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METROPOLITAN BOROUGH OF WOOLWICH

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ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

SIDNEY DAVIE **S**., M.A., M.D., Oxon.; D.P.H.CAMB.

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METROPOLITAN BOROUGH OF WOOLWICH

ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

STEWART DAVIS, M.D., F.R.S., F.R.C.S.



1913.

SUMMARY OF STATISTICS, 1917.

Area of Borough	...	...	...	...	8,276.6 acres.
Population - Census, 1911	...	...	...	...	121,376
do. estimated to middle of 1917, civil					146,503
				Total	157,973
Inhabited Houses - Census, 1911	...	...	...	...	21,463
Persons to an Acre	...	...	...	...	14.7
Persons to a House-Census, 1911	...	...	...	...	5.65
Marriages	...	...	...	...	1,445
Births	...	...	...	...	2,698
Birth Rate	...	...	...	...	17.1
Deaths	...	...	...	...	1,550
Death Rate	...	...	...	...	10.6
Infantile Mortality	...	...	...	...	79 per 1,000 births.

P R E F A C E

To the Mayor, Aldermen and Councillors of the
Metropolitan Borough of Woolwich.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present you with my 17th Annual Report on the Health of Woolwich. The report is much abbreviated owing to war conditions and the usual tables are omitted. They have, however, been prepared and are kept for reference.

The general health of the Borough has been wonderfully good in spite of the enforced change of diet and other conditions caused by the war.

The reduction in infant mortality has not quite kept pace with that of the general death rate, although for the first time Woolwich had the lowest infant mortality of any metropolitan borough. No doubt the favourable atmospheric conditions, and the reduction in alcoholism, as the result of the action of the Liquor Control Board, are largely responsible for the low death rate.

I have to acknowledge with thanks the support which you have given to my proposals for improving the public health.

I am,

Mr. Mayor, Ladies and Gentlemen,

Your obedient Servant,

SIDNEY DAVIES.

1917

To the Mayor, Aldermen and Councilors of the
Metropolitan Borough of Woolwich.

Mr. Mayor, Ladies and Gentlemen.

I have the honor to present you with my 17th Annual
Report on the Health of Woolwich. The report is much abbreviated
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I have to acknowledge with thanks the support which you
have given to my proposals for improving the public health.

I am,

Mr. Mayor, Ladies and Gentlemen,

Your obedient servant,

STURGEY DAVIES.

SEVENTEENTH ANNUAL REPORT

on the

HEALTH OF THE METROPOLITAN BOROUGH OF WOOLWICH

Year ending 31st December 1917.

P A R T 1.

STATISTICS.

Population.

1. The population of the Borough of Woolwich, as estimated at the Census of 1911, was 121,376. The estimated civil population to the middle of 1917 is 146,503.

The population of the four Registration Districts at the last three Censuses was as follows:-

	Census 1891	Census 1901	Census 1911	Estimated to middle of 1917
Woolwich Parish	40,848	41,625	36,710	33,605
Plumstead Parish West)		(38,569	40,328	43,098
)	52,436	(
East)		(29,758	30,888	39,424
Eltham Parish	5,710	7,226	13,450	30,376
	98,994	117,178	121,376	146,503

The estimated increase of the civil population from June 1916 to July 1917 is 9,780.

The following figures show how the number of persons to a house in Woolwich and Plumstead has varied during the past four Censuses:-

SEVENTEENTH ANNUAL REPORT

on the

HEALTH OF THE METROPOLITAN BOROUGH OF WOOLWICH

Year ending 31st December 1917.

TABLE I.

STATISTICS.

Population.

1. The population of the Borough of Woolwich, as estimated at the Census of 1911, was 181,376. The estimated civil population to the middle of 1917 is 146,808.

The population of the four Registration Districts at the last three Censuses was as follows:-

	Census 1901	Census 1911	Estimated to middle of 1917
Woolwich Parish	40,849	41,835	35,608
Plumstead Parish (West)	32,458	(38,889)	45,098
(East)	(29,758)	30,888	39,434
Stipon Parish	6,719	7,336	30,379
	108,924	117,158	146,505

The estimated increase of the civil population from June 1916 to July 1917 is 9,700.

The following figures show how the number of persons in a house in Woolwich and Plumstead has varied during the past four Censuses:-

				<u>WOOLWICH</u>	<u>PLUMSTEAD</u>
Census	1891	...	...	-	6.08
,,	1896	...	...	-	6.14
,,	1901	...	...	7.85	6.05
,,	1911	...	...	7.27	5.34

2. The estimated population of soldiers in Barracks in March 1917 was 11,470, making the total population 157,973. The civil population is used for all statistical rates except the Borough birth rate.

The Registrar-General estimates the civil population at 130,213.

In the Annual Report for 1913, on pages 15 to 19, tables were given showing the age distribution and condition as to marriage of the population, the proportion of males and females compared with London and England, and the classification of buildings, and in the Report for 1914, the number to a house in each Ward.

3. The following table shows the number of new houses certified for water each year since the Census of 1911:-

New Houses,	April 1st. to June 30th, 1911	34
,,	July 1st. 1911 to June 30th, 1912	93
,,	July 1st. 1912 to June 30th 1913	141
,,	July 1st. 1913 to June 30th, 1914	254
,,	July 1st. 1914 to June 30th, 1915	170
,,	July 1st. 1915 to June 30th, 1916	139
,,	July 1st. 1916 to June 30th, 1917	36

New Houses, 1916-7:-

Woolwich	...	-
West Plumstead	...	4
East Plumstead	...	7
Eltham	...	25

The following are the numbers of new houses and huts erected by the Government for Munition Workers from 1915-1917:-

Houses	1,269	Huts	1,904
--------	-------	------	-------

4. Unoccupied Houses. At the 1901 Census, there were 234 unoccupied houses in the Borough, viz., 46 in Woolwoch, 86

Woolwich

Woolwich

1901	1901	1901	1901
1901	1901	1901	1901
1901	1901	1901	1901
1901	1901	1901	1901

The estimated population of Woolwich in 1901 was 11,477, making the total population of the Borough 11,477. The civil population is used for all statistical purposes except the Borough birth rate.

The Registrar-General estimates the civil population at 11,477.

In the Annual Report for 1901, on page 15 to 18, tables were given showing the age distribution and condition as to marriage of the population. The proportion of males and females compared with London and England, and the classification of buildings, and in the Report for 1901, the number of houses in each ward.

The following table shows the number of new houses erected for water each year since the Census of 1901:-

New Houses, April 1st, to June 30th, 1901	July 1st, 1901 to June 30th, 1902	July 1st, 1902 to June 30th, 1903	July 1st, 1903 to June 30th, 1904	July 1st, 1904 to June 30th, 1905	July 1st, 1905 to June 30th, 1906	July 1st, 1906 to June 30th, 1907
24	24	24	24	24	24	24
24	24	24	24	24	24	24
141	141	141	141	141	141	141
224	224	224	224	224	224	224
170	170	170	170	170	170	170
139	139	139	139	139	139	139
38	38	38	38	38	38	38

New Houses, 1901-7:-

Woolwich	24
West Ham	24
East Ham	24
Waltham	24

The following are the numbers of new houses and flats erected by the Government for Munition Workers from 1901-1917:-

Houses	1,309	Hats	1,004
--------	-------	------	-------

At the 1901 Census, there were 224 unoccupied houses in the Borough, viz., 40 in Woolwich, 20

in Plumstead, and 102 in Eltham. At the 1911 Census, there were 1,296, viz., 450 in Woolwich, 387 in West Plumstead, 250 in East Plumstead, and 209 in Eltham.

In January, 1916, the Rate Collectors found 57 houses unoccupied, viz., 7 in Woolwich, 13 in West Plumstead, 5 in East Plumstead, and 32 in Eltham. There are now practically no houses fit for occupation to let.

BIRTHS.

5. The number of births was 2,698, viz., 657 in Woolwich parish, 752 in West Plumstead, 736 in East Plumstead, and 553 in Eltham (corrected for children born in the Infirmary, and the Wood Street Home for Mothers and Babies, whose parents reside outside the Borough, and births in outlying institutions added on). The birth-rate (calculated on the total population) 17.1 compares with 21.7 in 1916, and with 23.7 the average for the ten years 1906-15. The rate for the County of London was 17.5.

Notification of Births. 2,550 live births were notified under the Notification of Births Act (1,272 males, 1,273 females, 5 not stated). This is at the rate of 95 per cent of the registered births, compared with 94, 92, 89, 97 and 86 per cent in the five preceding years. 1,536 births were notified by midwives, 137 by the Home for Mothers and Babies, 325 by medical practitioners and 552 by other persons. 88 still-births were notified (64, 79, 59, 75 and 77 in 1912 to 1916 respectively). Of the still-born, 44 were males and 44 females.

The Notification of Births Act was adopted on March 1st. 1908. There were 148 births last year which were not notified. All the midwives and Doctors who neglected to notify were cautioned. The excuse generally given was that the notification must have been lost in the post.

6. The following table gives the birth rate of the Borough during the years 1901-5, 1906-10, 1911-1915, 1916 and 1917, and, for the purposes of comparison, the corresponding rates of the neighbouring Boroughs, London, and England:-

in Plumstead, and 102 in Eitham. At the 1911 Census, there were 1,298, viz., 480 in Woolwich, 887 in West Plumstead, 820 in East Plumstead, and 809 in Eitham.

In January, 1918, the Rate Collectors found 87 houses as occupied, viz., 7 in Woolwich, 15 in West Plumstead, 8 in East Plumstead, and 52 in Eitham. There are now practically no houses left for occupation as yet.

BIRTHS.

3. The number of births was 2,888, viz., 887 in Woolwich parish, 788 in West Plumstead, 788 in East Plumstead, and 885 in Eitham (corrected for children born in the Eitham, and the Wood Street Home for Mothers and Babies, whose parents reside outside the Borough, and births in nursing institutions added on). The birth-rate (calculated on the total population) 17.1 compares with 21.7 in 1916, and with 28.7 the average for the ten years 1906-15. The rate for the County of London was 17.8.

Notification of Births. 2,880 live births were notified under the Notification of Births Act (1,272 males, 1,278 females, 5 not stated). This is at the rate of 98 per cent of the registered births, compared with 94.98, 98.97 and 98 per cent in the five preceding years. 1,888 births were notified by midwives, 187 by the Home for Mothers and Babies, 825 by medical practitioners and 888 by other persons. 88 still-births were notified (64.79, 88.75 and 77 in 1916 to 1918 respectively). Of the still-births, 44 were males and 44 females.

The Notification of Births Act was adopted on March 1st, 1908. There were 148 births last year which were not notified. All the midwives and Doctors who neglected to notify were censured. The excuse generally given was that the notification must have been lost in the post.

4. The following table gives the birth rate of the Borough during the years 1901-5, 1906-10, 1911-15, 1916 and 1917, and, for the purpose of comparison, the corresponding rates of the neighbouring Boroughs, London, and England:-

BIRTH RATE

	1901-5	1906-10	1911-15	1916	1917
Greenwich Borough	27.6	26.5	25.1	24.6	21.1
Lewisham	25.7	23.3	20.2	20.4	16.5
West Ham	33.1	31.4	29.7	28.8	23.2
East Ham	33.8		24.4	22.1	18.5
Erith	34.1		24.8	23.1	20.0
London	28.2	26.5	24.7	23.0	17.4
England & Wales	28.2	26.0	23.5	21.6	17.8
Woolwich Borough	29.2	25.3	22.2	21.7	17.1

7. The following table gives the birth-rate for the Borough and each Registration District for the five past quinquennia and for 1916 and 1917, the rates for the Registration Districts being calculated on the civil population. Correction has been made for births in the Infirmary, the Wood Street Home for Mothers and Babies and outlying institutions, and the births distributed to the parishes to which they properly belong.

West Plumstead and Eltham had the lowest birth-rate of the four Registration Districts. Although the birth-rate in Eltham has fallen very much since 1916, it was still higher than in the five years 1911-15. The greatest decrease since 1911-15 is in the parish of Woolwich.

	1891 to 1895	1896 to 1900	1901 to 1905	1906 to 1910	1911 to 1915	1916	1917
Woolwich Borough	32.5	30.2	29.2	25.3	22.2	21.7	17.1*
Woolwich Parish	31.1	30.1	29.0	27.9	25.2	21.5	19.6 ^o
Plumstead - West)					20.7)	21.6)	17.4 ^o
East)	33.3	31.0	30.1	24.7			
Eltham Parish	22.8	20.6	24.0	21.6	22.7)	20.5)	18.7 ^o
					17.3	23.5	18.2 ^o

*Total population used.

^oCivil population used: number of soldiers not known, but very small.

8. Illegitimate Births. 101 of the births registered were illegitimate, giving a rate of 37 per 1,000 births, compared with 17, 23, 21, 29 and 34 in the five preceding years. The steady increase since 1914 is probably but a very partial measure of the increased immorality due to war conditions.

MARRIAGES.

9. There were 1,445 marriages. The marriage-rate was 19.7 compared with 17.7-27.1 and 23.7, in the three preceding years. The marriage-rate in England and Wales was 13.8 and was the lowest on record.

DEATHS.

10. Table 1 gives the gross and net deaths and death rates in 1917 and each of the past fifteen years, and shows how the net deaths are arrived at.

11. The net deaths were 1,550, and the net death-rate 10.6 compared with 13.7 and 12.3 in the two preceding years and 12.5 the average of the ten years 1905-1914. This is the lowest rate ever recorded.

12. The following table shows the death-rate of Woolwich compared with London and the adjoining Boroughs:-

		<u>1917</u>
England and Wales	...	14.4
96 great towns	...	14.6
London	...	15.0
Greenwich	...	15.1
Lewisham	...	11.6
West Ham	...	14.5
East Ham	...	11.4
Erith	...	9.6
WOOLWICH	...	10.6

Woolwich had the lowest death-rate of all the Metropolitan Boroughs.

13. The following table gives the average death-rate in each Registration District of the Borough during the past six quinquennial periods, 1916 and 1917.

Woolwich parish had the highest death-rate and Eltham the lowest.

	1886 to 1890	1891 to 1895	1896 to 1900	1901 to 1905	1906 to 1910	1911 to 1915	1916	1917
Woolwich Borough	-	17.2	16.9	13.9	12.5	12.7	12.3	10.6
Woolwich Parish*	20.4	19.3	20.1	16.5	14.8	14.9	14.3	13.9
Plumstead - West)	16.4	16.0	15.1	12.9	12.0	13.2)	12.6)	11.8
East)						11.8)	10.2)	8.4
Eltham Parish	-	13.0	14.6	10.2	10.1	8.9	8.5	8.0
London	20.0	19.8	18.5	16.1	14.9	14.7	14.3	15.0

*Three years - 1888, 1889 and 1890.

This table shows that the diminished death-rate affected each part of the Borough, but Woolwich parish least, and that there was an increase in London. The marked fall in the death rate though no doubt largely attributable to the satisfactory sanitary and industrial conditions, absence of poverty and diminished drinking, must not be put down entirely to these causes. It is partially due to the influx of a young adult population with a low mortality.

14. The following table gives the numbers dying at various ages in the past twelve years from all causes, and the deaths at all ages from certain diseases not hereafter referred to:-

Annual Deaths -- 1903 to 1917.

Year	Age Period											
	Under 1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75 & over
1903-7 (aver.)	402.4	102.8	43.4	27	31.4	44.8	104.2	138.4	155.6	174.8	201.4	171
1908-12 (aver.)	250.4	131.4	41.4	23.4	33.2	33.2	87.4	127	146.6	199.2	211.6	203.8
1913	229	93	34	25	44	48	109	134	177	208	240	239
1914	239	141	52	33	47	35	97	147	184	225	246	244
1915	268	136	62	28	47	41	93	170	210	246	269	263
1916	215	105	40	33	41	37	99	160	200	224	269	260
1917	214	113	28	34	41	33	96	116	179	221	243	232

Deaths from	Average 1903-7	Average 1908-12	1913	1914	1915	1916	1917
Apoplexy and all other diseases of heart and blood- vessels	217·4	258·8	312	332	351	319	283
Nephritis and Bright's disease	44	47	57	46	47	45	48
Respiratory diseases - all forms (except Phthisis)	260·8	228·4	254	287	385	299	302

The deaths under one, from 5-10, from 20-25 and from 35-45 were the lowest recorded, and those from 1-5 much below the average of previous years. The deaths from 10-20 have remained at the same level during the four years of war, but this level is much higher than in previous years. Probably there has been a great increase of population between the ages of 14 and 20, rather than any increase of mortality. There was a further decrease of deaths from apoplexy and diseases of the heart and blood vessels; but respiratory diseases remained at a much higher level than before the war.

15. The natural increase of the population (i.e., the excess of births over deaths) was 1,148 compared with 974 in 1915 and though smaller than in previous years, this increase compares very favourably with conditions in enemy towns.

INFANT MORTALITY.

16. The deaths under one year were 214 compared with 215 in 1916. The infant mortality (deaths under one year per 1,000 births) was 79. This is the lowest rate recorded with the exception of 1916 and 1912.

The following table gives the infantile mortality in the Borough since 1901, compared with the neighbouring Boroughs, London and England:-

Deaths from		Average					Average				
		1907-12					1913-18				
Apoplexy and all other diseases of heart and blood vessels		217.4	228.8	213	222	221	222	221	222	221	221
Bright's disease		44	47	54	45	47	45	47	45	45	45
Respiratory diseases - all forms (except pneumonia)		280.8	288.4	284	287	285	287	285	287	285	285

The deaths under one, from 5-10, from 20-25 and from 35-45 were the lowest recorded, and those from 1-5 and under the average of previous years. The deaths from 10-15 have remained at the same low level during the four years of war, but this level is much higher than in previous years. Probably there has been a great increase of population between the ages of 14 and 20, rather than any increase of mortality. There was a further decrease of deaths from apoplexy and diseases of the heart and blood vessels; but respiratory diseases remained at a much higher level than before the war.

15. The natural increase of the population (i.e., the excess of births over deaths) was 1.42 per cent in 1918 and 1.41 per cent in 1919. This is the lowest rate recorded since 1911, and shows a marked fall from the 1.75 per cent recorded in 1916.

INFANT MORTALITY

16. The deaths under one year were 214 compared with 215 in 1916. The infant mortality (deaths under one year per 1,000 births) was 70. This is the lowest rate recorded since the exception of 1916 and 1918.

The following table gives the infant mortality in the Borough since 1911, compared with the neighbouring Boroughs, London and England:-

	1901-5	1906-10	1911-15	1916	1917
Lewisham	112	92	81	72	87
Greenwich	107	112	103	83	101
West Ham	158	126	114	98	105
East Ham	131	106	80	78	85
Erith	112	80	77	60	83
London	138	114	108	89	103
97 great towns		127	117	98	104
England & Wales	135	115	109	91	97
WOOLWICH BOROUGH	119	97	86	70	79

Woolwich had the lowest infantile death rate of any Metropolitan Borough, and for the first time in recent years the rate was lower than in Erith.

17. The following table gives the infantile mortality during the past two years, and the six preceding quinquennia in the Borough and each Registration District:--

	1886 to 1890	1891 to 1895	1896 to 1900	1901 to 1905	1906 to 1910	1911 to 1915	1916	1917
Woolwich Parish [†]	151	157	170	134	109	101	84	97
Plumstead - West)						75)	54)	70
East)	121	120	132	113	91))	
Eltham		163	160	97	89	81)	65)	84
Woolwich Borough		140	146	119	97	67)	83)	67
						86)	70)	79

[†]1888, 1889 and 1890.

Eltham once more had the lowest infantile mortality, and West Plumstead the next lowest.

18. Table IV. gives full details as to the ages at death and causes of death of the infants dying in 1917 under one year. It shows that 42 per cent of those who died under one year were under one month old, compared with 49 per cent in 1916, and 37 per cent in the previous ten years; 49 deaths were from premature birth, compared with 52, 41, 53, 55 and 55, in the five preceding years. The number of deaths under one week in the past five years was 58, 68, 55, 73, and 57 respectively.

The number of deaths from suffocation or overlying was 5 compared with six in 1915, and nil in 1916. In the previous

four years the deaths from suffocation in bed averaged four a year, and in the four years 1904-7 they averaged 7. Alcoholism among women is no doubt the chief cause of overlying, but, in view of the decrease of alcoholism, it is probable that fatigue due to long hours at industrial occupation may be an important factor.

The death-rate per 1,000 births from premature birth in Woolwich Borough was 17.8 compared with 18.9, 14.2, 20.5, 19.5 and 17.9 in the five preceding years. In London it was

There were 22 deaths of illegitimate infants. The death-rate of illegitimate infants under one year was 218 per 1,000 births (compared with 246 in 1916) and that of legitimate children 74.

19. Compared with 1916, the past year had among infants more deaths from bronchitis and pneumonia, and fewer from premature birth.

20. Deaths between 1 and 5 years. 57 deaths (55 in 1916) occurred between 1 and 2 years, and 56, (50 in 1916) between 2 and 5. The corresponding figures in 1913 were 55 and 38 respectively. The death-rate between 1 and 5 was 10.7 per 1,000 children of that age found at the Census (viz., 10,357), compared with 13.6, 13.1 and 10.1 in the three previous years.

21. Zymotic death-rate. The number of deaths from scarlet fever, diphtheria, measles, whooping cough, enteric fever, and from diarrhoea and enteritis (under 2 years of age as regards diarrhoea and enteritis) was 101 and the death rate per 1,000 population 0.69 compared with 0.98, 0.95 and 0.85 in the three previous years.

The zymotic death-rate has fallen greatly since 1901, when it was 1.51.

22. Inquests. There were 131 inquests, compared with 105, 123, 146, 180 and 181 in the five preceding years.

The following table gives particulars as to the cause of death:

1.	Natural Causes	...	...	...	71
2.	Alcoholism	...	...	...	1
3.	Accidental Causes --				
	Burns and Scalds	...		7	
	Drowning	...		6	
	Vehicular traffic:-				
	(a) By road			11	
	(b) By rail			2	
	Explosions			4	
	Suffocation - Overlying			4	
	Other Accidental causes			18	52
4.	Homicidal Cases --				
	Suicide	...		5	
	Murder and Manslaughter	...		2	7
	Total				131

The "Accidental Causes" were 35, 37, 39, and 63, in the four preceding years. The "Homicidal Causes" were 11, 21, 13 and 12 in the same years. The reduction of accidents and homicide is very satisfactory.

SMALL-POX.

23. Not a single case of small-pox was notified in Woolwich or in London.

MEASLES.

24. There were 31 deaths from measles, giving a rate of 0.21 compared with 0.19, 0.33 and 0.17 in the three preceding years. The rate in London County was 0.47.

25. Of the 31 who died from measles, 30 were under five years of age; 16 were males and 15 females.

26. 1,710 notifications were received under the Local Government Board Order, compared with 1,590 in 1916. The mortality per cent of notifications was 1.8 compared with 1.4 in the preceding year.

45 cases were removed to the fever hospital on the certificate of the Medical Officer of Health that isolation was necessary, compared with 10 in 1916.

27. The following table gives the number of deaths and death-rates from measles for the past four years, and four preceding quinquennia in each parish and the death-rate in London:-

Year	Woolwich		Plumstead		Eltham		The Borough		London
	Aver. No.	Rate	Aver. No.	Rate	Aver. No.	Rate	Aver. No.	Rate	
1891-5	20	0.49	29	0.51	Not recorded		49	0.51	0.59
1896-1900	34	0.81	36	0.57	Not recorded		70	0.67	0.57
1901-5	9	0.22	15	0.22	1	0.13	26	0.21	0.44
1906-10	17	0.43	18	0.23	3	0.20	37	0.30	0.40
1911-15	12	0.30	14	0.19	2	0.13	27	0.21	0.42
1916	8	0.24	15	0.19	-	-	23	0.17	0.19
1917	13	0.39	11	0.16	7	0.23	31	0.21	0.48

The actual reduction in measles mortality is not quite so large as appears from the above table, owing to the fact that the falling birth rate has caused a diminution in the number of children living under five years.

The following table giving the deaths and death-rate per 1,000 births shows the reduction more accurately:-

	No.	Rate.
1891-95 (average)	49	14.7
1896-1900	70	20.9
1901-05	26	7.2
1906-10	37	11.8
1911-15	27	9.8
1916	23	7.5
1917	31	11.5

It appears from these tables that whereas from 1891-1900 Woolwich had a somewhat higher measles' mortality than London, since that date the measles death-rate has greatly diminished, and diminished much more in Woolwich than in London.

28. To prevent the spread of measles in school, the Medical Officer of the London County Council continued to close, or exclude unprotected children from classes on the occurrence of one or more cases. The period of exclusion or closure was usually for a few days only, in some cases for two weeks.

Notification. By Order of the Local Government Board made under S.130, P.H.A., 1875, Measles and German Measles were made compulsorily notifiable from January 1st, 1916, (see Council's Minutes, December 22nd. page 93).

1,710 cases of Measles were notified compared with 1,590 in 1916. Of these 713 were under five years of age, 791 between five and fifteen, and 206 over fifteen. The largest number of notifications was in Eltham, viz., 613.

In addition, 868 cases of German Measles were notified.

The cost of notification was £86. 19. 0.

The case mortality was 1.8. In Woolwich Parish it was 3.3, in Plumstead 1.5 and in Eltham, 1.1.

The Health Visitors visited all notified cases, gave advice as to isolation, cleanliness, ventilation, etc., and, where it seemed desirable, and the friends approved, the District nurse was requested to attend.

Fewer cases - 139 compared with 236 - were nursed in 1917 than in 1916. This is partly because North Woolwich was but slightly affected last year and in North Woolwich the nurses visit every case notified. Of the 139 cases visited by the District Nurses, 53 were in Woolwich (13 in North Woolwich), 28 in Plumstead and 58 in Eltham. These visits were paid by the Borough Council, according to the arrangements made in 1916, at a cost of £51. 19. 6.

It is satisfactory to note that although the number of cases was probably much above the average, the deaths were below the average of the previous ten years.

WHOOPING COUGH.

29. There were 10 deaths from whooping cough. The death-rate was 0.07 compared with 0.19, 0.03, and 0.25 in the three preceding years, and 0.13 in the County of London. Six of the deaths were under two years of age.

The following table gives the deaths and death-rates per 1,000 population since the Borough was formed, compared with London:-

	<u>Woolwich</u>		<u>London</u>
	<u>No.</u>	<u>Rate</u>	<u>Rate</u>
1901-05 (averages)	34	0.28	0.35
1906-10 ,,	26	0.21	0.29
1911-15 ,,	17	0.14	0.21
1916 ,,	34	0.25	0.18
1917 ,,	10	0.07	0.13

1,710 cases of Measles were notified compared with 1,800 in 1916. Of these 713 were under five years of age, 791 between five and fifteen, and 205 over fifteen. The largest number of notifications was in Epsom, viz. 615.

In addition, 858 cases of German Measles were notified.

The cost of notification was £86. 19. 0.

The case mortality was 1.8. In Woolwich Parish it was 2.3, in Plumstead 1.5 and in Epsom, 1.1.

The Health Visitors visited all notified cases, gave advice as to isolation, cleanliness, ventilation, etc., and, where it seemed desirable, and the friends approved, the District nurse was requested to attend.

Fever cases - 150 compared with 232 - were notified in 1917. This is partly because North Woolwich was not officially affected last year and in North Woolwich the nurses visit every case notified. Of the 150 cases visited by the District Nurses, 82 were in Woolwich (15 in North Woolwich), 28 in Plumstead and 40 in Epsom. These visits were paid by the Borough Council, according to the arrangements made in 1916, at a cost of £51. 19. 0.

It is satisfactory to note that although the number of cases was probably much above the average, the deaths were below the average of the previous ten years.

WHOPPING COUGH

There were 10 deaths from whooping cough. The death rate was 0.07 compared with 0.19, 0.02, and 0.25 in the three preceding years, and 0.13 in the County of London. Six of the deaths were under two years of age.

The following table gives the deaths and death-rates per 1,000 population since the Borough was formed, compared with London:-

Year	Deaths	Rate	London Rate
1907-08 (average)	34	0.24	0.25
1908-10	30	0.21	0.20
1911-15	17	0.14	0.21
1916	34	0.25	0.19
1917	10	0.07	0.13

The death-rate per 1,000 births was 3.7 compared with 11.1 in 1916. The death rate was the lowest recorded with the exception of 1911.

In 1913 an Order was issued by the Local Government Board giving permission to the Asylums Board to admit to their hospitals children under 14 suffering from whooping-cough, on the recommendation of the Medical Officer of Health. No cases were admitted during the year.

Instructions printed on cards are left at houses where cases are notified by school teachers. The instructions were printed in the Annual Report for 1910.

SCARLET FEVER.

30. There were 145 cases of scarlet fever notified (deducting two cases of mistaken diagnosis), equivalent to a rate of 0.99 per 1,000 population, compared with 1.69 in 1916. This is the lowest rate recorded.

31. The following table shows the case-rates of scarlet fever in the Borough and each Registration District during the past fifteen years, compared with London:-

Average

	1901 -5	1906 -10	1911	1912	1913	1914	1915	1916	1917
Borough	3.15	5.90	4.09	3.80	4.80	5.46	4.31	1.69	0.99
Woolwich Parish	2.99	5.66	2.89	2.41	5.44	6.11	4.48	1.94	1.19
Plumstead-West			3.77	4.96	4.68	5.45	4.0	1.30	0.84
East	3.24	6.33							
Eltham Parish	3.21	4.94	7.51	4.88	5.11	4.18	6.55	1.98	0.74
London County	3.57	4.22	2.09	2.64	4.36	7.45	3.85	1.67	1.38
			2.32	1.76	3.89	5.53	3.94	2.06	1.52

32. Table III gives the age distribution, the number in each parish and the number removed to hospital. Eltham was most affected.

33. Deaths. There was one death, giving a death-rate of 0.01 per cent compared with 0.03 in 1916, 0.06 in 1915, 0.08 in the five years 1908-12, and 0.19 in the ten years 1891-1900. The death-rate in London was 0.02 compared with 0.03 in 1916. The case mortality (or deaths per cent of notifications) was

0.7 compared with 1.3, 1.4 and 1.7 in the three preceding years. The death rate is the lowest recorded.

34. Hospital Isolation. Of the 147 cases notified, 125 (or 85 per cent) were removed to one of the fever hospitals, compared with 88, 90, 88, 85 and 91 per cent. in the five preceding years.

35. Home Isolation. Six certificates of efficient home isolation were given to enable men to continue their employment in the Arsenal, and so obviate unnecessary removal to hospital, compared with 31, 15, and 18, in the three preceding years.

In the Annual Report for 1911 a comparison was made between home and hospital isolation, showing that, whereas there were only 1.6 per cent. of failures in home isolation, there were 4.6 per cent in hospital isolation. Failure means the occurrence of secondary cases attributed to the primary case.

36. The Annual Report for 1905 contained a special report on a statistical investigation into school incidence of scarlet fever and diphtheria during the ten years 1896-1905.

DIPHTHERIA.

37. 242 cases of diphtheria were notified (excluding 35 cases of mistaken diagnosis). The case-rate (number of cases per 1,000 population), corrected for cases of mistaken diagnosis was 1.65 compared with 2.72, 1.77 and 1.81 in the three preceding years, and 1.99, the average of the ten years 1901-10. This is the lowest case rate since 1905.

38. There were 16 deaths, compared with 11, in 1916. The death rate was 0.11 compared with 0.26 in 1914, 0.15 in 1915 and 0.08 in 1916.

The London death-rate was 0.14.

39. 59 of the total cases notified were in Woolwich parish, 69 in West Plumstead, 59 in East Plumstead and 90 in Eltham. The following table shows the case-rate in each registration district (not corrected for mistaken diagnosis) in the past thirteen years, compared with London and the Borough:-

0.7 compared with 1.8, 1.4 and 1.7 in the three preceding years. The death rate is the lowest recorded.

54. Hospital Isolation. Of the 147 cases notified, 125 (85 per cent) were referred to one of the fever hospitals, compared with 88, 90, 88 and 91 per cent in the five preceding years.

55. Home Isolation. Six certificates of efficient home isolation were given to enable men to continue their employment in the Arsenal, and so obviate unnecessary removal to hospital, compared with 11, 15, and 16 in the three preceding years.

In the Annual Report for 1911 a comparison was made between home and hospital isolation, showing that, whereas there were only 1.6 per cent of failures in home isolation, there were 4.6 per cent in hospital isolation. Failure means the occurrence of secondary cases attributed to the primary case.

56. The Annual Report for 1908 contained a special report on a statistical investigation into school incidence of scarlet fever and diphtheria during the ten years 1898-1908.

DIPHTHERIA.

57. 242 cases of diphtheria were notified (excluding 88 cases of mistaken diagnosis). The case-rate (number of cases per 1,000 population), corrected for cases of mistaken diagnosis was 1.66 compared with 8.72, 1.77 and 1.81 in the three preceding years, and 1.95, the average of the ten years 1901-10. This is the lowest case rate since 1902.

58. There were 16 deaths, compared with 11 in 1916. The death rate was 0.11 compared with 0.28 in 1914, 0.15 in 1915 and 0.08 in 1916.

The London death-rate was 0.14.

59. 59 of the total cases notified were in Woolwich parish, 69 in West Plumstead, 88 in East Plumstead and 90 in Eltham. The following table shows the case-rate in each registration district (not corrected for mistaken diagnosis) in the past thirteen years, compared with London and the Borough:-

	1901 -5	1906 -10	1911	1912	1913	1914	1915	1916	1917
Borough	1.71	2.20	1.68	3.09	1.91	2.72	1.77	1.81	1.65
Woolwich Parish	1.63	2.34	2.40	4.38	4.43	4.92	2.23	2.80	1.76
Plumstead Parish	1.87	2.40	1.19	3.79	2.32	2.36	1.99	2.11	1.60
			2.33	2.81	1.02	2.39	2.87	1.23	1.50
Eltham Parish	1.62	2.22	2.30	1.71	1.29	3.33	0.88	1.72	2.96
London	1.90	1.63	1.64	1.57	1.70	2.02	2.01	2.04	2.06

The table shows that the rate in Eltham Parish was the highest since 1914 & E. Plumstead the lowest.

40. 253 cases, or 91 per cent of total notifications, were removed to hospital, compared with 93, 94, 92 and 91 per cent. in the four preceding years. A certificate of efficient home isolation was given in four cases, compared with 12, 1, 7, 10, and 8, in the five preceding years.

The case-mortality was 6.6 per cent. compared with 5.2, 7.0, 9.7, 8.3 and 4.4 in the five preceding years.

27 carrier cases, with or without slight symptoms, were discovered by your Medical Officer of Health. The usual steps were taken.

67, or 24 per cent of the cases notified were over 15 years of age. In the last seven years there has been a marked increase in the proportion of Diphtheria notifications over school age. In 1911 the percentage was only 13 and there has been a steady increase since. There is no similar increase in the rest of London, and it is probably connected with changed age distribution of the population, and increased provision for discovering infectious disease among munition workers.

41. Mistaken Diagnosis. 35 cases, or 13 per cent of notifications, were, after removal to hospital, stated to be not diphtheria. The percentage of the four preceding years was 19, 16, 15 and 8 respectively.

42. Source of Infection. Six cases occurred at the Eltham Hostel for Munition Workers. There were three Return cases, though the suspicion that they were the source of infection was not confirmed bacteriologically.

TABLE 1. - Age and sex distribution of cases of diphtheria, 1911-1912

Age	Male	Female	Total
Under 5	1,000	1,000	2,000
5-10	1,000	1,000	2,000
10-15	1,000	1,000	2,000
15-20	1,000	1,000	2,000
20-25	1,000	1,000	2,000
25-30	1,000	1,000	2,000
30-35	1,000	1,000	2,000
35-40	1,000	1,000	2,000
40-45	1,000	1,000	2,000
45-50	1,000	1,000	2,000
50-55	1,000	1,000	2,000
55-60	1,000	1,000	2,000
60-65	1,000	1,000	2,000
65-70	1,000	1,000	2,000
70-75	1,000	1,000	2,000
75-80	1,000	1,000	2,000
80-85	1,000	1,000	2,000
85-90	1,000	1,000	2,000
90-95	1,000	1,000	2,000
95-100	1,000	1,000	2,000

The table shows that the rate in Elkhart Parish was the highest since 1914-15. The lowest was in 1911-12.

60. The cases, or 51 per cent of total notifications, were removed to hospital, compared with 52, 54, 52 and 51 per cent in the four preceding years. A certificate of efficient home isolation was given in four cases, compared with 12, 1, 7, 10, and 8, in the five preceding years.

The case-mortality was 6.6 per cent, compared with 5.2, 7.0, 6.7, 6.5 and 6.4 in the five preceding years.

67 carrier cases, with or without slight symptoms, were reported by your Medical Officer of Health. The usual steps were taken.

67, or 24 per cent of the cases notified were over 15 years of age. In the last seven years there has been a marked increase in the proportion of diphtheria notifications over school age. In 1911 the percentage was only 15 and there has been a steady increase since. There is no similar increase in the rest of London, and it is probably connected with changed distribution of the population, and increased provision for discovering infectious diseases among munition workers.

61. Mucous Membrane. In cases, or 15 per cent of notifications, were after removal to hospital, stated to be not diphtheria. The percentage of the last preceding years was 12, 16, 15 and 6 respectively.

62. Source of Infection. Six cases occurred at the Elkhart Hospital for Mucous Membrane. There were three return cases. Among the suspicion that they were the source of infection was not continued bacteriologically.

43. Bacteriological Diagnosis. Since January, 1913, the Council's bacteriological work has been done by the Bacteriological Department of the Seamen's Hospital, Greenwich. 958 (896 in 1916) swabs were examined for the presence of diphtheria bacilli. In 157 (167 in 1916) the true Klebs Leffler bacillus was found, and 620 were found free from either the Klebs Leffler bacillus or Hoffman's.

Of the 958 swabs examined, 205 were taken from school children by the Medical Officer of Health. Of these, 24 contained the true Klebs Leffler bacillus (so-called positive cases), and 41 Hoffman's bacillus.

20 positive cases had some symptoms, viz., running or sore nose, mild clinical diphtheria or follicular tonsillitis. These were notified and sent to Hospital or strictly isolated. Positive cases without any symptoms were excluded from school and from mixing with other children outside the house. Of the 205 cases, 83 had some symptoms.

Diphtheria antitoxin is kept at the Town Hall and the Plumstead and Eltham Free Libraries, and supplied to medical practitioners on application at cost price, or free where there is inability to pay. Last year nine quantities were supplied on payment and nil gratis.

ENTERIC FEVER.

44. There were seven cases of enteric fever, not including five cases of mistaken diagnosis notified as enteric. The case-rate was 0.05, compared with 0.09, 0.17, and 0.05, in the three preceding years. For the ten years 1892-1901 the rate never fell below 0.41. The case-rate in London was 0.11.

45. There were three deaths from this disease, giving a death rate of 0.02. The death-rate in London was 0.02.

46. The following are the cases notified in each parish during the past fifteen years (not corrected for mistaken diagnosis):-

	<u>Average</u>								
	1901-5	1906-10	1911	1912	1913	1914	1915	1916	1917
Woolwich	12.6	7.6	10	10	7	6	11	2	5
Plumstead	21.2	11.4	(W. 3	4	3	6	13	3)	2
			E. 2	2	2	4	5	3)	1
Eltham	8.6	2.8	1	4	2	2	2	1	4

42. Enteric fever. Since January, 1912, the County's health department has been doing the bacteriological examination of the County's Hospital, Greenfield, 222 (222) cases were examined for the presence of typhoid fever. In 1912 (1912) the true typhoid fever was found, and 222 were found from either the Rhode Island or Boston's.

Of the 222 cases examined, 222 were taken from school children. The Medical Officer of Health, of these, 24 confirmed the true typhoid fever (so-called positive cases), and 41 Boston's.

20 positive cases had some symptoms, viz., running or sore nose, mild clinical diagnosis or typhoid fever. These were notified and sent to Hospital or specially isolated. Positive cases without any symptoms were excluded from school and from mixing with other children outside the house. Of the 200 cases, 88 had some symptoms.

Diphtheria antitoxin is kept at the Town Hall and the Pharmacy and Elisha Free Dispensary, and supplied to medical practitioners on application at cost price, or free where there is inability to pay. Last year nine quantities were supplied of diphtheria antitoxin.

ENTERIC FEVER.

43. There were seven cases of enteric fever, not including five cases of mistaken diagnosis notified as enteric. The case-rate was 0.02, compared with 0.09, 0.17, and 0.02, in the three preceding years. For the ten years 1902-1911 the rate never fell below 0.41. The case-rate in London was 0.11.

44. There were three deaths from this disease, giving a death rate of 0.02. The death-rate in London was 0.02.

45. The following are the cases notified in each parish during the past fifteen years (not corrected for mistaken diagnosis):—

Average

	1901-2	1902-10	1911	1912	1913	1914	1915	1916	1917
Woolwich	12.6	7.8	10	10	7	8	11	8	8
Plumstead	21.2	11.4	7	4	2	2	13	3	3
Elihu	8.6	2.8	1	4	2	2	2	1	4

Three cases occurred at one house in North Woolwich. A brother and his wife were notified some two weeks before in the adjoining borough of West Ham. The mother visited at their house, probably helped to nurse, and no doubt conveyed the infection through unclean hands infecting food. One case was attributed to mussels, one to a soldier carrier, and one to Sittingbourne. One was a soldier in the garrison.

Of the 12 cases notified, 10 were removed to a Fever Hospital and 5 were reported as mistaken diagnosis.

A report was made in 1916 on the prevention of fly-carried infection of enteric fever (see Zymotic Enteritis).

47. Bacteriological Diagnosis. 9 samples of blood were sent to the Seamen's Hospital to be examined for Widal's reaction. A positive result was obtained in four.

DIARRHOEA OR ZYMOTIC ENTERITIS.

48. The deaths from diarrhoea and enteritis under two years of age were 24 or 8.9 per 1,000 births, compared with 9.9, 10.7, and 7.2 in the preceding years. The rate for London was 18.7. The total number of deaths from these diseases at all ages was 39.

Notification. Voluntary notification of zymotic enteritis during July, August, and September, commenced in Woolwich in 1905. Compulsory notification commenced August 25th, 1913, and is unlimited as to season.

101 cases were notified in the past year, compared with 199, 173, and 80, in the three preceding years. Seven cases were notified from January to May, 5 in June, 8 in July, 31 in August, 33 in September, 10 in October and 7 in November and December.

The fatality rate (deaths under two years per 100 notified cases under two) was 20.7. This high fatality probably points more to neglect to notify rather than to prevalence of a type of disease severer than usual. Medical men, especially locum tenens, are not aware, or forget that this disease is notifiable, in spite of a circular reminder being sent every year.

As compared with the County, Woolwich had a very low death rate from diarrhoea and enteritis during the summer quarter. Per 1,000 births, the death-rate of children under 2 was 28.1 in London and only 17.7 in Woolwich (12 deaths). Only the City, Kensington, Chelsea, and Hampstead, had a lower rate.

49. The temperature of the summer quarter was above the average and the rainfall below. In spite of these unfavourable conditions the number of deaths and notified cases was below the average.

ZYMOTIC ENTERITIS AND METEOROLOGY
(Summer Quarter)

	1915	1916	1917
Number of cases notified	142	80	101
Number of deaths	12	14	12
Mean temperature of air	60.7	60.9	61.7
Mean temperature 3 feet below ground	60.6	59.9	62.6
Mean humidity	80	83	81
Number of days on which rain fell	35	42	47
Rainfall in inches	8.5	6.0	3.4
Number of hours bright sunshine	541	-	580

ERYSIPELAS.

50. There were 79 cases of erysipelas notified, compared with 107, 138, and 95 in the three preceding years. There were 4 deaths, one under one year, one 10-15, and two over 65. The case-rate was 0.54 the lowest recorded, and the death rate, 0.03 below the average. The London case-rate was 0.58 and the London death-rate 0.02.

CEREBRO-SPINAL MENINGITIS.

51. 46 cases occurred in 1915, 17 in 1916, and 17 in 1917. In addition 5 cases of post basic meningitis were notified. There were 5 deaths, 2 of which were under two years of age. The case rate was 0.12 in Woolwich, compared with 0.09 in London.

Seven cases occurred in Woolwich Parish and four in Eltham. Eight of the cases were soldiers in the garrison and six were under 15 years of age. The large majority of the cases occurred in the first three months of the year.

In none of the civilian cases did more than one case occur in the same house. The cases of post basic meningitis all occurred in West Plumstead. Notified cases (with one or two exceptions) were immediately removed to the fever hospital. Contacts in close association were bacteriologically examined

by a Medical Officer of the London County Council. Several doubtful cases were seen by the Medical Officer of Health, on request of the medical attendant, and when the former had any doubt as to the diagnosis a bacteriological examination was made.

PUERPERAL FEVER.

52. There were 12 cases of puerperal fever notified, compared with 2, 8, 7, 6 and 16 in the five preceding years. There were six deaths. The case-rate per 1,000 births was 4.44 compared with 2.14 and 3.25 in the two preceding years. The death rate was 2.22 compared with 1.05, 1.07 and 1.13 in the three foregoing years. The London case-rate and death-rate per 1,000 births were 2.47 and 1.48 respectively.

53. Influenza caused 29 deaths compared with 25, 35, 25, 33 and 29 in the five preceding years. Bronchitis and pneumonia caused 294 deaths, compared with 208, 253, 285, 380 and 290 in the five preceding years.

There was again a fall in the deaths from bronchitis and pneumonia in adults but an increase under five years. The increase in children was probably due to increased mortality from measles. The epidemic wave causing an increased mortality from respiratory and tuberculous diseases is slowly ebbing. The following table shows the figures from 1909 to date. The death-rate was 2.0 compared with 1.8 in 1909-12.

	1909 - 12	1913	1914	1915	1916	1917
Pneumonia over 5	61	63	78	99	98	95
Bronchitis over 5	80	120	113	160	135	113
Bronchitis and Pneumonia) under 5	68	70	94	121	57	86
Bronchitis and Pneumonia) over 5	153	183	191	259	233	208
Bronchitis and Pneumonia		M144	149	196	150	161
" "		F109	136	184	140	133

TUBERCULOSIS

54. Deaths. There were 207 deaths from tuberculous disease, giving a death-rate of 1.41, compared with 1.34, 1.69, 1.68, 1.72 and 1.48, in the five preceding years.

by a Medical Officer of the London County Council. Several doubtful cases were seen by the Medical Officer of Health, on request of the medical attendant, and when the former had any doubt as to the diagnosis a bacteriological examination was made.

INTERMITTENT FEVER.

52. There were 12 cases of malarial fever notified, compared with 2, 8, 7, 8 and 16 in the five preceding years. There were six deaths. The case-rate per 1,000 births was 4.44 compared with 2.14 and 2.22 in the two preceding years. The death rate was 2.22 compared with 1.08, 1.07 and 1.13 in the three foregoing years. The London case-rate and death-rate per 1,000 births were 2.47 and 1.48 respectively.

53. Influenza caused 29 deaths compared with 25, 25, 25, 23 and 29 in the five preceding years. Bronchitis and pneumonia caused 264 deaths, compared with 208, 225, 225, 220 and 220 in the five preceding years.

There was again a fall in the deaths from bronchitis and pneumonia in adults but an increase under five years. The increase in children was probably due to increased mortality from measles. The epidemic wave causing an increased mortality from respiratory and tuberculous diseases is slowly ebbing. The following table shows the figures from 1909 to date. The death-rate was 2.0 compared with 1.8 in 1909-12.

	1909	1910	1911	1912	1913	1914	1915	1916	1917
Pneumonia over 5	61	63	78	99	99	100	100	100	100
Bronchitis over 5	80	120	113	113	113	113	113	113	113
Bronchitis and Pneumonia under 5	28	70	94	121	121	121	121	121	121
Bronchitis and Pneumonia over 5	125	185	191	220	220	220	220	220	220
Bronchitis and Pneumonia	144	144	144	144	144	144	144	144	144
	7109	7109	7109	7109	7109	7109	7109	7109	7109

TUBERCULOSIS

54. Deaths. There were 207 deaths from tuberculosis, giving a death-rate of 1.41, compared with 1.34, 1.33, 1.33, 1.33 and 1.48 in the five preceding years.

55. The following table gives the number of deaths from each of the various forms of tuberculosis in the past 17 years and also the deaths from simple meningitis:-

	Average								
	1901 -5	1906 -10	1911	1912	1913	1914	1915	1916	1917
Tuberculous Meningitis	20·0	22·8	20	23	14	29	18	19	19
Simple Meningitis	22·0	15·0	16	13	10	15	16	9	4
Tuberculosis of Intestines and Peritoneum	13·0	10·8	5	5	10	13	5	5	1
Tuberculosis (other forms)	20·8	22·2	29	16	10	11	8	12	18
Phthisis	192·0	151·4	146	124	182	163	201	167	172

56. The deaths from phthisis were 172 giving a death-rate of 1·17 compared with 1·01, 1·42, 1·27, 1·49, and 1·22, in the five preceding years. The death rate is the lowest recorded except in 1912.

The rise and fall of the phthisis death-rate in recent years has been parallel with that of bronchitis and pneumonia. In each case 1912 showed a minimum, and the three subsequent years a marked rise. London had the highest death-rate since 1905.

Deaths - Phthisis (Tuberculosis, Lungs)

	1891-5		1896-1900		1901-5		1906-10		1911-15		1916		1917	
	No.	Rate	Aver. No. per year	Rate	Aver. No. per year	Rate	Aver. No. per year	Rate	No.	Rate	No.	Rate	No.	Rate
Woolwich Parish (West)	-	2·80	92	2·23	89	2·15	56	1·46	65	1·70	63	1·88	55	1·64
Plumstead (East)	-	1·78	92	1·42	97	1·34	87	1·20	51	1·22	57	1·32	60	1·39
									39	1·20	31	0·86	41	1·04
Eltham Parish	-	-	9	1·28	6	0·63	8	0·64	9	0·58	16	0·66	16	0·53
The Borough	-	-	193	1·74	192	1·56	151	1·22	164	1·28	167	1·22	172	1·17
London	-	1·88	-	1·80	-	1·57	-	1·33	-	1·37	-	1·46	-	1·58

55. The following table gives the number of deaths from each of the various forms of tuberculosis in the last 15 years and also the death rate per 1000 population.

Average

Year	1901-1905	1906-1910	1911-1915	1916-1920	1921-1925	1926-1930	1931-1935	1936-1940	1941-1945	1946-1950	1951-1955	1956-1960	1961-1965	1966-1970	1971-1975	1976-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070	2071-2075	2076-2080	2081-2085	2086-2090	2091-2095	2096-2100	2101-2105	2106-2110	2111-2115	2116-2120	2121-2125	2126-2130	2131-2135	2136-2140	2141-2145	2146-2150	2151-2155	2156-2160	2161-2165	2166-2170	2171-2175	2176-2180	2181-2185	2186-2190	2191-2195	2196-2200	2201-2205	2206-2210	2211-2215	2216-2220	2221-2225	2226-2230	2231-2235	2236-2240	2241-2245	2246-2250	2251-2255	2256-2260	2261-2265	2266-2270	2271-2275	2276-2280	2281-2285	2286-2290	2291-2295	2296-2300	2301-2305	2306-2310	2311-2315	2316-2320	2321-2325	2326-2330	2331-2335	2336-2340	2341-2345	2346-2350	2351-2355	2356-2360	2361-2365	2366-2370	2371-2375	2376-2380	2381-2385	2386-2390	2391-2395	2396-2400	2401-2405	2406-2410	2411-2415	2416-2420	2421-2425	2426-2430	2431-2435	2436-2440	2441-2445	2446-2450	2451-2455	2456-2460	2461-2465	2466-2470	2471-2475	2476-2480	2481-2485	2486-2490	2491-2495	2496-2500	2501-2505	2506-2510	2511-2515	2516-2520	2521-2525	2526-2530	2531-2535	2536-2540	2541-2545	2546-2550	2551-2555	2556-2560	2561-2565	2566-2570	2571-2575	2576-2580	2581-2585	2586-2590	2591-2595	2596-2600	2601-2605	2606-2610	2611-2615	2616-2620	2621-2625	2626-2630	2631-2635	2636-2640	2641-2645	2646-2650	2651-2655	2656-2660	2661-2665	2666-2670	2671-2675	2676-2680	2681-2685	2686-2690	2691-2695	2696-2700	2701-2705	2706-2710	2711-2715	2716-2720	2721-2725	2726-2730	2731-2735	2736-2740	2741-2745	2746-2750	2751-2755	2756-2760	2761-2765	2766-2770	2771-2775	2776-2780	2781-2785	2786-2790	2791-2795	2796-2800	2801-2805	2806-2810	2811-2815	2816-2820	2821-2825	2826-2830	2831-2835	2836-2840	2841-2845	2846-2850	2851-2855	2856-2860	2861-2865	2866-2870	2871-2875	2876-2880	2881-2885	2886-2890	2891-2895	2896-2900	2901-2905	2906-2910	2911-2915	2916-2920	2921-2925	2926-2930	2931-2935	2936-2940	2941-2945	2946-2950	2951-2955	2956-2960	2961-2965	2966-2970	2971-2975	2976-2980	2981-2985	2986-2990	2991-2995	2996-3000	3001-3005	3006-3010	3011-3015	3016-3020	3021-3025	3026-3030	3031-3035	3036-3040	3041-3045	3046-3050	3051-3055	3056-3060	3061-3065	3066-3070	3071-3075	3076-3080	3081-3085	3086-3090	3091-3095	3096-3100	3101-3105	3106-3110	3111-3115	3116-3120	3121-3125	3126-3130	3131-3135	3136-3140	3141-3145	3146-3150	3151-3155	3156-3160	3161-3165	3166-3170	3171-3175	3176-3180	3181-3185	3186-3190	3191-3195	3196-3200	3201-3205	3206-3210	3211-3215	3216-3220	3221-3225	3226-3230	3231-3235	3236-3240	3241-3245	3246-3250	3251-3255	3256-3260	3261-3265	3266-3270	3271-3275	3276-3280	3281-3285	3286-3290	3291-3295	3296-3300	3301-3305	3306-3310	3311-3315	3316-3320	3321-3325	3326-3330	3331-3335	3336-3340	3341-3345	3346-3350	3351-3355	3356-3360	3361-3365	3366-3370	3371-3375	3376-3380	3381-3385	3386-3390	3391-3395	3396-3400	3401-3405	3406-3410	3411-3415	3416-3420	3421-3425	3426-3430	3431-3435	3436-3440	3441-3445	3446-3450	3451-3455	3456-3460	3461-3465	3466-3470	3471-3475	3476-3480	3481-3485	3486-3490	3491-3495	3496-3500	3501-3505	3506-3510	3511-3515	3516-3520	3521-3525	3526-3530	3531-3535	3536-3540	3541-3545	3546-3550	3551-3555	3556-3560	3561-3565	3566-3570	3571-3575	3576-3580	3581-3585	3586-3590	3591-3595	3596-3600	3601-3605	3606-3610	3611-3615	3616-3620	3621-3625	3626-3630	3631-3635	3636-3640	3641-3645	3646-3650	3651-3655	3656-3660	3661-3665	3666-3670	3671-3675	3676-3680	3681-3685	3686-3690	3691-3695	3696-3700	3701-3705	3706-3710	3711-3715	3716-3720	3721-3725	3726-3730	3731-3735	3736-3740	3741-3745	3746-3750	3751-3755	3756-3760	3761-3765	3766-3770	3771-3775	3776-3780	3781-3785	3786-3790	3791-3795	3796-3800	3801-3805	3806-3810	3811-3815	3816-3820	3821-3825	3826-3830	3831-3835	3836-3840	3841-3845	3846-3850	3851-3855	3856-3860	3861-3865	3866-3870	3871-3875	3876-3880	3881-3885	3886-3890	3891-3895	3896-3900	3901-3905	3906-3910	3911-3915	3916-3920	3921-3925	3926-3930	3931-3935	3936-3940	3941-3945	3946-3950	3951-3955	3956-3960	3961-3965	3966-3970	3971-3975	3976-3980	3981-3985	3986-3990	3991-3995	3996-4000	4001-4005	4006-4010	4011-4015	4016-4020	4021-4025	4026-4030	4031-4035	4036-4040	4041-4045	4046-4050	4051-4055	4056-4060	4061-4065	4066-4070	4071-4075	4076-4080	4081-4085	4086-4090	4091-4095	4096-4100	4101-4105	4106-4110	4111-4115	4116-4120	4121-4125	4126-4130	4131-4135	4136-4140	4141-4145	4146-4150	4151-4155	4156-4160	4161-4165	4166-4170	4171-4175	4176-4180	4181-4185	4186-4190	4191-4195	4196-4200	4201-4205	4206-4210	4211-4215	4216-4220	4221-4225	4226-4230	4231-4235	4236-4240	4241-4245	4246-4250	4251-4255	4256-4260	4261-4265	4266-4270	4271-4275	4276-4280	4281-4285	4286-4290	4291-4295	4296-4300	4301-4305	4306-4310	4311-4315	4316-4320	4321-4325	4326-4330	4331-4335	4336-4340	4341-4345	4346-4350	4351-4355	4356-4360	4361-4365	4366-4370	4371-4375	4376-4380	4381-4385	4386-4390	4391-4395	4396-4400	4401-4405	4406-4410	4411-4415	4416-4420	4421-4425	4426-4430	4431-4435	4436-4440	4441-4445	4446-4450	4451-4455	4456-4460	4461-4465	4466-4470	4471-4475	4476-4480	4481-4485	4486-4490	4491-4495	4496-4500	4501-4505	4506-4510	4511-4515	4516-4520	4521-4525	4526-4530	4531-4535	4536-4540	4541-4545	4546-4550	4551-4555	4556-4560	4561-4565	4566-4570	4571-4575	4576-4580	4581-4585	4586-4590	4591-4595	4596-4600	4601-4605	4606-4610	4611-4615	4616-4620	4621-4625	4626-4630	4631-4635	4636-4640	4641-4645	4646-4650	4651-4655	4656-4660	4661-4665	4666-4670	4671-4675	4676-4680	4681-4685	4686-4690	4691-4695	4696-4700	4701-4705	4706-4710	4711-4715	4716-4720	4721-4725	4726-4730	4731-4735	4736-4740	4741-4745	4746-4750	4751-4755	4756-4760	4761-4765	4766-4770	4771-4775	4776-4780	4781-4785	4786-4790	4791-4795	4796-4800	4801-4805	4806-4810	4811-4815	4816-4820	4821-4825	4826-4830	4831-4835	4836-4840	4841-4845	4846-4850	4851-4855	4856-4860	4861-4865	4866-4870	4871-4875	4876-4880	4881-4885	4886-4890	4891-4895	4896-4900	4901-4905	4906-4910	4911-4915	4916-4920	4921-4925	4926-4930	4931-4935	4936-4940	4941-4945	4946-4950	4951-4955	4956-4960	4961-4965	4966-4970	4971-4975	4976-4980	4981-4985	4986-4990	4991-4995	4996-5000	5001-5005	5006-5010	5011-5015	5016-5020	5021-5025	5026-5030	5031-5035	5036-5040	5041-5045	5046-5050	5051-5055	5056-5060	5061-5065	5066-5070	5071-5075	5076-5080	5081-5085	5086-5090	5091-5095	5096-5100	5101-5105	5106-5110	5111-5115	5116-5120	5121-5125	5126-5130	5131-5135	5136-5140	5141-5145	5146-5150	5151-5155	5156-5160	5161-5165	5166-5170	5171-5175	5176-5180	5181-5185	5186-5190	5191-5195	5196-5200	5201-5205	5206-5210	5211-5215	5216-5220	5221-5225	5226-5230	5231-5235	5236-5240	5241-5245	5246-5250	5251-5255	5256-5260	5261-5265	5266-5270	5271-5275	5276-5280	5281-5285	5286-5290	5291-5295	5296-5300	5301-5305	5306-5310	5311-5315	5316-5320	5321-5325	5326-5330	5331-5335	5336-5340	5341-5345	5346-5350	5351-5355	5356-5360	5361-5365	5366-5370	5371-5375	5376-5380	5381-5385	5386-5390	5391-5395	5396-5400	5401-5405	5406-5410	5411-5415	5416-5420	5421-5425	5426-5430	5431-5435	5436-5440	5441-5445	5446-5450	5451-5455	5456-5460	5461-5465	5466-5470	5471-5475	5476-5480	5481-5485	5486-5490	5491-5495	5496-5500	5501-5505	5506-5510	5511-5515	5516-5520	5521-5525	5526-5530	5531-5535	5536-5540	5541-5545	5546-5550	5551-5555	5556-5560	5561-5565	5566-5570	5571-5575	5576-5580	5581-5585	5586-5590	5591-5595	5596-5600	5601-5605	5606-5610	5611-5615	5616-5620	5621-5625	5626-5630	5631-5635	5636-5640	5641-5645	5646-5650	5651-5655	5656-5660	5661-5665	5666-5670	5671-5675	5676-5680	5681-5685	5686-5690	5691-5695	5696-5700	5701-5705	5706-5710	5711-5715	5716-5720	5721-5725	5726-5730	5731-5735	5736-5740	5741-5745	5746-5750	5751-5755	5756-5760	5761-5765	5766-5770	5771-5775	5776-5780	5781-5785	5786-5790	5791-5795	5796-5800	5801-5805	5806-5810	5811-5815	5816-5820	5821-5825	5826-5830	5831-5835	5836-5840	5841-5845	5846-5850	5851-5855	5856-5860	5861-5865	5866-5870	5871-5875	5876-5880	5881-5885	5886-5890	5891-5895	5896-5900	5901-5905	5906-5910	5911-5915	5916-5920	5921-5925	5926-5930	5931-5935	5936-5940	5941-5945	5946-5950	5951-5955	5956-5960	5961-5965	5966-5970	5971-5975	5976-5980	5981-5985	5986-5990	5991-5995	5996-6000	6001-6005	6006-6010	6011-6015	6016-6020	6021-6025	6026-6030	6031-6035	6036-6040	6041-6045	6046-6050	6051-6055	6056-6060	6061-6065	6066-6070	6071-6075	6076-6080	6081-6085	6086-6090	6091-6095	6096-6100	6101-6105	6106-6110	6111-6115	6116-6120	6121-6125	6126-6130	6131-6135	6136-6140	6141-6145	6146-6150	6151-6155	6156-6160	6161-6165	6166-6170	6171-6175	6176-6180	6181-6185	6186-6190	6191-6195	6196-6200	6201-6205	6206-6210	6211-6215	6216-6220	6221-6225	6226-6230	6231-6235	6236-6240	6241-6245	6246-6250	6251-6255	6256-6260	6261-6265	6266-6270
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57. The decrease of deaths from tuberculous meningitis was maintained, and the deaths from simple meningitis and abdominal tuberculosis were the fewest recorded.

58. Notification Statistics. 543 cases were notified (excluding second notifications), viz., Tubercle of lung, 448; tuberculous meningitis, 12; tuberculosis of the intestines and peritoneum. 6; other forms, 74: Larynx, 3.

The 448 cases of phthisis compare with 532, 400, 420 and 392 in the four preceding years. 32 of these were in the Woolwich and Eltham Poor Law Infirmaries; 2 others were notified by the District Medical Officers of the Poor Law Union, 33 by the Medical Officers of the Royal Arsenal and Army, 252 from hospitals and dispensaries, including 221 from the Woolwich Tuberculosis Dispensary, and the remainder by private medical practitioners.

£13. 3. 9 was paid during the year for the notification of tuberculosis.

59. Duration. Of the 543 cases notified during 1917, at least 93 have since died, and of 469 cases notified during 1916, at least 136 have since died (February, 1918).

60. The source of infection of the notified cases was probably as follows:-

Family or personal:-

Father	30	
Mother	31	
brother	25	
wife	1	
son	2	
daughter	3	
sister	14	
husband	4	
members of family not defined	<u>12</u>	122
Workshop and Office		4
Navy and Army		26
Public House		4
Undetermined		387

61. Age and Sex Distribution. The following table, required by the Local Government Board, gives the age and sex distribution of pulmonary and non-pulmonary cases, and shows also the source of notification:-

17. The purpose of these tests was to determine the effect of the treatment on the growth of the bacteria. The results were as follows:

18. The results of the tests were as follows:

19. The results of the tests were as follows:

20. The results of the tests were as follows:

21. The results of the tests were as follows:

22. The results of the tests were as follows:

Results of tests	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

23. The results of the tests were as follows:

METROPOLITAN BOROUGH OF WOOLWICH

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.
Summary of Notifications during the year 1917.

Age Periods	Number of Notifications on Form A. from Private Medical Practitioners												Total Notifications, ie. including cases previously notified by other doctors	Number of Notifi- cations on Form B from School Medical Officers				Number of Notifications Form C.			
	Primary Notifications											Primary Notifications				Total Notifications, ie. including cases previously notified by other doctors	Poor Law In- stitutions	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 and upwards	Under 5		5 to 10	10 to 15				Total		
Pulmonary Males	2	10	33	19	18	30	44	65	22	14	-	257	270	-	-	-	-	-	26	139	22
.. Females	-	4	23	19	27	23	45	28	14	4	3	190	203	-	-	-	-	1	26	113	
Non-Pulmonary Males	1	14	12	7	-	2	7	1	4	-	-	48	49	-	2	-	2	3	4	7	
.. Females	-	4	15	8	10	2	5	4	-	-	-	48	52	-	1	1	2	4	2	3	
Total	3	32	83	53	55	57	101	98	40	18	3	543	574	-	3	1	4	8	59	262	

62. Visiting. The method of following up cases was described in the annual report for 1915.

63. Bacteriological Diagnosis. Sputum from 286 cases of suspected phthisis was examined at the Seamen's Hospital and tubercle bacilli were found in 63 cases. The number of examinations for the five preceding years was 151, 231, 273, 254, and 269, respectively. In addition, the Medical Officer examined 515 specimens of sputum at the Tuberculosis Dispensary, 73 being found positive.

64. In my Annual Report for 1904 some figures were given as to the "Public-house as a source of Infection" and "Chronic Tuberculosis in Children" (see page 50 of the Report).

65. Disinfection was performed by the Public Health Department at 301 premises compared with 166,243, and 217, in the three preceding years. Disinfection was performed after the death of the patient, and also after removal to hospital, sanatorium, or other occasion of the house or bedroom being vacated.

66. Sanatorium Treatment. Altogether 270 notified persons were admitted to some sanatorium or hospital for the treatment of tuberculosis. The following table shows the number sent to the chief institutions:-

<u>CASES ADMITTED AS IN-PATIENTS TO SANATORIA.</u> <u>HOSPITALS, ETC., 1917.</u>					
		<u>Male</u>	<u>Female</u>	<u>Total</u>	
Infirmery	...	30	29	59	
Down's Sanatorium	...	40	-	40	
Northern Hospital (Winchmore Hill)		2	40	42	
Nayland Sanatorium and Maltings Farm	...	15	11	26	
Treloar's Home, Alton	...	2	1	3	
Herbert Hospital	...	8	-	8	
Ventnor	...	11	8	19	
Brompton Hospital and Frimley		13	4	17	
Carshalton Children's Hospital		5	5	10	
All others		<u>19</u>	<u>18</u>	<u>37</u>	
Total		<u>154</u>	<u>116</u>	<u>270</u>	

There were 1,144 patients in the hospital and 1,144 patients in the hospital. The method of following up cases was described in the annual report for 1915.

53. Bacteriological Diagnosis. Sputum from 288 cases of suspected phthisis was examined at the German's Hospital and tubercle bacilli were found in 85 cases. The number of examinations for the five preceding years was 181, 231, 273, 281, and 289, respectively. In addition, the Medical Officer examined 615 specimens of sputum at the Tubercle Dispensary, 73 being found positive.

54. In my Annual Report for 1904 some figures were given as to the "Public House as a source of infection," and "Chronic Tuberculosis in Children" (see page 59 of the Report).

55. Disinfection was performed by the Public Health Department at 301 premises compared with 180, 245, and 217, in the three preceding years. Disinfection was performed after the death of the patient, and also after removal to hospital, sanatorium, or other occasion of the house or bedroom being vacated.

56. Sanatorium Treatment. Altogether 270 notified persons were admitted to some sanatorium or hospital for the treatment of tuberculosis. The following table shows the number sent to the chief institutions:-

CASES ADMITTED AS IN-PATIENTS TO SANATORIA, HOSPITALS, ETC., 1915.

	Male	Female	Total
Infirmary	30	20	50
Downs Sanatorium	40	-	40
Northern Hospital (Winchester)	2	40	42
Walls	15	11	26
Mayland Sanatorium and	15	11	26
Malden Farm	2	1	3
Treloar's Home, Alden	2	1	3
Herbert Hospital	8	-	8
Ventnor	11	8	19
Brompton Hospital and Finsbury	13	4	17
German's Children's Hospital	5	5	10
All others	19	18	37
Total	154	116	270

There were fewer admissions to the Infirmary and Herbert Hospital, but an increase of cases treated at Sanatoria.

There was much delay in obtaining Sanatorium treatment. On the average the non-insured patients who finally were admitted had waited ten weeks before going to the Sanatorium.

67. Shelters for Consumptives. The use and provision of these shelters has been described in previous Reports. There are 13 shelters available. Seven are now occupied by men and four by women. The demand has been less since the air raids deterred the nervous; most of them, however, have been in continuous use, and nine were occupied in December.

Shelters were lent to 16 persons last year, 10 men, 3 women, 1 boy and 2 girls. Two of these had the shelter free, three paid 3d. and 11 paid 6d. Most of the patients using shelters are under the supervision of the Tuberculosis Dispensary. £9.17.3 was paid as shelter rent during the year.

Three bedsteads with bedding are also being lent to needy cases too poor to provide such.

68. Tuberculosis Dispensary. A Dispensary for the treatment of tuberculosis was opened in September, 1911.

The following is the summary of the work referring to the period 1st. January to 31st. December 1917:-

Insured persons treated	775
Uninsured	1,710

In attendance on January 1st. 1915:-

Insured	<u>Treatment</u>		<u>Observation</u>	
	Insured	Uninsured	Insured	Uninsured
163		424	29	407
Total attendances year ending December 31st.				11,157
Number of new patients examined				1,482
,, with definite pulmonary tuberculosis				304
,, with surgical tuberculosis				190
,, of suspect and observation cases				394
,, found non-tuberculous				574
,, of home visits of medical officers				1,285
,, ,, ,, ,, nurses				1,735
,, ,, sputum examinations				515
,, found positive				73
,, of children new cases				688
,, of contacts examined				592

There was a diminution in the number of contacts and of new cases examined, and an increase in the number of those found definitely tuberculous.

The Medical Officer of Health acts as Administrative Tuberculosis Officer, and is a member of the Tuberculosis Dispensary Committee.

The Borough Council's scheme for the Treatment of Tuberculosis -- particularly for the provision of a Tuberculosis Dispensary -- was set out in the Annual Report for 1914.

The work of the Tuberculosis Care Committee was described in the Annual Report for 1915.

CANCER

69. There were 129 deaths from cancer (malignant tumour), giving a death-rate of 0.88 compared with 1.01, 1.06, 0.90 and 0.95 in the four preceding years. 57 of the deaths were in males and 72 in females; 80 or nearly two-thirds of the deaths were in persons over 65. The highest mortality was in West Plumstead. One-third of the deaths occurred in public institutions. The death rate in England and Wales in 1916 was 1.17

There were three deaths from sarcoma and 126 from carcinoma. The deaths from carcinoma have been classified under the organs affected, since 1903, and the following table shows the result for males and females respectively:-

Carcinoma Males.

Seat of Primary Disease	Aver. 1903-5	Average 1906-10	Average 1911-15	1916	1917
Head and face	1.7	1.2	1.2	3	1
Mouth, jaw and tongue	4.0	4.8	7.2	7	4
Pharynx, oesophagus, larynx and neck	5.0	8.6	10.4	8	11
Pleura, lung, mediastinum	0.3	0.4	0.4	-	-
Stomach and Pylorus	5.3	10.4	9.2	14	13
Intestines (excluding rectum)	2.7	3.2	4.6	4	8
Rectum and anus	4.0	4.8	5.8	5	3
(Peritoneum and omentum	0.7	-	-	3	6
(Liver	8.0	6.4	7.0		
Kidney and Bladder	-	1.6	1.8	3	3
(Genital organs,	-	-	-	-	2
(Prostate and external urinary	2.7	0.8	2.8		
Pancreas	0.3	1.4	1.8	3	2
Undefined and all other	0.6	2.2	2.2	1	1
	35.3	45.8	54.4	51	54

There was a distinction in the number of contacts and of new cases examined, and an increase in the number of those

found definitely tuberculous.

The Medical Officer of Health was an administrative

tuberculosis officer, and is a member of the Tuberculosis

Committee.

The Borough Council's scheme for the treatment of

tuberculosis -- particularly for the provision of a Tuberculosis

Dispensary -- was set out in the Annual Report for 1914.

The work of the Tuberculosis Care Committee was des-

cribed in the Annual Report for 1915.

There were 129 deaths from cancer (malignant tumours)

during a death-rate of 0.86 compared with 1.01, 1.06, 0.90 and

0.88 in the four preceding years. 57 of the deaths were in

males and 72 in females; 80 or nearly two-thirds of the deaths

were in persons over 65. The highest mortality was in West

Plumstead. One-third of the deaths occurred in public institu-

tions. The death rate in England and Wales in 1915 was 1.17.

There were three deaths from cancer and 135 from

tuberculosis. The deaths from cancer have been classified

under the system adopted since 1902, and the following table

shows the result for males and females respectively:

Cancers

Site of Primary Disease	Average 1902-5	Average 1906-10	Average 1911-15	1916	1917
Head and face	1.7	1.3	1.3	3	1
Mouth, jaw and tongue	1.0	0.8	0.8	7	4
Thyroid, oesophagus,					
larynx and neck	0.0	0.0	10.4	0	11
Pleura, lung, mediastinum	0.3	0.4	0.4	-	-
Stomach and intestines	0.3	10.4	0.3	14	13
Intestines (excluding rectum)	2.7	2.3	4.0	4	8
Rectum and anus	2.0	0.8	0.8	0	3
Testicles and ovaries	0.7	-	-	-	-
Uterus and vagina	0.0	0.4	7.0	3	0
Bladder	0.0	1.0	1.0	3	0
Prostate and external urinary	0.7	0.8	3.8	-	0
Penis	0.3	1.4	1.8	0	2
Unspecified and all other	0.8	3.3	3.3	1	1
	36.3	43.8	31.4	31	34

Females.

Seat of Primary Disease	Average 1903-5	Average 1906-10	Average 1911-15	1916	1917
Head and face	0.7	1.4	0.6	1	2
Mouth and tongue	1.7	0.6	0.6	1	-
Pharynx, oesophagus, larynx and neck	1.7	1.4	2.0	-	2
Pleura, lung, mediastinum	0.7	0.6	0.6	1	-
Stomach and Pylorus	5.7	7.6	9.0	5	11
Intestines (excluding rectum)	0.7	4.2	4.2	4	7
Rectum and anus	3.0	6.8	6.8	7	2
(Liver	7.3	8.6)			
(		)	8.4	14	14
(Peritoneum and omentum	0.3	0.4			
Kidney and bladder	-	1.2	1.0	-	2
Genital organs	16.0	13.6	14.0	23	15
Breasts	9.7	8.6	13.6	14	12
Pancreas	-	0.2	0.8	-	-
Undefined and all other	1.4	2.0	2.8	1	5
	48.9	57.2	64.4	72	72

Last year had the lowest cancer death-rate for five years; the reduction was greater in men. As compared with 1913, and previous years, in men there has been a decrease under carcinoma of the throat and intestines; and in both men and women an increase of cancer of the stomach.

70. Causes of Cancer. The special inquiry into the habits of persons suffering and dying from cancer since 1912 was continued. For the scope of this and the standards taken, see previous Annual Reports.

The following gives the parts affected for males and females:-

CARCINOMA.

Cases specially investigated and parts affected.

Seat of Primary Disease	Male	Female	Total
Face, mouth, jaw and tongue	35	7	42
Pharynx, Oesophagus, Larynx and Neck	37	6	43
Stomach and Pylorus	29	22	51
Intestines (excluding Rectum)	16	14	30
Rectum and Anus	17	17	34
Liver	9	4	13
Breasts	-	8	8
Uterus	-	4	4
All other	11	2	13
	154	84	238

TABLE 1				
Deaths from Cancer of the Digestive System, 1913-1915				
Year	1913	1914	1915	Total
Head and Neck	1	1	1	3
Pharynx, Oesophagus, Larynx	1	1	1	3
Stomach and Duodenum	1	1	1	3
Small Intestine (excluding Cecum)	1	1	1	3
Large Intestine	1	1	1	3
Liver	1	1	1	3
Bladder	1	1	1	3
Uterus	1	1	1	3
Prostate	1	1	1	3
Testis	1	1	1	3
Unspecified	1	1	1	3
Total	10	10	10	30

The following gives the rates affected for males and females:-

For the purpose of comparison, the special inquiry into the habits of persons suffering and dying from cancer since 1913 was conducted. For the purpose of this and the standards taken, see previous Annual Reports.

The following gives the rates affected for males and females:-

TABLE 2				
Deaths from Cancer of the Digestive System, 1913-1915				
Year	1913	1914	1915	Total
Head and Neck	1	1	1	3
Pharynx, Oesophagus, Larynx and Neck	1	1	1	3
Stomach and Duodenum	1	1	1	3
Small Intestine (excluding Cecum)	1	1	1	3
Large Intestine	1	1	1	3
Liver	1	1	1	3
Bladder	1	1	1	3
Uterus	1	1	1	3
Prostate	1	1	1	3
Testis	1	1	1	3
Unspecified	1	1	1	3
Total	10	10	10	30

Cancer Cases. 74 of the patients were stated to be excessive users of alcohol, 22 took the standard quantity, and 127 below the standard. There were thus 33 per cent of excessive alcohol drinkers.

91 smoked excessively, 18 consumed an average quantity of tobacco, and 113 below the average, giving 41 per cent of excessive smokers.

65 were excessive tea drinkers, 89 moderate and 54 small tea drinkers, giving 31 per cent of excessive tea drinkers.

99 were large eaters. 72 moderate and 48 small eaters. giving 45 per cent large eaters.

71 were large meat eaters, 86 moderate and 57 small meat eaters, giving 33 per cent of large meat eaters.

130 had a daily action of the bowels, and 44 suffered from constipation, giving 75 per cent of persons with a regular action.

Control or Non-Cancer Cases. These cases may be compared with those obtained for 218 persons of similar or greater age, living under similar circumstances, who did not die of Cancer.

Of these - 37 took alcohol excessively, 24 took the standard quantity and 157 below the standard, giving 17 per cent excessive drinkers.

46 smoked excessively, 19 in moderation, and 157 were non-smokers or slight smokers, giving 21 per cent of excessive smokers.

66 took tea excessively, 96 in moderate amount, and 48 were small tea drinkers, giving 31 per cent of excessive tea drinkers.

28 were large eaters, 22 moderate, and 13 small, giving 44 per cent of large eaters.

19 were large meat eaters, 9 moderate, and 36 small, giving 30 per cent large meat eaters.

166 had a regular daily action of the bowels and 26 suffered from constipation, giving 16 per cent of constipation.

Comparison. It will be seen that, comparing persons who suffer from Cancer with those living at advanced ages, or who died at advanced ages through other causes, the great differences are as to habits with respect to alcohol, smoke, and the action of the bowels, thus:-

Cancerous persons had 33 per cent of excessive alcohol users, 41 per cent excessive smokers, 35 per cent excessive tea drinkers, 45 per cent large eaters, 33 per cent large meat eaters, and 35 per cent of constipation.

Non-cancerous persons, living to a greater age, had 17 per cent of excessive alcohol users, 21 per cent excessive smokers, 31 per cent excessive tea drinkers, 44 per cent large eaters, 30 per cent large meat eaters, and 14 per cent of constipation.

Mouth and Throat. These differences are still more marked with respect to alcohol and smoking, if only those who died from Cancer of the mouth and throat are considered.

Of 103 persons dying from Cancer of the lips, tongue, jaws, fauces, larynx, oesophagus and cervical glands, 46 (or 45 per cent) took alcohol excessively, while 73 (or 71 per cent) smoked excessively. 28 of these smoked chiefly a clay pipe, 27 a briar, 3 cigarettes, and 3 cigars. There were only 5 out of the 37 cases of cancer of the mouth and tongue who did not smoke; 3 of these had bad teeth. Among the non-cancer cases all the smokers smoked pipes (42 clay and 25 briar, and 5 both), except two who smoked cigarettes.

Of 161 cases with cancer of other parts than the mouth and throat 39 (or 24 per cent) took alcohol excessively, and 36 (or 22 per cent) smoked excessively. It would appear, then, that both alcohol and smoking (especially alcohol) have some general effect in promoting cancer, but chiefly exert their injurious influence locally. This is shown also as regards alcohol by the figures given below for cancer of the stomach, which occupies an intermediate position.

Of the 103 cases of cancer of the mouth and throat, 28 (or 27 per cent) were excessive tea drinkers. Tea drinking does not seem to be specially injurious locally or generally as far as cancer is concerned. If the injurious effect of smoking were chiefly due to the local effect of heat one would have expected excessive drinking of hot tea to have had a similar result.

Of 13 cases of cancer of the stomach, 8 were large eaters and 2 were large meat eaters. Of 52 cases of cancer of the stomach 16 (or 31 per cent) were excessive alcohol drinkers.

As regards cancer of the bowels, out of 59 persons dying from cancer of the intestines, 32 had a regular daily action, and 26 had constipation, i.e., 44 per cent had constipation. Thus constipation seems to predispose to cancer of the bowels.

The following table gives the above results in tabular form:-

Cancerous persons had 33 per cent of excessive alcohol
users, 41 per cent excessive smokers, 33 per cent excessive
drinkers, 45 per cent large eaters, 33 per cent large meat eat-
ers, and 18 per cent of constipation.

Non-cancerous persons, living to a greater age, had 17
per cent of excessive alcohol users, 31 per cent excessive smok-
ers, 21 per cent excessive tea drinkers, 44 per cent large eaters,
30 per cent large meat eaters, and 14 per cent of constipation.

Mouth and Throat. These differences are still more marked
with respect to alcohol and smoking, if only those who died from
cancer of the mouth and throat are considered.

Of 103 persons dying from cancer of the lips, tongue,
jaw, throat, larynx, pharynx and esophageal glands, 45 (or 43
per cent) took alcohol excessively, while 73 (or 71 per cent)
smoked excessively. 28 of these smoked chiefly a clay pipe, 27
a briar, 3 cigarettes, and 3 cigars. There were only 2 out of
the 37 cases of cancer of the mouth and tongue who did not smoke;
3 of these had had teeth. Among the non-cancer cases all the
smokers smoked pipes (42 clay and 35 briar, and 3 both), except
two who smoked cigarettes.

Of 181 cases with cancer of other parts than the mouth
and throat 39 (or 21 per cent) took alcohol excessively, and 33
(or 18 per cent) smoked excessively. It would appear, then, that
both alcohol and smoking (especially alcohol) have some general
effect in promoting cancer, but chiefly exert their influence in-
fluence locally. This is shown also as regards alcohol by the
figures given below for cancer of the stomach, which occupies an
intermediate position.

Of the 103 cases of cancer of the mouth and throat, 33
(or 32 per cent) were excessive tea drinkers. The drinking does
not seem to be specially injurious locally or generally as far as
cancer is concerned. If the injurious effect of smoking were
chiefly due to the local effect of heat one would have expected
excessive drinking of hot tea to have had a similar result.

Of 13 cases of cancer of the stomach, 8 were large eat-
ers and 2 were large meat eaters. Of 33 cases of cancer of the
stomach 16 (or 51 per cent) were excessive alcohol drinkers.

As regards cancer of the bowels, out of 33 persons dying
from cancer of the intestines, 23 had a regular daily action, and
30 had constipation, i.e., 44 per cent had constipation. Thus
constipation seems to predispose to cancer of the bowels.

The following table gives the above results in tabular

	All Can- cer Cases	Cancer of Mouth and Throat	Cancer of other Parts	Control Cases (Non- Cancer)
	Per cent	Per cent	Per cent	Per cent
Excessive alcohol drinkers	33	45	24	17
.. smokers	41	71	22	21
.. tea drinkers	35	27	34	31
Large eaters	45	-	-	44
.. meat eaters	33	-	-	30
Constipation	25	-	-	16

ALCOHOLISM.

71. There were three deaths from alcoholism, one from peripheral neuritis, and 18 from cirrhosis of the liver, making a total of 22 deaths probably due to alcohol, compared with 23, 18, 31, 43, and 38, in the five preceding years.

Of the 22 deaths, 15 were males and 7 females.

The diminution of alcoholism, especially among women, is very satisfactory whatever its cause. Eight deaths occurred in the first quarter of the year, four in the second, two in the third, and eight in the fourth.

72. The death-rate from alcoholism, peripheral neuritis, and cirrhosis of the liver was 0.15, which is lower than it has been for several years.

SYPHILIS.

73. There were 7 deaths from Syphilis, compared with 3, 9, 9, 5 and 5, in the five preceding years. 5 of these occurred in public institutions. All but one were infants under one year. There were, in addition, 14 deaths from general paralysis, tabes dorsalis (locomotor ataxy) and aneurism, (diseases which are considered to be due to syphilis) compared with 29, 23, 27 and 17, in the four preceding years.

OPHTHALMIA NEONATORUM

(Inflammation of the eyes of the new-born. The bad cases are usually due to Venereal Disease in a parent.)

74. Notification of this disease is compulsory on Medical men, under the Public Health (London) Act, and on Midwives under an Local Government Board Order. Midwives are paid 1/- for each case notified.

41 cases were notified, compared with 14, 18, 19, and 33 in the four preceding years. The case-rate was 15.2 per 1,000 births. Two cases were removed to hospital and two were treated as hospital out-patients. The others were all reported to be receiving effectual treatment at home. The district nurses attended 15.

Excessive alcohol drinkers	Per cent	Mouth and Throat	Per cent	Other Parts	Per cent	Cases (Non-Genetic)	Per cent
35	45	25	35	15	15	15	15
41	45	25	35	15	15	15	15
35	45	25	35	15	15	15	15
45	45	25	35	15	15	15	15
35	45	25	35	15	15	15	15
35	45	25	35	15	15	15	15

ALCOHOLISM

71. There were three deaths from alcoholism, one from pharyngeal neuritis, and 18 from cirrhosis of the liver, making a total of 21 deaths probably due to alcohol, compared with 25, 18, 21, 45, and 38, in the five preceding years.

Of the 21 deaths, 15 were males and 7 females.

The distinction of alcoholism, especially among women, is very satisfactory whatever the cause. Eight deaths occurred in the first quarter of the year, four in the second, two in the third, and eight in the fourth.

72. The death-rate from alcoholism, peripheral neuritis, and cirrhosis of the liver was 0.15, which is lower than it has been for several years.

SYPHILIS

73. There were 7 deaths from syphilis, compared with 5, 9, 9, 5 and 8, in the five preceding years. 5 of these occurred in public institutions. All but one were infants under one year. There were, in addition, 14 deaths from general paralysis, tabes dorsalis (locomotor ataxia) and aneurism (diseases which are considered to be due to syphilis) compared with 20, 22, 27 and 17, in the four preceding years.

OPHTHALMIA NEONATORUM

(Inflammation of the eyes of the new-born. The bad cases are usually due to Venereal Disease in a parent.)

74. Notification of this disease is compulsory on Medical men under the Public Health (London) Act, and on Midwives under an Local Government Health Order. Midwives are paid 1/- for each case notified.

41 cases were notified, compared with 14, 18, 19, and 25 in the four preceding years. The death-rate was 15.2 per 1,000 births. Two cases were removed to hospital and two were treated as hospital out-patients. The others were all reported to be receiving effective treatment at home. The district nurses attended

P A R T II.
A D M I N I S T R A T I O N.

WATER SUPPLY

1. No house was provided with an additional water supply last year under the London County Council (General Powers) Act.
2. Defective and foul storage cisterns were found and remedied at nine houses, compared with 93, 40 and 44 in the three preceding years. At 19 houses the supply was found insufficient or temporarily cut off, and the necessary steps taken for obtaining a proper supply.
3. 457 samples were submitted to the Public Analyst, and 33 or 7.2 per cent were found to be adulterated, compared with 2.7, 5.6, 7.3, 7.9 and 9.4 in the five preceding years.
248 of the samples taken were informal. 17 of these were found to be adulterated.
4. Proceedings were taken in 15 cases; fines were inflicted in 11, in 3 there was proof of warranty, and in one costs were given against the defendant.
5. Over £30 was imposed in fines and £13 in costs.
6. 185 of the samples were fresh milk. 14 of these, or 7.6 per cent, were adulterated, compared with 3.5, 7.9, 9.7, 10.0 and 5.9 in the five preceding years.
91 samples were bought as butter and 6 were found to be adulterated.
Of the other articles analysed, 13 were found to be adulterated, viz., 2 samples of preserved cream, 2 margarine. 4 zinc ointment, 2 mustard, 1 coffee and 2 lard. The preserved cream contained boric acid in excess of the amount allowed by the Regulations. The mustard was adulterated with starch, the coffee with chicory, and the lard with cotton-seed oil. The zinc ointment was deficient in zinc oxide.

Milk and Cream Regulations. 151 samples were examined for the presence of a preservative, but none found. Four samples of preserved cream were examined as to the correctness of the statements on the label; two were found correct and two incorrect. Four samples of cream were found to have over 35 per cent of fat.

FOOD INSPECTION.

There were 34 surrenders of unsound food. The time of Inspectors Tedham and Shaw and of Chief Inspector Duck was mainly occupied with Food Control work and they were successful in detecting a large number of the Controller's Orders.

breaches of

DAIRIES, COWSHEDS AND MILKSHOPS.

7. On January 1st. 1917, there were 96 milkshops on the register; 8 were added, and 8 removed, during the year, leaving a total of 96 on the register at the close of 1917. There were 112 inspections made, and 9 notices were served. There were no prosecutions.

8. One cowshed was closed leaving 12 on the register. There were 39 inspections, and 6 notices were served for dirty conditions, etc.

SLAUGHTER HOUSES.

9. The number of slaughter-houses on the register remained the same, viz., 9. 33 inspections were made, and 2 notices served and complied with.

NUISANCES.

10. 549 complaints of sanitary defects were received and investigated, compared with 454, 614, and 599, in the three preceding years.

81 complaints of non-removal of dust were made and attended to, compared with 55, 43, and 74, in the three preceding years.

11. Drains and Water-Closets. 291 private drains, found choked and defective were examined, cleared, and re-laid, compared with 450, 475 and 440 in the three preceding years. The largest number, 55, was found in River Ward.

Milk and Food Inspections. 151 samples were examined for the presence of a preservative, but none found. Four samples of preserved cream were examined as to the correctness of the statements on the label; two were found correct and two incorrect. Four samples of cream were found to have over 35 per cent of fat.

FOOD INSPECTION.

There were 34 establishments of unsealed food. The staff of inspectors Tetham and Shaw and of Chief Inspector Dick was mainly occupied with Food Control work and they were successful in detecting a large number of the Controller's Orders.

DAIRIES, COWSHEDS AND MILKSHOPS.

7. On January 1st, 1917, there were 36 milkshops on the register; 5 were added, and 3 removed, during the year, leaving a total of 38 on the register at the close of 1917. There were 118 inspections made, and 3 notices were served. There were no prosecutions.

8. One cowshed was closed leaving 13 on the register. There were 35 inspections, and 6 notices were served for dirty conditions, etc.

SLAUGHTER HOUSES.

9. The number of slaughter-houses on the register remained the same, viz., 9. 35 inspections were made, and 3 notices served and cancelled with.

WITNESSES.

10. 545 complaints of sanitary defects were received and investigated, compared with 454, 444, and 599, in the three preceding years.

11. 81 complaints of non-removal of dust were made and attended to, compared with 55, 45, and 74, in the three preceding years.

12. Drain and Water-Closets. 391 private drains, found choked and defective were examined, cleared, and re-laid, compared with 455, 475 and 445 in the three preceding years. The largest number, 55, was found in River Ward.

213 water-closets and w.c. cisterns were repaired, compared with 782, 843, and 750, in the three preceding years. 151 foul w.c. pans were cleansed by tenants, compared with 181, 255, and 205, in the three preceding years.

12. House Inspection. 4,251 houses were inspected, house to house compared with 4,538, 4,707, and 5,736, in the three preceding years; 5,392 were inspected re infectious diseases and complaints, compared with 7,267, 7,207 and 6,423. In addition to these, 609 inspections of registered houses were made.

13. At 1,913 houses, interiors were cleansed, or defective roofs repaired, compared with 2,337, 2,703, and 2,906, in the three preceding years. 381 houses with damp walls were remedied, compared with 393, 646, and 589, in the three preceding years.

Improved ventilation was provided in 15 houses, compared with 55, 55, and 72, in the three preceding years.

447 new dust pails were supplied, compared with 474, 561, and 530, in the three preceding years.

14. Medical Officer's Special Inspections. These amounted to a total of 417. 24 inspections were made of cowsheds and milkshops, 23 of bakehouses, 7 of factories and workshops, 53 inspections were on account of tuberculosis, 48 cancer, 14 diphtheria, scarlet fever and enteric. 17 cerebro-spinal and other forms of meningitis and 51 re infant welfare. Many of these visits were made by request of the medical attendants for the purpose of diagnosing doubtful cases of infectious disease. Other visits re infectious disease were made at the request of school teachers and others. 82 premises were inspected re housing conditions and overcrowding.

Inspections were made of all the houses reported as unfit for human habitation and all those recommended for registration.

15. Overcrowding. 95 cases of overcrowding were found and remedied, compared with 93, 97, and 111, in the three preceding years. The overcrowding was 2.2 per cent of house-to-house inspections, compared with 2.0, 2.1 and 1.9 per cent in the three preceding years. No persons were convicted of allowing overcrowding.

The overcrowding met with is of a more aggravated nature than in former years, though there is no great increase.

16. Smoke Nuisance. Two observations re smoke nuisance were made and two nuisances of black smoke observed. The nuisances were abated on service of notice.
There was no prosecution.

17. Defective Light. At 12 houses new windows were supplied or existing ones enlarged, or other work done to improve the lighting by daylight, compared with 49 in 1916.

18. Verminous Rooms. 568 verminous rooms were cleansed under the London County Council (General Powers) Act, 1914, or were dealt with as dirty rooms under the Nuisance Section of the Public Health (London) Act compared with 198 and 213 in the two preceding years.

HOUSE AND TRADE REFUSE REMOVAL.

19. There was a diminution in house refuse.

In Woolwich Parish, 7,087 loads of house refuse, and 143 loads of inoffensive trade refuse were removed by the Borough Council, and in Plumstead, 14,512 loads of house refuse, weighing 12,720 tons were removed by the Contractors, Messrs. Tuff & Hoar, and destroyed at the Plumstead Destructor. This is a decrease of over 30 per cent compared with two years ago and points to a very satisfactory decrease of waste.

In addition, 683 loads of trade refuse weighing 340 tons were removed to the Plumstead Destructor and destroyed (the Contractors removed 354 loads and were paid for the removal by the tradesmen at the rate of 2/- per load). £3,493. 10. 2 was paid for collection in Plumstead, compared with £3,405. 16. 2 in 1916.

In Eltham, the sum of £1,676. 12. 5 (£1,364. 16. 6 in 1916) was paid to the Contractors for removal of dust. 20 loads of trade refuse were removed at the tradesmen's cost.

20. 2,863 (2,336 in 1916) receptacles of offensive trade refuse were removed. There are now 24 (26 in 1916) tradesmen on the books.

HOUSING OF THE WORKING CLASSES ACTS.

21. Four houses were dealt with under the Housing Act, compared with 18, 16, and 6, in the three previous years.

Two houses were closed; one, 16 Martyn's Passage was closed by order, and one, 6 New Street, was closed and demolished

by consent of owners. Closing orders were served for 87 Robert Street and 18 Ravine Grove. The work required was done and these houses are now re-opened.

HOUSES REGISTERED UNDER THE BY-LAWS.

22. At the commencement of the year, 430 houses were on the register, 6 were newly registered, and 1 taken off the register, leaving 435 on the register at the close of the year. The number has remained about the same for six or seven years.

23. These houses were inspected, some quarterly, others half-yearly or yearly. 609 inspections were made in all, and 316 notices served.

The registered houses were under the care of Inspectors Wood and Miss Middlebrook.

INHABITED HOUSE DUTY.

24. No certificate under the Inland Revenue Act was applied for.

UNDERGROUND ROOMS

25. Two underground rooms occupied for sleeping were found not in accordance with the regulations and the occupation stopped on service of notice.

FACTORIES, WORKSHOPS, AND WORKPLACES.

26. There were, at the close of the year, 203 (200 in 1916) workshops on the register. 387 inspections were made and 53 notices served and complied with. 342 (352 in 1916) inspections of home-workers' premises were made and 7 (12 in 1916) notices sent and attended to.

Mr. Rance inspected the Factories and Workshops employing males, and Miss Middlebrook those where women are employed; 10 new workrooms were measured up and put on the register.

BAKEHOUSES.

27. The number of factory bakehouses is 8, and of workshop bakehouses in use is 37. 11 of the latter being underground. They were all inspected twice. I inspected most of them personally and found them generally satisfactory. 14 certified underground bakehouses are not in use.

ICE-CREAM SHOPS

28. No ice cream was made or sold.

FRIED FISH SHOPS.

29. There are 39 fried fish shops in the Borough. 42 inspections were made, and 7 notices served.

DISINFECTION

30. Rooms at 1,064 houses were disinfected in 1917, compared with 1,344, 1,252, and 989 in the three preceding years.

The disinfecting apparatus was used 1,064 times for 22,180 articles after infectious disease and 93 times for special disinfection.

Books from the Free Libraries and Public Schools were disinfected.

The sum of £8. 7. 0 was received for disinfection after special cases of illness on request of the occupier. In addition a large quantity of horsehair and blankets was disinfected for the Army Ordnance Store Department for the sum of £79.13.9.

THE MORTUARIES.

31. The Sun Street Mortuary was used for 185 bodies compared with 189, 277 and 271 in the three preceding years. 177 were deposited for inquest and 8 for custody. 90 post-mortem examinations were made. No body was deposited in the infectious mortuary, compared with 2, 1, and 3 in the three preceding years.

The Eltham Mortuary was used for five bodies compared with 1 in 1914, 3 in 1915 and 8 in 1916. 2 were for inquest and 3 for custody.

CEMETERIES.

32. The two Borough Cemeteries were well maintained and no complaint was received. 701 bodies were buried in Woolwich Cemetery, compared with 667, 720, and 694, in the three previous years. There were 665 interments in the Plumstead Cemetery, compared with 842, 834, and 744, in the three previous years. 36 burials took place in Plumstead Churchyard, compared with 60, 34, 51, 46, and 38, in the five preceding years.

CLEANSING OF VERMINOUS PERSONS.

33. The station for cleansing verminous persons was opened in November, 1906. During 1917 it was used by 2,800 persons, compared with 430, 651, 811, 954, and 1,124, in the five preceding years. The users were 17 adults (viz., 8 females and 9 males) and 2,783 children (viz., 1,652 females and 1,131 males).

568 verminous rooms were disinfected. The adults came mainly from common lodging-houses and the children from County Council Schools.

An agreement was entered into with the London County Council, dated August 21st, 1911, to allow the London County Council to use the Borough Council Cleansing Station for cleansing school children.

Owing to vermin and scabies introduced by soldiers returning from abroad, there has been a great increase of cleansing required for the children.

The station is now reserved for them every day except Saturday and Sunday between 9 a.m. and 4.30 p.m., girls being cleansed between 9 and 1, and boys in the afternoon. The Borough Council must properly cleanse the children and their clothes to the reasonable satisfaction of the London County Council, which pays 1/- for each cleansing.

The Borough Council for this purpose employs a female attendant for the five days at a cost of 5/- per day, plus war bonus.

£136. 17. 0 was paid by the London County Council for the school children cleansed last year.

The cleansing of children is supervised by a school nurse.

A box of stavesacre ointment is supplied to each bather, with instructions for its use. The names and addresses of bathers are entered in a book, and the woman inspector calls at the homes and arranges for necessary disinfection and cleansing of verminous bedding and rooms.

TENTS, VANS AND SHEDS.

34. During the year, 58 tents, vans, and sheds, were inspected (53 in 1916) and one notice served under the By-laws for this class of dwelling. 53 were in Eltham, 4 in St. Margaret's Ward, and one in St. Nicholas Ward.

NOTICES AND PROSECUTIONS.

35. Fewer (2,750) intimation notices, but more (867) statutory notices were served. 101 of the latter, not having been complied with in the time specified, were referred to the Town Clerk, who, before taking proceedings, wrote a warning letter in each case. Finally, 4 defaulters were summoned at the Police Court. The results are given in Table XII. Convictions were obtained and orders made in every case.

BACTERIOLOGICAL EXAMINATION.

36. The Council's bacteriological work is done by the Bacteriological Department of the Seamen's Hospital.

1,253 bacteriological examinations were made for the Public Health Department, viz., 953 for diphtheria, 286 for phthisis, and 9 for enteric fever. The total cost was £199.7.0 compared with £156. 13. 0 in 1915.

INFANT WELFARE

37. Much work was done and considerable advance made in Infant Welfare during the year. The Infant Consultation conducted by the Medical Officer of Health at the Town Hall was continued on Wednesday afternoon. The number of attendances shows an increase on the preceding year. The Health Visitors of Woolwich and Plumstead parishes weigh the infants and assist the Medical Officer. A new Consultation was commenced at Eltham in April 1917. This is held on Thursday afternoons (at St. Luke's Church Hall, which the Borough Council rents for the purpose. The cost for rent, lighting and heating in 1917 was £30.

Dr. Hawthorne conducts the Consultation assisted by the Health Visitors and voluntary workers. Dr. Hawthorne was paid one guinea per afternoon. The average attendance at Woolwich was 23, and at Eltham 14.

The total attendances at the two consultations were 1,792 compared with 1,408 in 1913.

An arrangement was made for children needing medical attendance to be treated at the School Clinic in Brewer Street at the cost of the Borough Council if the parents could not afford a Doctor.

The Ante-natal Clinic conducted jointly with the British Hospital, continued at the Town Hall. The Medical Officer was Dr. Agnes Swanson and the Health Visitors attended in rotation. 48 expectant mothers attended.

An additional Health Visitor - Miss Latham - was appointed and commenced work in May 1917.

In addition to this official work, the Medical Officer of Health and Health Visitors co-operated in much voluntary work done by the Advisory Committee for Women Munition Workers, the Committee of the Day Nursery and the Invalid Children's Committee.

WOMAN SANITARY INSPECTOR'S WORK.

38. The following is a summary of the work done by Miss Middlebrook:-

Women's Lavatories - Inspections	150
Found dirty and defective	20
Restaurants and Eating-houses - Inspections	100
Defects and dirty conditions found and remedied	16
Factories and Workshops - Inspections	247
Notices served	9
New workrooms measured	10
Homeworkers' Premises - Inspections	342
Cases referred to District Inspectors	7
Houses let in lodgings - Inspections	357
Houses found dirty or unsatisfactory	187
Visits re Phthisis, Measles, Scabies, Whooping-cough and Zymotic Enteritis	622
Visits paid for various causes, complaints, etc.	443
Visits, verminous and dirty houses & bedding	506
Re-visits - estimated	1,000
Cases where bedding was found to be in a dirty and verminous condition, and cleansed or destroyed	420
Number of cases referred to District Inspectors	109
Overcrowding - cases found and abated	43
Notices served re dirty conditions on landlords and tenants	238

39. The following is a Summary of the work of the Health Visitors:-

	Miss Fitzgerald	Miss Farmer	Miss Latham 8 months	Total
successful visits (Mothers out)		319	223	542
visits re Notification of Births	536	460	351	1,347
amiciliary visits to Infants				
attending Consultation	272	166	142	580
re-visits (Births)	166	226	467	859
Ante-Natal visits	16	6	-	22
casualties	607	394	120	1,121
Re-visits	15	34	14	63
Infant Deaths investigated	20	9	8	37
Children over one year	30	-	-	30
motile Enteritis	22	36)	41)	120
Re-visits		6)	15)	
Ophthalmia Neonatorum	13	20	10	43
Re-visits	5	12	11	28
Periperal Fever	7	5	2)	16
Re-visits			2)	
Tuberculosis	38	19	22	79
Complaints investigated	7	-	-	7
Dirty Conditions	11	-	-	11
Visits not otherwise classified	114	48	35	197
Health Lectures given	9	3	1	13
Committees attended	25	-	-	25
(Local Advisory and Day Nursery)		W'ch 49)		
Afternoons at Infant Consultations	50	Eltham 9)	31	139
Mornings at Ante-Natal Clinic	18	19	13	50

N.B. Owing to queues and other difficulties in procuring food taking Mothers from home there was a great increase in unsuccessful visits.

Misses Farmer and Latham make the following observations on their work:-

The effect of war conditions during the latter half of the year, (when it was necessary for mothers to spend many hours a day doing the ordinary household shopping) was seen in many homes, by a considerable neglect of ordinary household duties. During the last months of 1917 there was great difficulty in obtaining milk for children. This was before the Milk Priority Order came into being. Milk sellers were asked to voluntarily agree to give priority in supplying milk to nursing mothers and young children. This arrangement was

readily agreed to by most of the milk sellers but it involved much time being spent by the Health Visitors in arranging for each individual case as it arose.

S T A F F.

40. The following alterations occurred in the Staff:-

Mr. Smith joined the Army and Mr. Britter again took up the duties of chief clerk. The time of Inspectors Tedham and Shaw, and, to a large extent of Chief Inspector Duck, was monopolised by the Food Control work.

My thanks are due to the untiring services of Mr. Duck and the devotion of other members of the sanitary staff. The work of the clerical department was very exacting and involved much overtime.

Messrs. Britter and Smith deserve special commendation for their assiduity.

