51.7
Southampton	... 51.9	Bournemouth	... 51.4
Brighton ...	... 51.9	Hastings	... 51.4
Eastbourne	... 51.8	Dover ...	... 50.3

By the courtesy of the Director-General of Ordnance Survey —Col. C. F. Close, C.M.G., R.E., an abstract from the Meteorological Register kept at the Ordnance Survey Office, Southampton, during the year 1913, and the averages for ten years—1903–1912—are appended in a Table at the end of the Report (page 133).

BIRTHS.

The birth-rate for the year amounted to 23.78 per 1000 of the population. This is an increase of 0.49 above the rate recorded last year, but is 1.83 below the average of the last ten years—1903–1912.

The number of births registered in the Borough amounted to 2,957 during the year, which included the fifty-three weeks ending 3rd January, 1914. This number is an increase of 151 compared with the previous year (52 weeks) when 2,806 births were recorded. The excess of births over deaths amounted to 1,353 compared with 1,209 in 1912 and 1,039 in 1911.

Of the 2,957 births registered, 1,495 were males and 1,462 females, the proportion of males to females being 1,023 males to every 1,000 females. The proportion in the previous ten years was 1,052, and the average for England and Wales 1,039.

The illegitimate births registered amounted to 115 compared with 97 in the previous year. This number is equal to a rate of 0.92 per 1,000 of the population, and to 39 illegitimate births to every 1,000 births registered. The average for England and Wales is 1.0 and 41 respectively. The occupation of the mother was given as domestic servant in 50 instances.

The birth-rate in the Municipal Wards was highest in Northam, Millbrook and Shirley Wards, and lowest in Banister and All Saints Wards. There was an increase in the birth-rate in Town, Trinity, Newtown, All Saints, Bevois, Banister, Freemantle, Portswood, and St. Denys Wards, and a decrease in St. Marys, Northam, Millbrook, and Shirley Wards.

The birth-rates in the Municipal Wards in 1913 are appended :—

Northam	30.3	St. Marys ...	22.9
Millbrook	28.4	Bevois	21.3
Shirley	27.8	Freemantle ...	21.0
Trinity	26.1	Newtown ...	20.3
Portswood ...	24.8	All Saints ...	16.9
St. Denys	24.8	Banister	15.8
Town	24.6		

The birth-rates in the old Civil Parishes of the Borough were :—

Town	23.7
Portswood and Bitterne Park	24.1
Shirley, Freemantle, and Millbrook	23.7

DEATHS.

The death-rate of the Borough for the year amounted to 12.90 per 1000 of the population. This rate is lower than that of the preceding year, and is 1.01 below the average of the previous ten years.

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 of such town 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 corrected death-rate of 12.35.

The statistics for the year 1913 relate to the fifty-three weeks ended 3rd January, 1914, and during this period 1,650 deaths were registered, which is an increase of 21 when compared with those recorded in the preceding year (52 weeks).

Of the total of 1,650 deaths registered, 91 were deaths of non-residents coming under the definition of "transferable deaths"; that is, persons who having a fixed or usual residence in England and Wales die in a district other than that in which they resided. On the other hand forty-five deaths of residents of the Borough occurred in other districts and were transferred. The corrected total of deaths belonging to the Borough is, therefore, 1,604.

The death-rate for England and Wales during the year 1913 was 13.7, and for the 96 large towns 14.3 per 1,000 of the population.

The number of deaths of males amounted to 845, and of females 759, the deaths of males being equal to a rate of 14.1, and females of 11.8 per 1,000 of the estimated male and female population of the Borough.

The deaths recorded from the various diseases were generally of an average number, the deaths from Cancer and Heart Diseases showing the largest increase.

Twenty deaths of persons (foreigners or colonials) who had arrived in the Port were registered during the year in the Borough, and having no settled residence in England or Wales are included as residents of the Borough in accordance with the rules of the Local Government Board. The diseases from which these persons died were Diphtheria, 1; Beri-beri, 1; Phthisis, 6; Cerebro-Spinal Meningitis, 1; Bronchitis, 1; Pneumonia, 2; Heart Disease, 2; Accident, 1; other diseases, 5. These deaths are included in the tabulated statements in this Report.

The death-rate in the Municipal Wards was lowest in All Saints, Millbrook and Shirley Wards, and highest in Town and St. Marys Wards. The wards in which there was a decrease in the death-rate compared with the previous year were Northam

Trinity, Newtown, All Saints, Millbrook, Shirley, and St. Denys, and those with an increased death-rate were Town, St. Marys, Bevois, Banister, Freemantle, and Portswood.

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

All Saints	9.6	Freemantle ...	12.0
Millbrook	11.2	Portswood ...	12.3
Shirley	11.2	Northam ...	13.2
Banister	11.3	Bevois	13.7
Newtown	11.3	St. Marys ...	16.8
St. Denys	11.6	Town	18.4
Trinity	11.7		

The causes of death in each of the Municipal wards are shown in Table 9 (page 121).

The death-rate in each of the old Civil Parishes of the Borough was :—

Town	14.3
Portswood and Bitterne Park	11.4
Shirley, Freemantle, and Millbrook	11.4

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.

Of the 1,650 deaths registered in the Borough 571 occurred in public institutions, which is equal to 34.6 per cent. of the total deaths. The percentage in England and Wales was 21.2, and in 96 large towns (including London), 27.8. The Institutions in which the deaths occurred were : Isolation Hospital, 40 ; Royal South Hants and Southampton Hospital, 152 ; Shirley Children's Hospital, 3 ; the Workhouse, 67 ; Union Infirmary, 282 ; Nursing Institutions, 27.

Inquests were held on 171 of the deaths registered during the year, which is equal to a percentage of 10.4 of the total deaths. The percentage in England and Wales was 7.2, and in the 96 great towns (including London), 7.9.

TABLE A.

Showing Estimated Population, Birth Rates, Infantile Mortality, and Death Rates in each of the Municipal Wards for the year 1913, together with the Averages for the years 1911-1912.

Ward.	Estimated population Middle of 1913.	1913.					Averages, Years 1911–1912.				
		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 ..	11,647	24.6	103.2	0.93	2.37	18.4	24.0	137	1.42	2.24	17.6
2. St. Mary's ..	12,679	22.9	159.3	1.55	1.32	16.8	24.3	96	1.70	1.70	15.5
3. Northam ..	11,597	30.3	67.2	1.61	1.11	13.2	31.4	114	2.11	1.82	15.9
4. Trinity ..	9,063	26.1	66.7	0.76	1.09	11.7	24.9	97	1.44	1.49	14.5
5. Newtown ..	8,345	20.3	40.7	0.59	0.36	11.3	20.0	96	0.72	1.26	12.35
6. All Saints ..	8,939	16.9	39.2	0.22	0.99	9.6	17.4	81	0.66	1.66	14.7
7. Bevois ..	8,277	21.3	72.6	0.71	1.07	13.7	20.0	86	1.09	1.15	13.2
8. Banister ..	7,525	15.8	49.6	0.13	0.65	11.3	15.1	68	0.27	0.55	9.8
9. Freemantle ..	8,029	21.0	64.3	0.86	0.98	12.0	19.6	108	1.33	1.26	13.5
10. Millbrook ..	9,688	28.4	68.1	1.12	1.73	11.2	28.3	161	2.43	1.29	14.9
11. Shirley ..	9,229	27.8	103.4	2.03	0.53	11.2	28.7	103	1.31	1.19	14.7
12. Portswood ..	8,811	24.8	85.6	0.89	1.90	12.3	24.3	103	1.54	1.41	11.7
13. St. Deny's ..	8,583	24.8	74.1	0.69	1.03	11.6	23.0	127	1.52	1.15	13.4
Totals ...	122,412	23.8	81.5	0.98	1.21	12.9	23.6	110	1.39	1.45	14.2

INFANTILE MORTALITY.

The deaths of infants under one year of age recorded during the year amounted to 241, which is equal to a rate of 81.5 per 1,000 births registered during the same period.

This rate, 81.5, is lower than that of the previous year, which was 84.4. In 1911 the rate was 135, and in 1910, 79, the latter is the lowest recorded in the Borough.

The infantile mortality rate in 1913 in England and Wales was 109, and in the 96 great towns (including London), 117.

Seventy-four of the deaths occurred during the first week of life, which is equal to 30.7 per cent. of the total recorded. In the previous year the percentage was 27.

The causes which were responsible for the largest number of deaths of infants under one year of age during the last three years are :—

	1911.	1912.	1913.
Diarrhœa and Enteritis	131	28	30
Premature Birth	65	55	64
Atrophy, Debility, and Marasmus	49	27	25
Bronchitis and Pneumonia ...	56	42	45
Measles	4	2	10

The deaths of illegitimate infants numbered 22, which, calculated upon the number of illegitimate births registered during the same period is equal to an infantile mortality rate of 191.2, compared with 77.4 for legitimate infants.

Similar rates for five years are given for comparison :—

	Legitimate Infant Mortality Rate.	Illegitimate Infant Mortality Rate.
1909	99	... 311
1910	75	... 164
1911	128	... 366
1912	79	... 237
1913	77	... 191

The infantile mortality in the old Civil Parishes of the Boroug was: Town proper, 86.8; Portswood and Bitterne Park, 76 Shirley, Freemantle and Millbrook, 75.4.

With regard to the rates in Municipal wards, the lowe were: All Saints, Newtown, and Banister, and the highest S Mary, Shirley, and Town.

The rates in the Municipal wards are given below, compare with the previous year:—

Ward.	1913.	1912.
All Saints	39.2 ...	57.6
Newtown	40.7 ...	72.3
Banister	49.6 ...	55.6
Freemantle	64.3 ...	50
Trinity	66.7 ...	78
Northam	67.2 ...	103.1
Millbrook	68.1 ...	89.2
Bevois	72.6 ...	31.4
St. Denys	74.1 ...	127.9
Portswood	85.6 ...	100.5
Town	103.2 ...	124.1
Shirley	103.4 ...	54.3
St. Marys	159.3 ...	91.8

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

This Act was passed in order that Health Authorities mi obtain immediate notice of the occurrence of a birth, thus mak it possible for Health Visitors to give early instruction a advice to the mother as to the feeding and treatment of the ch Under the Registration Act, which allows a limit of six we within which a birth may be registered, it frequently occurs t registration of a birth is only obtained after death has ta place. During the year 140 deaths occurred among infants un six weeks of age, being 58 per cent. of all those that occur under one year of age.

The number of notifications received during the year under he Act amounted to 2,492, which is 77 less than in the previous ear, but 46 more than in 1911.

The total notified is equal to a percentage of 84.3 of the irths registered during the same period, the percentage being ss than in previous years.

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

	1909.	1910.	1911.	1912.	1913.
Notified by—					
Doctors	302	255	319	289	334
Midwives	1,694	1,788	1,727	1,790	1,836
Other persons present in the house at time of birth ...	612	462	400	490	322
	2,608	2,505	2,446	2,569	2,492
Percentage to births registered during the same period ...	88.8	85.6	85.9	91.1	84.3

On the receipt of notification of births in the old and poorer uarters of the town a Health Visitor visits the house in order at she may give advice and instruction as to the feeding and anagement of infants if indicated. It is found that as a rule ese visits are welcomed, and they are repeated at intervals for vo or three months after the birth of the child if thought ecessary.

Information is also obtained as to the method of feeding the majority of other newly-born children in the Borough with view of obtaining information as to feeding for statistical pur-oses, and for comparing the mortality amongst breast-fed and ottle-fed children.

It is difficult, however, to arrive at a reliable comparison ving to many infants being weaned two or three months after rth, and as the visits are made within the first two months of rth the figures given below relate only to that period.

It was possible to obtain information in 2,581 instances a to the feeding, of which 2,103 were stated to be fed by breas alone, 96 by mixed feeding, and 382 by cows' milk, condense milk, or patent foods.

The deaths of infants under one year of age amongst thos as to whom information as to feeding had been obtained we as follows :—

How Fed.	Number.	Deaths.	Percentage.
Breast	2,103	88	4.1
Other than Breast-fed ...	478	69	14.4

All premises visited in connection with the Notification Births Act were inspected, resulting in 857 sanitary defects nuisances being remedied.

With regard to voluntary child welfare work there is Babies' Welcome and School for Mothers in Southampton. Th is managed by a Committee of Voluntary Helpers with the ch centre at Holy Trinity Schools, and branches at the Missi Room, King Street, and St. Agnes' Hall, Portswood. Each we there is a talk on some definite subject by a Doctor or certificat nurse, and weighing of babies, and infant consultations. Ma expectant mothers have also attended these centres. A medi officer from the staff of the Health Department frequen attends these centres to speak and to give advice.

During the year the Local Government Board issued a rep on Infant and Child Mortality in the Urban areas of England a Wales. This report contained an analysis of the conditi obtaining in the large towns and some of the more import conclusions drawn from the information collected may be su marised as follows :—

(1) Infant Mortality is higher in Urban than in Ru areas.

(2) The counties having the highest rate of Infant Morta are : Lancashire, Durham, Glamorgan, Nottingh Staffordshire, West Riding of Yorkshire, Northum land, Warwickshire.

(3) Towns within the same county sometimes within a few miles of each other, show widely divergent Infant Mortality rates.

(4) Equally marked differences in Infant Mortality rates occur between constituent wards or districts of a large number of towns, these differences not being confined to towns having a high total Infant Mortality.

(6) The size of a town has no definite relationship to excessive Infant Mortality, this occurring irregularly in towns having a population over and under 50,000.

(7) A high infant death-rate implies a high death-rate in the next five years of life, while low death-rates at both age periods are similarly associated.

(8) The relative importance of the many factors causing excessive Infant Mortality is difficult to assess.

(9) The smallest incidence of disease, occurs usually in districts supplied with water closets.

(10) Unpaved yards and streets and inefficient scavenging favour excessive Infant Mortality.

(11) In towns where the general conditions are more satisfactory, excessive Infant Mortality occurs in tenement and other small dwellings.

(12) Such relationship between large families and high Infant Mortality as is frequently found is in the main indirect, large families being most common among the poorest, who live under conditions unfavourable to child life.

(13) Infant Mortality is excessive among the poor ; it is low among the well-to-do.

(14) Poverty is a direct cause of Infant Mortality where it induces malnutrition of mother or infant, or where it implies that the mother cannot give adequate care to the infant.

(15) Poverty is also an indirect cause of Infant Mortality. Its influence is exercised in the following, among other ways :—

(a) Poverty is not infrequently associated with ignorance and carelessness.

(b) With these are commonly associated overcrowding and uncleanliness.

(c) Alcoholic habits frequently result from living under conditions of poverty, the converse also being true.

Poverty, uncleanliness, overcrowding, alcoholic indulgence and disease are closely inter-related in vicious circles, the starting point leading to excessive Infant Mortality not always being the same.

(16) The importance of the personal factor in the prevention of Infant Mortality is very great.

(17) The abandonment of breast-feeding without adequate cause is a most important factor of excessive Infant Mortality.

Diagrams are given in the report referred to showing the relative position of the 100 large towns with regard to infant and child mortality during the five years, 1907–1910. Southampton is bracketed as the ninth lowest for death-rate for ages 1 to 5 years, and twelfth lowest for Measles and Whooping Cough.

With regard to deaths under 1 year of age in Southampton compared with the average of 241 Urban areas, the deaths of infants in various age groups is given below. The deaths of infants in Southampton

Under 1 month are	...	3	per cent.	below	average
Under 3 months ,,	...	7	,,	,,	,,
3 to 6 months ,,	...	23	,,	,,	,,
6 to 12 months ,,	...	28	,,	,,	,,
Under 1 year ,,	...	16	,,	,,	,,

The only cause of death of infants that is above the average in Southampton is Premature Birth.

INFANTILE MORTALITY, 1913.

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	74	8	13	12	107	47	39	30	18	241
—Uncertified	...	...	...	...	...	...	...	...	...	...
Small Pox	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	...	...	...	...	1	...	...	1
Measles	...	...	...	...	...	...	3	4	3	10
Scarlet Fever	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	3	1	2	...	6
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis	...	...	...	...	...	1	...	1	...	2
Abdominal Tuberculosis	...	...	...	...	...	1	2	...	...	3
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...
Meningitis (not Tuberculous)	...	...	...	...	...	...	1	1	1	3
Convulsions	2	...	2	...	4	2	2	2	...	10
Laryngitis	...	...	...	...	...	...	...	...	1	1
Bronchitis	3	1	1	3	8	6	6	4	1	25
Pneumonia (all forms)	1	1	...	1	3	3	4	6	4	20
Diarrhœa	...	...	...	...	...	8	7	3	5	23
Enteritis	...	...	...	...	...	4	2	1	...	
Gastritis	...	1	...	...	1	2	...	...	...	3
Syphilis	...	...	...	...	...	...	2	1	1	4
Rickets	...	...	...	...	...	1	1	...	...	2
Suffocation, overlying	1	...	...	...	1	2	...	...	...	3
Injury at Birth	5	...	...	...	5	...	...	...	...	5
Atelectasis	4	...	...	...	4	...	...	...	...	4
Congenital Malformations	3	...	1	...	4	3	1	1	...	9
Premature Birth	42	4	7	6	59	3	2	...	...	64
Atrophy, Debility and Marasmus	9	1	1	2	13	6	4	2	...	25
Other Causes	4	...	1	...	5	2	...	2	2	11
Totals	74	8	13	12	107	47	39	30	18	241

Nett Births in the Year—Legitimate, 2,842; Illegitimate, 115.
Nett Deaths in the Year—Legitimate infants, 219; Illegitimate infants, 22.

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			
1883	34.6	20.9	137			
1884	31.7	16.9	114	31.8	18.6	134
1885	30.5	19.0	146			
1886	30.1	18.0	140			
1887	31.3	18.7	145			
1888	31.3	16.9	126			
1889	30.6	16.3	117	30.6	17.5	128
1890	28.5	17.5	129			
1891	31.3	18.0	123			
1892	28.6	21.5	148			
1893	29.5	19.5	157			
1894	30.2	16.0	119	29.8	18.6	145
1895	30.4	18.7	155			
1896	30.4	[illegible].2	146			
1897	30.4	[illegible].3	156			
1898	29.8	[illegible]7.3	153			
1899	29.6	19.1	178	29.6	17.6	159
1900	28.3	17.6	152			
1901	30.0	16.6	154			
1902	29.1	15.7	124			
1903	29.4	14.1	114			
1904	27.5	14.2	114	27.6	14.6	120
1905	26.0	15.1	133			
1906	26.0	13.8	113			
1907	24.3	13.6	108			
1908	25.4	13.6	113			
1909	25.3	13.9	106	24.8	13.7	108
1910	24.9	12.4	79			
1911	23.9	15.2	135			
1912	23.3	13.2	84			
1913	23.8	12.9	82			

MORTALITY FROM ZYMOTIC DISEASES.

The death-rate from diseases usually classified as the chi epidemic diseases, namely : Small Pox, Scarlet Fever, Diphtheri Enteric Fever, Measles, Whooping Cough, and Diarrhœa a Enteritis, amounted to 0.980 per 1,000 of the population, whi is slightly higher than in the preceding year, when the rate w 0.938.

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 :—

	1909.	1910.	1911.	1912.	1913.
Small Pox	.000	.000	.000	.000	.000
Scarlet Fever ...	.043	.017	.042	.017	.016
Diphtheria	.164	.136	.194	.158	.241
Enteric Fever ...	.086	.085	.025	.066	.048
Measles	.000	.145	.109	.149	.241
Whooping Cough ...	.362	.094	.151	.291	.080
Diarrhœa and Enteritis under 2 years of age	.491	.288	1.328	.257	.354
Total Zymotic death-rate ...	1.146	0.765	1.849	0.938	0.980

THE INCIDENCE OF NOTIFIABLE INFECTIOUS DISEASES.

The total number of cases of infectious disease notified during the year amounted to 1,191. The following is a list of notifiable diseases and the number of cases notified of each disease :—

Small Pox	1
Cholera	0
Plague	0
Diphtheria	357
Erysipelas	51
Scarlet Fever	177
Typhus Fever	0
Enteric Fever	33
Relapsing Fever	0
Continued Fever	0
Puerperal Fever	3
Cerebro-Spinal Meningitis	0
Poliomyelitis	0
Pulmonary Tuberculosis	464
*Other forms of Tuberculosis	105
	1,191

*Made compulsorily notifiable on and after 1st February, 1913.

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

Disease.	1909.	1910.	1911.	1912.	1913.
Small Pox	1	—	—	2	1
Scarlet Fever	424	219	198	288	177
Diphtheria	222	208	352	192	357
Enteric Fever	53	55	20	12	33
Continued Fever	—	—	—	1	—
Puerperal Fever	9	4	4	5	3
Erysipelas	92	67	69	72	51
Cerebro-Spinal Meningitis	—	—	—	1	—
Poliomyelitis	—	—	—	—	—
Pulmonary Tuberculosis	—	—	—	339	464
Other Forms of Tuberculosis ...	—	—	—	—	105
Total	801	553	643	912	1191

All cases of Pulmonary Tuberculosis were made compulsorily notifiable on the 1st January, 1912, and other forms of Tuberculosis on the 1st February, 1913.

Detailed information respecting Tuberculosis is given on pages 31 to 69.

The table which follows gives a comparison of the infectious sickness rates during the year 1913 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	1.42	4.26	3.51
Diphtheria	2.87	1.48	1.39
Enteric Fever	0.27	0.25	0.22
Puerperal Fever	0.02	0.07	0.05
Erysipelas	0.41	0.74	0.64
Cerebro-Spinal Fever ...	0.00	0.01	0.01
Poliomyelitis	0.00	0.02	0.02
	5.00	6.83	5.84

There were 2,140 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 the disease.

In addition, 1,236 visits were made to the homes of persons who had been exposed to infection on ships arriving in the Port.

In connection with school absentees, 745 visits were made where non-notifiable infectious diseases occurred.

Of the cases notified 382 were removed to the Isolation Hospital for treatment.

Sanitary defects were found in 127 houses in which cases occurred.

Particulars respecting each disease are appended :—

SMALL POX.

One case of Small Pox was notified during the year.

The case was that of a man, T.R.H., aged 33 years, and residing in the upper part of the town. The patient had been working in the Docks, but no evidence could be obtained of his having been in contact with Small Pox infection. He was removed to the Hospital Ship and the usual precautions taken to prevent the spread of infection. The case was of a discrete type. The patient had been vaccinated in infancy, and was stated to have been re-vaccinated 13 years before illness.

SCARLET FEVER.

The number of cases of Scarlet Fever notified during the year amounted to 177, being a decrease of 111 cases compared with total recorded in the previous year.

The number of cases notified was the lowest since 1907. The number of cases notified and deaths resulting from the disease for the past five 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

The cases occurred with about the same frequency throughout the year, and showed no excess in the autumn months. In proportion to the population the disease was most prevalent in Northam and Trinity Wards, and lowest in Banister and Bevois Wards.

The disease was generally of a mild type, two deaths being recorded, giving a case mortality of 1.3 per cent.

One hundred and thirty-eight of the cases notified were removed to the Isolation Hospital for treatment, being a percentage of 78 compared with 81.6 in the previous year, and 88.7 in 1911

In addition to the above cases twenty-three cases of Scarlet Fever from neighbouring districts, and two cases which were landed in the Port, were admitted to the Isolation Hospital during the year, making a total of 163 cases admitted.

Operation for the removal of tonsils and adenoids was performed in 7 cases, or 4.3 per cent. of the total number of cases admitted to Hospital (including cases admitted from other districts).

Several of the cases of Scarlet Fever admitted were suffering from purulent nasal discharge, 24 of the cases admitted being complicated in this way.

In one case, Whooping Cough developed two weeks after admission, the infection having occurred before admission. Measures were taken to prevent further spread of the disease, and no other case occurred.

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.

Four "return" cases occurred during the year. Appended are the particulars of each of these :—

1.—A.R., who was in Hospital with Scarlet Fever from 8th January to 10th February, lived in the same house with F.K. from 26th February; F.K. developed the disease on 7th March, and was admitted on 10th March.

2.—T.Y., admitted 15th February, and discharged 24th April, had chronic purulent nasal discharge before admission. She submitted to the operation for the removal of tonsils and adenoids, but the nasal discharge continued. She was finally sent home at her parents request, the necessary precautions and the risk involved having been fully explained to them.

Her cousin, A.W., visited her on the day of her discharge, and developed Scarlet Fever on 28th April, and was admitted on 1st May.

3.—This patient, A.W., was discharged on 26th May, and his sister, I.W., showed symptoms of the disease on 11th June, and was admitted on 13th June.

4.—Mrs. E.T., admitted 12th September, and discharged 6th November, had chronic nasal polypi, with purulent discharge. She was offered an operation for the removal of the polypi, but refused, although she clearly understood the risk of remaining infectious to others.

Her sister, B.W., had an attack of Scarlet Fever on 29th November, and was admitted to Hospital on 1st December.

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

DIPHTHERIA

The number of cases of Diphtheria notified during the year amounted to 357. This number is considerably higher than in the previous year, when 192 cases occurred. The total is, however, about the same as in the year 1911, when 352 cases were notified in the fifty-two weeks ending 30th December, compared with 357 in the fifty-three weeks ending 3rd January, 1914.

Thirty deaths from the disease were registered giving a case mortality of 8.4, which is lower than in the previous year, but higher than in 1911, as will be seen from the following table :—

	Cases.	Deaths.	Percentage.
1906	262	24	9.16
1907	204	22	10.78
1908	248	16	6.45
1909	222	19	8.56
1910	208	16	7.69
1911	352	23	6.53
1912	192	19	9.90
1913	357	30	8.40

The seasonal incidence of the disease was very marked, the excess being confined to the last three months of the year, during which period 201 cases were notified, reaching their maximum in the first two weeks of December.

The largest number of cases in proportion to the population occurred in Shirley Ward, many cases being notified in that area of small working class property north of Shirley High Street. Other wards in which the disease was prevalent were St. Denys, Northam, Millbrook, and Portswood Wards. The smallest number of cases occurred in Town, Freemantle, and St. Marys Wards.

The increase in the number of cases notified followed a dry summer, as was the case in 1911, but it is impossible to specify any cause to which the unusual prevalence of the disease was due. In the districts in which the oldest and smallest type of house is found, namely, in the Town and St. Marys Wards the cases were comparatively few in number, especially in the last three months of the year. Every investigation was made as to the origin of each case, but no probable cause could be discovered other than personal infection in some of the cases.

Two hundred and twenty-four of the 357 cases notified were admitted to the Isolation Hospital for treatment, which is equal to a percentage of 62.7 per cent. compared with 78.7 in 1912 and 79.8 in 1911.

In addition to the above, thirteen cases were admitted to the Isolation Hospital from neighbouring districts, and seven cases were admitted that were landed from the vessels which arrived in the Port.

ENTERIC FEVER.

The cases of Enteric Fever notified in the Borough amounted to 33, which is an increase of 20 compared with the year 1912, but is 3 less than the average of the preceding five 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

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. These deaths, however, are included in Table 4 in the appendix.

Six of the cases notified occurred in one family in Northam. The father had been ill for some weeks before the disease was recognised and notified to the Sanitary Authority. After his removal to Hospital five other members of the family developed the disease, having probably been infected by the original case.

Four of the cases had eaten uncooked shellfish (cockles 3, oysters 1) previous to the onset of the disease. Three cases were probably infected in other districts, 7 of the cases were contacts, one case had been working on a ship from which a case of Enteric Fever was removed, and in the remaining 18 cases no evidence could be obtained as to the cause of the disease.

Twenty of the cases notified were removed to the Isolation Hospital for treatment, five were admitted and notified from the Union Infirmary, after the disease was recognised, and three were notified under similar conditions from the Royal South Hants and Southampton Hospital. The remaining five cases were treated at their homes.

Of the six deaths registered three occurred in the Isolation Hospital and three in the Union Infirmary.

In addition to the cases removed to the Isolation Hospital from the Borough 11 cases were admitted that were landed from vessels which arrived in the Port, and two cases were admitted from neighbouring districts.

The following is a detailed list of the cases which occurred in the Borough during the year :—

NO.	DATE.	NAME	AGE.	SEX.	ADDRESS.	WHERE ISOLATED.	REMARKS.
	1912.						
1	Dec. 30	A J.O.	37	M	Britannia Road	Isolation Hospital	
	1913.						
2	Jan. 8	D.E.O.	12	F	Do.	Do.	In contact with the above case
3	„ 13	S.O.	1	M	Do.	Do.	Do.
4	„ 13	G.O.	10	F	Do.	Do.	Do.
5	„ 21	J.E.O.	35	F	Do.	Do.	Nursing above cases
6	Feb. 14	W.D.O.	8	F	Do.	Do.	In contact with the above cases
7	Mar. 8	P.K.	22	F	Royal South Hants Hospital	Royal South Hants Hospital	Had been nursing patients suffering from Enteric
8	Apl. 15	P.E.J.T.	44	M	Milton Road	Isolation Hospital	Had eaten uncooked cockles previous to illness
9	May 6	R.C.C.	15	M	Hill Lane	At Home	Returned home unwell from Bishops Waltham
10	„ 12	F.C.	25	M	Westgate Street	Isolation Hospital	
11	June 3	G.A.W.	14	M	Cossack Street	Do.	Had been working on board the s.s, La Savoie, from which a case of Enteric Fever was removed
12	Aug. 7	A.C.	44	M	St Michael's House	Union Infirmary	Notified after death; unable to get any information
13	„ 22	A E.K.	21	M	Rochester Street	Isolation Hospital	Returned home unwell from Rollstone Camp, Salisbury Plain
14	„ 22	E.J.W.	5	M	St James' Road	Do.	Contracted at Templecombe
15	„ 26	E.J.	22	F	Millbank Street	Union Infirmary	Notified after death; unable to get any information
16	Sept 17	E.W.	42	M	North Front	Isolation Hospital	

ENTERIC FEVER—Continued.

NO.	DATE.	NAME.	AGE.	SEX.	ADDRESS.	WHERE ISOLATED.	REMARKS.
17	Oct 17	E.A.	7	F	Threefield Lane	Isolation Hosqital	
18	„ 17	A.A.	13	F	Do	Do.	
19	„ 20	G.A.	5	M	Do	At Home	
20	„ 20	E.A.	4	F	Do	Do.	
21	„ 22	A.E.M.	34	M	Northam Road	Isolation Hospital	
22	„ 22	A.E.M.	26	F	Do.	Do.	Nursing case No. 21
23	„ 24	C.S.	29	M	Oxford Street	Do.	
24	„ 27	J.C.	19	M	Bond Street	Do.	
25	„ 27	E.B.	11	F	Chapel Street	Do.	Had eaten uncooked cockles previous to illness
26	Nov. 6	F.H.	21	M	College Street	Royal South Hants Hospital	
27	„ 17	M.L.D.	3	F	Nile Road	At Home	
28	„ 19	F.A.W.	37	F	Belgrave Road	Union Infirmary	
29	„ 19	G.R.	58	M	Endle Street	Do.	Had eaten uncooked cockles previous to illness
30	„ 27	B.F.	8	F	Princes Street	At Home	
31	„ 27	W.F.A.	6	M	Mount Pleasant Rd.	Union Infirmary	
32	Dec. 4	E.L.	33	M	Linney's Passage	Isolation Hospital	
		E.N.	49	F	East Street	Royal South	Had eaten oysters previous to

1913 (53 weeks ended 3rd January, 1914).—**TABLE** showing the number of Cases of Scarlet Fever, Diphtheria, and Enteric Fever, and Deaths from Measles, Whooping Cough, and Diarrhœa occurring in each week, tabulated according to the Municipal Ward in which such Cases or Deaths occurred.

Each ward column comprises: Cases (Scarlet Fever, Diphtheria, Enteric Fever) and Deaths (Measles, Whooping Cough, Diarrhœa).

Week ending	Town	St. Mary	Northam	Trinity	Newtown	All Saints	Bevois	Banister	Freemantle	Millbrook	Shirley	Portswood	St. Denys	Borough
January 4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
February 1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
March 1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
April 5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
May 3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
June 7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
July 5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
August 2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
September 6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
October 4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
November 1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
December 6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
" 27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
January 3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Totals	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rate per 100,000 of population	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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		Roof 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	14	9	...	...	...	...	2	...	...	...	1	1	2	...	...	...	...	...	5	1
St. Marys ...	25	2	...	...	1	...	3	...	3	...	3	...	...	...	...	...	...	...	10	...
Northam ...	40	10	..	...	5	1	7	2	5	1	5	1	2	...	2	...	...	...	26	5
Trinity ...	22	4	1	...	...	...	3	1	3	...	5	...	...	...	1	...	...	...	13	1
Newtown ...	20	2	...	...	1	...	2	...	1	...	1	...	3	...	...	...	...	...	8	...
All Saints ...	19	2	1	...	1	...	2	...	1	...	1	...	1	...	...	...	1	...	8	...
Bevois ...	17	...	...	...	1	...	3	...	2	...	1	...	2	...	...	...	1	...	10	...
Banister ...	15	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Freemantle...	12	...	...	...	...	...	2	...	2	...	...	...	1	...	...	...	2	...	7	...
Millbrook ...	31	...	...	...	1	...	4	...	1	...	3	...	1	...	1	...	...	...	11	...
Shirley ...	68	1	...	...	3	...	8	...	7	...	4	...	1	...	5	...	3	...	31	...
Portswood ...	27	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	2	...
St. Denys ...	47	...	...	...	...	...	6	...	5	...	3	...	2	...	...	...	...	...	16	...
Total ...	357	33	2	...	13	1	42	3	31	1	28	2	15	...	9	...	8	...	148	7

MEASLES.

The number of deaths from Measles amounted to 30, which is an increase of 12 compared with the preceding year, and 1 above the average for five years. The disease was prevalen during the first half of the year, but did not assume epidemi proportions.

The first death occurred in the Union Infirmary, 8 death from Measles being recorded in that Institution during th month of February, three being complicated by Diphtheria.

The districts in which the largest number of deaths occurre were Millbrook Ward, 8 deaths ; Shirley Ward, 6 deaths.

WHOOPING COUGH.

Ten deaths occurred from Whooping Cough, which is th lowest number recorded since the area of the Borough wa extended. The number registered is 25 less than in 1912 an 18 below the average of the past five years. Six of the death were under one year of age.

DIARRHŒA AND ENTERITIS.

There was a small increase in the number of deaths fro the diseases classified as Diarrhœa and Enteritis during the yea the number recorded being 55, compared with 37 in 1912 ; th average for the past five years being 79.

The deaths classified by the Registrar-General under th heading Diarrhœa and Enteritis include the following diseases :

	Under 2 years.	Aged 2 years and over.	Total
Diarrhœa and Infective Enteritis	34	3	37
Enteritis	6	5	11
Gastro Enteritis	4	0	4
Dyspepsia (under 2 years of age)	—	—	—
Colitis	—	1	1
Duodenal Ulcer	—	2	2
	—	—	—
	44	11	55
	—	—	—

The death-rate from all diseases under the heading of Diarrhœa and Enteritis amounted to 0.44 per 1,000 of the population, compared with 0.31 in 1912 and 1.50 in 1911. The death-rate from Diarrhœa and Enteritis under 2 years of age was equal to a rate of 0.35, compared with 0.24 in 1912, and 1.33 in 1911. The deaths from Diarrhœa and Enteritis under 2 years of age was equal to a rate of 14.9 per 1,000 births, compared with 23.4 for England and Wales, and 29.3 for the 96 large towns.

The deaths from these diseases reached their maximum in September, when 23 deaths were recorded.

The largest number of deaths occurred in St. Marys, Northam, and Town Wards, the totals recorded being 13, 9, and 7 respectively.

CEREBRO-SPINAL FEVER AND ACUTE POLIOMYELITIS REGULATIONS, 1912.

No notifications were received under these Regulations during the year.

One death from Cerebro-Spinal Meningitis occurred in the Royal South Hants and Southampton Hospital the case being that of a man aged 21 years, a Lascar coal trimmer on board one of the Transports.

TUBERCULOSIS.

The total number of deaths from all forms of Tuberculosis of persons classified as residents of the Borough amounted to 186, as follows :—

Pulmonary Tuberculosis	150
Tuberculous Meningitis	19
Tuberculosis of the Peritoneum and Intestines	4
,, ,, Spine	1
,, ,, Hip Joint	2
,, ,, Skin	1
,, ,, Kidneys	1
,, ,, Prostate	1
Disseminated Tuberculosis	7
	186

Six of the deaths from Pulmonary Tuberculosis occurred amongst persons who arrived in the Port from foreign countries and died in the Borough, and who, having no settled residence in England and Wales are included as residents.

The total number of deaths recorded from all forms of the disease is 16 less than in the previous year, Pulmonary Tuberculosis showing a decrease of 10 deaths, and other forms by 6.

The death-rate from Pulmonary Tuberculosis was equal to 1.21 per 1000 of the population. This is 0.11 lower than in 1912 and is slightly lower than the average of 1.28 for the preceding ten years.

The mortality of males from Pulmonary Tuberculosis showed a decrease when compared with the previous year, but the mortality of females was slightly higher. The death-rates calculated on the estimated male and female population were 1.52 and 0.92 respectively.

Death-rates from Pulmonary Tuberculosis.

	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

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

	Males.	Females.	Total.
1912	52.5	39.6	47.2
1913	38.7	25.8	32.3

Of the cases dying in 1913 the following table shows the years in which the notifications were received. Compulsory notification of all cases of Pulmonary Tuberculosis first came into operation on the 1st January, 1912 :—

1909	3
1910	2
1911	10
1912	43
1913	66
Not notified	26
	150

The mortality from tuberculous diseases other than pulmonary was equal to a rate of 0.29 per 1000 of the population, and is the lowest death-rate from non-pulmonary tuberculosis yet recorded in Southampton, and compares favourably with the average, 0.44, for the past ten years. The decrease was chiefly due to the diminution in the number of deaths recorded from Tuberculosis of the Peritoneum and Intestines, only 4 deaths being recorded, compared with an average of 16 during the preceding ten years.

Table showing death-rates, per 1000 of the population, from Tubercular Diseases, from 1873 to 1913, 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	1.58	0.43	2.01
1912	1.33	0.35	1.68
1913	1.21	0.29	1.50

The year 1913 will be remembered as a landmark in the history of the administrative control of Tuberculosis. It marks the introduction throughout the country of a special scheme in the great fight against Tuberculosis.

Southampton has been in front of this movement, the Corporation having had a complete scheme in full working order at the end of 1912. The year 1913 is the first during which the complete scheme has been in full work for the whole year, and, therefore, this Report will form the foundation on which future Reports will be based and with which they will be compared. Since 1908 the Local Government Board has from time to time issued Regulations as to the notification of Tuberculosis, each set of Regulations went a step further. The notification of cases occurring in Poor Law practice became obligatory on 1st January, 1909. The duty to notify was extended on 1st May, 1911, to cases occurring in Hospital practice. On 1st January, 1912, cases of Pulmonary Tuberculosis in all classes of practice became notifiable. This gradual introduction of the notification of Tuberculosis became complete on 1st February, 1913, when all forms of Tuberculosis, whether Pulmonary or otherwise, became notifiable. The order of the Local Government Board which enforced the compulsory notification of all forms of Tuberculosis from 1st February, 1913, revoked the previous three sets of Regulations, and modifications were introduced which experience had shown to be desirable. These modifications may be summarised as follows :—

(1) The practitioner is not required to notify if he believes the patient has already been notified to the Medical Officer of Health of the district in which he resides.

(2) School Medical Inspectors are required to notify new cases weekly.

(3) Medical Officers of Poor Law Institutions and Approved Sanatoria are required to notify weekly all patients admitted and all patients discharged to the Medical Officer of Health of the district to which they belong.

(4) The diagnosis leading to notification must be based upon evidence other than that derived solely from Tuberculin tests.

(5) The confidential character of the notifications is more strongly emphasised.

(6) The Notification Form has been extended to include the usual place of residence and the occupation of the patient.

The following table shows the number of cases notified since the Regulations of 1908 came into force until their revocation on 31st January, 1913 :—

	Poor Law Regulations.		Hospital Regulations.		1911 Regulations.	
	New.	Re-notified.	New.	Re-notified.	New.	Re-notified.
1909 ...	216	185	—	—	—	—
1910 ...	146	205	—	—	—	—
1911 ...	112	129	55	4	—	—
1912 ...	74	123	37	10	228	26
1913 ...	7	8	6	1	20	1

The new Regulations came into operation on the 1st February, 1913, and the following table gives a complete return of cases notified during the year 1913.

Summary of Notifications received during the Year 1913
(53 Weeks ended 3rd January, 1914).

Regulations	Primary.	Re-notifications.	Total.
1908	7	8	15
1911 (Hospitals) ...	6	1	7
1911	20	1	21
1912 (Form A) ...	527	65	592
,, (Form B) ...	9	2	11
,, (Form C) ...	—	198	198
,, (Form D) ...	—	183	183
	*569	458	1027

* Pulmonary, 464 ; Non-Pulmonary, 105.

As will be seen from the above table, of the total of 1,027 cases notified during the year 569 were primary notifications. Of these 464 related to Pulmonary Tuberculosis, and 105 to other forms of the disease. The localisation of the disease as specified on the notification certificates is classified in the following table :—

NUMBER OF PRIMARY NOTIFICATIONS RECEIVED DURING THE YEAR 1913 (53 WEEKS ENDED 3RD JANUARY, 1914).

Localisation of Disease.	Males.	Females.	Total.
PULMONARY.			
Lungs	223	213	436
Lungs and Larynx	2	5	7
,, Bronchial Glands	1	...	1
,, Pleura	...	1	1
,, Meninges of Brain	1	...	1
,, Intestines	2	1	3
,, Peritoneum	...	1	1
,, Cervical Glands	3	1	4
,, Glands of Abdomen	1	2	3
,, Kidneys	2	1	3
,, Skin of Face	...	2	2
Larynx	...	1	1
Pleuræ	...	1	1
Total Pulmonary	235	229	464

Localisation of Disease.	Males.	Females.	Total.
*NON-PULMONARY.			
Bronchial Glands	5	5	10
Meninges of Brain	8	6	14
,, ,, and Peritoneum ...	2	...	2
Peritoneum	2	2	4
Intestines	7	2	9
Abdominal Glands	2	1	3
,, ,, and Ears	...	1	1
Cervical Glands	16	11	27
,, ,, and Skin	...	1	1
Glands in Groin	1	...	1
Kidneys and Bladder	2	1	3
Spine	2	5	7
Spine and Elbow	1	...	1
,, and Hip Joint	...	1	1
Hip Joint	3	5	8
Knee Joint	1	...	1
Joints of Hand and Foot	1	2	3
Tibia	...	1	1
Arm	1	...	1
Skin of Face	1	4	5
Disseminated	2	...	2
	57	48	105
Total of Primary Notifications—			
Pulmonary	235	229	464
Non-Pulmonary	57	48	105
	292	277	569

*The notification of Non-Pulmonary Tuberculosis came into operation on 1st February, 1913.

The following table shows the age and sex incidence ot the disease. The numbers for each sex follow each other very closely in the age groups. The statistics, however, are too few at present to draw any conclusions as to the comparative prevalence of the disease at different ages in the sexes. The total notifications for the sexes differed very slightly, but the mortality amongst males was considerably higher. (See Page 32.)

PRIMARY CASES NOTIFIED DURING THE YEAR 1913 (53 WEEKS ENDED 3RD JANUARY, 1914), 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 upwards.	Total.
PULMONARY.												
Males	...	4	23	21	15	21	63	47	27	12	2	235
Females	...	6	25	24	15	29	55	41	18	12	4	229
Total of Pulmonary ...	...	10	48	45	30	50	118	88	45	24	6	464
NON-PULMONARY.												
Males	5	16	22	5	3	...	2	3	1	...	...	57
Females	1	6	18	7	4	5	4	1	2	...	...	48
Total of Non-Pulmonary	6	22	40	12	7	5	6	4	3	...	...	105
Total all forms of Tuberculosis ...	6	32	88	57	37	55	124	92	48	24	6	569

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

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM 1ST FEBRUARY, 1913, TO THE END OF THE WEEK ENDING ON THE 3RD JANUARY, 1914.

Age Periods.	Number of Notifications on Form A.													Number of Notifications on Form B.					Number of Notifications on Form C.	
	Primary Notifications.												Total notifications (i.e., including cases previously notified by other Doctors.	Primary Notifications.				Total notifications (i.e., including cases previously notified by other Doctors.	Poor Law Institutions.	Sanatoria.
	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—																				
Males ...	—	3	21	20	13	21	55	47	24	11	2	217	246	—	2	—	2	2	20	101
Females ...	—	6	18	21	13	29	51	37	18	10	3	206	238	—	5	1	6	8	6	68
Non-Pulmonary–																				
Males ...	5	16	22	5	3	—	2	3	1	—	—	57	60	—	—	—	—	—	—	2
Females ...	1	6	17	7	4	5	4	1	2	—	—	47	48	—	1	—	1	1	—	1

The social position of the primary cases notified is appended. The largest number come under the heading of "Labourers," amongst whom the mortality from this disease is high.

SOCIAL POSITION OF NOTIFIED CASES.

Position in Life.	Males.	Females.		Son of	Daughter of	Total.
		Wife or Widow.	Single (Adults).			
Army Captain	—	1	—	—	—	1
Army Pensioner ...	3	—	—	—	3	6
Baker	4	1	—	—	1	6
Barman or Barmaid ...	3	—	1	—	—	4
Blacksmith	1	—	—	—	—	1
Boot Repairer	2	—	—	—	—	2
Boiler Maker	3	—	—	1	2	6
Bricklayer	2	1	—	1	—	4
Bilger	1	—	—	—	—	1
Butcher	—	—	—	1	1	2
Butler	—	1	—	—	—	1
Carman	3	3	—	3	2	11
Carpenter	4	1	—	2	—	7
Carpet Worker ...	—	—	1	—	—	1
Chef	2	—	—	—	—	2
Chaffeur	—	1	—	2	—	3
Charwoman	—	2	—	1	1	4
Civil Assistant ...	2	—	—	—	1	3
Clergyman	—	1	—	—	—	1
Clerk	21	8	3	2	4	38
Coal Porter	2	3	—	1	1	7
Coal Merchant ...	—	—	—	—	1	1
Commercial Traveller .	1	1	—	3	2	7
Companion	—	—	3	—	—	3
Confectioner	—	1	—	—	—	1
Coppersmith	—	1	—	1	1	3
Collector	1	1	—	—	—	2
Crane Driver	—	—	—	1	—	1
Dentist	1	—	—	—	—	1
Dispenser	1	—	—	—	1	2
Domestic Servant ...	—	—	27	—	1	28
Draper	—	1	—	—	—	1
Dressmaker or Milliner	—	—	5	1	—	6
Dock Foreman ...	1	—	—	—	—	1
Engineer	4	—	—	2	3	9
Errand Boy	3	—	—	—	—	3
Factory Foreman ...	1	1	—	—	—	2
French Polisher ...	1	—	—	—	—	1
Furniture Remover ...	1	1	—	—	—	2
Gardener	2	—	—	—	2	4
Gas Fitter or Worker ...	4	1	—	—	—	5
General Dealer ...	1	3	1	1	1	7
Hairdresser	1	—	—	—	—	1
Hammerman	2	—	—	1	—	3
Hawker	4	1	—	—	—	5
House Furnisher ...	—	1	—	—	—	1
Insurance Agent ...	2	1	—	—	2	5
Interpreter	—	—	—	—	1	1
Iron Moulder	—	—	—	—	1	1
Labourer	43	24	—	26	28	121
Laundress	—	—	2	—	1	3

SOCIAL POSITION OF NOTIFIED CASES—(Continued.)

Position in Life.	Males.	Females.		Son of	Daughter of	Total.
		Wife or Widow	Single (Adults)			
Licensed Victualler ...	1	3	—	1	1	6
Lodging House Keeper	—	2	—	1	—	3
Milk Purveyor ...	1	—	—	—	—	1
Miner	1	—	—	—	—	1
Motor Engineer ...	2	—	—	1	1	4
Musician	1	—	—	—	1	2
Nurse	—	—	2	—	—	2
Ostler	1	—	—	—	—	1
Painter	2	1	—	3	—	6
Pattern Maker ...	1	—	—	—	—	1
Plumber	2	2	—	1	2	7
Police Constable ...	—	—	—	2	—	2
Postman	1	1	—	2	1	5
Postmaster	2	—	—	—	—	2
Porter (Shop)	3	1	—	2	1	7
Printer	2	2	—	—	—	4
Railw'y Carriage Clean'r	—	1	—	—	—	1
,, ,, finisher	1	—	—	—	—	1
,, Guard ...	—	—	—	—	1	1
,, Porter ...	—	—	—	1	—	1
,, Shunter ...	1	—	—	—	—	1
Salvation Army Superintendent	—	—	—	1	—	1
Seaman	12	17	—	8	11	48
School Teacher ...	1	1	2	1	—	5
,, Attend'ce Officer	—	—	—	1	—	1
Ship's Captain ...	1	—	—	—	—	1
,, Barber	—	—	—	—	2	2
,, Butcher ...	—	1	—	—	2	3
,, Carpenter ...	—	—	—	1	—	1
,, Cook	2	1	—	—	—	3
,, Engineer ...	1	—	—	1	—	2
,, Fireman ...	3	—	—	—	—	3
,, Printer	1	—	—	—	—	1
,, Steward ...	7	2	1	3	2	15
Shipwright	—	2	—	—	—	2
Shoeing Smith ...	1	—	—	—	—	1
Shop Assistant ...	4	1	4	1	—	10
Stevedore	2	1	—	—	—	3
Stonemason	2	—	—	—	—	2
Sweet Manufacturer ...	—	—	—	1	—	1
Tailor	3	2	—	—	1	6
Telegraphist	—	1	—	—	—	1
Tinsmith	1	1	—	1	—	3
Tram Conductor ...	2	—	—	—	—	2
Waiter or Waitress ...	1	—	3	—	—	4
Warehouseman ...	1	1	—	—	—	2
Wine Merchant ...	—	1	—	—	—	1
No occupation ...	—	3	7	—	—	10
Occupation unknown ...	3	6	6	12	7	34
Total ...	197	115	68	95	94	569

When investigating the cases notified enquiry was made as to the birth-place of each individual. This information has been grouped into the districts of the Municipal Wards, and may be compared with the cases notified and deaths occurring in each Ward given on page 43. It will be noticed that nearly half of the Pulmonary cases occurred amongst persons who were not natives of the Town.

PLACE OF RESIDENCE AT BIRTH OF CASES NOTIFIED DURING THE YEAR.

Ward.	Pulmonary.	Non-Pulmonary.
Town	30	5
St. Mary's	33	5
Northam	35	10
Trinity	17	5
Newtown	12	5
All Saints	8	5
Bevois	12	7
Banister	4	1
Freemantle	8	1
Millbrook	8	2
Shirley	11	5
Portswood	9	2
St. Denys	13	7
Outside the Borough ...	220	20
Unknown	44	25
	464	105

Of the notified Pulmonary cases living outside the Borough—

183 were born in other districts in England ;
9 ,, ,, Scotland ;
6 ,, ,, Wales ;
6 ,, ,, Ireland ;
3 ,, ,, India ;
2 ,, ,, Australia ;
2 ,, ,, France ; and

1 was born in each of the following places :—South Africa, Jersey, Aden, Finland, Guernsey, Sweden, Demerara, Italy, and Russia.

In 44 instances the birthplace of the patient could not be discovered.

The cases residing in Common Lodging Houses at the time of notification numbered 23, seven being in the Municipal Lodging House and 16 in other Common Lodging Houses.

The number of patients living in one-room tenements at date of notification was 24.

The following table shows the case-rate and death-rate from Tuberculosis in each of the Municipal Wards, and is valuable in showing the prevalence of the disease in each district during the year.

The case-rate during the year is unexpectedly highest in the Portswood and Bevois Wards, followed by Northam and Town Wards. The mortality was highest in Town, Portswood and St. Mary's Wards. However, as mentioned in last year's Report considerable variation always occurs in the number of cases notified or deaths occurring in a small district, and reliable comparisons are only possible when spread over a number of years.

TABLE showing cases, case-rate, deaths, and death-rate per 1,000 living from Pulmonary and Non-Pulmonary Tuberculosis in each Municipal Ward during the year 1913 (53 weeks ended 3rd January 1914) :—

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 ...	62	5.24	5	0.46	67	5.70	28	2.37	1	0.08	29	2.45
2. St. Marys ...	50	3.88	10	0.85	60	4.73	17	1.32	10	0.78	27	2.10
3. Northam ...	49	4.16	21	1.94	70	6.10	13	1.11	6	0.51	19	1.62
4. Trinity ...	23	2.50	8	0.95	31	3.45	10	1.09	1	0.11	11	1.20
5. Newtown ...	25	2.95	10	1.29	35	4.24	3	0.36	4	0.47	7	0.83
6. All Saints ...	29	3.20	8	0.96	37	4.16	9	0.99	1	0.11	10	1.10
7. Bevois ...	40	4.76	11	1.43	51	6.19	9	1.07	4	0.48	13	1.55
8. Banister ...	14	1.83	2	0.28	16	2.11	5	0.65	—	—	5	0.65
9. Freemantle ...	30	3.68	4	0.54	34	4.22	8	0.98	1	0.12	9	1.10
10. Millbrook ...	35	3.56	3	0.33	38	3.89	17	1.73	1	0.10	18	1.83
11. Shirley ...	23	2.45	5	0.58	28	3.03	5	0.53	3	0.32	8	0.85
12. Portswood ...	51	5.70	7	0.85	58	6.55	17	1.90	4	0.45	21	2.35
13. St. Denys ...	33	3.79	11	1.38	44	5.17	9	1.03	—	—	9	1.03
Borough ...	464	3.73	105	0.93	569	4.66	150	1.21	36	0.29	186	1.50
England and Wales	—	2.64	—	*1.14	—	—	—	—	—	—	—	—

*The notification of cases of Non-Pulmonary Tuberculosis came into operation on the 1st February, 1913 ; the rates are calculated as an annual rate.

Measures Prophylactic and Curative Adopted for Dealing with Tuberculosis.

GENERAL ARRANGEMENTS.

The scheme for the treatment and prevention of Tuberculosis was fully described in the last Annual Report, and has been carried out in detail throughout the year.

Although in certain cases careful adherence to routine procedure may be unnecessary for the satisfactory treatment of individual patients, this methodical adoption of routine is absolutely essential if the records are to be of any help in future years, and if a correct estimate of the value of the work is to be made.

From the inception of the scheme the aim has been to provide treatment not only for insured persons under the National Insurance Act, but for their dependents as well as for all other inhabitants of the Borough requiring it.

The Dispensary forms the centre from which all efforts for treatment and prevention are directed. All cases are dealt with in the first instance at that Institution, and a decision made as to what steps for treatment, prevention and education are indicated.

The Dispensary is open every week-day for observation, diagnosis and treatment, and, in addition, it is open on two evenings a week to meet the convenience of those patients requiring treatment who are able to follow their occupation.

Any patient recommended by a doctor is accepted for treatment if suitable. The medical practitioners of the town can also refer any patient to the Dispensary for diagnosis. Specimens of sputum can be submitted to the Local Authority for examination for tubercle bacilli by any local doctor free of charge.

The amount of work carried out during the year is shown in the following tables :—

RECORD OF DISPENSARY WORK FOR THE YEAR 1913.

New Patients—			
Insured	...	...	172
Dependents	...	...	209
Others	...	...	71
			452

Visits of Patients under Observation—

Insured	... ...	1141
Dependents	... ...	2201
Others	... ...	438
		3780

Visits of Patients under Treatment—

Insured	... ...	2911
Dependents	... ...	3195
Others	... ...	793
		6899

Visits paid by Health Nurse to Homes of Tubercular patients—

Insured	... ...	1322
Dependents	... ...	2225
Others	... ...	1227
		4774

Record of Sanatorium Work for the Year.

	Insd.	Dep.	Others.	Totals.
Patients remaining in Sanatorium on January 1st, 1913 ...	10	8	2	20
Patients admitted during 1913	112	51	32	195
Patients discharged during 1913	98	44	24	166
Patients died in Sanatorium ...	4	3	2	9
Patients in Sanatorium on January 3rd, 1914	24	11	5	40

Average duration of stay in Sanatorium of each patient ... ... 71 days

Number of sputum examinations undertaken for medical practitioners in the Borough 120

Special Arrangements with the Southampton Insurance Committee.

During the year the Corporation has carried out the Institutional and Dispensary treatment of insured persons on behalf of the Insurance Committee. Patients requiring Sanatorium or Dispensary treatment have been provided for in the Institutions

of the Local Authority, and those under Domiciliary Treatment have been seen every three months by the Tuberculosis Officer in consultation with the Panel Doctors.

The Medical Officer of Health is the Medical Advisor to the Insurance Committee on matters relating to Tuberculosis, and has presented throughout the year a monthly report on all insured patients applying for or receiving Sanatorium benefit. These reports contain the diagnosis, prognosis and recommendations as to the special form of treatment indicated in each case from time to time.

During the year under review, 145 insured patients applied for Sanatorium benefit. From the above table it will be seen that 10 insured persons were in the Sanatorium at the beginning of the year, 112 were admitted during the year, 98 were discharged, 4 died in the Sanatorium, and 24 were still in residence at the end of the year.

The table on Dispensary work shows that of the new patients 172 were insured, although only 145 applied for benefits. This is accounted for by the fact that a large number of insured patients were sent by doctors for diagnosis, and some of these were found to be non-tubercular.

It will be seen that about 40 per cent. of the new patients were insured, 30 per cent. of the visits for observation were made by insured persons, and over 42 per cent. of the Dispensary treatment was in connection with insured patients. Over 50 per cent. of the patients admitted to and discharged from the Sanatorium were insured. The number of insured patients transferred to Domiciliary Treatment during the year was 41, and 28 were still under this form of treatment at the end of the year

It is very satisfactory to be able to report that no real difficulties have arisen during the year. In fact, the very smooth working with patients, general practitioners, the hospitals and the Insurance Committee has been one of the most satisfactory features of the scheme adopted by the Corporation.

In the earlier conferences between the Health Committee of the Corporation and the Insurance Committee it appeared that administrative difficulties between the two bodies might arise but a satisfactory working basis was finally found and is now being carried out to the apparent satisfaction of both authorities.

Perhaps the main indication that the scheme has met with the approval of the local doctors is the fact that during the first year no fewer than 81 private and panel patients were sent to the Dispensary by the medical practitioners for an expert opinion on diagnosis.

ARRANGEMENTS FOR SUPERVISING DOMICILIARY TREATMENT.

Insured Patients.

The duties under this heading are carried out according to the terms of the General Order issued by the Local Government Board, on 26th July, 1912. The provisions of this General Order constitute quite a new departure for Public Health Authorities; for the first time Officers of a Local Authority are now called upon to supervise the treatment of patients by general practitioners, and to act as consulting officers in regard to these patients. It was obvious that friction might arise in carrying out these duties, therefore, it was deemed prudent to develop the necessary work under the General Order in a cautious and tactful manner. The work was quietly started during the year, and an effort was made to demonstrate to the doctors that as far as the Local Authority was concerned, the intention was to be helpful to the practitioners in carrying out their treatment rather than to be dictatory. In this way the work has now developed into the full scheme of supervision and consultation as required by the General Order. There has been an entire absence of friction and, in fact, the Tuberculosis Officer finds the consultations to be of the greatest value, for they have opened up numerous opportunities of explaining the Municipal scheme to the doctors, and of enlisting their support, assistance and sympathy which add greatly to the success of the local authority's efforts.

During the year 41 insured people were recommended to the Insurance Committee for Domiciliary Treatment, and 28 still remained under this form of treatment at the end of the year. Each case under Domiciliary Treatment has been seen every three months at his home, in consultation with the panel doctor, by the Tuberculosis Officer. The doctors also submit a quarterly report to the Tuberculosis Officer concerning the patient's condition, progress, behaviour in carrying out treatment, &c. In addition to these quarterly reports the practitioners keep a monthly chart for each patient, these charts contain a daily record of the temperature, pulse, and other symptoms. They also constitute a record of the treatment given and the visits paid by the doctors.

The number of patients under Domiciliary Treatment has been comparatively small owing mainly to the fact that the Southampton Municipal scheme has been so complete that the majority of patients who come under the Insurance Act could be treated either at the Dispensary or in the Sanatorium. This number, however, is bound to increase by reason of cases finishing their course of Sanatorium and Dispensary treatment.

Apart from the money paid to the Corporation, the Insurance Committee has laid aside £150 per annum for the provision of extra nourishment for patients under Domiciliary Treatment.

The nourishment provided generally takes the form of new laid eggs and milk, and is supplied to patients on the recommendation of the Medical Officer of Health. Before a patient is recommended for extra nourishment his prospects, as well as home and financial conditions are carefully investigated. The help is intended to act as a measure of treatment, and it is important to remember that the money was not provided for the relief of poverty ; therefore, in each case a decision has to be made as to whether the patient should be assisted by the Insurance Committee or advised to apply to the Poor Law Authority. It is often difficult to make a distinction, for those applying for extra nourishment are frequently patients who appear entitled to parish relief.

When it is decided to give assistance, an order is sent to a local tradesman requesting him to leave eggs and milk daily at the patient's house. In this way, the appearance of charity is avoided, and except for the fact that the monthly accounts are not paid by the patient it is impossible for anybody to know that the patient is not buying the articles supplied.

Not only in Domiciliary Treatment, but in every other branch the patients are assured that they are entitled to the treatment they receive. In addition to impressing this fact, an attempt is made to gain the confidence and co-operation of the patients. Many may consider that such methods may interfere with proper control over patients, but experience shows that this view is a fallacy. A very human relationship between the staff and the patients is essential, as it permits the officers to enter more closely into the habits of the patients and leads to opportunities for friendly talks which do much to improve the hygienic conditions under which the patients live.

Non-Insured Patients.

For these patients no scheme for Domiciliary Treatment similar to that for insured persons is in operation, and in fact no such scheme has been suggested by the Local Government Board. Possibly this may come later, and in Southampton will it is believed, be appreciated by patients and doctors alike.

There are many uninsured patients discharged from the Sanatorium, after an educational course, who return to their homes under their own doctors. Although no Domiciliary

supervision is aimed at, the Tuberculosis Officer is always willing to interview the doctor, or visit the patient at home in consultation with the doctor if he requests it.

Where it is agreeable to the medical practitioner this is done, and any particulars as to treatment already given or indicated, is freely offered.

Co-operation with Hospitals, School Clinic and Special Institutions.

Hospitals.

Throughout the year cases under the Municipal scheme requiring hospital treatment have been sent by the Medical Officer of Health with a special letter to the Royal South Hants and Southampton Hospital or the Southampton Free Eye Hospital; all these cases have been attended to, and in many of them the Hospital Surgeons have kindly forwarded a report to the Dispensary. Quite a large number of the patients coming under Municipal treatment are cases transferred from the Hospitals.

School Clinic.

The School Clinic was opened under the Local Authority at the end of 1913. During 1911, when the Health Committee was looking for suitable premises for the purpose of a Tuberculosis Dispensary, the possibility of establishing a School Clinic in the near future was borne in mind. The Board of Education was approached, and it was found that there would be no objection to the Tuberculosis Dispensary and School Clinic being housed on the same site, providing that the entrances to the Dispensary and School Clinic were separate, and that the two departments were more or less independent.

The Committee, therefore, purchased the large double-fronted house at 1, East Park Terrace, in which both the Dispensary and School Clinic are situated. The entrance to each is separate, and indeed each is approached from a different street.

The advantages are many, and allow such co-operation and co-ordination of effort that the best possible results are likely to be attained.

It must be remembered, that as far as school children are concerned, the Dispensary is really a sub-division of the Clinic for the treatment of Tubercular children, and, moreover the examinations at the Dispensary reveal conditions which require treatment at the Clinic. Thus each department becomes a feeder

of the other, and their close proximity has already proved to be of the greatest value, for it is surprising how frequently it has been necessary to transfer cases from one department to the other for an opinion or for treatment.

Special Institutions.

It is pleasing to report that the Queen's Jubilee Nurses are always willing to nurse and dress cases referred by the Tuberculosis Officer and during the year a number of cases have been dealt with in this way.

Beyond referring cases to the Jubilee Nurses, no definite attempts at co-ordination with special institutions have yet been made.

It is, of course, realised that the Local Authority does not fully supervise the treatment and care of all cases for the whole of their lives. This is the ideal plan, and would require an elaborate scheme of care committees.

It has been decided to defer the inauguration of Care and After-Care Committees until the Local Authority can see how far its present arrangements can cope with the disease in the Borough.

Diagnostic Methods and Number of Cases Diagnosed.

The usual method of onset of Pulmonary Tuberculosis, particularly among the working classes, is one of such a nature that the disease has often caused much destruction of lung tissue before the assistance of a physician is enlisted. There is generally in such cases a history of previous illness, probably bronchitis, a severe chill, influenza or pleurisy, and the patient will state that from the time of this illness he has not been very well, or has been subject to a cough, or in fact, has never been the same.

It is in the early stages following such lowering and depressing illnesses, and from which the patient does not readily recover, that the growth and develpoment of Tuberculosis so frequently commences, and it is at this time when it is of such vital importance for a definite diagnosis to be made.

It has become more and more recognised that this disease, so much feared in days gone by, can be fully cured in a clinical sense if it is recognised and treated in the early stages. Consequently, the need of methods for the early recognition of Tuberculosis has made itself felt, and thus not only have the older methods of diagnosis become more elaborately worked out, but new ones have been added.

Each patient is carefully examined in every necessary way. In addition to obtaining a full family and clinical history and to making a careful physical examination of the chest, abdomen, etc., every patient is examined under the X-Rays ; with very few exceptions an X-Ray photograph of each chest is taken. Where available the sputum is examined for tubercle bacilli by an ordinary smear method or by the anti-formin method ; if necessary several careful examinations are made. Every specimen of sputum is examined for albumen and the percentage present is calculated. Von Pirquet's test and the Quanti-Von Pirquet test are applied in every case. Finally, but only in cases where a diagnosis is not definitely settled, the subcutaneous tuberculin test is performed if there are no contra-indications.

In this way, a case is under observation on an average seven to ten days before a definite decision on diagnosis, prognosis, and line of treatment is determined ; but in many cases this period of observation extends to three or four weeks, especially when a careful study of the temperature records is needed in order to decide whether the disease is active or latent.

Diagnosis is undertaken at the Dispensary in all cases except those presenting difficulties. Such difficulties generally arise from the patient presenting incorrect or unsatisfactory temperature or other records. These patients, which are few, are admitted to the Sanatorium, where more complete control and closer observation are possible.

TABLE SHOWING THE NUMBER OF DIAGNOSES MADE DURING 1913, AND THE RESULTS OBTAINED.

	Found to be suffering from		Found to be Non-Tuberculous	Totals.
	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.		
Previously notified cases ...	216	3	13	232
Suspected cases, other than house contacts, found by members of Health Department	36	2	21	59
Sent by School Medical Officer for Diagnosis ...	24	0	16	40
Sent by Local Medical Practitioners for Diagnosis ...	66	1	14	81
House contacts	30	0	10	40
Totals	372	6	74	452

One hundred and seventy-two insured patients were examined for diagnostic purposes during the year, and of these 145 applied for Sanatorium benefit. In each case thus applying a special recommendation on prognosis and line of treatment was presented to the Insurance Committee from time to time. Further recommendations on these patients have been made when necessary. In all, 253 recommendations were made in 1913, and the Committee's sanction was given in every case.

When a doctor sends a case for an opinion, a written report is forwarded to him when the diagnosis is complete.

After receiving the report, the doctor may, and often does, refer the case to the local authority for treatment if Tuberculosis has been discovered.

PARTICULARS OF SPECIAL FORMS OF TREATMENT AND NUMBERS TREATED.

As in diagnosis, treatment is carried out as far as possible on a definite plan so that the results can be correctly summarised at the end of the year.

With the accommodation available under the Municipal scheme, it is found that the best results are obtained by dividing the treatment into the following six classes.

1) Dispensary Treatment.

This entirely ambulatory fo m of treatment is utilised fo non-febrile patients with satisfactory home conditions who ar careful in following the advice given on hygiene.

Tuberculin is given in a large number of these cases.

After .5 c.c. P.T.O. is reached, the patients attend onc weekly until the dose becomes 1 c.c. Albumose-free Tuberculi is then administered until a dose of .5 c.c. is reached. If furth treatment should be needed Sensitised Bacillary Emulsion given in increasing doses up to .5 c.c. It is found that larg doses than these are not usually necessary.

In addition to tuberculin, cod liver oil, medicines and inhal tion mixtures are dispensed to patients when indicated.

RECORD OF NUMBER OF PATIENTS UNDER DISPENSARY TREATMENT DURING 1913.

	Pulmonary.	Non-Pulmonary.
Number of cases under treatment on January 1st, 1913	47	0
New cases treated (i.e., the number of new dossiers commenced)	304	3
Cases transferred from Sanatorium ...	163	3
Cases transferred from Domiciliary Treatment	1	0
Cases transferred to Sanatorium ...	192	3
Cases transferred to Domiciliary (Insured or otherwise)	60	-
Cases who have finished treatment and are now under general supervision ...	70	-
Cases lost sight of	19	
Total under Dispensary Treatment, January 3rd, 1914	174	2

(2) Sanatorium Treatment for Four Weeks followed by Dispensary Treatment.

Those patients receiving this class of treatment fall into two main groups:—(a) non-febrile cases requiring a thorough hygienic education before ambulatory treatment is likely to be successful, and (b) cases in which difficulty is experienced in commencing tuberculin treatment owing to the unreliability of temperature records, or the impossibility of controlling the patients and securing adequate rest after injections.

(3) Sanatorium Treatment for Eight Weeks followed by Dispensary Treatment.

This form of treatment is prescribed for (a) fairly well-marked cases with good prospects of return to working capacity after appropriate treatment, and (b) febrile patients with good prospects.

(4) Sanatorium Treatment for Eight Weeks followed by Domiciliary Treatment.

Those placed under this class of treatment are patients with a bad prognosis in whom relief of symptoms is all that can be hoped for. Residential treatment, with the educational facilities it affords, is necessary because these patients may live for months or years, and they are a great source of danger to others unless they carefully adopt measures to prevent the spread of infection.

(5) Domiciliary Treatment.

Patients are recommended for this form of treatment when they have no prospects and are too ill to benefit by educational treatment in a Sanatorium, or when such would be useless owing to probable death within a short time. Also hopeless cases in good homes, where there is no need for education, are often placed in this class.

(6) Sanatorium Treatment for an Indefinite Period.

Many hopeless cases live under very unsatisfactory conditions, and often in overcrowded houses. They cannot benefit by treatment, but they are a great danger to those around them ; possibly children may sleep in the same bed. Such patients are often admitted to the Sanatorium for isolation purposes and nursing, and may remain there till death. Many patients in this class gain admission to the Shirley Warren Infirmary.

Although the above is a rough classification of the various forms of treatment, modifications are frequently necessary. Some patients refuse residential treatment owing to ignorance of the favourable life it is possible to lead in a Sanatorium. In other cases the length of stay in the Sanatorium may be reduced or increased according to the progress made. The average length of stay of the 195 patients admitted to the Sanatorium in 1913 was 71 days ; therefore, it is apparent that it is more usual to extend the period of tay in the Sanatorium than to reduce it. When a patient is apparently doing well the tendency is to increase his time in the Sanatorium as far as possible so as to give him the best possible chance of recovery.

The rules at the Sanatorium in regard to diet, rest, exercise, etc., are much the same as in other similar institutions.

In suitable cases, tuberculin is administered. P.T.O. is the preparation principally used, but as the patients are under constant control and observation a much wider variety of tuberculins can be used than is possible at the Dispensary.

The inhalation of antiseptic solutions such as cresote, carbolic acid, and iodine is prescribed in many cases. Sheep's serum has been administered during the year in tablespoonful doses three times a day. Owing to the difficulty in obtaining large quantities of the serum, it has not been possible to prescribe it in many cases at a time.

Each case, of course, receives appropriate medicinal treatment.

It cannot be maintained that the usual length of stay in the Sanatorium is sufficient to effect a cure, and the Dispensary must be relied upon to complete the treatment of favourable patients after their discharge.

The period is, however, sufficiently long to allow the most appropriate line of treatment to be found and initiated and to ensure a very sound course of instruction being given to each patient.

The educational work in the Sanatorium and Dispensary is very closely linked up with treatment. It is one of the special features of the Southampton scheme, and is dealt with under the heading of " Preventive Measures."

Tables on the results of treatment and explanations thereof are given on Pages 60 to 69.

Dental Treatment.

Until the last month of the year, patients requiring dental attention were usually recommended to go to a dentist, the hospital, or the New Road Dispensary. Extractions at the Hospital and Dispensary are performed free of charge, and at the latter institution teeth are extracted under gas, and artificial teeth supplied at a reasonable and much reduced charge.

In the case of one insured patient under treatment, her progress was being hindered by the very septic condition of her teeth. She could not afford dental treatment, therefore, the Insurance Committee were recommended to supply artificial teeth. The Committee acted on the recommendation, and a local dentist removed the decayed teeth and supplied artificial ones at a cost of £5. There was, at the time, some difficulty between the Insurance Commissioners and the local Committee concerning the payment of this item, but the results have fully proved the wisdom and economy of the Committee's action. The patient is now cured, is at full work, and can support herself. A satisfactory result in this case would not have been likely without the dental treatment.

Towards the end of the year, the School Clinic was opened, and it is now possible for necessary extractions of teeth to be undertaken by the full-time municipal dentist. If necessary, anæsthetics are administered by the Tuberculosis Medical Officer, and the Tuberculosis Nurses attend on the dentist. School children attending the Dispensary have defective teeth filled or extracted, as may be necessary, but in adults it is only possible to undertake necessary extractions.

Extracting the teeth of adult patients occupies very little time, and is not allowed to interfere with the primary duties of the School Dentist. The work is undertaken at times when school children are not being attended to.

Arrangements for Treating Non-Pulmonary Tuberculosis and for the Provision of Surgical Apparatus, Etc.

The records show very few non-Pulmonary cases, but this is somewhat accounted for by the fact that a patient exhibiting both a Pulmonary lesion and non-Pulmonary lesion is recorded under the heading of Pulmonary Tuberculosis, and not under both.

During the year many varieties of Tuberculosis were dealt with, including Tuberculosis of glands, bones, joints, kidney, bladder, and skin.

In a few cases the Corporation and the Insurance Committee have provided simple surgical apparatus, such as belts and splints. In cases where the patient's financial condition was satisfactory he has been encouraged to provide his own surgical apparatus, for it has been found that much greater care is taken of apparatus when purchased by the patient.

Preventive Measures.

It must be obvious to every careful observer that the widespread nature of Tuberculosis is such that years must elapse before any scheme can secure effective treatment of all cases. Moreover the insidious nature of the disease results in a large number of patients becoming very advanced, highly infectious, and beyond hope of recovery before they consult a doctor. Indeed, one of the appalling features of the work is the advanced degree of the disease and the hopeless outlook in the majority of patients applying for treatment. Preventive work must be regarded as of as great, if not greater, importance than the medical treatment of individual cases, and for some considerable time to come the indirect results of preventive efforts will be greater and more valuable to the community than the direct results of treatment.

Preventive measures, independent of curing the disease, received very careful consideration when the Municipal scheme was formulated, and much attention is directed towards them. The methods adopted may be described under five headings: (1) Education, (2) Collection and disposal of sputum, (3) Disinfection of clothes and houses of Tuberculous persons, (4) Detection and remedying of sanitary defects in the houses and environments of Tuberculosis subjects, (5) Isolation of infectious persons.

(1) *Education.*

The education of Tubercular patients in personal hygiene and diet has formed one of the special features of the local scheme. It is impossible to isolate all infectious persons, and it is beyond all question that under the present social conditions appropriate instruction to the infectious on the prevention of the spread of Tuberculosis is one of the most useful weapons in the armamentarium of the local Authority.

The living germs of the disease are in the sputum of Tuberculous patients, and this is the medium by which the disease is mainly propogated. When an infected person expectorates on the floor, the sputum gradually dries up and becomes mixed with the dust of the room, or public street, as the case may be. The dust is blown about by draughts or wind, and may thus be inhaled by healthy people or become deposited on food. It is now universally believed that the disease is spread in this way. If, therefore, all infected persons can be taught to dispose of their sputum in a proper manner the spread of the disease will be considerably checked. Every patient who attends the Dispensary for treatment receives individual instruction, at his first visit, on the disposal of sputum and method of coughing. At his subsequent visits he is frequently spoken to on the matter, and is impressed with the moral duty he owes to the community.

Courses of lectures are given periodically in the waiting room at the Dispensary by members of the staff, and all patients are invited to attend. The subjects usually dealt with are :—

Lecture 1.—Fresh air and ventilation.
,, 2.—Collection, disinfection and disposal of sputum.
,, 3.—Personal hygiene.
,, 4.—Care of the teeth.
,, 5.—Clothing, rest, exercise and sleep.
,, 6.—Food.
,, 7.—Care of infants (women only).

During their visits to the homes the nurses pay special attention to the educational needs of each patient and his family, and lay stress on necessary points. In fact, the chief work in the home visiting is that of educating the people how to live in their own homes. "Rules of Health," printed on cardboard and suitable for hanging up are left in each home and patients are recommended to display them in such a position as to always catch the eye.

All patients admitted to the Sanatorium undergo a thorough educational course and some are admitted with this as the primary

object. Lectures are given twice weekly to all patients, and every detail of personal hygiene is thoroughly instilled into each patient before his discharge.

The patient is compelled to live a thoroughly hygienic life, and it is intended that his period of stay in the Sanatorium shall form an example of how to live on his return home. After his discharge the home visiting nurse makes a special point of continually reminding the patients if any neglect in carrying out hygienic rules are found.

Although some patients appear indifferent to the welfare of themselves and those around them, the majority make a very satisfactory attempt to lead the life taught them, and the results are gratifying.

(2) *Collection, Disinfection and Disposal of Sputum.*

Every notified case of Tuberculosis in the Borough who expectorates is offered a sputum bottle and disinfectant fluid. He is taught to place disinfectant in the bottle and to carry it with him at all times so that he may expectorate into it. He is further taught to dispose of the sputum either by burning or by means of the water closet, and to afterwards boil the bottle.

The nurse is constantly examining patients with regard to these duties, and the majority are now carefully using the flasks.

The use of handkershiefs is discouraged, and patients are advised to use pieces of paper, which are afterwards burnt.

(3) *Disinfection of Clothing and Dwellings of Tubercular Patients.*

When a patient dies or is removed to a public institution or changes his address the fact is notified to the Chief Sanitary Inspector, who visits the house and offers to disinfect all rooms and clothing which may be infected. The following figures show the extent of work carried out under this heading during the year :—

No. of disinfections carried out after deaths	86
No. of disinfections carried out after removal of patients to public institutions or after change of address ...	106

It is not possible to disinfect all houses because objections are raised. The public is not sufficiently educated to realise that the disease is infectious.

(4) *Details of Sanitary Defects and their Remedy.*

The home of every notified case is visited as soon as possible after notification and the nurse makes a report on the home conditions, which includes reference to mode of life of the family and financial and sanitary conditions.

If any sanitary defects in the condition of the house are discovered they are reported to the Chief Sanitary Inspector. As a result of these reports the following improvements have been effected during the year in the homes of tubercular persons :—

Drains relaid	2
Drains cleaned and repaired	6
Water closets reconstructed	2
Ventilating shafts of drains repaired	1
Sinkwaste pipes, &c., disconnected from drains ...	4
New pans fixed in water closets	5
Sanitary sinks fixed in houses	3
Damp walls of houses remedied	9
Houses cleansed and whitewashed	26
Roofs of houses repaired	8
Floors, walls, and windows repaired	14
Window sashes made to open	11
Eaves guttering and stackpipe repaired	7
Rooms efficiently ventilated	5
Ventilation provided under ground floor rooms ...	6
Yards paved and drained	3
Yard paving repaired	12
Sanitary dustbins provided	9
Offensive matter removed	1

Many of the patients live in very poor houses and frequently express a disinclination to call attention to sanitary defects. The reason offered is that the landlord will give them notice to quit if he is called upon to carry out any special work or repairs.

(5) *Isolation of Infectious Persons.*

All tubercular persons are strongly urged to sleep in bed alone, and if possible to occupy a bed room alone. They are also advised to use separate cups, plates, spoons, towels, etc. Many advanced cases, especially if living in overcrowded houses, are removed to the Sanatorium chiefly for isolation and education. It is not, of course, possible to admit all such cases to the Sanatorium, and, therefore, others are urged to apply to the Guardians for admission to Shirley Warren Infirmary.

Such are a few of the details of the scheme which has been evolved at Southampton, and it will be seen that the Authority which receives notifications of the disease from general practitioners is the one which undertakes dispensary and sanatorium treatment of the residents, whether insured or not, in addition to dealing with methods of prevention, including disinfection, home visiting and the spread of knowledge.

A patient coming under the Municipal scheme is received, treated, educated and guided in his future life and work by the one organization ; this same organization protects his dependents and those in contact with him, and is the body which has the power more than any other to influence the social and economic conditions under which he lives.

This grouping of all measures for dealing with Tuberculosis under one set of officials allows a complete co-ordination of effort and prevents overlapping, and it is difficult to believe that any other scheme which sets up more than one body of workers can work with anything like the same measure of success economy and harmony

RESULTS OF TREATMENT.

The tables which are appended show the results of treatment in those patients who were discharged from the Borough Sanatorium during the year 1913. A separate set of tables show the results for those patients who came under and 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 present.
(B) Tubercule Bacilli absent. Albumen present to the extent of .2 per cent. or more.
(C) No expectoration. Tuberculin reaction positive.

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 Discharged from the Borough Sanatorium During 1913.

(A) Tubercle Bacilli present.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.												
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	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 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Females ...	...	...	...	1	...	...	1	1	...	...	...	...	...	1	...	1	...	...	...	...	1
Stage II.—																					
Males ...	...	1	...	7	...	...	8	1	5	2	...	...	...	8	1	2	4	1	...	...	8
Females ...	...	...	2	...	...	...	2	1	...	...	...	...	1	2	...	1	...	1	...	...	2
Stage III.—																					
Males ...	...	1	10	14	28	6	59	2	15	11	10	10	6	54	1	15	16	13	9	5	59
Females ...	...	...	3	10	6	7	26	...	5	4	1	7	6	23	...	4	5	7	7	3	26
Total ...	...	2	15	32	34	13	96	5	25	17	11	17	13	88	2	23	25	22	16	8	96

(B) Tubercle Bacilli absent. Albumen present to the extent of ·2 per cent. or more.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.												
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	1	2	3	4	5	6		1	2	3	4	5	6		Disease arrested.	Much improv'd	Improved.	No change.	Worse.	Died.	
Stage I.—																					
Males ...	2	2	...	1	...	...	5	5	...	...	...	...	...	5	1	4	...	...	...	...	5
Females ...	1	1	...	...	...	...	2	1	1	...	...	...	...	2	1	...	1	...	...	...	2
Stage II.—																					
Males ...	2	...	...	1	1	...	4	1	3	...	...	...	...	4	...	2	1	1	...	...	4
Females ...	...	3	...	3	...	...	6	5	1	...	...	...	...	6	2	4	...	...	...	...	6
Stage III.—																					
Males ...	...	1	1	2	...	...	4	1	3	...	...	...	...	4	...	3	1	...	...	...	4
Females ...	...	...	1	1	...	...	2	...	...	2	...	...	...	2	...	...	1	1	...	...	2
Total ...	5	7	2	8	1	...	23	13	8	2	...	...	...	23	4	13	4	2	...	...	23

*Table of explanation, page 60.
†Table of explanation, page 61.
‡Table of explanation, page 61.

(c) No Expectoration. Tuberculin reaction positive.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.											
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	1	2	3	4	5	6		1	2	3	4	5	6		Disease arrested.	Much improv'd	Improved.	No change.	Worse.	Died.	
Stage I.—																					
Males ...	4	3	...	6	...	...	13	3	9	1	...	...	...	13	...	5	8	...	...	...	13
Females ...	9	7	5	5	...	...	26	16	6	4	...	...	...	26	10	8	5	3	...	...	26
Stage II.—																					
Males ...	...	1	...	3	...	...	4	1	3	...	...	...	...	4	...	1	3	...	...	...	4
Females ...	...	...	...	6	...	...	6	4	2	...	...	...	...	6	1	2	3	...	...	...	6
Stage III.—																					
Males ...	...	...	...	4	2	...	6	...	5	...	...	...	...	5	...	2	2	1	...	1	6
Females ...	...	...	...	...	1	...	1	...	1	...	...	...	...	1	...	1	...	...	...	...	1
Total ...	13	11	5	24	3	...	56	24	26	5	...	...	...	55	11	19	21	4	...	1	56

*Table of explanation, page 60.
†Table of explanation, page 61.

Summary of the Three Preceding Tables.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.											
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	1	2	3	4	5	6		1	2	3	4	5	6		Disease arrested.	Much improv'd	Improved.	No change.	Worse.	Died.	
Stage I.—																					
Males ...	6	5	...	7	...	...	18	8	9	1	...	...	...	18	1	9	8	...	...	...	18
Females ...	10	8	5	6	...	...	29	18	7	4	...	...	...	29	11	9	6	3	...	...	29
Stage II.—																					
Males ...	2	2	...	11	1	...	16	3	11	2	...	...	...	16	1	5	8	2	...	...	16
Females ...	...	3	2	9	...	...	14	10	3	...	...	...	1	14	3	7	3	1	...	...	14
Stage III.—																					
Males ...	...	2	11	20	30	6	69	3	23	11	10	10	6	63	1	20	19	14	9	6	69
Females ...	...	...	4	11	7	7	29	...	6	6	1	7	6	26	...	5	6	8	7	3	29
Total ...	18	20	22	64	38	13	175	42	59	24	11	17	13	166	17	55	50	28	16	9	175

*Table of explanation, page 60.
†Table of explanation, page 61.
‡Table of explanation, page 61.

TABLE II.

Classification of the Immediate Results of Treatment in Those Patients Discharged from Active Treatment Under the Municipal Scheme During the Year 1913.

(A) Tubercle Bacilli present.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.											
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	1	2	3	4	5	6		1	2	3	4	5	6		Disease arrested.	Much improv'd	Improved.	No change.	Worse.	Died.	
Stage I.—																					
Males ...	1	1	...	...	...	...	2	2	...	...	...	...	...	2	2	...	...	...	...	...	2
Females ...	...	...	...	2	...	...	2	2	...	...	...	...	...	2	...	2	...	...	...	...	2
Stage II.—																					
Males ...	...	...	1	3	...	...	4	1	1	1	1	...	...	4	...	1	1	1	1	...	4
Females ...	...	1	3	1	...	...	5	2	...	1	1	...	1	5	1	1	1	2	...	...	5
Stage III.—																					
Males ...	...	1	6	8	19	7	41	1	8	4	8	5	10	36	...	8	7	10	11	5	41
Females ...	...	...	4	4	3	5	16	...	2	1	2	3	5	13	...	1	1	7	4	3	16
Total ...	1	3	14	18	22	12	70	8	11	7	12	8	16	62	3	13	10	20	16	8	70

(B) Tubercle Bacilli absent. Albumen present to the extent of ·2 per cent. or more.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.												
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	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 ...	2	...	1	...	...	...	3	1	1	1	...	...	...	3	1	...	1	1	...	...	3
Females ...	2	2	...	1	...	...	5	3	2	...	...	...	...	5	3	2	...	...	...	...	5
Stage II.—																					
Males ...	1	...	...	...	1	...	2	2	...	...	...	...	...	2	1	1	...	...	...	...	2
Females ...	...	1	...	2	...	...	3	2	1	...	...	...	...	3	...	2	1	...	...	...	3
Stage III.—																					
Males ...	...	...	...	1	...	...	1	...	1	...	...	...	...	1	...	...	1	...	...	...	1
Females ...	...	...	1	1	...	...	2	...	1	1	...	...	...	2	...	...	1	1	...	...	2
Total ...	5	3	2	5	1	...	16	8	6	2	...	...	...	16	5	5	4	2	...	...	16

*Table of explanation, page 60.
†Table of explanation, page 61
‡Table of explanation, page 61.

(c) No Expectoration. Tuberculin reaction positive.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.											
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	1	2	3	4	5	6		1	2	3	4	5	6		Disease arrested.	Much improv'd	Improved.	No change.	Worse.	Died.	
Stage I.—																					
Males ...	10	1	1	4	1	...	17	15	2	...	...	...	...	17	12	5	...	...	...	...	17
Females ...	12	7	2	8	...	...	29	25	3	1	...	...	...	29	17	9	1	2	...	...	29
Stage II.—																					
Males ...	...	1	1	1	...	...	3	2	1	...	...	...	...	3	1	1	1	...	...	...	3
Females ...	1	2	...	7	...	...	10	3	5	1	1	...	...	10	3	3	2	...	2	...	10
Stage III.—																					
Males ...	...	...	...	1	3	...	4	2	1	...	...	...	...	3	1	1	1	...	...	1	4
Females ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	23	11	4	21	4	...	63	47	12	2	1	...	...	62	34	19	5	2	2	1	63

*Table of explanation, page 60.
†Table of explanation, page 61.
‡Table of explanation, page 61.

Summary of the Three Preceding Tables.

Classification of Cases *Turban-Gerhardt.	On Admission.							On Discharge.												
	†Classification (Astor).						Total	‡Economic Condition.						Total	Physical Condition.						Total
	1	2	3	4	5	6		1	2	3	4	5	6		Disease arrested.	Much improv'd	Improved.	No change.	Worse.	Died.	
Stage I.—																					
Males ...	13	2	2	4	1	...	22	18	3	1	...	...	...	22	15	5	1	1	...	...	22
Females ...	14	9	2	11	...	...	36	30	5	1	...	...	...	36	20	13	1	2	...	...	36
Stage II.—																					
Males ...	1	1	2	4	1	...	9	5	2	1	1	...	...	9	2	3	2	1	1	...	9
Females ...	1	4	3	10	...	...	18	7	6	2	2	...	1	18	4	6	4	2	2	...	18
Stage III.—																					
Males ...	...	1	6	10	22	7	46	3	10	4	8	5	10	40	1	9	9	10	11	6	46
Females ...	...	...	5	5	3	5	18	...	3	2	2	3	5	15	...	1	2	8	4	3	18
Total ...	29	17	20	44	27	12	149	63	29	11	13	8	16	140	42	37	19	24	18	9	149

*Table of explanation, page 60.
†Table of explanation, page 61.
‡Table of explanation, page 61.

LEPROSY.

One death from Leprosy was recorded in the Union Infirmary during the year. The man was a ship's steward, aged 34, and had resided in Mount Pleasant Road for some years. The disease was first noticed nine years before death when he was trading from Indian to Russian Ports. The disease was of the anæsthetic form of Leprosy. The deceased had undergone several operations, and the examination of a section of nerve removed demonstrated the presence of the Bacillus Lepræ.

He had married after contracting the disease, and had one child. Neither the wife nor child showed any signs of the disease at the time of the man's death.

CANCER.

The number of deaths due to Cancer amounted to 139, which is an increase of 30 over the previous year, and is the highest number recorded in Southampton in any one year. The death-rate from the disease was 1.12 per 1,000 of the population. This is higher than in the two previous years, but slightly lower than in 1910. The increased number of deaths for the year occurred entirely amongst females, the death-rate for each sex calculated upon the estimated male and female population being: Males, 0.88; females, 1.33.

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

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

Death-rates from Cancer in Municipal Wards, 1911 1912 and 1913 :—

Ward.	1911.	1912.	1913.
1. Town	0.86	1.03	1.44
2. St. Marys	1.11	0.71	1.08
3. Northam	1.12	0.69	0.93
4. Trinity	0.66	1.55	0.98
5. Newtown	0.84	0.36	1.42
6. All Saints	1.81	0.82	0.66
7. Bevois	1.47	1.34	2.14
8. Banister	1.25	1.09	2.09
9. Freemantle	0.63	1.01	1.35
10. Millbrook	1.30	0.85	0.71
11. Shirley	1.03	0.89	0.53
12. Portswood	0.84	0.59	0.89
13. St. Denys	0.74	0.95	0.57
Borough	1.05	0.90	1.12

The localisation of the disease of the deaths recorded from Cancer is shown in the following table :—

	Males.	Females.	Total.
Jaw	2	1	3
Lip	1	—	1
Mouth	1	—	1
Tongue	7	—	7
Œsophagus	6	1	7
Stomach	6	7	13
Liver	4	13	17
Gall Bladder	2	1	3
Pylorus	—	1	1
Intestines	2	4	6
Cæcum	—	2	2
Ascending Colon	2	1	3
Colon	3	5	8
Rectum	3	7	10
Inguinal Glands	—	1	1
Uterus	—	17	17

	Males.	Females.	Total.
Cervix	—	2	2
Ovary	—	2	2
Vulva	—	1	1
Breast	—	12	12
Larynx	3	—	3
Lungs	1	1	2
Bladder	2	—	2
Kidney	—	1	1
Prostate	3	—	3
Penis	1	—	1
Brain	—	1	1
Nose	—	1	1
Mastoid	—	1	1
Glands of Neck	2	1	3
Pancreas	2	1	3
Mediastinum	—	1	1
	—	—	—
Totals	53	86	139
	—	—	—

The ages at death are shown in Table 11, pages 123 and 124.

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, AND CASES ADMITTED FROM NEIGHBOURING DISTRICTS.

DISEASE NOTIFIED OR SUSPECTED.	Cases Remaining in Hospital, 1st January, 1913.	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., 1913.	Average number of days in Hospital (Cases treated to a conclusion.)	Case Mortality (Actual cases).
Small Pox	—	1	1	—	1	—	—	—	—
Scarlet Fever	21	163	160	3	162	3*	19	34	1.25
Diphtheria	12	244	223	21	206	24*	26	23	9.87
Enteric Fever	4	31	29	2	30	3	2	50	10.34
Measles	—	22	21	1	22	—	—	—	—
Phthisis	20	195	—	—	165	9	41	—	4.6
Other Diseases	—	4	4	—	4	—	—	—	—
Total	57	660	—	—	590	39	88	—	—

NOTE.—Included in the above is 1 death of case admitted as Scarlet Fever, which was not Scarlet Fever, and 2 deaths of cases admitted as Diphtheria, which were not Diphtheria.

Six hundred and fifty-nine patients were admitted to the Isolation Hospital during the year 1913, being an increase of 82 compared with the previous year.

There was an increase of 81 in the number of cases of Diphtheria admitted, and a remarkably severe type of the disease was prevalent.

There was an increase of 99 in the number of Phthisis cases admitted.

On the other hand, there was a decrease of 83 in the number of Scarlet Fever cases, and these were mostly of a mild type.

There was a slight decrease in the number of cases of Enteric Fever treated.

Scarlet Fever.—One hundred and sixty-three cases were admitted. Of these, three were found not to be suffering from Scarlet Fever, and were diagnosed thus : Measles, with Pneumonia, 1 case, which was fatal ; Uræmia, following chronic nephritis, 1 case, which was fatal ; simple Erythema, 1 case, recovered. To the remaining 160 cases should be added four cases sent in as Diphtheria, and found to have Scarlet Fever. Of these 164 cases, 162 have been discharged, and 2 died, giving a mortality of 1.21 per cent. of the actual cases admitted.

Diphtheria.—Two hundred and forty-four cases were notified. Of these 21 were found not to be suffering from Diphtheria. These cases were diagnosed thus : Scarlet Fever, 4 cases, of whom 1 died ; Septic Throat, 1 case, who died ; Tonsillitis, 14 cases ; Broncho-pneumonia, 1 case ; Foreign body in larynx, 1 ; total 21 cases, of whom 2 died, while the rest recovered and were discharged. Of the remaining 223 cases, 197 have been discharged and 26 died—a mortality of 11.65 per cent. of the actual cases admitted. It was necessary to perform the operation of tracheotomy for the relief of laryngeal obstruction in 11 cases of which four died. The details of the fatal cases are appended :—

Initials.	Age.	Day of Disease on Admission.	No. of days in Hospital.	Remarks.
E.W. ...	1 ...	4 ...	3 ...	Laryngeal obstruction—tracheotomy
E.G. ...	5 ...	3 ...	9 ...	Severe toxic case
A.C. ...	1 5 mths. ...	2 ...	3 ...	Laryngeal obstruction—tracheotomy
E.N. ...	6 ...	4 ...	6 ...	Severe toxic case, with Broncho-pneumonia
F.T. ...	12 ...	? ...	— ...	Laryngeal obstruction, moribund—tracheotomy

Initials.	Age.	Day of Disease on Admission.	No. of days in Hospital.	Remarks.
N.H.	10	?	1 hour	Laryngeal obstruction—tracheotomy
B.P.	7	4	5	Severe toxic case
M.M.	10	4	58	Died of heart failure
K.U.	7	5	4	Severe toxic case
S.M.	9	2	4	Do.
M.M.	7	5	2	Do.
C.P.	8	5	1 hour	Do.
L.G.	1 6 mths.	?	—	Dead on admission; inquest held
M.M.	6	6	2	Severe toxic case
E.W.	6	5	2	Do.
S.S.	5	4	17	Before admission had Nephritis and Broncho-pneumonia
M.T.	3	5	1	Severe toxic case
W.W.	4	2	11	Severe toxic case. Heart failure
R.K.	7	4	1	Severe toxic case
W.McC.	8	2	52	Had Nephritis and Heart Disease
J.M.	8	6	3	Severe toxic case
A.S.	13	4	5	Do.
F.H.	17	4	13	Severe toxic case. Heart failure
R.M.	2	7	8	Severe toxic case
J H	8	2	5	Do
F M.	7	3	4	Do.

Enteric Fever.—Thirty-one cases were admitted. Two of these did not have Enteric Fever, being cases of Pneumonia. Both recovered. Of the remainder, 26 have been discharged, and three died—a mortality of 10.34 of actual cases admitted.

The stools and urines of all the patients in the Enteric ward are examined bacteriologically, with a view of determining when they are free from infection.

BACTERIOLOGICAL LABORATORY.

The following bacteriological examinations were carried out during the year at the Isolation Hospital :—

Serum for Widal reaction	48
Other Blood examinations	3
Swabs for Diphtheria	1,131
Examinations for Tubercle Bacilli—	
(a) Sputum	128
(b) Urine	2
Pus for Gonococci	1
Examinations for pathological organisms of—	
(a) Fæces	12
(b) Urine	20
Other examinations	8
Total	1,353

In addition numerous microscopical and chemical examinations were made of urine.

Included in the above figures are the following examinations made for medical practitioners in the Borough, viz.: For Diphtheria Bacilli, 207 ; for Widals, Typhoid reaction, 16 ; for Tubercle Bacilli in Sputum, 120 ; of other material, 3.

ISOLATION AND HOSPITAL SHIP.

The following Table shows the Districts from which cases were admitted during the year 1913.

Disease.	Boro'.	Port.	Itchen Urban.	East-leigh Urban.	New Forest Rural.	Romsey Rural.	Hursley Rural.	Total.
Small Pox ...	1	...	...	...	...	...	...	1
Scarlet Fever ...	138	2	...	...	22	1	...	163
Diphtheria ...	224	7	4	...	7	1	1	244
Enteric Fever ...	20	9	1	1	...	...	...	31
Measles ...	1	21	...	...	...	...	...	22
Phthisis... ...	195	...	...	...	...	...	...	195
Other Diseases .	2	2	...	...	...	...	...	4
Total ...	581	41	5	1	29	2	1	660

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 ...	177	1.13	138	1.45	39	0.0
Diphtheria	357	8.40	224	9.82	133	6.01
Enteric Fever ...	33	18.2	20	15.0	13	23.08
Totals	567	6.7	382	7.07	185	5.95

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 fo 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 case	1
,, contacts	2
Scarlet Fever contacts	29
Measles contact	1
Diphtheria contacts	3
Puerperal Fever contact	1

The following gives details of children treated at West Quay Hospital during the year 1913 in connection with the Medical Inspection of School Children :—

Disease.	Cases
Acne	1
Alopecia	4
Eczema	6
Furunculosis	1
Impetigo of Body...	61
,, Scalp	25
,, Body and Scalp	9
,, Scalp and Pediculosis Capitis ...	22
Impetigo and Scabies	6
Psoriasis	1
Ringworm of Body	57
Ringworm of Scalp	64
Ringworm of Scalp and Body	18
Ringworm and Impetigo...	5
Scabies	22
Verminous condition of Head	15
Total	317

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

Beds and Mattresses	1,448
Bolsters and Pillows	2,380
Blankets and Quilts	4,628
Sheets...	2,093
Counterpanes	1,057
Books	631
Sundries	17,084
Total	29,321

MIDWIVES ACT, 1902.

The number of midwives who notified their intention of practising in the Borough during the year amounted to 45, an increase of 7 compared with 1912.

Six of these midwives were only practising temporarily in the Borough. Seven only attended one case, or less, as midwives during the year, and two reside outside the Borough, but occasionally attend cases inside the boundary. One midwife died during the year from a disease contracted during the course of carrying out her professional duties.

Twenty-eight of the midwives were certified by reason of their having passed an examination in midwifery, viz :—Central Midwives Board, 20 ; London Obstetrical Society, 7 ; City of London Hospital, 1 ; the remaining 17 were certificated by reason of their having been in practice before the passing of the Act.

The number of women in the Borough who were delivered by midwives amounted to 2,079, of which 2,023 were live births and 56 still births. The total number of births registered during the same period was 2957, the percentage of live births attended by midwives was, therefore, about 68 ; the percentage in 1912 was 71, and in 1911, 69.

The number of births attended by Midwives in the Borough since 1910 are :—

	Live Births.	Still Births.
1910	1,960 ...	58
1911	1,973 ...	61
1912	1,996 ...	65
1913	2,023 ...	56

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

Notices received of	intention to practice ...	45
,,	change of address	2
,,	sending for medical help ...	206
,,	still births	56
,,	death occurring in practice	1
Inspections and Visits		105

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

MOTHER.

Contracted Pelvis	4	
Abnormal Presentation	17	
Prolonged Labour	30	
Ruptured Perinæum	13	
Ante or Post Partum Hæmorrhage	13	
Retained Placenta or Membranes	12	
Rise of Temperature	10	
Œdema	4	
Abortion or Premature Birth	12	
Convulsions	3	
Exhaustion	4	
Inflamed Breasts	2	
Other Causes	18	
	—142	

CHILD.

Feebleness of Child	27	
Inflammation or Discharge from Eyes ...	23	
Pemphigus	2	
Malformation	5	
Other Causes	7	
	—64	
Total	206	

Inspections were made during the year at the residences of the Midwives in order to examine their registers of cases, and bags and appliances. In the majority of cases these were found in good order. Notice to comply with the Rules of the Central Midwives Board was given in those cases in which unsatisfactory conditions were found.

Lectures to Midwives in the Borough were given at various times during the year by the Medical Staff of the Health Department on the duties and responsibilities of Midwives under the Act.

Three cases of Puerperal Fever were notified during the year, being equal to a rate of 0.02 of the population, which compares favourably with the rate of 0.05 for England and Wales, and 0.07 for the County Boroughs of England. The average number of cases notified in the Borough during the past five years is 6.

The particulars of the cases notified and death occurring from Puerperal Fever during the year are :—

January 31st.—S.B., Lyon Street. This woman was delivered by a Midwife on the 24th January. She was taken suddenly ill six days after confinement, and a medical man being called in diagnosed the case as one of Puerperal Fever. The illness proved to be slight, and the patient recovered.

September 13th.—R.A.D., Bargate Street. This case was one of abortion, neither midwife nor medical man being in attendance. The patient subsequently developed Septicæmia, which proved fatal.

October 17th.—E.P.H., Millbank Street. This case was delivered by a Midwife on 27th September. The Midwife ceased attending on the 6th October, when she states the condition of the patient was normal. The woman was apparently taken ill on the 15th October and a medical man was called in, who notified the case as one of Puerperal Fever. Recovered.

In addition to the above cases a death was registered as having occurred in the Royal South Hants and Southampton Hospital from Puerperal Septicæmia. The case, which was not notified, was one of Premature (six months) twin birth, and was delivered by a medical man on January 30th. The case was removed to the Hospital on the fourth day after confinement for curetting and died on the 17th February.

GENERAL ROUTINE WORK.

Summary of Inspections and of Work carried out.

General Inspection of Houses and re-visits	33,748
Inspections on complaint	404
,, under the Housing, Town Planning, &c., Act, including the supervision of works in p ogress	6,944
,, of Factories	71
,, of Workshops and Workplaces	1,444
,, of Laundries	90
,, of Bakehouses	562
,, under the Shops Act	1,150
,, of Slaughterhouses	3,586
,, of Butcher Shops	3,898
,, of Sausage Factories	548
,, of Wholesale Stores, Markets, &c.	590
,, of Dairies, Cowsheds and Milkshops ...	575
,, of Common Lodging Houses	1,089
,, of Houses Let in Lodgings	347
,, of Courts and Alleys	677
,, of Stable Yards, Mews, etc.	303
Visits re Infectious Diseases, including Port contacts ...	3,376
,, re Non-notifiable Infectious Diseases (School Absentees)	745
,, re Notification of Births	1,934
,, re Void Houses	226
,, re Weekly Death Returns	348
,, to Schools	282
Houses and Premises Disinfected	741
Preliminary Notices served for the Abatement of Nuisances	1,772
Legal Notices	825
Nuisances abated by Verbal Notice	1,748
Drains Tested with Smoke	260
,, ,, Water	354
Drains found Defective	159
,, cleared and repaired	715
,, re-constructed	302
,, re-trapped	408
,, intercepted from the Sewer and ventilated ...	171
Inspection chambers provided to house drains	102
New soil pipes fixed on external walls of houses ...	75
Water closets re-constructed	113

Urinals re-constructed and provided with means of flushing	9
New water-closet pans fixed	557
Water laid on to water closets	136
Ventilating shafts of house drains repaired, &c. ...	230
Bath, sink waste-pipes, stack pipes, etc., disconnected from drains	306
Sanitary sinks fixed in houses	188
Premises drained to the sewer	14
Cesspools abolished	7
Privies abolished	6
Damp walls of houses remedied	701
Houses cleansed and whitewashed	888
Roofs of houses repaired	486
Eaves guttering and stack-pipes repaired	343
Rooms of houses efficiently ventilated	354
Window sashes made to open	686
Flooring, windows, etc., repaired	537
Ground floor ventilation provided under rooms ...	485
Means of light and ventilation provided to water closets	56
Yards paved and drained	395
Yard paving repaired	398
Sanitary dust-bins provided to houses	366
Overcrowding of houses abated	16
Courts re- imewashed	22
Courts re-paved	1
Nuisances from keeping animals, etc., abated	23
Manure vaults constructed	5
Manure and offensive matter removed	124
Stables paved and drained	4
Smoke nuisance abated	2

SOUTHAMPTON CORPORATION ACT, 1910.

During the year 305 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	14
Drains re-constructed	132
,, cleared	122
,, repaired	128
,, ventilated	78

Intercepting traps fixed	93
Inspection chambers constructed	71
New traps fixed	212
New soil pipes fixed	27
Bath, sink waste-pipes, etc., disconnected from drains	45
Sanitary sinks provided	35
Water closets re-constructed	36
Water laid on to water closets	19
New pans fitted to water closets	158
Urinals re-constructed	4

DRAINAGE UNDER THE NEW BUILDINGS BYE-LAWS

During the year 357 plans were submitted, of which 310 were approved and 47 disapproved.

The approved plans comprised :—

Dwelling Houses	357
Stables	5
Alterations and additions	107
Sewers, roads, &c.	3
Miscellaneous buildings	93
Houses completed	269
Stables	3
Alterations and additions	84
Miscellaneous buildings	73
Number of inspections during progress of work ...	2,426
Number of drains tested and re-tested	599

POLLUTED WELLS

Three samples of water were taken from wells at Shirley which supplied four houses, and one cowshed.

These samples were submitted to the Public Analyst and found on analysis to be polluted and unfit for drinking or domestic purposes.

Notices were served on the owners to provide a proper supply of water to the houses.

These notices were complied with, and in the case of the three dwelling houses the water was obtained from the South Hants Water Company's mains.

One dwelling house and cowshed being at too great a distance from a public supply a deep well was sunk in a fresh position.

SLAUGHTERHOUSES.

There are 35 slaughterhouses in the Borough, one new license having been granted during the year.

Three thousand five hundred and eighty-six visits were made and the premises generally were kept in a satisfactory condition.

With a view to preventing as far as practicable unnecessary cruelty in the slaughtering of animals for food, the Council passed the following bye-laws which now await the approval of the Local Government Board :—

" A person shall not, in a slaughterhouse, proceed to slaughter " any animal until the same has been effectually stunned. The " instrument to be used for the effectual stunning to each class " of animal shall be an instrument prescribed by resolution of " the Council from time to time, after consultation with the " butchers carrying on trade within the Borough, who shall have " the right before the adoption of any instrument by the Council " to make representations as to the instrument best suited for the " purpose of humane slaughtering of animals, and such resolution " shall be published by advertisement in some one or more " newspapers circulating within the County Borough of Southampton, and otherwise in such manner as the Council think sufficient " for giving notice thereof to all persons interested, and shall come " into operation at such time not less than one calendar month " after the first publication of the advertisement of the resolution " as the Council may by the resolution fix.

" Provided that this requirement shall not be deemed to " apply to any member of the Jewish faith duly licensed by the " Chief Rabbi as a slaughterer, when engaged in the slaughtering " of cattle intended for the foods of Jews according to the Jewish " method of slaughtering, if no unnecessary suffering is inflicted.

" A person shall not, in a slaughterhouse, slaughter, or cause " or suffer to be slaughtered, any animal in the view of another " animal.

"An occupier of a slaughterhouse shall not cause or allow 'any blood or other refuse to flow from such slaughterhouse so 'as to be within the sight or smell of any animal in the slaughter-'house, and he shall not cause or allow any such blood or other 'refuse to be deposited in the waiting pens or lairs."

MEAT AFFECTED BY TUBERCULOSIS SEIZED OR SURRENDERED.

	In Slaughter-houses.	In Shops.	Weight.
Carcases of Beef	2	...	1,788 lbs.
,, Pork	8	—	1,240 lbs.
Part carcases of Beef	6	1	996 lbs.
,, ,, Pork	25	5	308 lbs.

FOOD INSPECTION.

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

Slaughterhouses	3,586
Butcher shops	3,898
Sausage Factories	548
Wholesale Stores, Markets, &c.	590

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

BEEF.

Whole carcases	2
Quarters	5
Livers	25
Lungs	9
Hearts	3
Tongues	2
Mesenteries	3
Stomachs	2
Spleens	3
Sundry Pieces of Beef	203 lbs.
Total weight of beef	3,451 lbs.

PORK.

Whole carcases	12
Heads	30
Offals	12
Livers	1
Total weight of Pork	1,888 lbs.

MUTTON.

Whole carcases	1
Plucks	3
Lungs	10
Livers	2
Heads	100
Total weight of Mutton	542 lbs.

FRUIT, VEGETABLES, ETC.

105 bags of Potatoes.
16 lbs. of Tomatoes.
8 lbs. Cherries.
8 lbs. Strawberries.
1 basket of Cress.
38 Rabbits.
Total weight of Fruit, etc., 11,904 lbs.

FISH.

	Boxes.
Cod	1
Cods' Roes	4
Hake	1
Haddock	1
Bream	4
Mackerel	40
Herrings	1
Soles	1
Megrims	1
Skate	2
Whiting	2
Smelts	29
Bloaters	81
Kippers	40
Haddocks	13
Haddocks (fillets)	16

	Boxes.
Codling	25
Sprats	10
Mixed Fish	1
Eels	1
Mullett	1
Dog Fish	1

33 tins of Prawns.
17 bags of Shrimps.
1 bag of Escallops.
4 barrels of Crabs.

Total weight of Fish ... ... 9,184 lbs.

DAIRIES, COWSHEDS AND MILKSHOPS ORDERS, 1885-1886.

There are 208 purveyors of milk registered in the Borough, including 6 cowkeepers and 15 purveyors of milk who reside outside the Borough. During the year 33 purveyors of milk have ceased to sell milk, and four cowkeepers have ceased to keep cows, and their names have been removed from the Register.

Applications have been received from 27 persons to be registered as purveyors of milk.

No change has been made in the register of those milk purveyors who reside 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.	Portswood and Bitterne Park.	Outside the Borough.	Total.
Number of Cowkeepers on Register	...	4	2	...	6
Number of Purveyors of Milk on Register	103	51	33	15	202
Number of Purveyors of Milk registered during the year ...	13	7	7	...	27
Number of Cowkeepers registered during the year	...	...	...	...	...

COWKEEPERS IN THE COUNTY BOROUGH OF SOUTHAMPTON.

Name.	Situation.
C.B.	Royal Mail, Millbrook.
W.P.	Highcrown Street.
W.H.	Manor Farm Road.
W.M.	Blighmont Farm, Millbrook
A.H.W.	Cockroads Farm, Hill Lane.
H.C.	The Nest, Lordswood.

NUISANCES ABATED IN DAIRIES, COWSHEDS, AND MILKSHOPS.

Particulars.	Town Proper.	Shirley, Freemantle and Millbrook.	Portswood and Bitterne Park.	Total.
Milkshops cleansed and limewashed	176	72	50	298
Dairies ,, ,, ...	30	30	16	76
Cowsheds ,, ,, ...	...	16	8	24
Drains re-laid	1	...	3	4
,, cleared	2	...	3	5
,, repaired	2	...	...	2
New pans and traps fixed	1	...	2	3
Water supply to water closets ...	2	...	...	2
New sinks and waste pipes	...	...	1	1
Roofs and stack-pipes repaired ...	1	...	1	2
Yard paving repaired	3	2	4	9
Milk stores constructed	...	...	1	1
Cowsheds paving repaired	...	2	2	4
Manure removed	1	5	...	6
Sanitary dust-bins provided ...	1	...	1	2
Totals	220	127	92	439

FOOD AND DRUGS ACTS.

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

One hundred and seventy-six were formally purchased in accordance with the Act, and 266 were informal, or test samples, 31 of the latter being milk samples.

Twenty-five samples, including 7 informal samples, were ound to be adulterated.

Proceedings were taken in eight cases, convictions being btained in each.

Article.	Number of Samples.	Genuine.	Adulterated.
Milk	203	187	16
Cream	8	8	...
Butter	101	97	4
Margarine	1	1	...
Bread and Butter	1	1	...
Cheese	17	17	...
Lard	37	37	...
Flour	8	8	...
Coffee	23	19	4
Mustard	6	6	...
Ground Ginger	5	4	1
Pepper	23	23	...
Vinegar	5	5	...
Olive Oil	4	4	...
Totals	442	417	25

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.
9	Jan. 9	Butter	100% Margarine	Test sample. Subsequent sample taken proved genuine
49	Feb. 6	Milk	2.94% of added water	No proceedings taken
53	,, 10	do.	6.66% deficient in fat	Test sample. Subsequent sample taken proved genuine
62	,, 13	Coffee	32.2% Chicory	Test sample (see No. 89)
89	Mar. 6	do.	33.11% ,,	Ordered to pay the costs of the Court (4/-)
168	May 19	Milk	3.33% deficient in fat	Vendor cautioned
170	,, 19	do.	6.66% ,, ,,	Ditto
173	,, 19	do.	6.66% ,, ,,	Ditto
176	,, 19	do.	3.33% ,, ,,	Ditto
178	,, 23	do.	3.33% ,, ,,	Ditto
182	,, 26	do.	3.33% ,, ,,	Ditto
186	,, 26	do.	3.33% ,, ,,	Ditto
293	Sep. 16	do.	1.33% deficient in fat & 2.58% of added water	Ordered to pay the costs of the Court (8/-)
294	,, 16	do.	2.66% deficient in fat & 8.2% of added water	Fined £2, and 8/6 costs
295	,, 16	do.	2.94% of added water	Ordered to pay the costs of the Court (8/-)
296	,, 16	do.	11.05% of added water	Fined £2 and 8/6 costs
326	Oct. 3	Butter	100% Margarine	Test sample (See No. 378)
330	,, 10	Coffee	70% Chicory	Test sample (See No. 383)
332	,, 10	Ground Ginger	40% Calcium Carbonate	Test sample. Subsequent sample taken proved genuine
340	,, 14	Milk	8.66% deficient in fat	Vendor cautioned
362	,, 28	do.	11.33% deficient in fat & 3.41% of added water	Fined £1, and 6/6 costs
378	Nov. 13	Butter	100% Margarine	Fined £1, and 6/6 costs also the costs of the Court (4/-) for unlabelled wrapper
383	,, 14	Coffee	75% Chicory	Fined £2, and 10/6 costs
419	Dec. 18	Milk	6.33% deficient in fat	Vendor cautioned
425	,, 18	Butter	100% Margarine	Test sample. Subsequent sample taken proved genuine

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

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

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	202	Nil
Cream	2	2

The nature of preservative in each case in column (b) was Boric Acid. They were Test samples, and subsequent samples taken were labelled as Preserved Cream.

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 ...	6
(ii) Statements incorrect	Nil
Total	6

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

(i) Above 35 per cent.	6
(ii) Below 35 per cent.	Nil
Total	6

(c) Instances where (apart from analysis) the requirements as to 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.

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

HOUSES LET IN LODGINGS.

There are 33 houses in the Borough registered under the Bye-laws relating to Houses Let in Lodgings.

Of this number 28 were placed upon the Register during the year on application being made to the Local Authority.

Three hundred and forty-seven visits were made, and the houses generally were kept in conformity with the Bye-laws.

COMMON LODGING HOUSES.

There are 18 common lodging houses in the Borough, with a registered accommodation for 600 persons, six new houses having been registered during the year.

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 and eighty-nine visits were made during the year, and the houses generally were kept in a satisfactory condition.

Proceedings were taken with respect to a person keeping two common lodging houses without the same being registered.

The cases were adjourned sine die, the defendant having made application for registration previous to the summons being heard.

Proceedings were taken with respect to a second person for keeping a common lodging house without the same being registered.

The defendant was fined 10s., and 6s. costs.

HOUSING.

The following table, which was issued in Vol. VI. of the Census Returns during the year, gives detailed particulars as to the number and description of buildings enumerated in the Borough.

	1901	1911											
			Buildings used as Dwellings.									Buildings not used as Dwellings.	
	Total.	Total. Columns 4–11	Ordinary Dwelling Houses.	Blocks of Flats.	Shop.	Hotels, Inns, and Public Houses.	Offices, Warehouses, Workshops, Factories.	Institutions.	Others.	Vessels, Sheds, Vagrants, &c.	Separate Flats (included in Column 5.)	Kind of Building.	No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Southampton County Boro':												Places of Worship	67
Number inhabited ...	19,843	22,565	20,274	22	1,514	414	136	157	47	—	204	Government & Municipal Buildings ...	23
Separate Occupiers ...	23,048	26,983	24,237	209	1,636	426	142	167	49	116	209	Shops	508
Population ...	104,824	119,012	102,976	777	7,160	3,084	536	2,884	217	1,352	777	Offices	84
												Warehouses, Workshops, Factories ...	343
												Theatres and other places of amusement	12
Uninhabited ...	1,130	836	730	1	84	6	5	8	2	—	7		1037
Being built ...	231	150	148	—	2	—	—	—	—	—	—		

In July, Vol. VIII. of the Census of 1911 was issued dealing with tenements and classifying the people by the size of the family of which they are members and by the number of rooms in the occupation of that family.

The definition of the expressions " dwelling " or " tenement " and " private family " upon which the tabulation of the Census returns in this volume are based was stated in the instructions issued to the enumerators to be : A " dwelling " or tenement " is " a place in which any person entitled to receive a schedule usually lives," and the persons entitled to receive a schedule, and, therefore, for Census purposes regarded as heads of families, were stated to be : (a) Every head of a family occupying the whole or part of a house or flat. (b) Every separate lodger occupying a room or rooms in a house or flat (where two or more lodgers shared a room, or rooms, they were treated for census purposes as a single family). (c) Every resident caretaker of a house to be let, of a shop or of other business premises, or of a public building. (d) Every outdoor servant (with or without family) occupying separately any building or rooms in a building, such as a lodge, gardener's cottage, dwelling-rooms over a coach-house or stable, etc., which is detached from the house to which it belongs or has no internal communication therewith. (e) Every resident proprietor, manager or head of an hotel, club, business establishment, school, etc. (f) The chief resident officer of every institution. (g) The master or person in charge of every barge, boat or other vessel. The families under headings (a) to (d) have been treated as " private families," those under heading (e) as " private " only when the domestic members of the occupier's family exceed the non-domestic (i.e., trade servants, visitors, scholars, etc.), and those under headings (f) and (g) have been treated as non-private " families."

The total number of families or separate occupiers, " private " or other, amounted to 26,983, of which 26,642 were " private families," as defined above. The following table has been extracted from the Census Returns and shows the number of rooms in tenements in the occupation of Private families, and also shows the number of the persons in the families, and the number of rooms they occupied.

Tenements in the Occupation of Private Families.

Table showing the number of Rooms in Tenements in the occupation of Private Families, and the number of Persons occupying such Tenements.

Number of Rooms per Tenement.	Number of Private Families (or Tenements) consisting of :—										Total number of Private Families or Tenements.	Population.
	1 person.	2 persons.	3 persons.	4 persons.	5 persons.	6 persons.	7 persons.	8 persons.	9 persons.	10 persons and upwards.		
1	845	326	128	39	9	6	1	...	...	...	1,354	2,125
2	482	919	530	305	151	66	23	13	3	1	2,493	6,583
3	165	533	481	375	276	184	119	40	25	5	2,203	8,088
4	178	782	906	859	741	473	308	148	74	45	4,514	18,921
5	107	672	937	1,017	850	623	415	260	161	134	5,176	24,179
6	108	841	1,044	1,097	888	684	425	306	220	215	5,828	27,614
7	48	334	538	550	511	319	198	142	62	79	2,781	12,928
8	9	94	193	179	172	114	87	53	33	40	974	4,824
9	3	47	101	104	85	71	46	26	19	28	530	2,673
10 and upwards	8	43	87	153	147	107	87	62	35	60	789	4,450
Totals ...	1,953	4,591	4,945	4,678	3,830	2,647	1,709	1,050	632	607	26,642	112,385

It has not been possible when taking the Census to obtain information as to the size of the rooms occupied nor the age of the inhabitants. This is a point which has to be taken into calculation when considering overcrowding, but the basis adopted in the Census Returns is to count as overcrowded all Tenements with more than two occupants per room.

At the Census of 1911 the total population of Southampton was 119,012, and the number of separate occupiers of all kinds 26,983. In 1901 the tenements with more than two occupants to a room numbered 370 ; in 1911 they amounted to 834. As will be seen from the table given above there were 183 single-room tenements overcrowded, 257 of two rooms ; 189 of three rooms and 119 of four rooms. In 1901 there were 2,213 persons living more than two to a room, but in 1911 there were 5,705. The percentage was 2.1 in 1901, and 5.1 in 1911.

In 183 overcrowded single-room tenements 628 persons were found to be living more than two to a room in the following proportions :—128 at the rate of three to a room ; 39 at four 9 at five ; 6 at six, and in one case 7 to a room. An analysis o the figures for overcrowded tenements under five rooms shov that there were altogether 748 cases of over two persons to single room, 101 of more than three, and 20 cases of more tha four.

The portion of the Housing, Town Planning, &c., Act, dealin with the provision of housing schemes for the working classe was referred by the Council to the Housing Committee. In orde that effect may be given to the resolution of the Council th Committee has from time to time considered the acquisition sites for the erection of dwellings for the working classes, viz. :—

(a) The site occupied by the old buildings in front of S Michael's House and the Council Buildings and bein part of the Simnel Street area.

(b) On land owned by the Corporation at Bitterne Par close to the river and school. In connection with th the Borough Engineer was directed to submit plans an estimates for houses proposed to be erected on this sit

In dealing with the question of houses for the workers, th Committee had in view the accessibility of the site to the centr of industry which is a matter of considerable importance. Th main industry of the town is centred at the Docks, in which very large proportion of casual labour is employed. This cla of labour is large in proportion to the population when compare with other towns, and with whom the earnings are bound fluctuate and probably do not on the average exceed £1 per wee

It is essential that this class of worker should receive primary consideration in any scheme of housing that may be provided. The provision of houses for any class of people at a rental of 5s. or more per week, inclusive of rates, would have little effect on the existing conditions, more particularly if the houses are situated at an unreasonable distance from the centres of employment unless exceptionally cheap, and quick means of transit is provided.

The idea usually associated with housing schemes is that they should be self-supporting, i.e., the rent paid by the tenant should cover interest and sinking fund charges, etc., and otherwise be carried on free of any charge on the rates. Any such financial arrangement as this will in the course of years put the Corporation in the position of being owners of property, which will have been paid for by the necessitous people they now propose to assist.

It was undoubted y the intention of the Legislature when framing the Housing, Town Planning, &c., Act, that the carrying out of such Act should be to some extent a charge on the rates, and this is borne out by the recent suggested State Grants in aid of such rate charges. It is very apparent that any Authority who is able to make financial adjustment, so as to provide and let houses at a rent that will cover all expenses will not participate in any part of this Grant.

The scarcity of houses in the Borough is responsible for high rents and consequent overcrowding, and often leads landlords who are over-run by applicants to shirk their responsibilities with regard to the condition of their houses. It frequently leads him to refuse tenants with families, and to cause the ejectment of tenants or the raising of their rents when the Sanitary Authority enforce the different provisions of the Public Health Acts, Housing, Town Planning, &c., Act, Notification of Births Act, or Tuberculosis Regulations, etc.

With regard to the question of casual labour it is interesting to compare Southampton with Portsmouth, in which there is a much smaller number of Common Lodging Houses, showing that although Portsmouth has double the population of Southampton the demand for Common Lodging House accommodation, which as a rule is occupied by this class of worker, is not half that provided in Southampton.

In Southampton with a population of 122,412, there are 19 Common Lodging Houses (including the Municipal Lodging House) accommodating 850 lodgers; in Portsmouth, with a population of 241, 256,there are only 12 Common Lodging Houses, with an accommodation for 373 persons.

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

During the year 1,185 houses were inspected under the provisions of the above Act.

The following is a list of streets 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.
Barnfield Court	3	...	...
Bell's Buildings	5	...	2
Birmingham Street	16	...	10
Bond Street	54	...	44
Carlisle Road	20	...	11
Cement Terrace	4	...	4
Coburg Street	13	...	11
Coronation Terrace	5	...	5
Didcot Road	8	...	6
Dock Street	53	...	47
Edward Road	41	...	27
Elm Street	28	...	19
Evans Street	7	...	4
Henry Road	40	...	26
Heysham Road	18	...	14
Hill Street	21	2	17
Lion Street	19	...	8
Lower Back-of-the-Walls	25	...	5
May Road	11	...	9
Mount Street	39	...	28
Nelson Place	7	...	5
New Buildings	16	...	16
Newbury Road	6	...	2
Newman Street	10	...	9
Oxford Street, Shirley	35	...	24
Park Street	20	...	12
Pope's Buildings	10	...	9
Priory Road	198	...	45
Regent's Place	4	...	4
Regent Street	4	...	3
Ryde Terrace	15	...	13
St. George's Place	7	...	6
St. Mary's Buildings	16	...	16
Shirley Park Road	84	...	45
Spa Court	6	...	6
Spa Gardens	12	...	12
Spa Road	12	...	10
Sussex Terrace	14	...	14
Tower Place	13	...	12
Trinity Terrace	32	...	17
Vaudrey Street	23	...	13
Victoria Road	14	...	14
Villiers Road	4	...	2
Waterhouse Court	2	...	2
Wellington Street	18	...	14
Western Terrace	15	...	10
York Street	82	...	78
Total	1,109	2	710

Representations were made in respect of 21 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.

Seven closing orders were determined, one house voluntarily closed, and nine houses demolished ; also closing orders became operative under Section 15 (4) with respect to six dwelling houses.

REPRESENTATIONS MADE WITH REGARD TO DWELLING HOUSES.

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

Situation of House.	Date.	Nature of Order made.	Further Action.
91, Grove Street	Feb. 6	Closing Order	Closing Order determined
92, do.	do.	do.	do.
92½, do.	do.	do.	do.
93, do.	do.	do.	do.
94, do.	do.	do.	do.
95, do.	do.	do.	do.
1, Barnfield Court	do.	do.	
3, do.	do.	do.	
4, do.	do.	do.	
64, Arthur Road	July 3	do.	Closing Order determined Sept. 4th, 1913
Loosemore Cottage, Chapel Road	Sept. 4	do.	
49, Grove Street	Oct. 9	do.	
50, do.	do.	do.	
51, do.	do.	do.	
136, Dukes Road	do.	do.	
138, do.	do.	do.	
140, do.	do.	do.	
3, Howards Grove	Dec. 4	do.	
4, do.	do.	do.	
98½, Northam Road	do.	do.	
2A, Wharf Street	do.	do.	

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

Drains re-constructed	76
,, cleansed and repaired	35
,, re-trapped	25
,, intercepted from sewer and ventilated	32
Inspection chambers provided to house drains	12

Water closets re-constructed	106
New pans fixed in water closets	124
Water laid on to water closets	50
Ventilating shafts of house drains repaired	1
Bath sink waste-pipes, stack-pipes, &c., disconnected from the drains	76
Light and ventilation provided to water closets	53
Sanitary sink fixed	83
Dampness in dwelling houses remedied	371
Houses cleansed and whitewashed	418
Roofs of houses repaired	171
Flooring, walls, &c. of houses repaired	338
Window sashes repaired and made to open	425
Rooms of houses efficiently ventilated	239
Lighting of rooms improved	50
Ground floor ventilation provided under rooms	254
Eaves guttering and stack-pipes repaired	142
Yards paved and drained	160
Yard paving repaired	111
Sanitary dustbins provided	128

THE RAG FLOCK ACT, 1911.

Six 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, 9.7 parts per 100,000
2	" " 7.08 " "
3	" " 14.10 " "
4	" " 7.1 " "
5	" " 4.37 " "
6	" " 8.87 " "

SHOPS ACT, 1912 AND 1913.

During the year the Shops Act, 1912, has been amended in its application to premises for the sale of refreshments by the Shops Act, 1913.

The Act is an adoptive one, and the occupier of such premises may by a statutory notice hung in a conspicuous place elect that the following provision shall apply :—

(a) No assistant shall be employed for more than sixty five hours in any week, exclusive of meal times.

(b) Provision shall be made for securing to every such assistant—

(i) Thirty-two whole holidays on a week-day in every year, of which at least two shall be given within the currency of each month, and which shall comprise a holiday on full pay of not less than six consecutive days ;

(ii) Twenty-six whole holidays on Sunday in every year, so distributed that at least one out of every three consecutive Sundays shall be a whole holiday :

Provided that two half-holidays on a week-day shall be deemed equivalent to one whole holiday on a week-day.

(c) Intervals for meals shall be allowed to every such assistant amounting on a half-holiday to not less than three-quarters of an hour, and on every other day to not less than two hours, and no assistant shall be employed for more than six hours without being allowed an interval of at least half-an-hour :

Provided that this provision shall not apply if the only persons employed as such shop assistants are members of the family or the occupier of the premises maintained by him and dwelling in his house.

(d) The occupier shall affix and constantly maintain in a conspicuous position in the premises a notice in the prescribed form referring to the provisions of this Section and stating the steps taken with a view to compliance therewith.

The notice may be withdrawn by the occupier of the shop at the expiration of a year from the date when it was given and thereafter Section 1 of the Shops Act, 1912, shall apply to the shop in like manner as before the notice was given.

A Closing Order with respect to Butchers' Shops came into operation in the Borough, October 10th, 1913.

Eleven hundred and fifty visits were made and proceedings instituted in 11 cases for breaches of the Act, as follows :—

Name.	Situation.	Date Summons Returnable.	Offence.	Result of Proceedings.
A.D.N.	Sidford Street	Jan. 3	Selling non-exempted articles after 1 p.m. on early closing day	Fined 5s., including costs
H.P.	High Street	Feb.10	Not exhibiting assistants weekly half-holiday notice	Ordered to pay the costs of the Court (4s.), on giving an undertaking to comply with the Act in future
E.P.	Do.	Do.	Obstructing Inspector	Fined 5s. and 9s. costs
L.D.P.	Do.	Do.	Do.	Do.
A.M.	Northam Road	Mar. 3	Selling non-exempted articles after 1 p.m. on early closing day	Fined 2s. 6d., including costs
H.K. & Co.	St. Mary's Road	June 5	Employing a young person more than 74 hours in one week	Fined 10s. and 5s. 6d. costs
G.A.P.	Oxford Street	July 17	Selling non-exempted articles after 1 p.m. on early closing day	Case dismissed
E.A.G.	Portswood Road	July 29	Do.	Fined 10s. and 13s. 6d. costs
F.R.	Orchard Lane	Do.	Do.	Fined 10s., including costs
R.M.	Bevois Valley Road	Nov. 24	For failing to exhibit exemption notice on early closing day	Fined 10s. and 6s. 6d. costs
E.G.C.	Millbank Street	Do.	Do.	Fined 10s. and 6s. 6d. costs

Factory and Workshops Act, 1901.

There are 837 Factories, Workshops and Workplaces, Bakehouses, and Laundries on the Registers.

They give employment to 5,353 workers, 3,660 males and 1,693 females, as compared with a total of 5,240 in 1912.

SUMMARY OF VISITS.

Factories	71
Workshops and Workplaces	1,444
Bakehouses (including Factory Bakehouses)	562
Laundries (including Factory Laundries) ...	90
Visits re Sanitary Matters	654
Total	2,821

FACTORIES.

Trade.	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Antiseptic Factory	1	3	...	3	1
Bedding Factories	2	7	4	11	2
Blacksmiths and Coachbuilders ...	1	7	...	7	2
Boot Makers and Repairers ...	17	52	3	55	10
Bottle Washing Factories	1	6	...	6	1
Brass and Iron Founders	4	48	...	48	1
Brickyards	1	20	...	20	1
Brush and Basket Makers	1	44	16	60	1
Building Trades	16	274	...	274	4
Cabinet Makers	5	19	...	19	4
Cement, Lime and Putty Works ...	3	45	...	45	...
Confectioners and Sugar Boilers ...	2	5	2	7	3
Cycle and Motor Works	8	52	5	57	5
Dyeing and Cleaning Works ...	2	22	22	44	...
Engineers and Electricians	9	82	...	82	5
Flag and Banner Maker	1	1	11	12	...
Horse Hair Dresser	1	8	...	8	1
Lead and Paint Factories	2	35	...	35	1
Margarine ,, ...	1	70	...	70	...
Mineral Water ,, ...	6	48	26	74	...
Oil Cake ,, ...	1	60	...	60	...
Picture Framing ,, ...	1	3	...	3	1
Sailmaking ,, ...	2	11	...	11	...
Sausage Making ,, ...	10	28	...	28	10
Seedsmen	1	13	26	39	2
Ship and Yacht Builders	7	945	...	945	4
Steam Saw Mills and Joinery Works	4	101	...	101	6
Stonemasons	2	32	...	32	...
Wine and Beer Bottlers	7	41	...	41	6
Totals	119	2082	115	2197	71

NUISANCES ABATED IN FACTORIES.

Sanitary Conveniences provided (separate for sexes)	1
Sanitary Conveniences properly separated from Factory	1
Sanitary Conveniences lighted and ventilated	2
Water closets re-constructed	1
,, cleansed and limewashed ...	1
New cisterns and flush-pipes fixed	3
Means of flushing provided to urinal ...	2
Total	11

WORKSHOPS.

Trade.	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Billiard Table Maker ...	1	3	...	3	1
Blacksmiths and Coachbuilders ...	43	141	...	141	82
Blind Makers	1	8	...	8	3
Boot Makers and Repairers ...	43	92	...	92	70
Brickmakers	2	14	...	14	3
Brush and Basket Makers	4	9	...	9	8
Building Trades	39	162	...	162	42
Cabinet Makers and Upholsterers ...	22	93	7	100	36
Carpets and Upholstery Needle-workers	4	5	20	25	17
Clay Tobacco Pipe Maker	1	4	2	6	2
Confectioners and Sugar Boilers ...	3	6	4	10	6
Coopers	1	2	...	2	2
Cork Maker	1	2	...	2	3
Cycle Makers and Repairers ...	18	41	...	41	24
Dressmakers and Milliners	114	...	743	743	245
Dyers and Cleaners...	2	...	5	5	2
Electricians and Engineers	5	17	...	17	3
Feather Dressers and Furriers ...	2	3	4	7	4
Hearth Stone Cutter	1	1	...	1	1
Iron and Steel Merchant	1	9	...	9	1
Metal Polish Works	1	4	...	4	1
Mineral Water Works	1	1	1	2	3
Modellers	1	3	...	3	1
Offensive Trades	3	22	...	22	91
Organ Builder	1	5	...	5	2
Perfumiers	2	3	9	12	2
Photographers	8	14	29	43	11
Piano Repairing	3	10	...	10	3
Picture Framers and Gilders ...	6	20	...	20	9
Rag Sorters	6	11	16	27	287
Restaurant Kitchens	32	67	50	117	83
Sack Repairers	1	3	7	10	3
Saddlers and Harness Makers ...	11	29	...	29	14
Sailmakers	1	18	...	18	1
Sauce and Pickle Works	1	1	...	1	2
Shirt and Underwear Makers ...	2	...	6	6	16
Stonemasons	5	17	...	17	5
Tailors	112	166	238	404	283
Ticket Writers and Engravers ...	9	14	...	14	11
Tin Plate Workers	10	35	...	35	13
Trunk and Bag Makers	2	4	...	4	4
Umbrella Makers	1	2	2	4	1
Undertakers	5	11	...	11	5
Watchmakers and Jewellers ...	12	32	...	32	16
Weight and Scale Makers	2	12	...	12	2
Wholesale Dealers and Packers ...	3	12	8	20	7
Wine and Beer Bottlers	6	33	...	33	11
Yacht and Boat Builders	4	22	...	22	2
Totals	559	1183	1151	2334	1444

Number of Workrooms measured during the year ... 48.

NUISANCES ABATED IN WORKSHOPS.

Sanitary conveniences provided to Workshops	3
Ditto separate for sexes ...	2
Insanitary privies abolished	2
Drains re-laid, trapped and ventilated	2
,, cleared and repaired	1
Water closets re-constructed	8
,, impervious floors laid	1
New soil-pipes fixed	2
New cisterns, flush-pipes, &c., fixed	4
Defective roofs repaired	2
,, ceiling repaired	1
Eaves guttering and stack-pipes fixed	1
New sinks and waste-pipes fixed	2
Yards paved or repaired	4
Workrooms cleansed and limewashed	23
Accumulations of offensive matter removed	6
Smoke nuisance abated	1
Other nuisances	5
Total	70

REPORTS RECEIVED FROM H.M. FACTORY INSPECTOR.

Sixty-three reports were received from the Factory Inspector during the year, viz. :—

Nature of Report.	No. sent in.	Action taken.
New Workrooms or Change of Address	19	Premises inspected, Rooms Measured, &c
Workshops Notified (already on L.A. Register or re-notified after Notice from Local Authority)	29	No action taken
Sanitary Defects	15	Defects remedied
Total	63	

NOTIFICATIONS SENT TO H.M. FACTORY INSPECTOR.

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

INFECTIOUS DISEASE OCCURRING ON WORKSHOP PREMISES DURING THE YEAR.

Date.	Disease.	Street.	Trade.	Action taken.
Jan. 11	Scarlet Fever	Palmerston Road	Tailoring	Patient removed to the Isolation Hospital. Premises, bedding, &c., disinfected also Tailoring Work in house at time. The father of patient (a master tailor) was bathed and disinfected at West Quay.
Mar 1	Scarlet Fever	Oxford Street	Baker & Confectioner	Patient removed to the Isolation Hospital, and premises bedding, &c., disinfected
Oct. 3	Scarlet Fever	Bellevue Road	Dress-making	Do
Nov 10	Diphtheria	Do	Do.	Patient isolated at home, and premises, bedding, &c., disinfected after recovery of case
Nov. 14	Diphtheria	St. Mark's Road	Tailoring	Do.

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

Three cases of Scarlet Fever and eight cases of Diphtheria occurred in homes of persons employed in Factories and Workshops during the year.

Nine of these cases were removed to the Isolation Hospital and two were isolated at home.

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

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

In the case of Diphtheria, the workers residing in the houses ad their throats bacteriologically examined, and were not llowed to return to work unless the result was negative.

HOME WORK.

During February 52 lists were sent in containing names and ddresses of 160 outworkers, and during August 54 lists containing ames and addresses of 160 outworkers.

They are situated as follows :—

	February.	August.
wn District	109	106
rtham and Chapel	10	9
vois Town, Portswood and St. Denys	18	22
eemantle and Shirley	19	18
tside District	4	5
Totals	160	160

Of the 160 names received in August, 52 occupy premises gistered as workshops employing labour, and of the remainder siding in the Borough 74 carry on tailoring work, 9 bootmaking, d 21 upholstery and fancy needlework, underwear, &c.

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

Two hundred and three visits of inspection have been made ring the year to outworkers' premises and six nuisances abated.

Nuisances Abated.

Water closet re-constructed	1
Workrooms limewashed	5
Total	6

BAKEHOUSES.

The tendency at the present time towards installing moto power in Bakehouses renders the definition of a factory in th Factory Act of 1901 of much greater importance to Loca Authorities than it was at the date of the passing of the Act.

In Southampton, where electricity for motor power supplied at a cheap rate, many of the bakehouses have intro duced motors for mixing the dough. The result is that suc bakehouses have become factories as defined by the Factory Ac and the Local Authority have only power to deal with :—

(1) Means of escape in case of fire.

(2) Take action under the Public Health Act when th Factory Inspector reports defective sanitary co veniences.

It follows therefore that premises in which the chief ar most essential food of the people is prepared and stored t Sanitary Authority have to all intents and purposes ceased have any effective control and supervision, This lack of supe vision will in many cases lead to very undesirable conditio arising in the sanitary state of bakehouses.

The same remarks apply to Slaughterhouses, in which t installation of a motor for the manufacture of sausages or for mincing machine for potted meats, etc., would constitute su premises a factory, and make any essential sanitary supervisi by the Local Authority impossible.

It is therefore necessary in order to prevent friction a overlapping and to remove any objection to direct action on t part of the Sanitary Authority that they should be given f power of enforcing the statutory requirements and of deali with all insanitary conditions both under the Public Health A and Factory Acts.

There are 126 Bakehouses on the Register, 18 being Factor (i.e., using mechanical power) and 108 workshops.

Ninety-eight of these were in use at the end of the year, a 28 were unoccupied.

They give employment to 318 male employees.

Five hundred and sixty-two visits of inspection have been made during the year, resulting in the detection and abatement of 26 nuisances.

All occupied Bakehouses were re-limewashed during the months of April and October in accordance with the Regulations.

During the year one new business commenced at 9, Romsey Road, where the occupier has installed a small portable oven.

TABLE C.—Bakehouses.

	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Factories	18	110	...	110	54
Workshops	108	208	...	208	508
Totals	126	318	...	318	562

Nuisances Abated in Bakehouses.

Drains repaired	1
Water closets re-constructed	2
,, lighted and ventilated	1
,, impervious floors laid	1
New cisterns, flush-pipes, &c., fixed	1
Eaves guttering and stack-pipes fixed	1
Roofs repaired	1
Ceilings repaired	2
Damp walls remedied	1
Extra light and ventilation provided	1
Bakehouses cleansed and limewashed	4
Yards paved or repaired	2
Stable paving repaired	2
Accumulation of offensive matter removed	6
Total	26

LAUNDRIES.

There are 34 Laundries on the Register, one having lapsed during the year.

Twelve of these use mechanical power and 22 manual labour.

They employ 77 male and 427 female workers.

Ninety visits of inspection have been made and three nuisances abated during the year.

Means of escape in case of fire was provided in one Factory Laundry.

TABLE D.—Laundries.

	No. on Register.	Employees.		Total.	No. of Visits.
		Male.	Female.		
Factories	12	61	299	360	7
Workshops	22	16	128	144	83
Totals	34	77	427	504	90

Nuisances Abated in Laundries.

New cisterns and flush-pipes, &c., fixed	
Water-closet cleansed and limewashed	
Total	

VISITS re SANITARY MATTERS.

In addition to the foregoing, 654 visits have been made during the year, comprising re-visits to Factories, Workshops, Bakehouses and Laundries, serving notices, investigating complaints, overcrowding, and various other matters.

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)	132	10	...
Workshops ... ... (Including Workshop Laundries)	1952	39	...
Workplaces ... ... (Other than Outworkers' premises included in Part 3 of this Report) ...	83	1	...
Total	2167	50	...

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

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Reported to H.M. Inspector.	
NUISANCES UNDER THE PUBLIC HEALTH ACTS :—				
Want of Cleanliness	27	27	..	..
Want of Ventilation	1	1	..	..
Overcrowding	..	..	..	..
Want of drainage of floors ..	..	..	..	..
Other nuisances	64	64	..	..
Sanitary accommodation — insufficient ..	3	3	..	..
Sanitary accommodation — unsuitable or defective ..	13	13	..	..
Sanitary accommodation — not separate for sexes ..	3	3	..	..
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	111	111	..	..

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.									PREMISES, SECTION 108.			PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending Lists.	Prosecutions.							
	Sending twice in the year.			Sending once in the year.											
	Lists.	Outworkers (Contractors)	Outworkers (Workmen)	Lists.	Outworkers (Contractors)	Outworkers (Workmen)		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).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Wearing Apparel— (1) making, &c.	98	..	289	4	..	16	7	..	..	..	..	..	..	..	..
Furniture and upholstery ..	4	..	15	..	..	..	..	..	..	..	..	..	..	..	..
Total	102	..	304	4	..	16	7	..	..	..	..	..	..	..	..

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Workshops	559
Bakehouses	108
Laundries	22
Total number of Workshops on Register ..	689

5.—OTHER MATTERS.

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)	13
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	15
Reports (of action taken) sent to H.M. Inspector	..
Other	15
Underground Bakehouses (s. 101) :—	
Certificates granted during the year	..
In use at the end of the year	7

SYNOPSIS OF TABLES.

TABLE 1.

SHOWING BIRTHS AND BIRTH RATES FOR WHOLE BOROUGH, AND THE OLD CIVIL PARISHES OF THE BOROUGH, FOR 10 YEARS—1903–1912, COMPARED WITH THE YEAR 1913.

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.
*1903	1638	1527	3165	29.40	1718	27.4	583	30.2	864	31.2
1904	1502	1501	3003	27.53	1677	27.1	525	27.1	801	28.7
1905	1428	1440	2868	25.96	1572	25.4	543	27.4	753	26.2
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
Average 10 years.	1497	1423	2920	25.61	1590	25.4	538	25.7	792	26.0
*1913	1495	1462	2957	25.78	1543	23.70	579	24.13	835	23.70

*53 weeks.

TABLE 2.

SHOWING DEATHS AND DEATH RATES FOR THE WHOLE BOROUGH, AND THE OLD CIVIL PARISHES OF THE BOROUGH, FOR 10 YEARS—1903–1912, COMPARED WITH THE YEAR 1913.

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.
*1903	808	714	1522	14.14	955	15.2	203	10.5	364	13.1
1904	804	747	1551	14.22	931	15.1	245	12.6	375	13.4
1905	901	767	1668	15.10	1026	16.6	253	12.8	389	13.6
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
Average 10 years	836	754	1590	13.9	964	15.4	238	11.3	388	12.7
*1913	845	759	1604	12.90	928	14.2	274	11.4	402	11.4

*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.
1904	1551	344	134	49	66	485	473
1905	1668	382	214	72	68	493	439
1906	1544	330	121	67	54	531	441
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

TABLE 4.

CAUSES OF DEATHS IN SOUTHAMPTON FOR 10 YEARS, 1904 TO 1913.

CAUSE OF DEATH.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Enteric Fever	1	8	5	4	4	10	10	3	8	6
Small Pox	..	4	..	2	..	..	..	..	..	...
Measles	..	130	..	5	22	..	17	13	18	30
Scarlet Fever	1	10	..	2	4	5	2	5	2	2
Whooping Cough	16	19	36	18	35	42	11	18	35	10
Diphtheria and Croup	12	26	24	22	16	19	16	23	19	30
Influenza	7	15	9	26	11	19	19	17	17	20
Erysipelas	3	2	..	6	1	2	4	3	3	...
Phthisis (Pulmonary Tuberculosis)	137	135	154	126	135	158	145	188	160	150
Tuberculous Meningitis	24	28	19	13	10	23	23	24	18	19
Other Tuberculous Disease ..	31	32	32	37	29	20	30	27	24	17
Cancer, malignant disease ..	106	92	102	125	108	105	135	125	109	139
Rheumatic Fever	4	5	4	5	3	7	4	3	6	2
Meningitis	16	19	24	18	14	21	10	14	14	14
Organic Heart Disease	126	114	113	151	153	129	120	158	137	158
Bronchitis	157	143	113	141	143	135	108	126	144	137
Pneumonia (all forms)	90	125	92	96	85	112	83	129	103	88
Other Diseases of Respiratory Organs	20	14	19	23	22	17	14	23	27	27
Diarrhœa and Enteritis	93	78	104	59	75	63	38	178	39	55
Appendicitis and Typhlitis ..	8	11	8	6	5	8	6	9	13	12
Cirrhosis of Liver	21	13	10	10	11	14	7	17	15	16
Alcoholism	6	4	6	9	6	4	4	8	2	1
Nephritis and Bright's Disease ..	42	44	56	37	35	50	43	50	56	52
Puerperal Fever	3	2	6	2	4	2	2	2	2	2
Other accidents and Diseases of Pregnancy and Parturition ..	4	1	6	3	7	5	5	4	10	8
Congenital Debility and Malformation, including Premature Birth	152	134	106	134	130	125	110	127	88	113
Violent Deaths, excluding Suicide	30	31	40	35	38	44	42	49	34	49
Suicide	9	4	12	13	17	11	12	11	13	7
Other Diseases	432	425	444	417	467	462	437	469	471	440
Totals	1551	1668	1544	1545	1590	1612	1457	1823	1587	1604

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, 1894—1913.

Year.	Population.	Births.			Deaths.			Zymotic Deaths.			Infantile Mortality. Deaths under 1 year per 1000 Births Registered		Marriages.		
		Total Births.	Birth Rate.	Birth Rate England and Wales.	Total Deaths	Death Rate.	Death Rate England and Wales.	Total Zymotic Deaths.	Zymotic Death Rate.	Zymotic Death Rate England and Wales.	Southampton.	England & Wales.	Total Marriages.	Marriage Rate	Marriage Rate England and Wales.
1894	70,000	2,113	30.2	29.6	1,161	16.0	16.6	81	1.14	1.88	119	137	617	17.6	15.0
1895	71,750	2,180	30.4	30.3	1,395	18.7	18.7	111	1.53	2.21	155	161	675	18.8	15.0
1896	94,150	2,859	30.4	29.7	1,657	17.2	17.1	192	2.04	2.17	146	148	838	17.8	15.8
1897	96,500	2,937	30.4	29.7	1,711	17.3	17.4	217	2.24	2.15	156	156	848	17.6	16.0
*1898	98,950	2,945	29.8	29.4	1,756	17.3	17.6	267	2.63	2.21	153	161	791	16.0	16.2
1899	101,350	2,995	29.6	29.3	1,992	19.1	18.3	297	2.88	2.19	178	163	896	17.7	16.4
1900	103,500	2,929	28.3	28.9	1,881	17.6	18.3	163	1.51	1.99	152	154	846	16.3	15.9
1901	105,179	3,141	30.0	28.5	1,789	16.6	16.9	173	1.64	2.05	154	151	918	17.5	15.9
1902	106,601	3,152	29.1	28.6	1,726	15.7	16.3	174	1.64	1.64	124	133	966	18.1	15.8
*1903	108,022	3,165	29.4	28.4	1,557	14.1	15.4	165	1.50	1.46	114	132	883	16.3	15.6
1904	109,444	3,003	27.5	27.9	1,590	14.2	16.2	123	1.13	1.94	114	146	859	15.7	14.6
1905	110,865	2,868	26.0	27.2	1,735	15.1	15.2	275	2.49	1.52	133	128	827	14.9	15.3
1906	112,287	2,913	26.0	27.0	1,611	13.8	15.4	169	1.51	1.73	113	133	805	14.3	15.6
1907	113,708	2,757	24.3	26.3	1,572	13.6	15.0	112	0.99	1.28	108	118	827	14.5	15.8
*1908	115,130	2,971	25.4	26.5	1,642	13.6	14.7	156	1.33	1.34	113	121	867	15.1	14.9
1909	116,551	2,938	25.3	25.6	1,694	13.9	14.5	139	1.20	1.13	106	109	928	15.9	14.6
1910	117,973	2,926	24.9	25.1	1,554	12.4	13.4	94	0.80	0.99	79	106	773	13.1	14.8
1911	119,394	2,849	23.9	24.4	1,847	15.2	14.6	220	1.85	2.49	135	130	914	15.4	15.2
1912	120,891	2,806	23.3	23.8	1,587	13.2	13.3	113	0.94	..	84	95	990	16.4	15.5
*1913	122,412	2,957	23.8	23.9	1,604	12.9	13.7	122	0.98	..	82	109	1032	16.9	15.5

*53 Weeks.

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

TABLE 6.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1913 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.			
		Uncorrected Number.	Nett.				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.			Number.	Rate per 1000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1908	115,130	2,971	2,971	25.41	1,642	14.04	88	36	336	113	1,590	13.60
1909	116,551	2,938	2,938	25.30	1,694	14.58	82	..	320	106	1,612	13.88
1910	117,973	2,926	2,926	24.89	1,554	13.22	99	2	236	79	1,457	12.39
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

TABLE 7.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

Notifiable Disease.	Number of Cases notified. At Ages—Years.								Total Cases Notified in each Municipal Ward.														Total cases removed to Hospital.
	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.	Town.	St. Mary's.	Northam.	Trinity.	Newtown.	All Saints.	Bevois.	Banister.	Freemantle.	Millbrook.	Shirley.	Portswood.	St. Deny's.		
Small-pox ...	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..		..	..	1
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	357	4	71	245	18	14	5	..	14	25	40	22	20	19	17	15	12	31	68	27	47	..	224
Erysipelas ...	51	2	..	4	1	18	19	7	8	3	6	5	1	4	3	..	3	3	3	11	1	..	..
Scarlet Fever ...	177	1	38	121	9	8	..	..	13	18	30	19	8	13	6	5	13	12	15	17	8	..	138
Tyhpus Fever ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever ...	33	..	3	11	6	11	2	..	9	2	10	4	2	2	..	1	..	..	1	2	..	..	22
Continued Fever ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ...	3	..	..	..	..	3	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis ...	464	..	10	93	80	206	69	6	62	50	49	23	25	29	40	14	30	35	23	51	33	..	195
Other Forms of Tuberculosis ...	105	6	22	52	12	10	3	..	5	10	21	8	10	8	11	2	4	3	5	7	11	..	..
Totals ..	1191	13	144	526	126	271	98	13	112	108	157	81	67	75	78	37	62	84	115	115	100	..	580

TABLE 8.

CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1913.

CAUSE OF DEATH.	Nett Deaths at the subjoined Ages of "Residents," whether occurring within or without the District.									Total Deaths in Institutions 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	1604	241	57	44	71	53	232	377	530	..
—Uncertified	..	..	..	..	..	..	..	..	..	..
Enteric Fever	6	..	..	..	..	3	3	..	..	8
Small Pox	..	..	..	..	..	..	..	..	..	..
Measles	30	10	11	7	2	..	..	..	..	9
Scarlet Fever	2	..	1	1	..	..	..	..	..	2
Whooping Cough	10	6	2	1	1	..	..	..	..	..
Diphtheria and Croup	30	..	3	7	18	2	..	..	..	24
Influenza	20	..	1	..	1	..	5	6	7	3
Erysipelas	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	150	..	1	4	6	22	69	48	..	55
Tuberculous Meningitis	19	2	4	5	7	1	..	..	..	5
Other Tuberculous Diseases	17	3	1	1	3	..	5	4	..	11
Cancer, malignant disease	139	..	..	..	1	..	15	67	56	48
Rheumatic Fever	2	..	..	..	1	..	1	..	..	1
Meningitis	14	3	2	2	3	1	1	2	..	5
Organic Heart Disease	158	..	..	..	2	1	20	54	81	29
Bronchitis	137	25	3	4	..	..	5	21	79	34
Pneumonia (all forms)	88	20	6	3	2	2	11	24	20	24
Other diseases of Respiratory Organs	27	1	..	1	3	1	1	9	11	6
Diarrhœa and Enteritis	55	30	14	3	..	..	1	2	5	14
Appendicitis and Typhlitis	12	..	..	..	2	5	2	1	2	14
Cirrhosis of Liver	16	..	..	..	..	..	4	7	5	6
Alcoholism	1	..	..	..	..	..	..	1	..	..
Nephritis and Bright's Disease	52	..	..	..	..	2	8	18	24	20
Puerperal Fever	2	..	..	..	..	..	2	..	..	3
Other accidents and diseases of Pregnancy and Parturition	8	..	..	..	..	1	7	..	..	3
Congenital Debility and Malformation, including Premature Birth	113	111	1	..	..	1	..	..	..	10
Violent Deaths, excluding Suicide	49	4	1	..	8	1	14	11	10	25
Suicide	7	..	..	..	..	..	3	4	..	1
Other Defined Diseases	431	24	4	4	11	8	55	97	228	211
Diseases ill-defined or unknown	9	2	2	1	..	1	..	1	2	..
	1604	241	57	44	71	52	232	377	530	571
SUB-ENTRIES—										
Cerebro-spinal Meningitis	1	..	..	..	..	1	..	..	..	1
Poliomyelitis	..	..	..	..	..	..	..	..	..	..
Pneumonia (other than Broncho-pneumonia)	61	7	2	3	2	2	9	21	15	22

TABLE 9.

CAUSES OF DEATH IN THE MUNICIPAL WARDS DURING THE YEAR 1913.

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.		
eric Fever ..	2	..	2	..	..	1	..	..	..	..	..	1	..	..	6
ll Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
sles	4	4	2	1	..	..	..	..	..	8	6	3	..	2	30
let Fever ..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	2
ooping Cough ..	..	..	1	..	2	..	1	1	2	1	..	1	1	..	10
htheria & Croup	..	3	3	4	2	1	..	..	4	..	7	2	4	..	30
uenza	3	..	2	..	1	3	4	1	1	1	..	1	3	..	20
sipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
hisis	27	16	12	10	3	9	9	5	8	16	5	16	9	5	150
erculous Meningitis ..	..	5	5	..	1	1	3	..	1	1	1	1	..	..	19
er Tuberculous Diseases ..	1	5	1	1	3	..	1	..	..	..	2	3	..	..	17
cer	17	14	11	9	12	6	18	16	11	7	5	8	5	..	139
umatic Fever ..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	2
ingitis	1	3	2	3	..	..	1	1	..	2	..	1	..	..	14
anic Heart Disease	28	13	22	9	10	8	8	9	14	12	4	10	8	3	158
nchitis	19	20	12	11	11	8	10	4	5	7	5	9	10	6	137
umonia (all forms)	15	17	9	5	5	4	7	1	5	4	5	4	6	1	88
er diseases of espiratory Organs	4	3	2	1	..	2	1	3	3	2	2	2	2	..	27
rrhœa & Enteritis	7	13	9	3	4	..	5	..	1	3	6	2	1	1	55
endicitis ..	3	..	1	1	1	2	..	2	..	1	1	..	..	..	12
hosis of Liver ..	..	2	1	3	..	3	..	1	2	..	2	1	1	..	16
holism	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
hritis & Bright's isease	7	8	1	3	6	5	2	3	..	4	3	4	6	..	52
rperal Fever ..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	2
er accidents and iseases of Pregncy & Parturition	..	..	2	1	..	..	1	..	..	1	2	..	1	..	8
genital Debility & alformation (including Premature rth)	12	19	11	8	2	4	6	3	5	5	15	8	14	..	112
nt Death (exuding Suicide) ..	9	12	3	2	2	3	5	..	2	4	4	3	..	1	50
de	2	..	1	..	1	1	..	1	..	..	..	..	1	..	7
r Diseases ..	51	53	37	31	28	24	31	32	32	27	27	28	25	14	440
Totals ..	213	211	153	106	94	85	113	84	96	108	103	108	97	33	1604

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

TABLE 10.

The total Deaths from the seven principal Zymotic Diseases during the year amounted to 122, 38 being of a notifiable and 84 of a non-notifiable character.

	1909.	1910.	1911.	1912.	1913.	
Small Pox	..	..	..	..	..	
Scarlet Fever ..	5	2	5	2	2	Notifiable under the In
Diphtheria	19	16	23	19	30	fectious Disease (Not
Enteric Fever ..	10	10	3	8	6	fication Act, 1889 Death Rate, 0.31.
Measles	..	17	13	18	30	Not notifiable und
Whooping Cough ..	42	11	18	35	10	the said Act. Deat
Diarrhœa	49	28	158	31	44	Rate, 0.67.
Totals	125	84	220	113	122	

TABLE SHOWING DEATHS FROM ALL CAUSES BELONGING TO THE COUNTY BOROUGH OF SOUTHAMPTON DURING THE YEAR 1913 (53 weeks ended 3rd January, 1914) CLASSIFIED ACCORDING TO DISEASES AND AGES. (This Table includes deaths of "Residents" occurring in other Districts, and excludes deaths of "Non-Residents," in accordance with the Rules of the Registrar-General).

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.	
I. GENERAL DISEASES.																
Enteric Fever	...	...	...	...	3	...	3	...	...	...	...	...	...	4	2	6
Measles	10	11	7	2	...	...	...	...	...	...	...	...	...	17	13	30
Scarlet Fever	...	1	1	...	...	...	...	...	...	...	...	...	...	...	2	2
Whooping Cough	6	2	1	1	...	...	...	...	...	...	...	...	...	4	6	10
Diphtheria	...	3	7	18	2	...	...	...	...	...	...	...	...	15	15	30
Influenza	...	1	...	1	...	4	1	2	4	...	5	2	...	6	14	20
Leprosy	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Mumps	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Varicella	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Septicæmia	...	...	...	1	...	...	...	...	...	1	...	...	...	1	1	2
Actinomycosis	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Beri-beri	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1
Pulmonary Tuberculosis	...	1	4	6	22	41	28	22	19	7	...	...	...	91	59	150
Tuberculous Meningitis	2	4	5	7	1	...	...	...	...	...	...	...	...	13	6	19
Tuberculosis of Peritoneum & Intestines	3	...	...	1	...	...	...	...	...	...	...	...	...	4	...	4
Tuberculosis of Spinal Column	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Tuberculosis of Hip Joint	...	...	...	...	...	1	...	1	...	...	...	...	...	2	...	2
Tuberculosis of Skin (Lupus)	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
Tuberculosis of Kidneys	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1
Tuberculosis of Prostate	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Disseminated Tuberculosis	...	1	1	1	...	3	...	...	1	...	...	...	...	5	2	7
Rickets	2	1	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Syphilis	...	...	...	...	1	...	1	1	...	1	...	...	...	1	3	4
Congenital Syphilis	4	1	...	...	...	...	...	...	...	...	...	...	...	3	2	5
Cancer of the Buccal Cavity	...	...	...	1	...	...	1	4	2	1	2	1	...	11	1	12
Cancer of the Stomach, Liver, &c.	...	...	...	...	...	...	2	8	13	11	6	1	...	18	23	41
Cancer of the Peritoneum, Intestines, and Rectum	...	...	...	...	...	1	4	7	5	9	3	1	...	10	20	30

TABLE 11.—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.	
Cancer of the Female Genital Organs ...	...	...	...	...	...	...	4	2	7	8	1	...	...	...	22	22
Cancer of the Breast	...	...	...	...	...	...	2	3	2	5	...	...	...	...	12	12
Cancer of the Skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer of Unspecified Organs	...	...	...	...	...	...	1	2	12	4	2	1	...	14	8	22
Rheumatic Fever	...	...	...	1	...	...	1	...	...	...	...	...	...	...	2	2
Rheumatism	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
Rheumatoid Arthritis	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	2
Diabetes	...	...	...	...	1	1	...	2	3	6	2	...	...	8	7	15
Lymphadenoma	...	...	...	1	...	...	...	1	...	...	...	...	...	1	1	2
Anæmia	...	...	...	...	1	2	1	3	...	...	...	...	...	4	3	7
Purpura	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1
Alcoholism	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
II. Diseases of the Nervous System and of the Organs of Special Sense.																
Encephalitis	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
Cerebro-Spinal Meningitis	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1
Meningitis	3	2	2	3	1	1	...	...	1	1	...	...	...	7	6	13
Locomotor Ataxy	...	...	...	...	...	...	...	3	1	1	...	...	...	4	1	5
Myelitis	...	...	...	...	...	1	...	1	...	1	...	...	...	1	2	3
Lateral Sclerosis	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Paralysis Agitans	...	...	...	...	...	...	...	...	2	...	2	...	...	4	...	4
Cerebral Hæmorrhage	...	...	...	...	...	...	5	8	11	25	11	5	...	28	37	65
Cerebral Softening	...	...	...	...	...	...	2	...	8	8	6	...	...	13	11	24
Hemiplegia	...	...	...	...	...	...	...	1	2	1	2	1	...	2	5	7
Paraplegia	...	...	...	...	...	...	1	...	2	1	...	...	...	3	1	4
General Paralysis of the Insane	...	...	...	...	...	2	6	2	2	...	...	...	...	10	2	12
Melancholia	...	...	...	...	...	1	...	...	1	...	...	...	...	1	1	2
Epilepsy	...	...	...	...	...	3	...	1	...	1	1	...	...	4	2	6

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.	
Chorea	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Neuritis	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
Cerebral Tumour	...	...	...	...	2	1	1	...	...	...	...	...	...	4	...	4
Mastoid Disease	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
Otitis, Otorrhœa	...	...	...	...	...	3	...	...	1	...	...	...	...	2	3	5
III. Diseases of the Circulatory System.																
Pericarditis	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
Myocarditis	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
Infective Endocarditis	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2	2
Valvular Disease of Heart	...	...	...	2	1	3	13	13	23	25	13	2	...	45	50	95
Fatty Degeneration of Heart	...	...	...	...	...	...	...	...	1	6	2	...	...	3	6	9
" Heart Disease "	...	...	...	...	...	...	4	3	14	15	16	2	...	29	25	54
Angina Pectoris	...	...	...	...	...	...	...	3	1	2	1	...	...	6	1	7
Aneurysm	...	...	...	...	...	...	3	2	1	1	...	...	...	7	...	7
Arterial Sclerosis	...	...	...	...	...	...	1	...	8	11	7	2	...	16	13	29
Rupture of Artery	...	...	...	...	...	1	...	...	1	...	...	...	...	1	1	2
Embolism and Thrombosis	...	...	...	1	...	...	1	...	3	2	2	1	...	3	7	10
Varicose Ulcer	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
Epistaxis	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
IV. Diseases of the Respiratory System.																
Laryngitis	...	...	...	...	...	1	...	1	...	...	...	...	...	2	...	2
Goitre	...	...	...	...	...	...	...	...	...	1	1	...	...	1	1	2
Myxœdema	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
Bronchitis	...	...	...	...	...	25	3	4	...	...	2	3	6	15	34	38	6	1	73	64	137
Broncho-Pneumonia	...	...	...	...	...	13	4	...	...	...	...	2	1	2	2	2	1	...	15	12	27
Pneumonia	...	...	...	...	...	7	2	3	2	2	3	6	7	14	7	7	1	...	38	23	61
Empyema	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	2	1	3

TABLE 11.—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.	
Pleurisy	...	...	...	1	...	...	...	1	1	...	2	...	...	1	4	5
Pulmonary Congestion	...	...	...	...	...	...	...	...	...	2	1	...	...	1	2	3
Asthma	...	...	...	1	...	1	...	2	...	1	2	...	...	3	4	7
Emphysema	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	2
Fibroid Disease of Lung	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
Hæmoptysis	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1
V. Diseases of the Digestive System.																
Tonsillitis	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	2
Pharyngitis	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Ulcer of Stomach	...	...	...	...	...	...	1	2	2	1	...	...	...	5	1	6
Gastritis	...	...	...	...	...	...	...	3	1	...	2	...	...	6	5	11
Hæmatemisis	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Acute Vomiting	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
Dilatation of Stomach	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Diarrhœa and Infective Enteritis	...	1	...	...	...	...	...	...	...	...	1	...	...	21	16	37
Enteritis	...	23	11	2	...	...	1	...	...	...	1	2	...	6	5	11
Gastro-Enteritis	...	4	2	1	...	...	...	...	...	...	...	...	...	3	1	4
Colitis	...	3	1	...	...	...	...	...	...	...	...	...	...	1	...	1
Duodenal Ulcer	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	2
Appendicitis	...	...	...	...	...	...	...	...	1	1	1	...	...	2	...	2
Hernia	...	...	...	2	5	2	...	...	1	1	1	...	...	9	3	12
Intestinal Obstruction	...	...	...	...	...	...	...	...	3	...	1	...	...	3	1	4
Intussusception	...	...	...	...	...	...	1	1	...	1	...	...	...	...	3	3
Fæcal Impaction	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Tumour of Intestines	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	1
Acute Yellow Atrophy of Liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Cirrhosis of Liver	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
Lardaceous Disease of Liver	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Enlargement of Liver	...	...	...	...	...	1	3	5	2	3	2	...	...	5	11	16
	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1
	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2

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.	
Cholecystitis	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	2
Peritonitis	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1
Pancreatitis	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
VI. Non-Venereal Diseases of the Genito-Urinary System and Annexa.																
Acute Nephritis	...	...	...	...	1	2	1	...	...	1	...	...	...	2	3	5
Chronic Nephritis	...	...	...	...	1	2	3	8	10	10	12	1	...	28	19	47
Cystitis	...	...	...	...	...	...	1	1	1	...	...	...	...	3	...	3
Stricture of Urethra	...	...	...	...	...	1	1	...	...	...	...	...	...	2	...	2
Rupture of Urethra	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
Prostatitis	...	...	...	...	...	...	...	...	1	2	2	...	...	5	...	5
Tumour of Uterus	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1
Endometritis	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
Ovarian Cyst	...	...	...	...	...	...	...	1	1	...	...	...	...	...	2	2
Salpingitis	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
VII. The Puerperal State.																
Hyperemisis Gravidarum	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Ectopic Gestation	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Placenta Prævia	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1
Post-partum Hæmorrhage	...	...	...	...	...	1	1	...	...	...	...	...	...	...	2	2
Puerperal Fever	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	2
Puerperal Convulsions	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	2
Puerperal Embolism	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
VIII. Diseases of the Skin and of the Cellular Tissue.																
Senile Gangrene	...	...	...	...	...	...	...	...	...	...	4	...	...	1	3	4
Carbuncle	...	...	...	...	...	...	...	1	...	1	...	...	...	2	...	2
Cellulitis	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1

TABLE 11.—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.	
Abscess	...	...	...	...	...	...	...	1	1	...	1	...	...	2	1	3
Ulcer	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1
Bedsore	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
Eczema	1	...	...	...	...	...	...	...	...	1	...	...	...	1	1	2
IX. Diseases of the Bones and of the Organs of Locomotion.																
Abscess of Knee	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Osteitis	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1
Necrosis of Bone	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
X. Malformation.																
Congenital Hydrocephalus	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Malformation of Heart	2	1	...	...	1	...	...	...	...	...	...	...	...	2	2	4
Cleft Palate	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Imperforate Anus	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
Spina Bifida	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Stenosis of Pylorus	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
XI. Diseases of Early Infancy.																
Premature Birth	64	...	...	...	...	...	...	...	...	...	...	...	...	36	28	64
Atrophy, Debility and Marasmus ...	25	...	...	...	...	...	...	...	...	...	...	...	...	12	13	25
Icterus Neonatorium	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Hæmorrhage of Umbilicus	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Melæna Neonatorum	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Atelectasis	4	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4
Injury at Birth	5	...	...	...	...	...	...	...	...	...	...	...	...	3	2	5
Cyanosis	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

TABLE 11.—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.	
XIII. AFFECTIONS PRODUCED BY EXTERNAL CAUSES.																
Suicide—																
Coal Gas Poisoning	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1
Hanging	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1
Cutting Throat	...	...	...	...	...	1	2	1	...	...	...	...	...	4	...	4
Drowning	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
Accident—																
By Coal Gas Poisoning	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
,, Burns or Scalds	1	1	...	2	...	...	1	...	...	...	...	...	...	3	2	5
Injury by Fall	...	...	...	1	...	...	...	3	3	...	4	4	...	6	9	15
,, Drowning	...	...	...	1	1	1	2	3	...	2	...	...	...	10	...	10
,, Machinery	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
On Railways	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1
In Vehicular Traffic	...	...	...	4	...	1	...	...	...	...	...	...	...	4	1	5
By Ships, Boats, or Docks	...	...	...	...	...	2	4	1	...	...	...	...	...	7	...	7
Asphyxiated by Sewer Gas ...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
Overlaid	3	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Homicide—																
Struck on Head with Hammer ...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1
XIII. ILL-DEFINED CAUSES.																
Heart Failure	...	...	...	...	...	...	...	...	1	2	...	...	...	1	2	3
Marasmus over 1 year of age	...	2	1	...	...	...	...	...	...	...	...	...	...	2	1	3
"Found Dead"	2	...	...	...	1	...	...	...	...	...	...	...	...	3	...	3
Totals	241	57	44	71	52	103	129	151	226	246	221	61	2	845	759	1604

TABLE 12.

SHOWING MARRIAGE RATE, BIRTH RATE, DEATH RATE, ZYMOTIC DEATH RATE AND INFANTILE MORTALITY FOR THE OLD CIVIL PARISHES OF THE BOROUGH, FOR THE YEAR 1913.

District.	Marriage Rate.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality (Deaths under One Year per 1000 Births registered).
Whole Borough ..	16.86	23.78	12.90	0.98	81.5
Town Proper		23.70	14.25	1.00	86.8
Portswood & Bitterne Park		24.13	11.42	0.75	76.0
Shirley, Freemantle, and Millbrook ..		23.70	11.41	1.11	75.4

TABLE 13.

SHOWING NUMBER AND DESCRIPTION OF CASES OF INFECTIOUS DISEASE OCCURRING IN EACH OF THE FOUR QUARTERS OF 1913.

Disease.	Quarter ending.				Total for Year.	Mortality
	March. 30th.	June 29th.	Sept. 30th.	Dec. 30th.		
Small-pox	..	..	1	..	1	..
Scarlet Fever	41	44	43	49	177	2
Diphtheria	52	43	61	201	357	30
Enteric Fever	7	4	5	17	33	6
Puerperal Fever	1	0	1	1	3	2
Erysipelas	13	15	10	13	51	0
Total	114	106	121	281	622	40

TABLE 14.

SHOWING ALL DISEASES NOTIFIED DURING THE PAST TEN YEARS, ALSO TOTAL ADMISSIONS TO HOSPITAL AND HOSPITAL SHIP, INCLUDING ISOLATION OF CASES IMPORTED BY VESSELS AND REMOVED FROM NEIGHBOURING DISTRICTS.

DISEASES.	1904.		1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.		1913.	
	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.
Small Pox	1	4	17	22	..	1	7	8	3	..	1	1	..	1	..	1	2	5	1	1
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	158	119	225	189	262	239	204	199	248	197	222	195	208	187	352	294	192	163	357	244
Membranous Croup	..	..	4	4	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	49	..	46	1	56	1	62	..	74	..	92	..	67	..	69	..	72	..	51	..
Scarlet Fever	113	109	140	139	68	78	165	182	536	401	424	339	219	219	195	186	288	246	177	163
Typhoid Fever	19	23	34	44	15	30	21	39	37	44	53	53	55	62	20	24	13	36	33	31
Puerperal Fever	3	..	4	..	8	1	4	2	7	1	9	..	4	..	4	..	5	..	3	..
Measles	..	3	..	42	..	49	..	5	..	52	..	6	..	4	..	25	..	22	..	22
Suspected Plague, Adenitis	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken Pox	..	2	..	4	..	11	..	29	..	11	..	8	..	6	..	4	..	9	..	..
Other Diseases	..	34	..	22	..	6	..	6	..	27	..	8	..	7	..	9	..	7	..	4
Pulmonary Tuberculosis	..	1	..	1	..	4	..	24	..	4	..	..	..	22	..	31	339	96	464	195
Other forms of Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	105	..
Cerebro-Spinal Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	343	296	470	468	410	422	464	494	905	737	801	610	553	508	640	574	912	584	1191	660

TABLE 15.

VACCINATION RETURNS.

Year.	Births.	Successfully Vaccinated.	Died Unvaccinated.	Insusceptible to Vaccination.	Declarations of Conscientious objection	Postponed and whereabouts unknown or removed to other districts.	Total.
1891	1714	1365	157	4	...	188	1714
1892	1646	1312	178	8	...	147	*1646
1893	1701	1407	180	16	...	98	1701
1894	1796	1496	185	28	...	87	1796
1895	1874	1560	207	16	...	91	1874
1896	1912	1577	231	18	...	86	1912
1897	1886	1580	195	15	...	96	1886
1898	1847	1491	218	19	...	119	1847
1899	1802	1425	245	12	...	120	1802
1900	1751	1414	217	7	...	113	1751
1901	1821	1502	202	6	...	101	1821
1902	1739	1466	163	3	...	107	1739
1903	1697	1459	152	6	...	80	1697
1904	1683	1435	167	9	...	72	1683
1905	1543	1319	153	4	...	67	1543
1906	1570	1312	150	6	...	102	1570
1907	1504	1240	149	3	...	112	1504
1908	1585	1203	134	9	...	239	1585
1909	†2681	1889	197	14	...	581	2681
1910	†2931	1863	187	5	651	225	2931
1911	†2851	1630	263	9	771	178	2851
1912	†2823	1524	164	8	908	219	2823

* One Child had Small-pox.

† Returns for whole Borough.

ABSTRACT FROM THE METEOROLOGICAL REGISTER KEPT AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON, DURING THE YEAR 1913.

Month.	Barometer.						Temperature.									Rainfall.				Sunshine.		
	Mean at		Maximum Reading.	Date.	Minimum Reading.	Date	Mean at		Mean.		Approx. Mean.	Highest Maximum.	Date.	Lowest Minimum.	Date.	Total in Inches.	Greatest quantity in 24 hours.	Date.	No. of days on which .01 or more fell.	Total No. of hours.	Maximum No. of hours.	Date.
	9 a.m.	9 p.m.					9 a.m.	9 p.m.	Max. in Air.	Min. in Air.												
Jan. ...	29.831	29.794	30.33	26th	29.12	20th	42.4	43.1	47.7	38.1	42.9	51.9	23rd	26.0	13th	5.265	0.930	11th	24	36.7	5.8	26th
Feb. ...	30.220	30.189	30.71	12th	29.55	1st	40.8	41.9	46.9	39.9	43.4	54.2	4th	28.5	19th	1.245	0.370	1st	11	77.3	7.6	21st
March ...	29.932	29.912	30.65	9th	29.05	19th	44.6	44.8	51.6	39.5	45.6	57.3	30th	29.4	18th	3.445	0.385	21st	22	98.0	7.8	5th & 8th
April ...	29.884	29.882	30.23	9th	29.42	27th	48.4	47.0	54.8	41.3	48.1	66.2	23rd	28.0	13th	3.035	0.690	29th	18	123.4	10.4	20th
May ...	29.934	29.939	30.34	24th	29.43	4th	55.7	53.3	65.8	47.2	56.5	78.0	27th	36.0	7th	3.235	0.970	29th	12	217.5	13.4	26th
June ...	30.131	30.134	30.42	28th	29.82	5th	59.5	57.5	66.3	51.0	58.7	82.0	29th	44.0	9th	0.705	0.230	19th	11	205.8	14.2	29th
July ...	30.084	30.082	30.38	1st	29.73	6th	59.8	59.8	66.0	53.3	59.7	76.3	31st	48.2	9th	0.965	0.270	10th	12	139.2	13.3	20th
August	30.083	30.074	30.30	26th	29.75	29th	62.2	61.3	69.5	53.9	61.7	75.4	26th	47.0	26th	2.080	1.150	31st	10	170.2	12.6	1st
Sept. ...	29.978	29.970	30.34	8th	29.32	13th	58.5	57.7	66.0	53.3	59.7	71.5	27th	46.3	15th	2.130	0.610	1st	12	139.9	10.7	8th
Oct. ...	29.879	29.875	30.46	13th	29.24	29th	53.9	52.4	60.3	48.8	54.6	65.2	25th	39.5	24th	4.260	0.700	20th	19	82.5	6.5	25th
Nov. ...	29.948	29.956	30.48	28th & 29th	29.24	12th	48.3	48.9	54.8	43.3	49.1	60.0	11th	29.0	23rd	3.690	0.940	21st	19	78.0	7.1	22nd
Dec. ...	30.145	30.159	30.67	21st & 31st	29.41	3rd	41.7	42.5	46.9	38.5	42.7	56.0	1st	28.0	31st	1.910	0.770	23rd	12	49.6	6.2	31st
For the year ...	30.004	29.997	30.71 12th Feb.	12th Feb.	29.05 19th Mar.	19th Mar.	51.3	50.9	58.1	45.7	51.9	82.0	29th June	26.0	13th Jan.	31.965	1.150	31st Aug.	182	1418.1	14.2	29th June
For 10 years, 1903–1912	29.954	29.948	30.974 29/1/05	29/1/05	28.638 4/12/09	4/12/09	51.4	49.7	57.9	44.2	51.0	89.1	22/7/11	11.0	3/3/09	32.942	2.480	5/6/05	176	1689.3	15.5	14/6/10

This Table has been supplied by the courtesy of Colonel C. F. CLOSE, C.M.G., R.E., Director-General of Ordnance Survey.

Analyst's Department.

ANNUAL REPORT

For the Year ended 31st December, 1913.

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.—Sale of Food and Drugs Acts.

The number of samples submitted under the above Acts during the year 1913 was 545.

Of this number 442 samples were submitted by Inspectors 68 by Residents in the Borough, 10 by Residents outside the Borough, and 25 by the Borough of Newbury.

In the following tables the samples received from outside the Borough and from 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 of Samples.	Number of Samples Adulterated.	Percentage of Samples Adulterated.
Bread and Butter	1	...	...
Butter	101	3	2.97
Cheese	17	...	...
Coffee	23	4	17.38
Cream	10	...	...
Flour	8	...	...
Ginger (Ground)	5	1	20
Lard	37	...	...
Margarine	5	...	...
Milk	261	26	9.96
Do. (Condensed)	3	...	...
Do. (Human)	1	...	...
Do. (Separated)	1	...	...
Mustard	6	...	...
Olive Oil	4	...	...
Pepper	23	...	...
Vinegar	5	...	...
Totals	511	34	6.65

The adulterated samples and amount of Adulteration, prosecutions and result of proceedings are given in Table II.

TABLE II.

Article Analysed.	No. on Register.	Nature and Amount of Adulteration.	Action taken.	Result.	
				Fines.	Costs.
Butter	326	100% margarine, containing 25% of butter	Test sample		
,,	378	100% margarine containing 23% of butter	Summoned	£1	6/6
,,	425	100% margarine containing 50% of butter	Test sample		
Coffee	62	33% of chicory	Test sample		
,,	89	33.11% of chicory	Summoned		4/-
,,	336	70% of chicory	Test sample		
,,	383	75% of chicory	Summoned	£2	10/6
Ginger	332	40% of calcium carbonate	Test sample		
Milk	49	2.9% added water	None		
,,	168	3.33% fat deficient	,,		
,,	170	6.66% ,,	,,		
,,	173	6.66% ,,	,,		
,,	176	3.33% ,,	,,		
,,	178	3.33% ,,	,,		
,,	182	3.33% ,,	,,		
,,	186	3.33% ,,	,,		
,,	293	1.33% fat deficient and 2.58% added water	Summoned		8/-
,,	294	2.66% fat deficient and 8.2% added water	,,	£2	8/6
,,	295	2.9% added water	,,		8/0
,,	296	11.05% ,,	,,	£2	8/6
,,	340	8.66% fat deficient	Cautioned		
,,	362	11.33% fat deficient and 3.41% added water	Summoned	£1	6/6
,,	419	6.33% fat deficient	Cautioned		
,,	p. 22	40% fat deficient	Private		
,,	p. 24	6.6% fat deficient	,,		
,,	p. 26	6.6% ,,	,,		
,,	p. 27	13.33% ,,	,,		
,,	p. 6	14.94% added water	,,		
,,	p. 10	3.33% fat deficient and 17.88% added water	,,		
,,	p. 71	50% fat deficient and 6.47% added water	,,		
,,	p. 73	86% fat deficient	,,		
,,	p. 75	82.6% ,,	,,		
,,	p. 81	11% fat deficient and 8.47% added water	,,		

The total fines for the year amounted to £8 10s., and the total costs to £2 10s. 6d.

The number of samples analysed is four more than in 1912.

The number of samples from Inspectors is 10 more than n 1912.

BUTTER.

The number of samples analysed was 101, being 10 more han in 1912.

Three samples, or 2.96 per cent., were adulterated.

These adulterated samples are remarkable, as in every case t was not simply the substitution of margarine for butter, but rdinary margarine was mixed with butter.

In defence it was stated that the mixture was accidental. t must have been a recurring accident, for the test sample aken from the same shop six weeks previously was of the same haracter, but the prosecuting Solicitor was not permitted to roduce this evidence.

This mixing of butter and margarine seems to be a common ractice, the detection of which adulteration is difficult, because he article is not exposed for sale, and the Inspector does not ee it.

Again, it is found that a stranger is supplied with a genuine rticle, and regular customers are unwilling to help the Inspectors.

Two samples only were official.

COFFEE.

The Justices, as a rule, are inclined to view the addition of hicory to coffee lightly, and inflict merely nominal fines, but n the case of Sample No. 383 they expressed the opinion, not-ithstanding a clever defence, that it was a bad case, and made ne penalty £2 and costs.

Four samples were test samples.

CREAM.

Since the regulations as to the sale of cream were published e have been unable to get an unlabelled article.

Whenever cream is asked for " Preserved Cream " is supplied n vessels properly labelled, and the boric acid is always well ithin the limit of 0.5 per cent. stated on the label.

INGER.

This was a sample of ground ginger containing lumps of calcium carbonate. A second sample from the same source contained only a slight excess of lime, and from information subsequently received it appears that alterations were in progress at the time, and that the calcium carbonate was accidentally present.

MILK.

The number of samples analysed was 261, or 20 more than in 1912.

The percentage of Adulterated samples was 9.96, compared with 11.38 per cent. in the previous year.

MONTHLY AVERAGES.

	Fat.	Non-Fatty Solids.	Total Solids.
January ...	3·74	8.92	12.66
February ...	3·54	8.82	12.42
March ...	3·78	8.83	12.61
April	4.11	8.79	12.90
May	3.83	9.72	13.55
June	3.46	8.79	12.25
July	3.70	8.71	12.41
August ...	3·43	8.81	12.24
September ...	3·93	8.81	12.74
October ...	4.09	8.88	12.97
November ...	3.96	9.18	13.14
December ...	3.64	8.87	12.59

The month of April showed the highest per cent. of fat, and May the highest percentage of non-fatty solids.

June, July, and August were the months showing milk of poorest quality, and April, May, October and November yielded milk of best quality.

It will be seen from the above figures that the poorest month gave milk considerably above the limit of 3 per cent. fat, and 8.5 per cent. non-fatty solids.

COMPOSITION OF MILK SUPPLY.

Table III. shows the composition of genuine samples for the past seven years.

TABLE III.

ear ...	1907.		1908.		1909.		1910.		1911.		1912.		1913.	
ource ...	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private
otal Solids	12.67	12.47	12.57	12.55	12.73	12.74	12.61	12.62	12.48	12.60	12.48	12.54	12.62	13.19
at	3.85	3.55	3.67	3.68	3.82	3.87	3.75	3.76	3.72	3.77	3.63	3.64	3.71	4.33

The general averages of genuine samples were :—

	1907	1908	1909	1910	1911	1912	1913
Total Solids...	12.63%	12.56%	12.73%	12.61%	12.49%	12.48%	12.73%
Fat	3.79%	3.67%	3.82%	3.75%	3.73%	3.63%	3.83%

The averages for adulterated samples for the seven years were :—

TABLE IV.

ear ...	1907.		1908.		1909.		1910.		1911.		1912.		1913.	
ource ...	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private
otal Solids	11.03	11.75	11.26	11.04	11.36	11.30	11.40	11.32	10.45	9.95	11.30	11.82	11.53	10.36
at	2.78	2.85	2.78	2.62	3.04	2.59	2.92	3.16	3.07	3.00	3.00	2.85	2.90	2.16

The general average of supply for 1913 shown above is 12.73 per cent. of total solids, containing 3.83 per cent. of fat, which is a marked improvement on the average for 1912.

I would again point out the desirability of the farmer selling his milk by quality on a basis of standard price calculated on the unit of one-half per cent. (0.5) fat, with a percentage added or deducted as the price advanced above this standard or fell below it.

The farmers are very suspicious of this, because, they say, they would have no check upon the person making the determination of the fat.

I would suggest the formation on co-operative principles of depots for definite districts to which the farmers would deliver their milk. Samples of each consignment would be taken, the fat determined, and the price fixed according to standard.

The milk so received would be mixed and sold from the depot to the dairymen.

The advantages of such a system would be :—

1. A more uniform supply of milk, as to quality, to the consumer.
2. There would be no incentive to the farmer to adulterate his milk.
3. The farmer would have an incentive to improve his stock and their feed.
4. Such improvement would improve his manure and also his land.
5. All consignments would be from the depot, would be greater in quantity and command better railway rates.
6. The limit for fat and non-fatty solids could be raised without injury to the farmer, and honest retailer.

In connection with advantage No. 4 the reply received from farmers is invariably " Umph ! and then up would go the rent of my farm."

In a case before the Justices in the latter part of 1913, the defence was that the milk was sold as it came from the cows. In his evidence the farmer said the cattle were turned out on water meadows, and fed on " Brewer's grains and cabbages." No hay, roots, or cake being used for feeding.

Under present arrangements this man was getting the same price per gallon for his milk as another farmer whose milk was quite 60 per cent. better.

Seven samples were test samples.

The remaining articles were all genuine and present no feature calling for comment.

SUPPLEMENTARY REPORT.

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

At the request of the Local Government Board the articles taken under the above Act are not included with the samples taken under the Food and Drugs Acts, but are dealt with annually in a Supplementary Report.

The number of articles received under the above Act was 25, namely :—

	Samples.
Beef (tinned)	2
Butter	20
Cream	1
Milk (condensed)	2

BEEF.

The contents of the two tins of beef were in a state of decomposition, and when cut into showed dark patches and gave off an unpleasant odour.

The interior surfaces of the tins were covered with black patches, and around the soldering was a bulky mass of black powder, which on further examination was proved to contain lead.

BUTTER.

Two of the 20 samples received were adulterated, containing respectively 17.41 and 17.05 per cent. of water.

Eighteen samples contained boric acid, the quantity ranging from 0.07 to 0.46 per cent.

CREAM.

This was " Preserved Cream " containing over 40 per cent. of fat and 0.16 per cent. of boric acid.

MILK (CONDENSED).

One of the two samples was in a state of decomposition, being liquid, strongly acid, and discoloured.

The other sample was in a good condition.

SECTION II.—GENERAL.

(A) RAG FLOCK ACT.

Fourteen samples of rag flock were submitted, and all of them complied, as to cleanliness, with the requirements of the Act.

This Act was passed to prevent the use of dirty clothes and rags, both native and imported, which were being teased (devilled) into flocks used for bedding, mattresses, etc., without having undergone any process of cleansing and disinfecting.

(B) OTHER SOURCES.

Borough Engineer's Department	4
Education Department	2
Medical Officer's Department	93
Private	35
Waterwork Department	12
Water for hardness	1045
Total	1191

Borough Engineer's Department.

The samples from this department were plaster and cement used in new buildings, owing to their emitting unpleasant odours when used, and scrapings from ceilings and walls which had shown discolouration.

Education Department.

Two samples of white lead were examined, and one sample contained zinc carbonate.

Medical Officer's Department.

The samples were all water from the Borough supplies and from wells supplying houses. Three wells were condemned and closed.

Private.

The articles submitted privately were: Cocoanut oil, 1 sample; egg yolk, 2 samples; human organs for toxicological analysis, 10 samples; lard, 5 samples; liquids, 2 samples; margarine, 1 sample; "Oleo," 1 sample; water, 9 samples.

Waterworks Department.

The samples were all water, and were analysed in consequence of complaints and for special purposes of the department.

Water for Hardness.

The softening of the supply during the year has been :—

For the Otterbourne supply about the same as for 1912, the averages showing 0.1° difference.

The supplies from the South Hants Company show an increase in the averages of 0.6° for the water at Bitterne Park, and a decrease of 0.63° in the Shirley district.

Summary of Hardness for the Year 1913.

Source.	Hardness.		
	Highest.	Lowest.	Average.
Otterbourne—Oxford Avenue	15.22°	2.56°	8.18°
South Hants—Bitterne Park	12.23°	2.36°	7.41°
Do. Albany Road	13.70°	4.30°	8.83°

	£	s.	d.
Fees received for year ending Dec. 31st, 1913	69	11	6
Fees outstanding on Dec. 31st, 1913 ...	5	19	0

Summary of Samples for the Year 1913.

Food and Drugs	545
Public Health Regulations	25
Rag Flock Act	14
General	1191
Total	1775

I am, Gentlemen,

Your Obedient Servant,

J. BRIERLEY,

Public Analyst.