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County Borough of Ipswich.

ANNUAL REPORT

OF THE

Medical Officer of Health

AND THE

School Medical Officer

FOR THE YEAR 1913.

BY

A. M. N. PRINGLE, M.B., C.M. Edin., D.P.H. Camb.

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Fellow of the Royal Society of Medicine.

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GENTLEMEN,

I have the honour to present to you my Annual Report on the Health of the Borough for the year 1913, with which is included the sixth Report on the Medical Inspection of School Children.

I desire to express my thanks to the members of the Public Health Committee for the cordial support they have extended to me during the year.

I beg to record once more my grateful appreciation of the support given me by all the Members of the Staff of the Public Health Department.

I remain, Gentlemen,

Your obedient Servant,

A. M. N. PRINGLE, M.B., C.M., D.P.H.,
Medical Officer of Health.

INDEX.

PART I.

PART II.

SUMMARY OF THE VITAL STATISTICS DURING 1913.

Population of the Borough estimated to the middle of the year	75,681
Area of the Borough in Acres	8,336
Density of the Population; persons per acre	9·09
Marriages--Number 586. Marriage-rate per 1000 living	15·4
Births—Number 1814. Birth-rate per 1000 living ..	23·8
Deaths—Number 1057. Death-rate per 1000 living ...	13·9
Number of deaths of Infants under 1 year of age ...	174
Infantile death-rate per 1000 Births	96
Zymotic death-rate per 1000 living (7 principal Zymotic Diseases)	0·88
Death-rate per 1000 living from Pulmonary Tuberculosis	1·16
Death-rate per 1000 living from other forms of Tuberculous Disease	0·43
Respiratory death-rate per 1000 living	1·96
Cancer death-rate per 1000 living	1·347

POPULATION.

The Registrar General estimated the population of Ipswich at the middle of 1913 to be 75,681, of whom 35,890 were males and 39,791 were females.

There is reason to believe that the actual population was greater than that estimated. Probably 76,000 would be nearer the mark.

The estimated population was distributed as follows:—

WARD.	No. of Inhabitants.
St. Margarets	19,832
St. Clements	15,296
Middle	10,009
Bridge	13,273
Westgate	17,271
Total whole Borough	75,681

The completed returns of the 1911 census render it possible to discuss in some detail the age and sex distribution of the population.

For this purpose I append a Table in which is shown the age and sex distribution of the population as actually enumerated at the census years 1891, 1901 and 1911, together with the increase in numbers at each age period and for both sexes, corresponding to the decennial periods 1891-1901 and 1901-1911.

Census Table.

Age Periods.	Census 1891.			Census 1901.			Census 1911			Decennial increases 1891—1901			Decennial increases 1901—1911		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0—5	329	3526	6822	3694	3734	7428	3932	3873	7805	393	211	604	238	139	377
5—10	3269	3443	6712	3483	3604	7087	3866	3772	7638	214	161	375	383	168	551
10—15	3211	3121	6332	3412	3646	7058	3538	3639	7177	201	525	726	126	—7	119
15—20	2749	3300	6049	3250	3731	6981	3285	3651	6936	501	431	932	35	—80	—45
20—30	4150	5315	9465	5328	6287	11615	5587	6526	12113	1178	972	2150	259	239	498
30—40	3484	3933	7417	4180	4963	9143	5189	5760	10949	696	1030	1726	1009	797	1806
40—50	2570	3039	5609	3264	3687	6951	3973	4545	8518	694	648	1342	709	858	1567
50—60	1870	2272	4142	2249	2690	4939	2806	3286	6092	379	418	797	557	596	1153
60—70	1283	1663	2946	1400	1858	3258	1786	2312	4080	117	195	312	368	454	822
over 70	776	1090	1866	921	1249	2170	1036	1588	2624	145	159	304	115	339	454
All ages	26658	30702	57360	31181	35449	66630	34980	38952	73932	4518	4750	9268	3799	3503	7302

Taken as a whole the increase in the population from 1901—1911 was 1966 less than would have been the case if the rate of increase during the 1891—1901 decennium had been maintained.

As regards sex the deficiency in the rate of increase represented a loss of 719 males and 1247 females.

I find that the whole of the deficiency in the rate of increase occurred under 30 years of age. At all age periods under 30, except the 5—10 group, the rate of increase during 1901—1911 was much below that of 1891—1901. Indeed at the 15—20 age period there was an actual diminution in the numbers of the population as enumerated in 1911 when compared with 1901.

In general terms the population increased during the period 1891—1901 by 4787 individuals under 30 years of age, equal to 51% of the total increase, and by 4481 individuals over 30 years, equal to 49% of the total increase.

On the other hand, between 1901 and 1911, the increase in the population under 30 was only 1500, or 20% of the total increase, whilst the increase over 30 years of age was 5802 or 80% of the total increase.

There has thus been a very heavy loss of young lives between 1901—1911 and an accumulation of older persons. Thus we find that between 60 and 70 years of age the population at 1911 was 500 in excess of that enumerated in 1901, and between 50 and 60, 356 in excess.

These are very serious figures, especially in view of a steadily falling birthrate.

I call particular attention to the age periods, 15—20 and 20—30.

Census Year	Number.		Decennial Increase.	
	15—20	20—30	15—20	20—30
1891	6049	9465	—	—
1901	6981	11615	932	2150
1911	6936	12113	—45	498

Here, at two of the most important periods of life from the point of view of future prospects, the rate of increase of the population from 1891—1901 was 3082 or 33% of the total increase during the period, whereas from 1901—1911 the increase was only 543 or 6·2% of the total decennial increase.

MARRIAGES.

586 marriages were registered in Ipswich in 1913 as compared with 596 in 1912 and 559 in 1911.

The marriages may be classified as follows :—

Church of England	301
All others	285
Total	586

The marriage-rate was thus equal to 15·4 per 1000 living as compared with 15·9 in 1912 and 15·0 in 1911.

BIRTHS.

1808 Births were registered in Ipswich during 1913 as compared with 1732 in 1912, 1769 in 1911 and an average of 1836 in the quinquennium 1906 –1910.

The Birth-rate was thus equal to 23·8 per 1000 living as compared with 23·1 in 1912, 23·8 in 1911 and an average of 25·5 in the quinquennium 1906 - 1910.

The Birth-rate for 1913 was the lowest recorded in the known history of the Borough, with the single exception of 1912.

The actual position of the Birth-rate is well illustrated by the following Table, in which are shown, in the form of quinquennial averages :—

(1) The average annual number of births since 1871,

(2) The average annual birth-rates since 1871 and

(3) The average proportional Ratios since 1871.

Quinquennial Periods.	Average Annual No of Births.	Average Annual Birth-rate.	Proportional ratios. The birth-rate 1871-1875. being taken as 100.
1871-1875	1492	33·5	100
1876-1880	1627	33·7	100
1881-1885	1695	32·3	96
1886-1890	1720	31·0	92
1891-1895	1748	29·4	88
1896-1900	1840	28·1	84
1901-1905	1924	28·1	84
1906-1910	1836	25·5	76
1911	1769	23·8	71
1912	1732	23·1	69
1913	1808	23·8	71

Thus the birth-rate at the present time is 30% below that of 1871—1875.

This may be expressed in another way, viz, that if the birth-rate during 1913 had been the same as that of the average of the five years 1871—1875, then there would have been in round figures, 720 more births in Ipswich during 1913 than were actually registered.

I have, in previous Reports drawn attention to the progressive fall in the birth-rate and will not pursue this aspect of the question further than to reiterate the view that the decrease in the number of births of recent years is very largely due to deliberate prevention of conception, or if conception has occurred, to the deliberate production of abortion or mis-carriage. It is almost needless to state that the latter step is infrequent as compared with the former.

The Births during 1913 were distributed as regards sex and legitimacy throughout the various Wards of the Borough and the Workhouse as follows:—

Wards.	Legitimate.			Illegitimate.			Total Legitimate and Illegitimate			per cent of Illegits.	Birth-rate per 1000 living
	M	F	T	M	F	T	M	F	T		
St. Margarets	190	209	399	4	4	8	194	213	407	1·97	20·5
St. Clements	193	169	362	13	16	29	206	185	391	7·41	25·5
Middle	119	120	239	4	7	11	123	127	250	4·4	25·0
Bridge	155	130	285	9	12	21	164	142	306	6·86	23·0
Westgate	205	214	419	12	11	23	217	225	442	5·20	25·6
Transfers Nett	—	—	—	4	2	6	4	2	6	—	—
Workhouse	2	1	3	6	3	9	8	4	12	75	—
Total	864	843	1707	52	55	107	916	898	1814	5 9	23·9

Thus, as in 1912, the birth-rate was lowest in the St. Margarets Ward.

Deaths from all causes.

1091 deaths from all causes were registered in Ipswich during 1913 as compared with 1173 in the previous year.

The crude death-rate, that is to say, the rate calculated without reference to transferred deaths, was thus equal to 14·4 per 1000 living as compared with 15·6 in the previous year.

Of the 1091 deaths registered in the Borough 62 were not inhabitants. The nett number of deaths of inhabitants, registered in the Borough, was thus 1029, as compared with 1119 in the previous year.

To the nett number of deaths it is necessary to add the deathsof 28 individuals, inhabitants of the Borough who died in other parts of the country.

The nett number of deaths of Ipswich inhabitants in 1913 was thus 1057 as compared with 1139 in the previous year.

The nett death-rate, the true death-rate, was equal to 13·9 per 1000 living as compared with 15·2 in the previous year and 12·6 in 1911.

The standardised death-rate is obtained by correcting the nett death-rate for the Borough for age and sex distribution of the population so as to be comparable with that of England and Wales as a whole and was equal to 12·9 per 1000 living.

The death-rate for 1913 was the lowest recorded in Ipswich since 1871 with the exception of the years 1909 and 1912. As regards 1909 the position is doubtful as the system of transfers was not then in operation. As a result of the transfer system it may be taken as certain that all the death-rates prior to 1911 are slightly understated.

The following Table will illustrate the behaviour of the Ipswich death-rate since 1871.

The figures for the 40 years 1871—1910 are given as quinquennial averages.

The proportional ratios are obtained by stating the quinquennial average death-rate of the five years 1871--1875 as 100.

Quinquennial periods.	Average death-rates.	Proportional ratios.
1871-1875	22·5	100
1876-1880	21·9	97
1881-1885	19·7	87
1886-1890	18·7	83
1891-1895	18·8	83
1896-1900	17·4	77
1901-1905	15·6	69
1906-1910	14·5	64
1911	12·7	56
1912	15·2	67
1913	13·9	61

Thus the Ipswich death-rate has fallen about 40% since 1871-1875. In round figures, if the people of Ipswich had died in as great numbers in 1913 as they did in the five years 1871-1875, 650 more deaths would have occurred in the Borough. These 650 individuals owe their lives to three prime agencies :—

(1) Sanitary Science.

(2) Advance in Medical and Surgical knowledge.

(3) Improvement in economic position.

As to which of these factors has had the greater influence, each will be acclaimed *the cause* alike by the Sanitarian, the Practitioner of Medicine, and the Politician, and in each case the claim will be false if the whole credit is claimed.

Admitting all this, we nevertheless claim that Sanitary Science has herein justified every farthing spent upon its pursuit. There is only one asset of real value in human existence and that is health. Health, however, is precisely the last thing that appeals to an individual in health. The appeal in this case is to his pocket.

We need go no further to understand the indignation of the healthy ratepayer against the extravagance of the Local Authority in matters of health if we realise that the only thing appreciable by the man in the street is a dividend expressed in £ s. d.

The Health Department can show nothing of this sort; its dividend is Health, physical fitness, and the mental value that attaches to a healthy population.

The Health Department is out to fight disease-producing conditions, but it is up against two mountains of obstruction.

One of these is self-interest; the other is ignorance colossal, hopeless, assinine.

Age and Sex Distribution of the Deaths from all causes during 1913.

The subjoined table shows the age and sex distribution of the deaths during 1913, together with the corresponding death-rates for both sexes at each age.

Age Periods.	Males.		Females.		Persons	
	No. of Deaths.	Death rate.	No. of Deaths.	Death rate	No. of Deaths.	Death rate.
Under 1 year ..	109	1·19	65	72	174	95
1 year and under 5	45	14·0	31	9·8	76	11·9
5 ,, ,, 10	12	3·0	8	2·0	20	2·5
10 ,, ,, 15	9	2·5	5	1·3	14	1·9
15 ,, ,, 20	12	3·6	11	3·0	23	3.3
20 ,, ,, 30	27	4·7	21	3·1	48	3·9
30 ,, ,, 40	32	5·8	25	4·2	57	5·0
40 ,, ,, 50	45	10·8	48	10·1	93	10·4
50 ,, ,, 60	65	22·1	46	13·4	111	17·4
60 ,, ,, 70	73	39·2	73	30·1	146	34·0
70 and over ..	140	131·7	155	92·8	295	107·9
TOTALS	569	15·8	488	12·2	1057	13·9

The deaths of infants under 1 year are given in relation to the number of births of each sex and both sexes registered during the year.

All the other rates are given in terms of death-rates per 1000 living of each sex and of persons.

The table shows that at all ages and all the age periods the male death-rate was in excess of the female. The greatest excesses of the male death-rate occurred under 5 years of age and over 50.

Quarterly Distribution of the Deaths during 1913.

	March.	June.	Sept.	Dec.	Whole Year
Number of deaths ...	302	247	220	288	1057
Death-rate per 1000 living	15·9	13·0	11·6	15.2	13.9

These figures include the deaths of the 28 inhabitants of the Borough who died in other parts of the country.

As compared with the corresponding periods of 1912, the mortality figures for 1913 were considerably lower for the first three quarters of the year, but higher for the December quarter.

Distribution of the deaths throughout the Borough.

The following Table shows the distribution of the deaths throughout the various Wards of the Borough. The deaths of inhabitants of the Borough, occurring in Public Institutions in the Borough are separately stated and allocated to the Wards in which the persons were resident before removal to the Institutions. In addition, the transferred deaths, that is to say the deaths of inhabitants of the Borough occurring in other parts of the country, are distributed in accordance with the Wards to which the individuals belonged.

There remained 9 deaths, 5 occurring in Ipswich Institutions, and 4 transfers, of which the home address could not be ascertained.

WARD.	No. of deaths registered in the Ward.	No. of deaths occurring in Public Institutions.	Transfers from other parts of the country.	Total deaths of inhabitants in each Ward.	Proportion of deaths in Public Institutions in the Borough.	Death rates per 1000 living.
St. Margaret's ..	201	41	7	249	20·3	12·5
St. Clement's ..	163	59	4	226	36·1	14·7
Middle ..	123	33	2	158	26·8	15·7
Bridge ..	135	40	7	182	29·6	13·7
Westgate ..	187	42	4	233	22·4	13·4
Institution deaths not allocated	—	5	—	5	—	—
Transfers not allocated	—	—	4	4	—	—
TOTAL ..	809	220	28	1057	27·1	13·9

Thus the death-rate was highest in the Middle Ward and lowest in St. Margaret's.

DEATHS IN PUBLIC INSTITUTIONS.

282 deaths were registered in Public Institutions in 1913 as compared with 271 in the previous year. Of these, 62 were deaths of individuals not inhabitants of the Borough. The nett number of deaths of inhabitants in the local Institutions was thus 220. This is the greatest number of Institution deaths yet recorded in the history of the Borough.

In addition to the deaths in Local Institutions, 10 inhabitants of the Borough died in Institutions outside the Borough.

These are shown in the annexed Table.

Character of Institution.	Ipswich Institutions.			Institutions in other Districts.			Total Institutional Deaths.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Infirmaries ..	85	40	125	3	—	3	88	40	128
Asylums ..	8	9	17	3	1	4	11	10	21
Hospitals ..	34	21	55	2	—	2	36	21	57
Fever Hospitals	13	5	18	1	—	1	14	5	19
St. John's Home	1	4	5	—	—	—	1	4	5
TOTAL ..	141	79	220	9	1	10	150	80	230

The deaths of residents of the Borough in Public Institutions were equivalent to an annual death-rate of 3·12 per 1000 living as compared with 2·89 in 1912.

21·7% of all the deaths of inhabitants of the Borough occurred in Public Institutions as compared with 19·3% in 1912, and 17·4% in 1911, and with averages of 13·8%, 10·5%, and 9·8% in the three preceding quinquennial periods.

The Institution deaths in 1913 were 68% in excess of those of the quinquennial period 1891-1895.

10 inhabitants of the Borough died in Nursing Homes as compared with 6 in 1912, and 4 in 1911.

The causes of death in Institutions were very various but may be summarised as follows:—

Zymotic Diseases ...	...	...	14
Diphtheria ...	7		
Scarlet Fever ...	4		
Pertussis ...	2		
Diarrhœa ...	1		
Tuberculous Diseases ...	...	...	35
Pulmonary Tubercle ...	27		
All others ...	8		
Cancer	...	...	18
Senility	...	...	32
Diseases of the Nervous System	...	...	28
,, ,, Circulatory System	...	...	20
,, ,, Respiratory ,,	...	...	23
,, ,, Digestive ,,	...	...	15
,, ,, Urinary ,,	...	...	9
Violence	...	...	17
All others	...	...	19
	TOTAL		230

Summary of the causes of Death during 1913.

In the following Table the principal causes of death during 1913 are given in comparison with the corrresponding figures for 1911 and 1912.

Cause of Death.	1911	1912	1913
Respiratory Diseases ...	109	176	149
Cancer	83	89	102
7 Principal Zymotics ...	87	111	67
Heart Diseases	115	115	86
Pulmonary Tuberculosis ...	98	92	88
Other forms of Tubercle ...	17	34	33
Apoplexy	47	49	55
Prematurity	32	44	39
Atrophy, Debility, Marasmus ...	30	36	39
Senility	79	89	99
Diseases of the Digestive System	35	36	34
Urinary Diseases	24	39	37
Accidents	35	28	38
All others	153	201	191
	944	1139	1057

The principal variation is the heavy increase in the number of deaths assigned to Cancer.

There is a considerable drop in the case of Heart Diseases and Zymotic Diseases.

In other respects there is but little variation.

RESPIRATORY DISEASES.

149 deaths were ascribed to diseases of the Respiratory System in 1913 as compared with 176 in the previous year.

The Respiratory death-rate was thus equal to 1·96 per 1000 living as compared with 2·34 in the previous year.

The following table shows the quarterly distribution of the deaths from Respiratory Diseases in Ispwich during 1913 as contrasted with the experience of the previous five years. As usual the March Quarter was the most fatal and the September Quarter the least fatal.

Taken as a whole the figures for 1913 correspond very closely with the average of the previous five years.

Table showing the deaths from Respiratory diseases in Ipswich in 1913 distributed according to the Quarters of the year in which they occurred together with the corresponding death-rates and proportions of the total mortality.

Year.	March.			June.			September.			December.			Whole year.		
	No. of Deaths.	Death rate per 1000 living.	Proportion of the total mortality from all causes.	No. of Deaths.	Death rate per 1000 living.	Proportion of the total mortality from all causes.	No. of Deaths.	Death rate per 1000 living.	Proportion of the total mortality from all causes.	No. of Deaths.	Death rate per 1000 living.	Proportion of the total mortality from all causes.	No. of Deaths.	Death rate per 1000 living.	Proportion of the total mortality from all causes.
1908	91	5·06	25	30	1·66	13	17	0.94	8	39	2.17	14	177	2·46	16·7
1909	56	3·08	19	25	1·37	11	14	0·77	7	53	2.91	18	148	2·03	14·9
1910	56	3·05	17	25	1·36	10	12	0·65	6	32	1.74	12	125	1·70	12 1
1911	43	2·32	18	34	1·83	15	11	0·59	4	19	1·02	8	107	1·44	11·5
1912	66	3·52	20	38	2·03	13	23	1·23	9	49	2 61	19	176	2·34	15.7
Average of 5 years	**62·4**	**3·40**	**19**	**30·4**	**1·65**	**12**	**15·4**	**0·83**	**7**	**38.4**	**2·09**	**14**	**146·6**	**1·99**	**14·2**
1913	62	3·27	20	29	1·53	11	16	0 84	7	42	2·22	14	149	1·96	14·0

The following Table shows the age distribution of the deaths from Respiratory Diseases in Ipswich during 1913.

Age periods	Under 1	1-5 yrs.	5-10 yrs.	10-15 yrs,	15-20 yrs.	20-25 yrs.	25-35 yrs.	35-45 yrs.	45-55 yrs.	55-65 yrs.	65-75 yrs.	+75 yrs.	All ages
Death-rates per 1000 living at each age period.	10·2	2·5	0·38	0·27	0·33	0·41	0·96	1·20	2·82	10·69	25·34	23·2	1.96
No. of deaths.	16	16	3	—	2	2	5	10	9	15	34	37	149

Thus 46% of all the deaths from Respiratory Diseases occurred at the two age periods of under 5 years and over 75 years. If the age period 65-75 be included the proportion is increased to 69%.

The Mortality from Respiratory Diseases in children under 5 years of age was much below that of 1912.

CANCER.

102 deaths were referred to Cancer in 1913 as compared with 89 in the previous year and 83 in 1911.

Of the 102 deaths from Cancer 98 occurred in the Borough whilst 4 occurred in other parts of the country.

The distribution of the deaths from Cancer throughout the various Wards of the Borough was as follows :—

Ward	Males	Females	TOTAL
St. Margarets	12	19	31
St. Clements	7	12	19
Middle	5	3	8
Bridge	7	9	16
Westgate	13	15	28
TOTALS	44	58	102

Of these deaths 18 or 17·4% (10 males and 8 females) occurred in Public Institutions. These 18 deaths as well as the deaths in other districts are referred, in the above Table, to the various Wards to which the persons belonged.

The age and sex distribution of the deaths from Cancer together with corresponding death-rates were as follows :—

Age periods.	Males.		Females.		Total.	
	No.	Death-rate	No.	Death-rate	No.	Death-rate
under 35 years	2	0·08	3	0·12	5	0·10
35-45	3	0·62	3	0·54	6	0.58
45-55	8	2·30	12	2·98	20	2·66
55-65	10	4·14	16	5·55	26	4·91
65-75	13	9·93	16	8·55	29	9·12
75 and over	8	14·06	8	8·97	16	10·95
All ages	44	1·226	58	1·457	102	1·347

We may construct the following additional Table :—

	Males.	Females.	TOTAL.
Death-rates per 1000 living at all ages under 35 years	0·08	0·12	0·10
Death-rates per 1000 living at all ages over 35 years	3·33	3·62	3·49

The higher mortality at the greater ages is very marked. There is a notably heavy mortality amongst males over 65 years of age. As a matter of fact the male mortality is the heaviest yet recorded. The female mortality is also the highest on record, except for the year 1909.

For both sexes the mortality of 1913 was the highest on record, except the year 1909, which was ·015 per 1000 higher.

97 of the deaths from Cancer were over 35 years years of age. Cancer thus accounted for no less than 14·2% of all the deaths occurring over 35 years of age.

The deaths from Cancer were distributed according to the parts of the body affected, as follows:—

Organ Affected.	Males.	Females.	TOTAL.
Tongue	4	—	4
Oesophagus	2	1	3
Stomach	6	6	12
Intestines	2	4	6
Rectum	6	3	9
Liver	5	8	13
Head and Face	3	3	6
Neck and Throat ..	6	3	9
Urinary Organs ..	3	1	4
Generative Organs ..	2	11	13
Breast	—	11	11
Other parts of the body ..	3	3	6
Parts not stated ..	2	4	6
	44	58	102

Thus more than half of the Male Cancer deaths were referred to the digestive system, whilst the usual selection of the female generative organs was again in evidence.

The subjoined Table compares the Cancer deaths and death-rates for 1913 with the previous 5 years.

Year.	Number of Deaths.			Death-rate per 1000 living.		
	Male.	Female.	Total.	Male.	Female.	Total.
1908	29	52	81	0·854	1·369	1·126
1909	41	58	99	1·194	1·512	1·362
1910	40	48	88	1·152	1·241	1·199
1911	35	48	83	0·999	1·229	1·119
1912	36	50	86	1·014	1·268	1·148
1913	44	58	102	1·226	1·457	1·347

Thus during each of the last six years the Cancer death-rate in Ipswich has exceeded 1 per 1000 living.

This rate is considerably in excess of that of England and Wales as a whole.

DEATHS FROM TUBERCULOSIS IN 1913.

88 deaths were referred to Pulmonary Tuberculosis in 1913 as compared with 92 in 1912, 98 in 1911, and an average of 100·6 for the years 1890-1910 inclusive.

33 deaths were referred to non-Pulmonary Tuberculous Disease in 1913, as compared with 34 in 1912, 17 in 1911, and an average of 32 for the years 1890-1910 inclusive.

The death-rate from Pulmonary Tuberculosis in 1913 was equal to 1·16 per 1000 living, as compared with 1·23 in 1912 and 1·32 in 1911.

Pulmonary Tuberculosis accounted for 8·3% of all the deaths registered during the year as compared with 8% in 1912.

The death-rate from forms of Tuberculosis other than Pulmonary was equal in 1913 to 0·43 per 1000 living as compared with 0·45 and 0·22 in 1912 and 1911 respectively.

The following Table gives the age and sex distribution of the deaths from the various forms of Tuberculosis in 1913.

Group.	Sex	Under 1 year	1—5	5—10	10—15	15—20	20—25	25—35	35—45	45—55	55—65	Over 65	All Ages.	Death-rates per 1000 living at all ages for each sex.	Death-rates per 1000 living both sexes
Pulmonary Tuberculosis	M	1	1	..	..	2	2	9	13	12	10	6	56	1·56	1·16
	F	..	..	2	1	6	1	4	8	9	..	1	32	0·80	
Abdominal Tuberculosis	M	..	4	..	..	..	..	..	..	..	..	..	4	0·11	0·11
	F	1	1	..	..	1	1	..	1	..	..	..	5	0·12	
Cerebral Tuberculosis	M	3	1	1	2	..	..	..	..	..	..	..	7	0·19	0·14
	F	3	1	..	..	..	..	..	..	..	..	..	4	0·10	
General Tuberculosis	M	..	..	..	..	..	..	2	..	..	1	..	3	0·07	0·11
	F	..	2	..	..	..	1	..	..	1	1	1	6	0·15	
All other forms of Tuberculosis.	M	..	..	..	..	..	..	..	..	..	..	1	1	0·07	0·05
	F	..	..	..	..	..	..	1	1	..	..	1	3	0·27	
Total all forms of Tuberculosis.	M	4	6	1	2	2	2	11	13	12	11	7	71	1·97	
	F	4	4	2	1	7	3	5	10	10	1	3	50	1·25	
Grand Totals	Both sexes	8	10	3	3	9	5	16	23	22	12	10	121	1·59	
Death-rates per 1000 living for both sexes at each age period		5·13	1·57	0·38	0·41	1·29	0·82	1·32	2·22	2·93	2·26	2·15	1·59		

As usual the male death-rate was much higher than the female.

The deaths from the various forms of Tuberculosis were distributed throughout the Borough as follows :—

Ward.	Forms of Tuberculosis.					Total.
	Pulmonary	Abdominal	Cerebral.	General.	All others.	
St. Margaret's	17	2	2	2	2	25
St. Clement's	23	1	1	3	1	29
Middle ..	6	3	3	1	1	14
Bridge ..	24	2	3	2	..	31
Westgate ..	18	1	2	1	..	22
Whole Borough	88	9	11	9	4	121

Of the total 121 deaths from Tubercule, 35 occurred in Public Institutions in Ipswich.

Institution.	Pulmonary.			Abdominal.			Cerebral.			General.			All others.			TOTAL.		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Infirmary	17	2	19	..	..	..	..	..	..	..	4	4	..	..	..	17	6	23
East Suffolk Hospital	..	..	..	..	1	1	1	..	1	..	..	..	..	1	1	1	2	3
Isolation Hospital ..	4	2	6	..	..	..	..	..	..	..	..	..	..	..	..	4	2	6
Asylum	1	1	2	..	..	..	..	..	..	1	..	1	..	..	..	2	1	3
TOTAL	22	5	27	..	1	1	1	..	1	1	4	5	..	1	1	24	11	35

26% of all the deaths from Pulmonary Tuberculosis occurred in the Infirmary, and 30·6% of the total in Public Institutions.

The quarterly distribution of the deaths from the various forms of Tuberculosis was as follows :—

	Pulmonary	Abdominal	Cerebral.	General.	All others.	TOTAL.
March ..	29	1	2	2	..	34
June ..	18	5	3	3	3	32
Sept. ..	18	1	5	1	1	26
December	23	2	1	3	..	29
TOTAL	88	9	11	9	4	121

DEATHS FROM ZYMOTIC DISEASES.

The diseases discussed in this relation are the 7 principal Zymotic Diseases, viz, Smallpox, Diphtheria, Scarlet Fever, Enteric Fever, Measles, Whooping Cough and Zymotic Diarrhœa.

During 1913, 67 deaths were referred to these various diseases, as compared with 111 in the previous year and 85 in 1911.

The death-rate from these diseases was thus equal to 0·88 per 1000 living, as compared with 1·62 in 1912 and 1·14 in 1911.

It will be well to set forth, in some detail, the previous Zymotic history of the Borough, at least in so far as the deaths are concerned, and for this purpose I have constructed the following Table, in which the mortality from each of the principal Zymotics is set forth for each year since 1891, together with quinquennial averages for the four quinquennial periods in the Table.

Year.	Smallpox	Scarlet Fever	Diphtheria	Enteric	Measles	Pertussis	Diarrhœa	Total	Death-rate per 1000
1891	—	5	20	16	7	5	27	80	1·39
1892	—	3	13	7	10	8	33	74	1·26
1893	1	8	7	20	43	12	92	183	3·08
1894	—	18	22	4	—	42	11	97	1·60
1895	—	2	35	11	3	34	122	207	3.37
Average	**0·2**	**7·2**	**19·4**	**11·6**	**12·6**	**20·2**	**57·0**	**128·2**	**2·15**
1896	—	4	18	8	50	23	71	174	2·79
1897	—	2	8	6	1	21	73	111	1·76
1898	—	2	8	7	48	31	127	223	3·48
1899	—	5	9	32	2	3	147	198	3·05
1900	—	2	9	12	17	16	72	128	1·94
Average	—	**3·0**	**10·4**	**13·0**	**23·6**	**18·8**	**98·0**	**166·8**	**2·60**
1901	—	—	19	14	9	35	70	147	2·20
1902	—	2	7	32	—	14	18	73	1·08
1903	—	—	11	5	48	12	32	108	1·58
1904	—	1	10	7	20	7	79	124	1·79
1905	—	3	11	7	12	22	40	95	1·36
Average	—	**1·2**	**11·6**	**13·0**	**17·8**	**18·0**	**47·8**	**109·4**	**1·60**
1906	—	2	9	4	—	6	79	100	1·42
1907	—	1	8	3	36	27	15	90	1·26
1908	—	1	10	1	15	12	37	76	1·05
1909	—	4	8	3	17	15	16	63	0·86
1910	—	1	8	2	35	16	19	81	1·10
Average	—	**1·8**	**8·6**	**2·6**	**20·6**	**15·2**	**33·2**	**82·0**	**1·14**
1911	—	—	12	1	—	2	70	85	1·14
1912	—	1	15	—	50	33	12	111	1·62
1913	—	5	11	—	6	15	30	67	0·88

DIARRHŒA.

30 deaths were ascribed to Diarrhœa in 1913 as compared with 12 in 1912 and 70 in 1911.

The Diarrhœa death-rate was thus equal to 0·39 per 1000 living as compared with 0·16 in 1912 and 0·94 in 1911 and an average of 0·46 for the previous 5 years.

Of the deaths from Diarrhœa during 1913, 3 occurred in the March Quarter, 1 in the June and 13 each in the September and December Quarters.

9 deaths were registered in both September and October.

The greatest prevalence of the disease was in the end of September and the first fortnight in October.

The Ward Distribution of the deaths was as follows :—

Ward.	No. of Deaths.	Death-rate per 1000 living.
St. Margarets	7	0·35
St. Clements	8	0·52
Middle	8	0·77
Bridge	2	0.15
Westgate	5	0·28
Whole Borough	30	0.39

One of the deaths occurred in a Public Institution.

22 of the fatal cases were males and 8 females.

22 of the Diarrhœa deaths were under 1 year of age, 6 were between 1 and 2 years, 1 between 2 and 3 years and 1 between 70 and 75 years.

WHOOPING COUGH.

15 deaths were referred to Whooping Cough in 1913 as compared with 33 in the previous year and 3 in 1911.

The death-rate from Whooping Cough was thus equal to 0·19 per 1000 living as compared with 0·44 in 1912. Of the deaths 10 were male and 5 females.

All the deaths were under 5 years of age. 3 were under 1 year, 8 between 1 and 2, 2 between 2 and 3, 1 between 3 and 4 and 1 between 4 and 5.

5 cases belonged to St. Margarets, 4 to the St. Clements and 2 each to the other three wards of the Borough.

10 cases occurred in the March Quarter, 3 in the June Quarter and 2 in the December Quarter.

MEASLES.

6 deaths occurred from measles in 1913 as compared with 50 in in the previous year.

1 death occurred in each of the months of March, April and May and 3 in December.

The death-rate from Measles was equal to 0·07 per 1000 living as compared with 0·66 per 1000 living in 1912, 0·00 in 1911, and an average of 0·28 per 1000 living in the previous 5 years.

5 of the deaths were males and 1 female.

All the deaths were under 5 years of age.

2 were under 1 year, 2 between 3 and 4 years and 2 between 4 and 5 years.

2 of the deaths belonged to the St. Margarets, 1 to the Middle and 3 to the Westgate Wards.

INFANTILE MORTALITY.

174 deaths of infants under 1 year of age were registered in Ipswich during 1913 as compared with 196 in 1912, 180 in 1911, and an average of 202 in the previous 5 years.

The Infantile death-rate was equal to 96 per 1000 births, as compared with 113 in 1912, 101 in 1911, and an average of 110 for the previous 5 years.

The scheme for dealing with Infantile Mortality in Ipswich began in 1907. In the following Table a comparison is instituted between the experience from 1907 to the end of 1913, with that obtaining in a corresponding number of years prior to 1907.

Years.	Total number of deaths of Infants.	Average Annual No. of deaths.	Average annual death-rate.
1900-1906	1956	279	146
1907-1913	1282	183	101

Thus the number of deaths of Infants from 1900-1906 exceeded the Infant deaths recorded from 1907-1913 by 674. This figure gives an erroneous conception as to the actual saving of Infants' lives, which is not really so great. By comparing the death-rates for each selected period we find that the actual saving in life is 562. In other words, since Infantile Mortality procedures have been in force in the Borough, 562 individuals have not died in infancy who would have died if the conditions as to infant mortality had remained during the last 7 years at the same level as obtained in the immediately preceding 7 years. This difference is rendered all the more striking by the fact that the seven years 1900-1906 represent quite the normal rate of infantile mortality as exhibited by the experience of the Borough from 1871 onwards.

Perhaps the case may be rendered more evident by the following Table :—

Year.	No. of deaths under 1 year.	Infant Death-rate.	Special Procedures in force.
1900 ...	281 ...	156 ...	nil.
1901 ...	327 ...	172 ...	,,
1902 ...	231 ...	123 ...	,,
1903 ...	272 ...	140 ...	,,
1904 ...	276 ...	141 ...	,,
1905 ...	289 ...	147 ...	,,
1906 ...	280 ...	144 ...	,,
Total number of deaths	1956		
Average annual number of deaths	279		
Average annual death rate ...		146	
1907 ...	197 ...	106 ...	Special Schemes.
1908 ...	200 ...	110 ...	,,
1909 ...	162 ...	89 ...	,,
1910 ...	173 ...	95 ...	,,
1911 ...	180 ...	101 ...	,,
1912 ...	196 ...	113 ...	,,
1913 ...	174 ...	96 ...	,,
Total number of deaths	1282		
Average annual number of deaths	183		
Average annual death rate ...		101	

Evidently, therefore, the fall is a sustained matter from year to year, and not a question of accidental variation.

The causes of death of infants during 1913 are given below.

6 Principal Zymotic Diseases ...	6
Diarrhœa	22
Premature Births	39
Atrophy, Debility, Marasmus ...	45
Congenital Defects	14
Tuberculous Diseases ...	9
Respiratory Diseases	16
Suffocation	7
Meningitis	6
All others	10
TOTAL ...	174

The chief variations from the experience of 1912 were the small number of deaths from Zymotic diseases, and an increase in the deaths from Diarrhœa.

The Respiratory deaths were much below the experience of previous years.

The deaths from Prematurity were about the average, but the deaths from Atrophy, Debility, Marasmus and congenital Malformation were rather more numerous than usual.

Of the total deaths from all causes in Infancy, 62 occurred in the first week in life or 35% of all the deaths under one year, and 83 or 47% of all Infant deaths occurred under 1 month. Thereafter, each month showed progressive diminution in the number of deaths.

There is nothing very new in this condition except that there is a slight excess in the first week of life.

The essential fact is that a large number of infants died during the first week, who apparently had no chance of survival, or who, if they had survived, might have added to the already closely packed ranks of the unfit. But it is not clear that all the infants who died during the first week of life were really unfit.

It is a reasonable proposition that given suitable environment many of these infants would survive and become satisfactory members of society. Colour is afforded to this view of the case, in face of the fact that the social position of the parents of not a few of the children dying under one week was distinctly unsatisfactory.

The inevitable result of such conditions of life are of course poor food, poor housing and not infrequently conditions of extreme squalor. Survival under such conditions is evidently only to be thought of for the more fit members of the family. Under these conditions an infant born prematurely or the victim of primary deficiency of vitality has a much diminished chance of survival.

Whilst this is true of the infant it is equally true that permanent injury may be inflicted on the infant before birth through malnutrition or neglect of the mother herself. There is no doubt that ante-natal conditions exercise a profound influence on the future of a child.

It is true of course that the vast majority of infants are born healthy and fit but it is a question if they are born as healthy or as fit as they could be if the mother could receive adequate attention during pregnancy.

There can be no question that the pregnant woman is entitled to receive much more attention than has been bestowed upon her in the past.

The question of factory labour by pregnant women is a matter requiring legislative control, not from any point of view of sickly sentimentality, but merely from considerations of the future of the race.

The quarterly Infant Mortality was as follows :—

Quarter.	March.	June.	Sept.	Dec.	Whole Year.
No. of deaths	53	36	44	41	174
Death-rate per 1000 births	120	74	96	93	96

As usual in the absence of a Diarrhœa Epidemic, the March Quarter showed the heaviest mortality.

The deaths were distributed throughout the Borough as follows :—

	No. of deaths.	Infant death-rate
St. Margarets	40	95.4
St. Clements	32	81·9
Middle	36	144
Bridge	27	88·2
Westgate	39	88·2
Whole Borough	174	96·5

Thus St. Clements Ward showed the lowest rate whilst the Middle produced the highest.

The following Table shows the causes of death amonst illegitimate infants.

Prematurity	3
Debility from Birth	2
Pneumonia	2
Tuberculosis	2
Diarrhœa	1
Suffocation	1
TOTAL	11

The illegitimate Infant Death-rate was equal to 109 per 1000 births as compared with 95 for the legitimates. These figures contrast with the corresponding rates for 1912 of 250 for the illegitimates and 105 for the legitimates.

The work of the Lady Health Visitor has been carried out during 1913 as before, but it became evident during the year that the demands upon her time were greater than she could fulfill. It was therefore decided to appoint an additional Nurse, half of whose time should be given to the school work in connection with Public Health and half to the Infant work.

As a matter of fact the whole of the time of this Nurse from the time of her appointment to the end of the year was given over to visiting cases of Measles.

1530 visits were paid to infants in their own homes as compared with 1237 in 1912 and 1333 in 1911.

The work carried on at the Infant Consultation progressed in a most satisfactory manner during the year. There is no doubt that this is very greatly appreciated and its educative effects are of the greatest utility. It is an infinitely practical school for mothers, of far more real value than all the lectures in the world.

Medical advice is not given, as the function of the Consultation is to advise on the general management and hygiene of Infancy. This is the true function of such a Consultation.

735 mothers brought their children to the Consultation in 1913 as as compared with 448 in 1912.

The number of visits paid was 3092 as compared with 2097 in 1912.

61 infants were supplied with milk during 1913 as compared with 64 in 1912.

30 expectant mothers received milk or were provided with other food during 1913 as compared with 4 in 1912.

There is great prospect of good work in connection with this particular branch. Experience has shown the Consultation is becoming a centre of information not only on the hygiene of Infancy but also on that of Pregnancy.

NOTIFICATION OF ZYMOTIC DISEASES.

464 notifications of Infectious Disease, exclusive of Tuberculosis, were received in 1913 as compared with 344 in 1912, 315 in 1911, and an average of 219·8 in the preceding quinquennial period.

Of the notifications received, 1 of Enteric Fever, 2 of Diphtheria, and 1 of Scarlet Fever were withdrawn. The nett result was thus 460 notifications of notifiable Zymotic Diseases.

To these have to be added 3 notifications of Enteric Fever which occurred in connection with the shipping using the port.

The following Table shows the number of cases of Zymotic Disease notified in Ipswich since 1891, the year of commencement of compulsory notification.

Year.	No. of Cases.	Attack-rate per1000 living	Year.	No. of Cases.	Attack-rate per1000 living
1891	315	5·46	1903	296	4·33
1892	191	3·26	1904	343	4·97
1893	952	16·00	1905	345	4·94
1894	812	13·45	Quin. Aver.	400	5.85
1895	399	7·60	1906	289	4·10
Quin. Aver.	533·8	8·97	1907	194	2·72
1896	466	7·48	1908	223	3.17
1897	192	3·04	1909	216	2·97
1898	226	3·52	1910	172	2·34
1899	749	11·52	Quin. Aver.	219·8	3·05
1900	332	5·03	1911	315	4·24
Quin. Aver.	393	6·13	1912	344	4·59
1901	319	4·77	1913	460	6·06
1902	697	10·31			

The degree of prevalence of notifiable disease was thus much in excess of the last few years.

Indeed, it is necessary to go back to 1902 to find a year of such high Zymotic prevalence. The figures for 1913 were exceeded by those of the years 1893, 1894. 1895, 1896 (years of excessive Scarlet Fever prevalence), 1899 and 1902.

The cause of the excess in 1913 was Scarlet Fever chiefly, and to a lesser extent Diphtheria. Enteric Fever gave only 8 cases and Puerperal Fever 2.

The notifications were as follows :—

Scarlet Fever	...	...	274
Diphtheria	...	...	136
Erysipelas	...	...	40
Enteric Fever	...	...	8
Puerperal Fever	...	...	2
TOTAL		...	460

SCARLET FEVER.

274 cases of Scarlet Fever occurred in Ipswich in 1913 as compared with 115 in 1912, and 113 in 1911.

The number of notifications in 1913 was exceeded on four occasions since 1891, the year of commencement of compulsory notification, viz., 1893, 1894, 1896 and 1899.

Scarlet Fever accounted for 59·5% of all the notifications received during 1913.

The attack-rate for Scarlet Fever was equal to 3·62 per 1000 living as compared with 1·53 and 1·52 in 1912 and 1911.

The following Table will sufficiently illustrate the behaviour of Scarlet Fever in Ipswich since 1891.

The figures from 1891-1910 inclusive are represented as quinquennial averages, whilst 1911, 1912, and 1913 are dealt with as separate years.

Years.	Average Annual :—						
	No. of notifications	Attack-rates per 1000 living	Numbers isolated in Hospital	Percentage isolation in Hospital	No. of Deaths	Case mortality per cent	Death-rates per 1000 living
1891-1895	358	6·03	124	34·6	7·2	2·0	0·12
1896-1900	172	2·69	71	41·6	3·0	1·73	0·04
1901-1905	138	2·03	103	74·5	1·2	0·86	0·01
1906-1910	86	1·20	72	83·6	1·8	2·07	0·02
1911	113	1·52	101	89·3	—	—	--
1912	115	1·53	103	89·5	1	0·87	0·01
1913	274	3·62	233	85·0	5	1·82	0·06

Thus 1913 exhibited a much higher degree of prevalence than the other periods taken in the above Table except the 1891-1895 quinquennium. In that period there are included the two great epidemic years of 1893 and 1894, in which the numbers of notifications and the attack-rates per 1000 living were respectively 698 and 11·74; and 673 and 11·14.

The following Table shows the Ward distribution of the cases notified during the year together with the numbers and proportions of those removed to Hospital.

Ward.	No. of Cases Notified.	Attack-rates per 1000 living.	Hospital Isolation.	
			No. of cases removed to Hospital.	Percentage removed to Hospital.
St. Margarets	75	3·78	49	65·3
St. Clements	67	4·38	66	98·5
Middle	40	4·00	39	97·5
Bridge	51	3·84	41	80·4
Westgate	41	2·37	38	92·9
Whole Borough	274	3·62	233	85·0

The figures as to isolation refer only to those cases removed to the Borough Isolation Hospital. If there be included 15 cases isolated in the Special Isolation Block at the Ipswich and East Suffolk Hospital, and which occurred in that Institution, then the total number isolated in Hospital from the St. Margarets Ward becomes 64 instead of 49, and the percentage isolated 84·2 in place of 65·3.

For the whole Borough the total Hospital isolations become 248 instead of 233 and the percentage of Hospital isolations becomes 90·5% instead of 85%.

The disease was most prevalent in St. Clements and least in the Westgate Ward.

Hospital isolation was highest in the St. Clements and least in the Bridge Ward.

The age and sex distribution of the cases notified during 1913 was as follows :—

Age periods.	Under 5			5-10			10-15			15-20			20-25			25-35			35-45			All ages		
Sex.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
No. of cases Notified,	30	20	50	63	75	138	24	29	53	2	12	14	2	7	9	1	8	9	1	—	1	123	151	274
Attack-rates per 1000 living.	7·5	5·1	6·3	15·9	19·6	17·7	6·7	7·9	7·3	0·6	3·3	2·0	0·7	2·1	1·4	0·1	1·2	0·7	0·2	—	0·09	3·42	3·79	3·62
Percentage of totals.	24.4	13·6	18·2	51·3	49·6	50·3	19·5	19·2	19·3	1·6	7·9	5·1	1·6	4·6	3·2	0·08	2·9	3·2	0·8	—	0·3	—	—	—

Thus the attack-rate for males under 5 years of age was higher than that of females, but at all other ages the female attack-rate was higher.

The heavy incidence upon children between 5 and 10 years of age is well shown. Indeed a little over 50% of all the cases notified during the year occurred at these ages.

The Scarlet Fever experience of Ipswich compares with that of England as follows :—

Notification Rates per 1000 living.

Year.	England.	County Boroughs.	London.	Ipswich.	Rural Districts.
1911	2·84	3·32	2·33	1·52	2·37
1912	2·95	3·46	2·51	1·53	2·47
1913	3·51	4·26	3·89	3·62	2·61

This is an interesting comparison showing that Ipswich shared in a more or less increased prevalence of Sarclet Fever throughout the country as a whole. In all parts of the Table 1913 is the year of highest prevalence.

In the following Table the cases of Scarlet Fever are referred to the particular portions of the year in which they occurred.

March Quarter.		June Quarter		Sept. Quarter.		Dec. Quarter.	
Jan.	22	April	21	July	21	Oct.	26
Feb.	14	May	15	August	20	Nov.	26
March	16	June	13	Sept.	33	Dec.	47
Total	52	Total	49	Total	74	Total	99

Thus the greatest number of cases were notified in December and the fewest in February. As usual the cases were most numerous in the last quarter of the year.

The type of the disease was mild on the whole though a few rather severe cases occurred.

Two out of five fatal cases were adults. Of these one died from a Streptothrix Septicæmia, whilst the other died suddenly from Cardiac failure. This patient was also suffering from Valvular Heart Disease.

The fatal cases in children were all septicæmic. The case mortality was equal to 1·82 per cent of the cases notified.

4 of the fatal cases died in Hospital.

DIPHTHERIA.

136 cases of Diphtheria were notified in Ipswich in 1913 as compared with 157 in 1912, and 136 in 1911.

The attack-rate was thus equal to 1·79 per 1,000 living, as compared with 2·09 in 1912, and 1·83 in 1911.

Diphtheria was thus less prevalent during 1913 than in either of the preceding years.

Diphtheria accounted for 29·5% of all the notifications received during 1913.

The following Table indicates the history of Diphtheria in Ipswich since 1891 :—

The figures from 1891 - 1910 inclusive are represented as quinquennial averages, whilst 1911, 1912 and 1913 are dealt with as separate years.

Years.	Average Annual—						
	Number of Notificat's	Attack rates per 1000 living	Numbers Isolated in Hospital.	Percent'ge Isolated in Hospital.	Number of Deaths.	Case Mortality per cent.	Death-rate per 1000 living
1890 - 1895	54	0·91	2	4·4	19·4	35·5	0·32
1896 - 1900	52	0·82	4	7·9	10·4	19·7	0·16
1901 - 1905	85	1·25	37	43·2	11·6	13·5	0·17
1906 - 1910	72	1·00	55	76·3	8·6	11·8	0·11
1911	136	1·83	114	83·8	12	8·8	0·16
1912	157	2·09	138	87·9	15	9·5	0·20
1913	136	1·79	118	86·7	11	8·0	0·14

Thus the Diphtheria attack-rate during 1913 was higher than that recorded in any year since 1891, except 1911 and 1912.

The following Table gives the distribution of the cases notified according to the Wards of the Borough :—

Ward.	Number of Cases Notified.	Attack-rates per 1,000 livihg.	Hospital Isolation.	
			No. of cases removed to Hospital.	Percentage Isolated in Hospital.
St. Margarets	32	1·61	25	78·1
St. Clements	33	2·15	31	93·9
Middle ..	18	1·80	16	88·8
Bridge ..	30	2·26	26	86·6
Westgate ..	23	1·33	20	86·9
Whole Borough	136	1·79	118	86·7

Thus the St. Clement's and Bridge Wards were more affected than the rest of the Borough, whilst the Westgate Ward was least affected. The differences are not great, and represent the fact that the disease was generally distributed throughout the Borough.

As usual, Hospital isolation was highest in the St. Clement's Ward.

It was least in the St. Margarets.

The following Table gives the monthly and quarterly distribution of the notifications :—

March Quarter.		June Quarter.		Sept. Quarter.		Dec. Quarter.	
Jan. ..	20	April ..	11	July ..	14	Oct. ..	7
Feb. ..	20	May ..	3	August	12	Nov. ..	13
March..	5	June ..	6	Sept. ..	12	Dec. ..	13
Total -	45	Total -	20	Total -	38	Total -	33

Thus Diphtheria was most prevalent in the March quarter, and the worst months were January and February.

The disease was least prevalent during the June Quarter, and the fewest notifications were received in May.

The age and sex distribution of the cases notified during 1913 was as follows :—

Age Periods	—5			5 - 10			10 - 15			15 - 20			20 - 25		
Sex.	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Number of Notifications	17	15	32	20	37	57	10	16	26	4	5	9	4	1	5
Attack-rate per 1,000 living.	4·26	3·84	4·05	5·05	9·70	7·33	2·80	4·39	3·60	1·21	1·37	1·29	1·46	0·30	0·82
Percentage of Totals	29·8	18·9	23·5	35·0	46·8	41·9	17·5	20·2	19·1	7·0	6·3	6·6	7·0	1·2	3·6

Age Periods	25 - 35			35 - 45			45 - 55			55 - 65			All Ages.	M	F	T
Sex.	M	F	T	M	F	T	M	F	T	M	F	T				
Number of Notifications	2	1	3	..	1	1	..	1	1	..	2	2	Number of Notifications	57	79	136
Attack-rates per 1,000 living	0·34	0·15	0·24	..	0·18	0·09	..	0·24	0·13	..	0·69	0·37	Attack-rates per 1,000 living	1·58	1·98	1·79
Percentage of Totals	3·5	1·2	2·2	..	1·2	0·7	..	1·2	0·7	..	2·4	1·4				

Thus at all ages the male attack-rate was below that for females just as in the case of Scarlet Fever. Under 5 years of age the male attack-rate exceeded the female, and the same thing occurred in the case of males between 20 and 35 years of age.

At all other age periods the female attack-rate was in excess of the males.

By far the heaviest incidence of the disease occurred between 5 and 10 years of age, whilst the degree of prevalence at all ages under 5, together with that between 10 and 15 years of age was practically equal to that of the 5 - 10 age period.

The Diphtheria Statistics of Ipswich during 1911, 1912 and 1913 are contrasted with those of the Country as a whole in the annexed Table of notification rates per 1,000 living.

Year.	England.	County Boroughs.	London.	Ipswich.	Rural Districts.
1911	1·33	1·47	1·64	1·83	1·09
1912	1·24	1·32	1·57	2·09	1·00
1913	1·39	1·48	1·70	1·79	1·03

Thus the Ipswich figures have been consistently higher than any of the groups given in the Table. The last three years have been years of exceptional local prevalence.

ENTERIC FEVER.

9 cases of Enteric Fever were notified in Ipswich during 1913. Of these one was withdrawn, reducing the number of cases to 8, as compared with 4 in 1912, and 10 in 1911.

The attack rate was equal to 0·10 per 1,000 living, as compared with 0·05 in 1912, and 0·13 in 1911.

As to causation, 2 cases were ascribed to oysters and 1 gave a doubtful history of cockles.

Of the remaining 5 cases, 3 were members of the same family. Of these, one had been ill for several weeks, and presumably was the source of infection of the other two members.

Of the 8 cases notified, 2 occurred in the St. Margaret's Ward, 5 in the St. Clement's Ward, and 1 in the Middle Ward.

The attack rates in the St. Margaret's and Middle Ward were equal to 0·10 per 1,000 living, whilst in the St. Clement's Ward, the rate was equal to 0·32 per 1,000.

All the cases notified were removed to the Hospital.

There were no deaths from Enteric Fever in 1913.

Thus for 2 consecutive years, 1912 and 1913, no fatal case of Enteric Fever has occurred in the Borough, an event without parallel in the known health history of Ipswich.

The age and sex distribution of the notified cases was as follows :—

5			5-10			10-15			15-20			20-25			25-35			35-45			All Ages		
M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
-	-	-	-	1	1	-	1	1	-	-	-	1	-	1	3	-	3	1	1	2	5	3	8

The following Table shows the sickness-rate per 1,000 of the population in Ipswich from Enteric Fever, as compared with other parts of the country: —

Year.	England.	London.	County Boroughs.	IPSWICH.	Rural England.
1911	0·38	0·23	0·43	0·13	0·33
1912	0·23	0·16	0·28	0·05	0·18
1913	0·22	0·17	0·25	0·10	0·18

Thus the local conditions were favourable when compared with the rest of the County Boroughs, or with England as a whole.

There is no doubt that the immunity now enjoyed by Ipswich in relation to Enteric Fever is due to the complete abolition of the privy middens and their substitution by the water carriage system.

ERYSIPELAS.

40 cases of Erysipelas were notified in Ipswich in 1913, as compared with 57 in 1912, and 46 in 1911.

The attack-rate per 1000 living was thus equal to 0 53, as compared with 0·76 in the previous year, and 0·44 in 1911.

In the following Table the sickness rates from Erysipelas in Ipswich are contrasted with those of England as a whole :—

Year.	England.	London.	County Boroughs.	Ipswich.	Rural England.
1911	0·71	1·09	0·81	0·44	0·46
1912	0·65	0·91	0·75	0·76	0.45
1913	0·64	0.92	0.74	0.53	0·43

Thus Ipswich compares favourably with the other County Boroughs and with England as a whole.

Of the 40 cases of Erysipelas notified in 1913, 22 occurred in the practise of three Practitioners.

1 case proved fatal. The case mortality per cent. was thus equal to 2·5, whilst the death-rate was equal to 0·01 per 1000 living.

PUERPERAL FEVER.

2 cases were notified in 1913, as compared with 5 in 1912 and 5 in 1911.

Of the notified cases, 1 proved fatal. The death-rate was thus equal to 0·01 per 1000 living.

1 case occurred in the practise of a Midwife, who was suspended from duty until sufficient disinfection had been carried out.

SMALLPOX.

No cases were notified in 1913. The last case notified in the Borough occurred in 1902, and the last fatal case in 1893.

Last year I referred to the progressive tendency to the neglect of vaccination. There is no evidence of any decrease in this attitude of the Public, and it may be assumed with safety that there will be little, if any, improvement in the future, in the absence of a Smallpox outbreak. Thus arises the paradox that vaccination, which prevents Smallpox, will not be practised until the disease, which its use would entirely prevent, has once more claimed its toll of sickness, suffering, permanent disablement and death.

I say nothing of the cost of an Epidemic, in money expended by the public for its control, or of the disastrous effect on commerce occasioned by the occurrence of the disease.

These are, no doubt, heavy matters, but they dwindle into insignificance when compared with the loss of health and life entailed by an Epidemic of Smallpox in an unprotected community.

The whole of this is preventable by efficient vaccination and re-vaccination.

ANTERIOR POLIOMYELITIS and CEREBRO SPINAL MENINGITIS.

There were no cases notified in Ipswich in Ipswich in 1913, as compared with 4 in 1912 and 8 in 1911.

NOTIFICATION OF TUBERCULOSIS

Pulmonary Tuberculosis.

The following Table shows the number of notifications received in each year from the commencement of notification in 1909 to December 31st, 1913.

Year	Poor Law	Hospital	School	Private	Insured	All others	Total
1909	64	—	—	—	—	—	64
1910	44	—	—	—	—	—	44
1911	30	66	—	30	—	6	132
1912	38	39	73	138	—	46	334
1913	21	27	6	60	69	17	200
Totals	197	132	79	228	69	69	774

Of the total cases notified since 1909, 291 have died.

The following Table indicates the classification of the deaths:—

Groups	No. Notified	No. of Deaths	Per cent of Deaths	No. left town	No. remaining on Dec. 31, 1913
Poor Law	197	141	71·5	6	50
Private	228	90	39·4	10	128
Hospital	132	30	34·2	14	88
School	79	2	2.5	6	71
Insured	69	18	26·1	2	49
All others	69	10	14·5	5	54
Total	774	291	37·6	43	440

The chief points of interest in this Table are—

(1) The enormous proportion of Poor Law consumptives that are dead.

(2) The extremely low fatality amongst the school children notified as suffering from the disease.

It is to be noted that the above Table contains all the fatal notified cases irrespective of the cause of death.

I find that 18 of the notified cases of Pulmonary Tuberculosis died from causes other than Tuberculosis. There is, of course, no reason why a patient suffering from Tuberculous Disease should not die from some other disease.

In some cases, however, the conditions are difficult to understand. Thus a child was notified as suffering from pulmonary Tuberculosis. In the death returns for the same week this child was certified to have died from another condition. The date of the death was the day prior to notification. The notification and the death certificate were given by the same practitioner. We may leave this matter with the statement that the number of deaths ascribed to Pulmonary Tuberculosis will never correspond to the number of deaths of notified persons.

The following Table shows the Ward distribution of the notified cases during 1913. The attack-rates for 1912 are given for purposes of comparison.

Ward.	No. of cases notified	Attack-rates per 1000 living.	
		1913	1912
St. Margarets	51	2·57	3·72
St. Clements	33	2·15	4·83
Middle	22	2·19	3·45
Bridge	45	3·38	4·22
Westgate	49	2·83	5·12
TOTAL	200	2·64	4·45

Thus there has been a very marked drop in the notifications received during 1913. This, of course, is merely the result of the clearance of arrears in 1912, the first full year of notifications. Possibly

the experience of 1913 may not be far from the normal, but it would be unwise to draw conclusions at the present time.

It is notable that the Bridge Ward supplied the highest proportion of notifications in 1913, and that it was also high in 1912. The Westgate Ward was again higher than the other Wards of the town with the exception of the Bridge Ward. In the St. Clements Ward the notifications have dropped 50%. This is no doubt due to the fact that the majority of the Poor Law and Hospital cases live in the St Clements Ward and, of course, all the accumulated cases were notified in 1912, so that the number of notifications for 1913 automatically fell.

The following Table gives the age and sex Distribution of the cases notified during 1913.

Age periods	under 1 year	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	over 65	All Ages
No's. of Cases notified.												
Males	—	4	12	8	8	8	24	27	11	11	3	116
Females	—	2	9	9	11	11	21	10	8	2	1	84
TOTAL	—	6	21	17	19	19	45	37	19	13	4	200
Notification-rates per 1000 living at each age Period.												
Males	—	1·25	3·03	2·24	2·42	2·92	4·15	5·59	3·17	4·56	1·59	3.20
Females	—	0·63	2·36	2·47	3·02	3·32	3·33	1·81	1·98	0·69	0·36	2·11
TOTAL	—	0·94	2·70	2·35	2·74	3·14	3·72	3·57	2·53	2·45	0·86	2.64

Thus at all ages the male notification-rate greatly exceeded the female. This is true also of each particular age period with the exception of the females between 10 and 25 years of age. At all ages over 35 there was a very great excess of males.

The notification-rate in Ipswich in 1913 was exactly the same as the provisional rate given by the Medical Officer to the Local Government Board, for England and Wales as a whole, viz., 2·64 per 1000 living.

Table showing the Age and Sex Distribution of the Cases of Non-Pulmonary Tuberculosis notified during 1913.

Age Periods.	Sex	Under 1 year	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	Over 65	All Ages	TOTAL
Abdominal Tubercle	M	..	5	2	..	..	..	..	..	..	..	..	7	15
	F	1	1	..	3	1	2	..	..	..	..	..	8	
Cerebral Tubercle	M	2	..	1	..	..	..	..	..	..	..	..	3	6
	F	1	1	1	..	..	..	..	..	..	..	..	3	
General Tubercle	M	1	..	..	1	..	1	..	..	..	..	..	3	5
	F	..	1	..	..	..	..	..	..	..	1	..	2	
Bones	M	..	1	4	..	1	1	1	1	..	..	..	9	15
	F	..	1	2	..	..	..	..	1	1	..	1	6	
Joints	M	..	3	3	1	1	..	1	..	..	..	..	9	19
	F	..	..	2	1	1	1	2	2	..	1	..	10	
Glands ..	M	3	3	8	5	2	1	1	..	..	..	..	23	44
	F	..	3	13	4	..	1	..	..	..	..	..	21	
All Others ..	M	..	..	..	..	..	1	1	..	..	..	..	2	7
	F	..	..	1	..	2	..	2	..	..	..	..	5	
Total all Forms.	M	6	12	18	7	4	4	4	1	..	..	..	56	111
	F	2	7	19	8	4	4	4	3	1	2	1	55	
	T	8	19	37	15	8	8	8	4	1	2	1	111	

Notifications of Forms of Tuberculosis other than Pulmonary.

The Local Government Board Order, dealing with the notification of forms of Tuberculosis other than Pulmonary, came into force on February 1st, 1913.

111 cases of various forms of Tuberculous Disease were notified under this heading during 1913, a number considerably less than would have been anticipated from the information in existence prior to the establishment of notification.

Non-Pulmonary Tuberculosis may be classified as follows: —

Group.	No. of Cases Notified.	Notification-rate per 1000 living.
Abdominal Tuberculosis ..	15	0·19
Cerebral Tuberculosis	6	0·07
General Tuberculosis .. .	5	0·06
Tuberculosis of the Bones ..	15	0·19
,, ,, Joints ..	19	0·25
,, ,, Glands ..	44	0·58
All other Forms of Tuberculosis	7	0·09
TOTAL	111	1·46

The various units comprised in the Table may be dealt with separately as follows:—

Glandular Tuberculosis.

In this classification Abdominal Glandular Tuberculosis is excluded from the group.

I find, that in all, there were 44 cases of Glandular Tuberculosis notified during 1913, the equivalent of a notification-rate of 0·58 per 1000 living. Of these, 42 were cases of Tuberculosis of the Glands of the Neck, 1 was a Gland in the Thigh, and in one case the position was not stated.

For all practical purposes, therefore, the notifications of Glandular Tubercle were confined to the Neck, or, in other words, to the region in the immediate vicinity of the Tonsils.

The following Table shows the age and sex distribution of the 44 cases notified :—

Sex.	Under 1 Year	1-5	5-10	10-15	15-20	20-25	25-35	All Ages
Males ..	3	3	8	5	2	1	1	23
Females	..	3	13	4	..	1	..	21
TOTAL	3	6	21	9	2	2	1	44

Thus 30 of the 44 cases occurred between 5 and 15 years of age.

The notification-rate for males at all ages was equal to 0·64 per 1,000 living, whilst for females, it was equal to 0·52 per 1,000. Apparently, therefore, females were less liable than males to Glandular Tuberculosis, corresponding to some extent with the same tendency as regards Lung Tubercle. But it would be futile and foolish in the extreme to draw any conclusions from the notifications for the year 1913.

It may be asserted with some degree of confidence that Tuberculous Cervical Glands are more common between the ages of 5 and 10 than at any other age, and it may be taken as reasonably certain that this age period will, in the future, continue to exhibit the greatest number of recognised cases. As to whether this age period furnishes the greatest number of actually commencing cases is quite another story.

The following was the Ward Distribution of the notified cases of Glandular Tuberculosis.

Ward.	No. of Cases Notified.	Notification-rate per 1000 living.
St. Margaret's	14	·70
St. Clement's	5	·32
Middle	4	·39
Bridge	11	·82
Westgate	10	·57
Whole Borough	44	·58

By far the greatest proportion of cases were notified by the School Medical Officer, or from the Hospital, The annexed Table will indicate this point:—

Source of Notifications.	Number of Notifications.
School Medical Officer ..	16
Hospital	15
Private Practise ..	8
Insured Persons ..	3
Club Practise	2
TOTAL	44

With regard to the School cases a considerable number were in attendance at the Hospital or were sent to the Hospital, but each notification recorded in the above Table represents a separate case.

One of the notified cases of Glandular Tuberculosis died during the year. The cause of death was returned as Broncho Pneumonia.

Abdominal Tuberculosis.

Abdominal Tuberculosis includes all the varieties of Tuberculous disease affecting the abdominal viscera, including the Intestines, the Peritoneum and the Abdominal Lymphatic Glands.

15 cases of Abdominal Tuberculosis were notified during 1913.

The sources of the notifications were as follows :—

Private Practise	...	2
Insured Persons	...	2
Club Practise	...	3
Hospital	...	8
	TOTAL	15

The cases were distributed amongst the Wards :—

St Margarets	..	4
St. Clements	...	1
Middle	...	6
Bridge	...	3
Westgate	...	1
Whole Borough		15

All the cases notified were below 25 years of age. The annexed Table gives the ages and sexes of the cases :—

Age Periods.	—1	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	All Ages.
Males ..	..	5	2	..	..	..	7
Females ..	1	1	..	3	1	2	8
TOTAL	1	6	2	3	1	2	15

4 of the 15 cases of notified abdominal Tuberculosis proved fatal within the year.

Of the fatal cases 1 died from General Tuberculosis after 175 days illness.

The other three died from Abdominal Tuberculosis. Of these 1 died 2 days before it was notified, 1 died the same day, and 1 died 17 days after notification.

The parts of the abdomen stated to be the seat of the Tuberculous process were in 9 cases the Peritoneum, in 3 the Abdomen, in 2 the Intestines, and in 1 the Mesenteric Glands.

Cerebral Tubercle.

By Cerebral Tubercle is meant that variety of Tuberculous Disease affecting either the brain itself or the membranes enveloping the brain. For the purpose of this report both these forms will be included under one heading.

6 cases were notified during 1913.

No cases were notified over 10 years of age.

The age and sex distribution of the notifications were as follows :—

Ages.	Under 1 Year	1 - 5 Years.	5 - 10 Years.	All Ages.
Males ..	2	..	2	4
Females ..	1	1	..	2
TOTAL	3	1	2	6

Of the 6 notified cases 2 died the same day, 1 died three days before it was notified, 1, one day before notification, 1 survived 6 days and 1, 9 days.

All the notified cases thus proved fatal.

The Ward distribution of the cases was as follows :—

St. Margarets	...	1
St. Clements	...	1
Middle	...	1
Bridge	...	1
Westgate	...	2
TOTAL		6

5 cases occurred in Private practise, whilst the remaining case was Poor Law.

In 2 cases the disease was notified simply as affecting the Brain, whilst in the remaining 4 cases the meninges were given as the seat of the disease.

GENERAL TUBERCULOSIS.

5 case of General Tuberculosis were notified during 1913.

The sources of the notifications were as under :—

Poor Law	...	...	3
Institution for Imbeciles		...	1
Insured Person	...	...	1
TOTAL	...	...	5

The age and sex distribution of the cases was as follows : —

Age Periods	under 1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55 65	All Ages
Males	1	--	—	1	—	1	—	—	—	—	3
Females	—	1	--	—	—	—	—	—	—	1	2
TOTAL	1	1	—	1	—	1	—	—	—	1	5

3 of the cases proved fatal. One in 7 days, 1 in 29 days and 1 in 133 days. One of the deaths was ascribed to Pulmonary Tuberculosis.

The deaths of the remaining 2 cases were not recorded.

There is therefore legitimate room to doubt the accuracy of the diagnosis.

BONE TUBERCULOSIS.

15 cases of Tuberculosis of the Bones were notified during 1913.

It is to be pointed out that the differentiation between Bone and Joint Tuberculosis must often be of quite an arbitrary character. In this Report the primary source of the mischief has been taken as the basis of classification.

The sources of notification were as follows :—

Hospital	11
Private Practise	3
Insured Persons	1
TOTAL	15

The cases were distributed throughout the Borough as follows :—

St. Margarets	4
St. Clements	2
Middle	-
Bridge	5
Westgate	4
Whole Borough	15

The age and sex distribution of the cases was as follows :—

Age Periods	1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	+65	All Ages
Males	--	1	4	—	1	1	1	1	—	—	—	9
Females	—	1	2	—	—	—	—	1	1	--	1	6
TOTAL	—	2	6	--	1	1	1	2	1	—	1	15

Thus, as with Joint Tubercule, although most of the cases occur under 10 years of age, yet the disease may occur amongst very old people. One of the cases was in a woman 85 years of age.

The distribution of the disease throughout the Bones of the Body was as follows :—

	Males.	Females.	TOTAL.
Spine	4	3	7
Carpus	1	1	2
Tarsus	1	1	2
Ileum	2	-	2
Tibia	1	-	1
Femur	-	1	1
TOTAL	9	6	15

Thus the spine was the most frequently affected.

It must be confessed that the small number of Bone notifications is a matter of considerable surprise to me.

None of the notified cases of Bone Tubercle were fatal during the year.

Joint Tuberculosis.

19 cases of Tuberculosis of Joints were notified in 1913.

The notifications came from the following sources :—

Hospital	...	11
Private Practise	...	5
Insured Persons	...	2
Poor Law	...	1
	Total	19

The cases were distributed throughout the Borough as follows :—

St. Margarets	...	6
St. Clements	...	4
Middle	...	4
Bridge	...	2
Westgate	...	3
	Whole Borough	19

The age and sex distribution is given in the subjoined Table :—

Age Periods	—1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	All Ages.
Males ..	..	3	3	1	1	..	1	..	..	..	9
Females ..	..	..	2	1	1	1	2	2	..	1	10
TOTAL ..	..	3	5	2	2	1	3	2	..	1	19

Thus Joint Tubercle though most frequent amongst children, still exhibits a considerable proportion of cases amongst Adults.

The Joints affected were as follows : —

	Males.	Females.	Both Sexes.
Hip Joint ...	7	5	12
Knee Joint ...	2	2	4
Wrist ,, ..	—	2	2
Sacro Iliac ...	—	1	1
	9	10	19

Thus the Hip Joint is by far most frequently affected. In one case both Hip Joints were diseased, whilst of the remainder 7 were the left hip and 4 the right. 3 of the notified cases of Joint Tubercle proved fatal within the year. Of the fatal cases 1 died from Abdominal Tuberculosis, whilst two died from General Tuberculosis.

All other forms of Tuberculosis.

7 cases were notified during 1913. Of these 2 were Tuberculosis of the Skin, 2 of the Kidney, whilst the remaining 3 were miscellaneous.

The sources of notification are stated below :—

Hospital	...	2
Insured Persons	...	2
Private Patients	...	3
	Total	7

The cases occurred in the Wards of the Borough as follows :—

St. Margarets	...	2
St. Clements	...	1
Middle	...	—
Bridge	...	1
Westgate	...	3
	Whole Borough	7

The age and sex distribution was as follows : —

Age Periods	Under 1	1-5	5-10	10-15	15-20	20-25	25-35	All Ages.
Males ..	..	..	..	..	..	1	1	2
Females ..	..	..	1	..	2	..	2	5
TOTAL	..	..	1	..	2	1	3	7

Two of these cases proved fatal. 1 after 65 days illness from Tuberculous Nephritis and the other after 85 days illness from General Tuberculosis.

Institutional Treatment of Tuberculosis (Pulmonary).

It would be unwise in the extreme to discuss at the present time the results of Sanatorium treatment.

This matter will, therefore, be dealt with on a suitable occasion in the future.

The following Table gives the number of patients admitted to the various Institutions for the treatment of Pulmonary Tuberculosis in Ipswich during 1913 :—

Sanatorium	...	46
Isolation Hospital	...	40
Infirmary	...	23
	Total	109

None of the Ipswich cases admitted to the Sanatorium died in the Institution.

20 were discharged fit to work, 4 fit for light work, 1 not fit for work, 6 took their own discharge, and 15 remained under treatment.

Of the 51 cases dealt with at the Isolation Hospital, 7 were sent to the Sanatorium, 21 improved so as to be capable of light work, 8 died, 7 were unimproved and 8 became worse.

Of the 23 cases dealt with at the Infirmary, 19 died.

It is satisfactory to report that a childrens' wing of 24 beds is now under construction at the Sanatorium, together with a recreation room and work room for the adult patients.

BOROUGH FEVER HOSPITAL.

On January 1st, 1913, there were 17 cases of Scarlet Fever, 10 of Diphtheria, and one of Enteric Fever under treatment in the Hospital and remaining over from the cases admitted during 1912, a total of 28 cases of Fever.

365 cases of Fever were admitted for treatment during 1913, as compared with 249 in the previous year, and 228 in 1911.

The number of Fever cases admitted during 1913 was by far the largest with which the Hospital has ever had to deal.

The total number of Fever cases under treatment during the year was thus 393, as compared with 281 in the previous year.

The number of cases remaining under treatment on December 31st, 1913, was 51, of whom 40 were cases of Scarlet Fever and 11 Diphtheria.

In addition, 51 cases of Pulmonary Tuberculosis received treatment in the Isolation Hospital. Of these, 11 were in the Hospital at the end of 1912, so that 40 new cases were admitted during the year. 8 remained in the Hospital on December 31st, 1913.

The total number of cases of disease of all kinds treated in the Isolation Hospital during 1913 was 444, as compared with 316 in 1912, and 261 in 1911.

233 cases of Scarlet Fever were admitted to the Hospital during 1913, as compared with 104 in 1912 and 101 in 1911. This constitutes the highest number of cases of Scarlet Fever admitted to the Hospital since its opening, except in the year 1894, when 245 Scarlets were admitted.

5 of the Scarlet Fever cases admitted during 1913 proved fatal. The case mortality per cent. of the cases treated was thus equal to 2·14 as compared with 0.96 in the previous year.

There were 7 "Return" cases during 1913, as compared with 4 in 1912. The "Return" case-rate was thus 3·0 per cent.

The infecting cases discharged from Hospital were 4 in number. 3 of these caused two "Returns" each.

The proportion of potential infecting cases discharged from the Hospital thus appears to have been 1·71 per cent.

118 cases of Diphtheria were admitted to the Hospital during 1913, as compared with 139 in 1912 and 114 in 1911. 7 of the admissions proved fatal.

The case mortality per cent. of the Hospital treated cases was thus equal to 5·9%, as compared with 10·8% in 1912 and 7% in 1911.

2 of the fatal cases died in less than 24 hours after admission to Hospital, one dying 5 minutes after admission to the Ward, and the other, $3\frac{1}{2}$ hours.

10 cases of Enteric Fever were treated during 1913, as compared with 4 in 1912 and 9 in 1911.

7 of these cases belonged to the Borough, all of whom recovered.

The three remaining Enterics were removed from on board ship. 1 of these cases proved fatal.

4 cases of non-infectious Disease were admitted during 1913. All recovered.

For the first time I have noted the presence of a considerable number of cases of mixed Scarlet Fever and Diphtheria. These cases have been a source of the very greatest difficulty to the Staff.

The limitations of the accommodation at present in existence have rendered it extremely difficult to secure anything like the proper degree of isolation.

51 consumptives were treated in the Hospital during 1913 as compared with 67 in 1912 and 33 in 1911.

34 of the Consumptives were males and 17 females. Of the 34 male consumptives 12 improved considerably, 5 were worse, 4 remained stationary, 6 died and 7 improved so much as to be fit to send to the Sanatorium.

The type of case admitted to the Hospital was of course advanced.

Of the 12 improved, all were more or less able to undertake light work, but not hard labour of any sort, with the exception of three who made very unusual progress at the Hospital and took their own discharge.

Of the females 9 were improved, 3 became worse, 3 remained unchanged and 2 died. None were sent to the Sanatorium as only severe cases were admitted to the Hospital during the year.

Thus 44 persons 27 males and 17 females were treated for consumption in the Hospital alone during 1913.

PORT SANITARY AUTHORITY.

The inspection of vessels entering the Port of Ipswich was commenced in 1908, and, including that year, 4,692 vessels have been inspected and re-inspected up to the end of 1913. Since 1908 the vessels trading regularly to the Port showed marked improvement in their sanitary condition, especially the barges. The steam and sailing ships show the largest number of insanitary and defective conditions, and consequently require strict supervision during their stay in Port.

BUTTERMAN'S BAY.

This is the name given to a portion of the river Orwell situated about six miles below the dock of Ipswich. The vessels of recent years trading to Ipswich, have increased in size so much as to be too large to enter the dock, so that they have to discharge the whole of their cargo at the deep water berth constructed in the Bay. The greater portion of these vessels arrive from infected Ports.

Three cases of Enteric Fever were removed from the S.S. "Losna" from Karachi. This was one of the vessels whose beam was too large to admit her to the dock.

40 vessels were inspected in Butterman's Bay during the year, 1913.

Summary of Vessels inspected since 1908.

	1908	1909	1910	1911	1912	1913
No. of Vessels Inspected	504	340	347	244	386	471
Number of re-visits ..	345	342	279	450	660	324
TOTAL	849	686	626	694	1046	795

The following Tables give a summary of the inspections and re-inspections during the year of 1913 :—

TABLE I.

Number of vessels inspected	...	471
Number of vessels re-inspected	...	324
Total number inspected and re-inspected		795

TABLE II.

British Steamships	...	...	44
British Sailing Ships	...	...	25
British Barges	...	...	346
Foreign Steamships	...	...	32
Foreign Sailing Ships	...	...	24
		Total	471

TABLE III.

British	...	412
Norwegian	...	14
German	...	12
Dutch	...	9
Swedish	...	9
Danish	...	8
French	...	4
Italian	...	2
Greek	...	1
TOTAL		471

CLASSIFICATION OF SANITARY CONDITIONS.

Steamships.

Seamen's quarters dirty and verminous	18
Portlights cracked and leaking	9
Waterclosets in a filthy condition	8
Insufficient ventilation in seamens quarters	3
Insufficient light in seamens quarters	1
TOTAL	39

Sailing-ships.

Seamen's quarters in a filthy condition	7
Insufficient height in forecastles	3
Animals kept in a filthy condition	3
Waterclosets in a filthy condition	2
TOTAL	15

Barges.

Skylights cracked and leaking	4
Seamens quarters dirty	2
TOTAL	6

TABLE IV.

	Inspected	Defective	Percentage
Steamships ...	76	40	52·6
Sailing ships ...	49	15	30·6
Barges ...	346	6	1·7
TOTAL ...	471	61	32·9

TABLE V.

Steam.

Class of Vessels Registered Tons.	No. of Vessels in class.	Number Defective.	Percentage.
1-250 ...	35	3	6·5
250-750 ...	13	0	—
750-1250 ...	11	2	18·1
1250-2000 ...	10	1	10
2000 and over ...	6	—	—
TOTAL	75	6	8

Sail.

1-250 ...	35	9	25·7
250 and over	15	—	—
TOTAL	50	9	18

Barges.

150 ...	346	4	1 1

Notices.

The number of notices served during the year 1913 was 6. Of these, 3 were served on steamships and 3 on barges.

FUMIGATION OF VESSELS.

Vessels arriving from infected or suspected ports are fumigated for the purposes of rat destruction.

The following Table shows the number of vessels fumigated and the number of rats discovered after fumigation for the years 1911, 1912 and 1913 :—

	1911.		19 2.		1913.	
	Number of Vessels Fumigated	Number of rats discovered	Number of Vessels Fumigated	Number of rats discovered	Number of Vessels Fumigated	Number of rats discovered
British Steamships ..	10	111	28	856	21	750
British Sailing Ships	1	32	—	—	6	285
Foreign Steamships ..	4	42	13	190	7	200
Foreign Sailing Ships	8	393	—	—	1	233
TOTAL	23	578	41	1046	35	1468

The buildings and Warehouses adjoining the dock are continually re-visited with a view to ascertaining the increase or decrease of the rat population.

FOOD INSPECTION.

During the year vessels trading to the Port of Ipswich have been constantly inspected and foodstuffs examined.

300 sacks of wheat were consigned ex S.S. "Dorset Coast" alleged to be intended for the preparation of cattle food. After full enquiries the Authority was satisfied that it was consigned to be mixed and used solely for cattle feeding.

THE HOSPITAL SHIP.

The Hospital ship has been maintained in good repair and kept in a clean condition during 1913. A few minor repairs will be necessary during the coming year.

SICKNESS TABLE, 1913.

Date	Name of Vessel	Where from	Sickness	Remarks.
30-1-13	S.S Ochringen	Rosario	Severe Burns	A fireman was incapacitated from duty suffering from severe burns on the forearm.
28-4-13	Bq. Anne de Bretagne	San Francisco	Hernia	A sailor was suffering from Hernia and left the vessel for France.
24-8-13	S.S. Losna	Karachi	Enteric Fever	Three cases of Enteric Fever were removed from this vessel to Borough Isolation Hospital.

MUNICIPAL LABORATORY.

21 specimens of blood were examined for the Widal re-action during 1913. Of these 9 were positive, 10 negative and 2 doubtful.

The total number of swabs examined from suspected cases of Diphtheria was 475. 187 of these proved positive.

Of the total number examined, 228 were from the Fever Hospital, and of these, 97 were positive.

The remainder for the greater part were sent in by the Medical Practitioners of the Borough.

2 positive gonococci swabs were also examined.

The total number of specimens of sputum, from persons suspected to be suffering from Tuberculosis, examined and re-examined in the Municipal Laboratory in 1913, was 214. 63 of these were positive. The 214 specimens represent 147 different persons.

2 urines (from persons suspected to be suffering from Tuberculosis) were examined during the year, and of these 1 was positive.

16 samples of milk were examined (bacteriologically) to detect the presence of Tubercule Bacilli. All of these proved negative.

In connection with the School Clinic, hairs from 10 children suspected to be suffering from Ringworm, were examined and the diagnosis was confirmed in 9 of the cases.

WATER SUPPLY.

The water supply of the Borough is obtained from a deep well in the chalk, supplemented by a number of small surface supplies.

The new well at Akenham is sunk in the chalk and provides a supply in all respects similar to the water taken from the existing main well.

The following Table gives the amount supplied from the respective sources during the year 1913.

Total water from the wells	566,352,000 gals.
Total water from Gravitation Sources . .	80,000,000 gals.
Total water for all purposes	646,352,000 gals.
Average supply per day for all purposes ...	1,770,830 gals.
Supply per head per day for all purposes (including Trades)	23·3 gals.

Samples have been taken at frequent intervals and submitted to analysis. The results show that the well water continues to exhibit its character of high organic purity.

Some uneasiness has from time to time been expressed as to the injurious effect upon health alleged to be produced by hard water. In my opinion there is no evidence to justify this opinion. Hard water has not been proved to be injurious to health, and it posseses many qualities positively advantageous from a health point of view.

On the other hand, soft water has been found to be capable of causing definite injury to health.

A good deal of the local agitation in this matter appears to have arisen from a ridiculous comparison between the interior of the human organism and a steam boiler.

MIDWIVES ACT, 1902.

There were 7 Midwives on the local Roll during 1913.

All were certificated Midwives with one exception.

The Midwives attended 841 confinements or 46·5% of the total births registered during the year.

Notifications of the sending for Medical help were received in 91 instances, 43 for the mother and 48 for the infant.

In the case of the mothers, help was required for the following reasons :—

Rise of Temperature 8 ; Delayed Labour 6 ; Adherent Placenta 6 ; Post Partum Haemorrhage 4 ; Malpresentations 3 ; Abortion, Impacted head, Ante Partum Haemorrhage, Rupture of Perineum, Severe After Pain, Eruption on Fingers 2 each ; Fits, Varicose Veins, Collapse and Prolapse of Cord, 1 each. Total 43.

In the case of the child the reasons were as follows ;

Prematurity 16 ; Inflammation of the Eyes 14 ; Debility 12 ; Convulsions 2 ; Malformation 3 ; All others 1. Total 48.

48 Still Births were certified by Midwives.

1 case of fatal Puerperal Fever occurred in the practise of a Midwife. The usual precautions were observed.

RAT DESTRUCTION.

The number of rats destroyed in Ipswich during 1913 was 21,447.

Apart altogether from any question of Plague, the policy of rat destruction should be steadily pursued, as its economic value alone more than pays for its cost.

No rats were examined for Plague during 1913.

Careful and continuous enquiries were made as to any undue mortality amongst rats in Ipswich, but no information of such occurrence was forthcoming. In the absence of such mortality the policy of examining the bodies of rats killed in the ordinary way, with a view to the discovery of Plague infected rodents, is like looking for a needle in a haystack.

It was decided that after November 24th, 1913, 1d. only should be paid per rat. The number of rats paid for, however, has not in any way diminished since that date.

SLAUGHTER HOUSES.

There were 26 private Slaughter Houses and 1 Knacker's Yard in existence in the Borough during 1913, the same as in 1912.

1245 visits of inspection were paid during 1913, as compared with 1090 in 1912, and 728 in 1911.

I have again and again pointed out, in these Reports, that the existence of Private Slaughter Houses is extremely undesirable, since it is impossible to ensure adequate inspection and control.

Apart altogether from the question of control, many of the existing Slaughter Houses are structurally unsatisfactory, whilst not a few are situated in positions entirely unsuited to such purposes.

All the Private Slaughter Houses in Ipswich are old.

There can be, and indeed there is, no question as to the necessity for a competent and rigid control of the meat supply. This is impossible under existing circumstances. The one and only solution of the problem is the construction of a Public Abattoir, together with the power of compulsory closure of the existing Private Slaughter Houses after a sufficient lapse of time, say 5 or 6 years in the case of the better ones, and immediate in the case of the worst. There are Slaughter Houses in Ipswich to-day which, from their situation, construction and amenities generally, ought to be closed immediately. These, however, cannot be closed at the present time because even although there are 26 Houses in the Borough, many are very small and only capable of accommodating a limited business, and, therefore, the closure of a few would make the position of the remainder much worse.

Perhaps the Legislature may awake to the fact that the soundness of the food of the people is worthy of some consideration and proceed to pass a measure empowering Local Authorities to construct Public Abattoirs and close existing Slaughter Houses.

If the Powers that be are afraid of an Act conferring compulsory powers on the whole country, let it be made adoptive. Then the Authorities, alive to their responsibilities, will avail themselves of their opportunities.

BAKEHOUSES.

There were 113 Bakehouses registered in the Borough during 1913 as compared with 112 in the previous year.

297 visits of Inspection were paid during 1913 as compared with 336 in 1912 and 315 in 1911.

On the whole the premises were fairly well kept.

FACTORIES AND WORKSHOPS.

BOROUGH OF IPSWICH.

1913.

Inspection of Factories and Workshops

Premises	Inspections	Written Notices
Factories ...	56 ...	1
Workshops ...	85 ...	6
Workplaces ...	27 ...	—
	168	7

Defects.

	No. Found.	No. Remedied
Want of Cleanliness	9 ...	9
Want of Ventilation	1 ...	1
Want of Drainage to Floors ...	2 ...	2
Other Nuisances	6 ...	6
Sanitary Accommodation Insufficient ...	1 ...	1
" " Unsuitable or defective	15 ...	15
Sanitary Accommodation not separate for Sexes	2 ...	2
Breach of Special Sanitary Requirements for Bakehouses	1 ...	—
	37	36

Works Carried Out.

	Factories.	Work shops.	Work Places.	Totals
New W.C.'s provided	17	2	—	19
Intercepting ventilated spaces to W.C.'s	1	—	—	1
W.C.'s cleansed and unblocked ...	—	2	—	2
Defective drains reconstructed ...	5	2	1	8
Limewashing and cleansing ...	1	5	1	7
Additional means of Ventilation provided	—	1	—	1
New floors laid	1	2	—	3
	25	14	2	41

Factories on Register.

Artificial Stone ...	1	Jam Factory	1
Bakeries	7	Laundries	6
Bookbinders	6	Maltings	20
Boot and Leather Factories	7	Meat Factors	6
Bottle Washers ...	5	Mineral Water Works ...	8
Box Factories	1	Mills	15
Breweries	3	Organ Builders ...	1
Brick Works	3	Printers	23
Cabinet Works and Joinery	21	Sacks and Tents . .	3
Chemical Manures, etc ...	5	Seed Cleaning	6
Coach Builders ...	2	Sugar Boilers	4
Clothing Factories ...	4	Saw Mills	9
Creameries	3	Shipyards	2
Dye Works	2	Tan Works	1
Engravers	1	Tea Mixing, Currant Dressing, etc. ...	4
Engineers and Ironfounders	39	Tobacco	1
Electricity Works ...	5	Jeweller	1
Electric Plating ...	2		
Gas Producer Works ...	4		

TOTAL 230, as compared with 229 in 1912.

Workshops on Register.

Art Needlework	...	2	
Bakers	...	...	100
Builders	...	...	3
Beer Bottling	...	...	5
Bedding Manufacturers	...		2
Brick Maker	...	...	1
Basket Maker	...	...	1
Creamery	...	...	1
Candles and Soap	...		1
Casing Cleaning	...		1
Confectionery	...		4
Coach Builders	...		6
Dress Makers	...	...	60
Engineers and Smiths	...		34
Furniture and Cabinets	...		9
Jewellers	...	...	1
Joiners	...	...	15
Lath Rending	...	...	1
Laundries	...	...	8
Lime Burners	...	...	2
Milliners	...	...	27
Mattresses	...	...	1
Maltings	...	...	5
Outfitting	...	...	3
Painters	...	...	3
Plumbers	...	...	7
Plasterer	...	...	1
Rag Sorting	...	...	1
Saddlery, Boots, etc.	...		27
Sails and Tents	...		1
Tallow Melter	...	...	1
Stone Masons	...	...	7
Tailors	...	...	34
Upholsterers	...	...	5
Vegetable Cleaning	...		2
Wigs	...	...	1
Hosiery	...	...	2

TOTAL 385, as compared with 384 in 1912.

Provisions of the Factory Acts with reference to Home Work.

40 lists of outworkers were received twice in the year, including 2 contractors and 197 outworkers. The 2 contractors were employed in making wearing apparel. Of the outworkers, 183 were employed in making wearing apparel, 13 in the making of sacks and 1 in the making of paper bags.

86 visits were made to the 183 houses occupied by outworkers.

In 5 instances unsatisfactory conditions were found and remedied.

In one of these, wearing apparel was being made and in 4, sacks.

75 inspections were made of premises where wearing apparel was being made and 11 of premises in which sacks were being made.

HOUSING CONDITIONS IN IPSWICH.

There is no subject of such vital interest to the Public Health of the community as that of Housing, and it may be questioned if there is any subject about which the people, as a whole, know less.

Before discussing the Local Housing conditions in Ipswich, it will be well to establish a sound basis of comparison in so far as the 1911 Census will help, as between Ipswich and the rest of England and Wales as a whole.

In the first place I append a Table in which is shown the number of 1, 2, 3 or more roomed tenements in Ipswich, together with the proportions of corresponding tenements in England and Wales as a whole, in the Urban Districts of England and Wales, the Rural Districts and the County Boroughs of England and Wales.

Number of Rooms per Tenement	Number of Tenements in Ipswich.	Percentage of Total Tenements.					
		IPSWICH	England and Wales.	Urban Districts.	Rural Districts.	London	County Boroughs
1	230	1·3	3·2	3·9	0·6	13·5	2·7
2	633	3·6	8·3	9·0	5·5	19·2	7·8
3	378	2·2	13·8	14·1	12·9	21·4	14·3
4	2072	12·1	24·7	24·0	27·7	16·1	26·2
5	3017	17·6	20·4	20·2	21·7	9·2	21·2
6	7961	46·8	13·6	14·0	12·2	7·1	15·0
7	1205	7·0	5·9	5·8	6·1	4·5	5·2
8	598	3·4	3·5	3·2	4·5	3·1	2·8
9	356	2·0	2·0	1·8	2·5	1·8	1·4
10+	347	3·1	3·8	3·2	5·6	4·1	2·3
Non Priv. Families	127	0·7	0·8	0·8	0·8	—	0·7
TOTAL	17124	100	100	100	100	100	100

The principal feature of this Table is the high proportion of six roomed houses in Ipswich as compared with England and Wales or the other County Boroughs.

Perhaps the comparison will be more striking if the grouping be made as follows :—

Number of Rooms per Tenement.	Percentage of Total Tenements.					
	IPSWICH	England and Wales.	Urban Districts.	Rural Districts.	County Boroughs	London.
3 or less ..	7·3	25·4	19·3	19·1	25·0	54·1
4 - 6 inclusive	76·8	59·4	64·3	62·0	63·0	32·4
7 and more ..	15·9	15·2	16·4	18·9	12·0	13·5
TOTAL	100	100	100	100	100	100

Thus from the point of view of the number of rooms per tenement Ipswich compares very favourably with the County Boroughs, and with the rest of the Country as a whole.

Detailed comparison with other County Boroughs shows that in 1911, the Census year, there were five Boroughs out of 75 where the proportion of tenements with 1 - 3 rooms was lower than in Ipswich, and, of course, 69 in which the proportion was higher, 17 in which the proportion of 4 - 6 roomed tenements was higher, and 21 in which the proportion of 7 and more roomed tenements was higher than in Ipswich.

The broad general fact is that in Ipswich 92·7% of the tenements consist of 4 or more rooms as compared with 74·6% for England and Wales as a whole, 80·7% for the Urban Districts of England and Wales 80·9% for the Rural Districts, and 75% for the other County Boroughs of England and Wales, and 45·9% for London.

The predominant type of tenement for England and Wales as a whole, for Rural and Urban England and Wales and for the County Boroughs of England and Wales is the 4 roomed tenement. We may say that one quarter of the tenements in England and Wales are 4 roomed cottages.

Thus in round figures there are in England and Wales as a whole just about as many 1 - 3 roomed tenements as there are of 4 roomed tenements alone. This is largely accounted for by the enormous proportion of 1 - 3 roomed tenements in London.

In Ipswich the 6 roomed tenement constitutes nearly half of the total housing accommodation of the town. Only two of the 75 County Boroughs exceeded the Ipswich proportion of six roomed cottages, viz., Leicester and Northampton, both of which have slightly over 51% of 6 roomed tenements.

We may now embark on a further analysis of tenements, viz., in respect of the number of persons occupying 1, 2, 3 or more roomed houses.

We construct the following comparative Table.

No. of rooms per Tenement	Population Ipswich.	Percentage proportion of the total population.					
		Ipswich	England & Wales	Urban District	Rural Districts	County Boroughs	London
1	296	0·4	1·4	0·6	0·2	1·2	6·2
2	1348	1·9	6·1	4·5	3·6	5.8	15·8
3	1154	1·6	12·8	10·3	11.2	13·5	21·3
4	7866	11·1	24·7	24·5	26·4	26·2	18·5
5	12638	17·8	22·4	25·1	22·9	23·3	11·4
6	34562	48·7	14·8	16·8	12·9	16·3	8·9
7	5405	7·6	6·4	7·2	6·7	5.8	5·4
8	2783	3·9	4·0	3·9	5.1	3·2	3·8
9	1848	2·6	2·3	2·3	3·0	1·7	2·4
10+	3143	4·4	5·1	4·8	8·0	3·0	6·3

This Table may be further considered in terms of tenements of 3 rooms and less, 4 - 6 rooms and 7 rooms and more.

No. of rooms per Tenement	Percentage proportion of the total population					
	Ipswich	England & Wales	Urban Districts	Rural Districts	County Boroughs	London
1 - 3	3·9	20·3	15·4	15·0	20·5	43·3
4 - 6	77·6	61·9	66·4	62·2	65·8	38·8
7 and more	18·5	17.8	18·2	22·8	13.7	17·9
TOTAL	100	100	100	100	100	100

This Table emphasises the position of affairs in a most unmistakable manner. Whereas less than 4% of the population of Ipswich living as private families live in Tenements of 3 rooms or less, no less than 43% of the population of London are so housed, 20·5% of the other County Boroughs, 15% of the population of Urban and Rural England and 20% of the population of England and Wales as a whole.

The broad general fact remains, therefore, that in so far as the proportion of inhabitants living under conditions of limited accommodation is concerned, the postion of Ipswich is very favourable.

Further light is shed upon this matter by the fact that of 75 County Boroughs in 1911 only 4 showed a lower proportion of inhabitants living in three rooms or less, 19 a higher proportion living in 4 - 6 roomed Tenements and 21 a higher proportion living in Tenements of 7 or more rooms.

We are now in a position to go a step further and enquire into the average number of occupants per room in Tenements of various sizes

The 1911 Census yields the following Table :—

Average number of occupants per room in Tenements consisting of rooms as under :—

Rooms per Tenement.	1	2	3	4	5	6	7	8	9	10+
England and Wales ..	1·90	1·59	1·33	1·08	0·95	0·78	0·68	0·61	0·56	0·95
London ..	1·92	1·71	1·37	1·19	1·03	0·87	0·72	0·65	0·59	1·14
County Bor.	2·00	1·61	1·38	1·09	0·96	0·79	0·69	0·62	0·57	0·98
IPSWICH	1·29	1·06	1·02	0·95	0·84	0·72	0·64	0·58	0·58	0·75
Urban Dis.	1·72	1·53	1·33	1·08	0·94	0·78	0·67	0·59	0·54	0·92
Rural Dis.	1·57	1·40	1·24	1·02	0·90	0·76	0·66	0·61	0·57	0·89

Here again, in every instance, the number of occupants per room in Ipswich was lower for all Tenements except 9 roomed Tenements than any of the general groups given in the Table.

As a matter of fact, taking the average of all 1 - 9 roomed Tenements in Ipswich as 0·75 persons per room, there was only one town (Great Yarmouth 0·72) in which there was a lower average number of persons per room.

So far, therefore, as general considerations of size of Tenements, proportion of inhabitants, and general number of persons per room is concerned, Ipswich enjoys a favourable position.

Finally, I give a comparative Table taken from the 1911 Census, in which is set forth in percentage proportions, the number of persons per family in England and Wales, Ipswich, etc.

Persons per Family.	1	2	3	4	5	6	7	8	9	10	11	12 or more
England and Wales ..	5·3	16·2	19·4	18·1	14·4	10·4	6·9	4·3	2·5	1·3	0·7	0·5
London ..	9·3	18·1	18·5	16·4	12·9	9·3	6·4	4·1	2·4	1·3	0·7	0·6
County Bor.	4·3	15·6	19·3	18·5	14·8	10·7	7·2	4·5	2·6	1·4	0·6	0·5
IPSWICH	5·6	18·0	19·9	18·4	14·0	9·7	6·7	3·7	2·1	1·1	0·5	0·3
Urban Dis.	4·4	15·5	19·6	18·7	14·9	10·6	7·0	4·4	2·5	1·3	0·6	0·5
Rural Dis.	5·8	16·9	19·4	17·7	14·0	10·1	6·8	4·3	2·5	1·3	0·6	0·6

We are now in a position to consider some aspects of the Local housing circumstances of Ipswich with, of course, special reference to insanitary conditions.

Ipswich consists, for practical purposes, of two towns, a modern in which the housing conditions are, on the whole, good, and an old one in which the conditions are mixed.

There are areas in the old town where there are large numbers of small houses crowded into courts and narrow streets.

These areas are more or less insanitary for several reasons:—

(1) Overcrowding of houses upon area, *e.g.*, 80 houses to the acre.

(2) Density of population.

(3) General conditions of lack of repair of the houses themselves.

(4) Want of separate water supply for each house.

(5) Want of separate sanitary accommodation for each house.

(6) Conditions of filth of back yards and premises as a whole.

In a large proportion of cases these old properties are repairable, and can be put in a condition in all respects reasonably fit for human habitation. As a matter of fact, very extensive alterations have been carried out as regards housing in recent years.

The nature of these alterations may be summarised as follows :—

(1) Drastic general repairs to the fabric and interiors of the houses themselves.

(2) Re-drainage of premises.

(3) Paving of back yards.

(4) Provision of suitable windows to houses.

(5) Provision of sinks, cooking ranges, etc., etc.

But, when all is said and done, there still remain a considerable number of the smaller class of houses to which orders such as those indicated do not apply.

These houses are all old, all out of repair and, generally speaking, in an insanitary state. They are overcrowded upon area, damp in places, badly ventilated, with common water supply and common sanitary conveniences. (There is one Court in Ipswich with 2 water closets to 16 houses).

There is no possible treatment for such cases except condemnation by area.

Now, it appears a very simple proposition to establish the fact that an area contains insanitary houses and to condemn the area.

The moment, however, that this position is established, we are faced with the problem as to what is to be done with the people displaced.

Some time ago I carried out a local enquiry into the housing and economic conditions of the inhabitants of 100 houses let at Rentals of less than 3/6 per week. The Report on that enquiry has been placed before the Corporation.

One or two facts may be culled from this Report :—

In the first place, the 100 houses admit of the following classification according to number of rooms and rentals.

Weekly Rentals.	No. of Rooms in House.			Total.
	2	3	4	
1/-	1	—	—	1
1/8	9	—	—	9
1/9	3	—	—	3
2/-	27	2	—	29
2/2	5	—	—	5
2/3	17	—	—	17
2/4	6	—	—	6
2/6	9	10	2	21
2/9	—	1	—	1
3/-	1	3	2	6
3/6	1	1	—	2
Total	79	17	4	100

This Table requires no explanation.

The 79 two-roomed houses were occupied by 18 families, the head of whom was in permanent employment; 43, the head of whom was a casual labourer; 15 by Old Age Pensioners, and 3 by persons in receipt of Parish Relief.

Taken as a whole, 23% of the houses were occupied by persons in permanent employment, 57% by casual labourers, 17% by Old Age Pensioners, and 3% by persons in receipt of Parish Relief.

In 34% of the houses, one person only occupied the premises; in 30% there were 2 occupants; 15%, 3; 12%, 4; 3%, 5; 2%, 6; 3%, 7; and 1%, 8 persons.

28% of the houses were occupied by a man, wife and family, and 10% by widows with children. Excluding the Old Age Pensioners, 18% of the houses were occupied by widows, of whom 8 lived alone and 10 with families.

32% of the houses were occupied by persons disabled by ill-health or advanced age.

The one straight, definite fact arising out of all the information herein given is that these houses were occupied by their inhabitants because, in the great majority of cases, the people could not afford to pay the rent commanded by a decent house.

In other words, the economic position of the occupants precluded them from paying an economic rent.

Now, there is no defence for slums. Every person should have a decent sanitary habitation, but every person is not able to pay a rent that will afford a reasonable return for capital. Therefore, no attempt is, or ever will be, made by private enterprise to provide houses at a rent within the reach of the class of people now under consideration. As a result, whilst the better paid skilled artisan and labourer can afford out of his wages a remunerative rent for a decent house, certain classes of badly paid artisans and unskilled casual labourers can afford a rent that only the worst and most dilapidated property can earn.

Hence houses at 2/-, 1/8, etc., etc. But even in these cases the rent works out at nearly 1/- per room which comes to much the same as 6/- for the five-roomed cottage, with a kitchen and sanitary conveniences attached.

Thus, in proportion to his accommodation, his house at 2/- is dearer than a decent six-roomed cottage at 6/-. The point is that 2/- or 2/6 is all that he can afford. *If he pays more for rent it means less food and less clothes*, with a correspondingly increased liability to disease.

Now we have clearly shown elsewhere that the inhabitants of our slums are practically all people who cannot afford to live anywhere else.

We have also indicated that these slums are insanitary, and that there are areas requiring condemnation.

These areas cannot be condemned until housing accommodation is available in sufficient amount to re-house the inhabitants of the demolished slums; and further, the accommodation provided must be let at a rental that the slum dweller can afford to pay. It is apparently impossible to build new accommodation to let at 2/- a week, so as to pay. Therefore the new accommodation must be let at a loss, which means that the Local Authority must provide the houses.

Thus we arrive at a logical position, sound alike from the point of view of the Public Health and of existing economic conditions.

The disappearance of areas of insanitary property means :—

(1) The condemnation of the area on Public Health grounds by the Local Authorities.

(2) The re-housing of the dispossessed at rentals within their means.

(3) The only means whereby the dispossessed can be re-housed at Rentals they can afford is by means of a subsidy from the Rates. That is to say, the Local Authority must themselves do the re-housing.

(4) In the re-housing scheme provision of varied kinds suited to the varied needs of the people dis-housed must be forthcoming. Thus two-roomed tenements should be provided for couples, single people, etc., and three and four or five-roomed cottages for people with families.

A scheme such as this would include old age pensioners, widows with families, and all other workers not in receipt of a wage sufficient to enable them to pay an economic Rent.

Such persons as choose to inhabit slums, although able to pay an economic rent, should not participate in any re-housing scheme financed at the expense of the ratepayers.

Clearly the re-housing scheme must go along with the demolition scheme, because it is very essential to house the people as near as possible in the surroundings to which they are accustomed. On this basis areas would require to be dealt with part at a time.

I am very strongly of opinion that the true function of the Local Authority in so far as housing is concerned, is to secure the demolition of slum properties, and their replacement by sound sanitary accommodation, let at rentals within the reach of the classes of people who inhabit the present slum houses.

The provision of a 6/- per week cottage for a labourer who can only afford 3/- is a swindle.

Clearly this policy involves the acceptance of the principle of the non-economic rent.

With regard to small pockets of insanitary property in small courts, etc., off main streets, of course there is nothing for these but simple condemnation. There can be no question of re-housing in the site.

Therefore, in view of the fact that the economic position of the inhabitants of the small insanitary court is the same as that of the inhabitants of the large slum area, the treatment required for his case

is precisely the same, viz. re-housing at a rental within their means. In this case, however, they cannot be re-housed in situ but accommo dation must be found for them as near as may be to the site of their original home.

In this case, however, there is a vital difference in that the new accommodation provided is in substitution, not replacement.

Finally, I desire to refer to an aspect of the housing question, which, I note, is seldom discussed. I refer to the capacity of the slum owner to bear the cost of the improvement of slum property so as to render it in all respects reasonably fit for human habitation. It is the custom to describe the slum landlord as a ghoul fattening on the vitals of the poor, but this is a profound mistake. There are landlords who exploit their property to the last ounce without the least consideration for their tenants but they are the exception.

The worst slums in Ipswich are owned by people who are too poor to keep them in repair. The result is that the property deteriorates year after year until it becomes unfit for human habitation, or its downward progress is arrested by a drastic order from the Local Authority. In the latter case the property is usually sold for a song and thus, even with the sanitary amendment order over it, may form a sound and profitable investment to the purchaser.

Within recent years large blocks of property have changed hands in Ipswich at 3 and 4 years rental, in some cases even less.

The pitiful part of this business is that the owners of these wretched properties are often widows and old people who live on the rentals of the property and who have no other means of livelihood.

To these people the sale of the property at the prices stated means ruin.

The Local Authority have however, in this matter, only one thing to consider and that is whether the property is reasonably fit for human habitation. If it is not, then it is the duty of the Local Authority to see that it is put into, and maintained in, a condition in all respects reasonably fit. If the owner is too poor to keep the property in proper repair then the property must pass into the hands of those who can. From the point of view of the Local Authority *it is the health of the inhabitants, not the prosperity of the owner*, that must receive consideration.

In such a matter as housing all matters of sentiment must be ruthlessly set aside and the practise of securing that every inhabitant shall have a sound sanitary house, must be the only principle kept in view.

COUNTY BOROUGH OF IPSWICH.

Report of the Inspector of Nuisances, Inspector under the Food and Drugs Act, Inspector of Butter Factories, Inspector of Common Lodging Houses, Inspector under Dairies, Cowsheds and Milkshops Orders, Inspector under Shops Act, and Inspector under Contagious Diseases (Animals) Act, year ending December 31st, 1913.

Number of Complaints	295
Number of visits to houses	11932

Synopsis of Inspections.

Letters issued	628
Preliminary Notices served	376
Statutory Notices served	3
Drains reconstructed	148
Drains tested complete or in part	369
Visits for tests or re-tests	1425
Drains cleansed and trapped	221
Gullies fixed	69
New sinks and wastes	109
Dead wells filled in	5
New W.C.'s provided	31
Defective W.C. pans	75
Foul W.C.'s	69
Water laid on to W.C.'s	22
Privies done away with	2
Pail closets done away with	—
New Privies built	—
Privies repaired	—
Urinals repaired and cleansed	—
New Urinals	—
Houses closed as unfit for human habitation ...	20
Rooms closed as unfit for human habtiation ...	—
Houses in a a dirty state	187
Want of general repairs to house	334
Overcrowding	21

Rooms ventilated	668
Damp houses	25
Defective eaves troughing	97
Paving to yards and sculleries	586
Wash-houses repaired, etc.	60
Premises limewashed	305
Removal of animals	81
Removal of manure, etc.	7
Manure bins repaired	—
Ash receptacles provided	25
Offensive trades	22
Smoke nuisances	36
Visits to slaughter houses	1245
Food seized :—	
Meat	1750 lbs.
Killing on unlicensed premises	—
Bakehouses	297
Butter Factory	1
Cowsheds	9
Purveyors of Milk	120
Removal of Infectious Diseases	361
Enquiries re Infectious Diseases	385
Common Lodging Houses	26
Visits under Contagious Diseases (Animals) Act	6
Legal Proceedings	3
Miscellaneous	1039

INFECTIOUS DISEASES.

Number of cases removed to Hospital ...	361
Number of enquiries made *re* notified cases of Infectious Disease	385

DISINFECTION.

Rooms disinfected after notifiable Infectious Diseases	460
Rooms disinfected after Phthisis	123
,, ,, ,, Cancer	50
,, ,, ,, Measles	—
,, ,, ,, Ringworm ...	—
,, ,, ,, Vermin	17
,, ,, ,, Scabies	—
,, ,, ,, Puerperal Fever ...	1
Articles of Bedding, Clothing, etc., Disinfected in Steam Disinfector at the Isolation Hospital	5,741
Articles of Bedding, Clothing, etc., burnt ...	82
School-rooms Disinfected	—
Library Books Disinfected	73
Cabs Disinfected	2

The Ambulance Brougham and Bedding Van have been disinfected and cleansed after removals.

MORTUARY.

Number of bodies removed to Mortuary:	Males ...	8
	Females	5
	TOTAL	13
Number of Post Mortem Examinations ...		7

WATER SUPPLY.

Samples taken from Corporation Supplies for Chemical Analysis	14
Samples taken from Private Supplies ...	—
Number of Wells closed	—

BUTTER FACTORY.

At the time of my visit these premises were clean	1

BAKEHOUSES.

Number of Bakehouses in the Borough at end of year	113
Notices served for Repairs, Cleaning, etc. ...	5
Number of Visits to Bakehouses	297

SLAUGHTER HOUSES.

Number of Slaughter Houses in the Borough ...	26
Knackers' Yard	1
Notices served for Repairs, Cleaning, etc. ...	18
Number of visits to Slaughter Houses ...	1,245

PUBLIC LAVATORIES AND URINALS.

There are 13 Urinals and 6 W.C's for Males, and Cloak Room and 2 W.C's for Females.

The daily cleansing of these has been carried out as usual.

The takings at the Lion Street Lavatories are still on the increase.

Number of persons using W.C's during year:—

Males ...	20,930
Females ...	37,102
TOTAL	58,032

Bad Coins found in Slots	7
Half Crowns ...	2
Two-shilling pieces ...	10

The change of 1 half-crown and 3 two-shilling pieces was claimed and returned.

1 half-crown and 7 two-shilling pieces were paid into the Lavatory Account.

SALE OF FOOD AND DRUGS ACT.

164 Samples were taken during the year as compared with 191, 176, 191, 186, and 155 in the five preceding years respectively.

The following Table shows the Samples taken together with the number adulterated or otherwise unsatisfactory and the result.

Article.	No. of Samples.	No. of Unsatisfactory Samples.	No. of Prose-cutions.	No. of Convictions.	Dismissed.	Fines and Costs.
Milk	127	4	2	1	1	23/-
Butter	27	—	—	—	—	—
Cream	4	1	—	—	—	—
Cheese	6	—	—	—	—	—
Total	164	5	2	1	1	23/-

Number of cautions issued, 3.

Of the total samples taken 86 were formal and 78 informal.

Dairies, Cowsheds and Milkshops Orders.

Number of purveyors on Register at end of year	141
Purveyors registered during year ...	3
Purveyors given up during year	8
Visits to Purveyor's premises	120
Number of cowkeepers on Register at end of year	31
Cowkeepers registered during year ...	1
Cowkeepers given up during year ...	—
Notices served for alterations, repairs, etc. ...	1
Visits to cowsheds	9

CONTAGIOUS DISEASES (ANIMALS) ACT.

Six visits were made under the above named Act.

SHOPS ACT 1912.

The Shops Act, 1912, has now been in operation about 19 months.

Number of shops registered in 1912 ...	1506
,, ,, ,, 1913 ...	419
TOTAL	1925
Number of visits to shops	894
New shops opened	9
Number of Transfers	5
Number of prosecutions during 1913 ...	—

Owning to a re-arrangement of the Staff through removals, the Public Health Committee appointed me Inspector under this Act in July, Inspector Mears having been delegated a District Inspector.

The Inspection of Shops is now divided amongst all the Inspectors, each taking his own District

An application was made from the Tobacconists of the Borough for a Closing Order. This was not granted.

An application was made from the Antique Furniture Dealers to be exempted from Section 4 of the Act. This was not granted.

METEOROLOGICAL TABLE 1913.

Kindly supplied by Mr. F. Woolnough, and derived from readings taken on the Ipswich Scientific Society's Instruments.

Month.	Barometer.	Temperature (mean).				Rainfall.		Deaths from	
		Max.	Min.	Mean.	Earth.	Amount in inches.	No. of days.	Respiratory diseases	Diarrhœa.
January ..	29·812	59·5	37·4	48·4	46·2	3·75	21	20	2
February ..	30·051	60·7	36·1	48·4	44·7	·46	8	21	1
March ..	29·866	61·7	39·5	50·6	44	1·49	20	21	—
April ..	29·821	62·6	40·1	51·3	45·2	2·02	14	16	—
May ..	29·890	65·9	47·4	56·6	47·7	1·46	8	8	—
June ..	30·049	67·2	49·4	58·3	52·5	1·19	6	5	1
July ..	30·007	65·3	51·6	58·4	54·5	2.17	15	2	2
August ..	29·949	70·5	53·5	62	55·3	1·15	11	10	2
September	28·895	65·9	52·3	59·1	55·3	0.93	14	4	9
October ..	29·879	62·3	50·8	56 5	54·4	2·81	13	15	9
November	29·917	61·9	43·4	52·6	51·9	3·09	17	10	1
December	30·033	58·6	37·2	47·9	47·6	·85	9	16	3
Mean of the whole year	**29·847**	**63·5**	**44·8**	**54·1**	**49·9**	**21·27**	**156**	**148**	**30**
Corresponding for 1912	29·874	61·8	44·3	53	51·8	26·23	174	176	12
For 1911	30·002	62·3	44·37	53·3	50·2	24·44	157	107	70
For 1910	29·863	55·8	44·55	50·22	48·8	32·92	198	125	19

TABLE I.

Vital Statistics of Whole District during 1913 and previous years.

Year.	Population estimated to Middle of each year.	Births.			Total Deaths registered in the Districti		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.				Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 year of Age.		At all ages.	
			Number.	Rate.	Number.	Rate.			Number.	Rate per 1000 Nett Births.	Number.	Rate.
1908	71848	1808	—	25·1	1095	15·2	36	1	200	110	1059	14·7
1909	72598	1792	—	24·6	1035	14·2	44	3	162	89	991	13·6
1910	73356	1819	—	24·7	1078	14·6	47	1	173	95	1031	14·0
1911	74124	1762	1772	23·8	983	13·2	57	18	180	101	944	12·7
1912	74898	1732	1736	23·1	1173	15·6	54	20	196	113	1139	15·2
1913	75681	1808	1814	23·8	1091	14·4	62	28	174	96	1057	13·9

TABLE II. **Cases of Infectious Disease notified during the Year 1913.**

NOTIFIABLE DISEASE	Number of Cases.								Total cases notified in each locality.					Total cases removed to Hospital
	At all Ages.	At ages—years.							St. Margaret's	St. Clement's	Middle	Bridge	Westgate	
		Under 1	1 and under 5 years.	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and upwards						
Small pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera, Plague ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous croup)	136	—	32	83	14	4	3	—	32	33	18	30	23	118
Erysipelas	40	—	—	—	—	—	—	—	11	6	5	6	12	—
Scarlet fever ..	274	1	49	191	23	10	—	—	75	67	40	51	41	233
Typhus fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric	8	—	—	2	1	5	—	—	2	5	1	—	—	8
Relapsing fever Continued fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal fever ..	2	—	—	—	—	—	—	—	—	1	—	—	1	—
Cerebro-spinal Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	200	—	6	38	38	82	32	4	51	33	22	45	49	109
Other forms of Tuberculosis	111	8	19	52	16	12	3	1	32	17	16	21	25	—
TOTALS	771	9	106	366	92	113	38	5	203	162	102	153	151	468

TABLE III.

Causes of, and Ages at Death during the Year 1913.

Causes of Death.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of Residents or Non-Residents in Institutions in the District.
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
All causes { Certified	1057	174	38	39	36	42	125	226	377	
All causes { Uncertified ..	—	—	—	—	—	—	—	—	-	
1. Enteric Fever	—	—	—	—	—	—	—	—	—	1
2. Small-pox	—	—	—	—	—	—	—	—	—	—
3. Measles	6	2	—	4	—	—	—	—	—	—
4. Scarlet Fever	5	—	—	1	1	2	1	—	—	3
5. Whooping	15	3	8	4	—	—	—	—	—	2
6. Diphtheria and Croup ..	11	—	—	6	2	1	1	—	1	8
7. Influenza	10	1	—	—	1	—	2	3	3	2
8. Erysipelas	1	—	—	—	—	—	—	—	1	—
9. Phthisis (Pulmonary Tubérculosis)	88	1	—	1	3	11	33	32	7	28
10. Tuberculous Meningitis ..	11	6	1	1	3	—	—	—	—	1
11. Other Tuberculous Diseases	22	2	5	1	—	3	5	3	3	11
12. Cancer, malignant disease	102	—	—	1	—	—	9	47	45	27
13. Rheumatic Fever ..	2	—	—	—	2	—	—	—	—	2
14. Meningitis	18	6	2	5	4	1	—	—	—	2
15. Organic Heart Disease ..	67	—	1	—	1	4	7	19	36	11
16. Bronchitis	76	8	6	2	—	—	3	8	49	6
17. Pneumonia (all forms) ..	60	7	2	6	3	4	11	11	16	17
18. Other diseases of respiratory organs	13	1	—	—	—	—	1	5	6	4
19. Diarrhœa and Enteritis ..	32	22	6	1	1	—	—	1	1	2
20. Appendicitis and Typhlitis	4	—	—	—	2	2	—	—	—	7
21. Cirrhosis of Liver ..	6	—	—	—	—	—	1	4	1	2
21a Alcoholism	4	—	—	—	—	—	2	2	—	—
22 Nephritis & Bright's Disease	22	—	—	1	1	—	3	11	6	1
23. Puerperal Fever ..	1	—	—	—	—	—	1	—	—	—
24. Other accidents and diseases of Pregnancy and Parturition	8	-	—	—	—	—	8	—	—	1
25. Congenital Debility and Malformation, including Premature Birth ..	86	85	—	—	—	1	—	—	—	5
26. Violent Deaths, excluding Suicide	39	7	—	1	5	2	7	7	10	20
27. Suicide	5	—	—	—	2	—	—	2	1	3
28. Other Defined Diseases ..	338	20	8	4	5	11	28	71	191	116
29. Diseases ill-defined or unknown	5	3	—	—	—	—	2	—	—	—
TOTALS	1057	174	38	39	36	42	125	226	377	282

TABLE IV.

Infant Mortality.

1913. Nett Deaths from stated causes at various Ages under 1 Year of Age

Causes of Death.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 mths	3 mths. and under 6 mths	6 mths. and under 9 mths	9 mths. and und'r 12 mths	Total Deaths under 1 year
All causes { Certified.	62	8	7	6	83	35	28	16	12	174
All causes { Uncertified.	—	—	—	—	—	—	—	—	—	—
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	2	2
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Whooping-Cough	—	—	—	—	—	1	1	1	—	3
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—
Tuberculous Megingitis	—	1	—	—	1	—	2	1	2	6
Abdominal Tuberculosis	—	—	—	—	—	—	1	—	—	1
Other Tuberculous Diseases	—	—	—	—	—	—	—	2	—	2
Meningitis (*not Tuberculous*)	—	—	—	1	1	—	2	2	1	6
Convulsions	1	—	—	—	1	—	1	1	—	3
Laryngitis	—	—	—	—	—	—	—	1	—	1
Bronchitis	—	—	—	—	—	2	3	3	—	8
Pneumonia (all forms)	—	—	—	—	—	1	4	1	1	7
Diarrhœa	—	—	—	—	—	2	3	—	—	5
Enteritis	—	—	—	—	—	8	5	2	2	17
Gastritis	—	—	—	—	—	—	—	—	—	—
Syphilis	1	—	—	—	1	1	1	—	—	3
Rickets	—	—	—	—	—	—	—	—	1	1
Suffocation, overlying	3	—	—	—	3	2	1	—	1	7
Injury at birth	—	—	—	—	—	—	—	—	—	—
Atelectasis	—	—	—	—	—	—	—	—	—	—
Congenital Malformations	7	2	—	1	10	3	1	—	—	14
Premature birth	29	2	2	3	36	3	—	—	—	39
Atrophy, Debility and Marasmus	21	2	5	1	29	10	2	2	2	45
Other Causes	—	1	—	—	1	2	1	—	—	—
TOTALS	62	8	7	6	83	35	28	16	12	174

County Borough of Ipswich Education Committee.

ANNUAL REPORT

FOR 1913.

ON THE

Medical Inspection of Elementary School Children

A. M. N. PRINGLE, M.B., C.M. (Edin.), D.P.H. (Camb.)

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— AND —

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The Medical Inspection of School Children, as carried out in the Borough of Ipswich, consists essentially of two parts:—

(1) The Inspection of Children at the Schools, and

(2) The Examination of Children at the Inspection Clinic in Arcade Street.

INSPECTION OF CHILDREN AT THE SCHOOLS.

There are 26 Elementary Schools in the Borough of Ipswich. The average number of children on the registers during 1913 was 12,508, and the average attendance was 11,527.

The same groups of children were examined in the schools as in previous years, namely:—

(1) Children newly admitted.

(2) Children at 5 years of age.

(3) Children at 9 years of age.

(4) Children at 13 years of age.

(5) "Specials" (i.e., children, of any age, who, in the opinion of the teachers, parents, managers, nurses, or doctor, require medical examination).

(6) "Contacts" (i.e., children attending school from a house in which a case of Pulmonary Tuberculosis has been notified).

During 1913 the Medical Inspector paid 225 visits to schools to carry out routine and special examinations.

The work of Inspection has been performed as in previous years, but, in addition, special attention has been paid to "following up" cases previously recommended for medical treatment.

The number of children examined in 1913 was as follows:—

Routine Examinations	...	3,597
Special Examinations	...	10,841
"Contacts" ...	...	129
	TOTAL	14,567

The number of Examinations made at the Office will be found under School "Inspection Clinic."

The details of Routine Examinations are given in the following Table :—

TABLE I.

Number of Children Medically Inspected at the Routine Examinations during 1913.

Sex.	Admissions.	5 Years.	9 Years.	13 Years.	Totals.				
					1913	1912	1911	1910	1909
Males	285	502	572	499	1858	1977	2158	1781	1086
Females	309	457	510	463	1739	1894	2029	1685	1114
Total	594	959	1082	962	3597	3871	4187	3466	2200

Number of Children found Defective at the Routine Medical Inspections.

Sex.	Admissions.		5 Years.		9 Years.		13 Years.		Total 1913.		Total 1912.	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Males	149	52	246	49	332	58	226	45	953	51	1194	60
Females	162	52	241	53	304	59	221	48	928	53	1154	61
Total	311	52	487	51	636	59	447	47	1881	52	2348	61

Under defects are included children with more than 4 decayed teeth, also conditions of the ear, nose, throat and eyes, and any degree of uncleanliness of the head or body.

The defects found are not necessarily such as to call for medical treatment.

Defects recommended for treatment will be dealt with further on in the report.

Clothing and Footgear.

	Admissions.		Age 5.		Age 9.		Age 13.		All Ages.	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No	Per cent.	No.	Per cent.
Males Unsatisfactory.	17	6·6	21	4·2	47	8·2	36	7·2	121	6·5
Females Unsatisfactory.	16	5·2	10	2·1	14	2·7	16	3·5	56	3·1

Clothing and Footgear were classified at examination as Good, Fair, or Bad, but for the purposes of this report, Fair and Bad are grouped together as unsatisfactory.

Many parents, even where poverty is not a factor, still need instruction as to proper clothing for their children.

The points which need emphasis are:—

(1) Lightness and looseness of clothing. It is no uncommon thing to find children, more especially girls, wearing as many as seven garments—and sometimes more. In addition, the clothing around the chest is often far too tight to allow of proper expansion of the lungs after exercise. The results of over-clothing are that the child becomes over-heated and languid, and is more liable to "catch cold" than the child who is properly clad.

(2) Woollen Undergarments:—Wool being a poor conductor of heat, prevents too rapid cooling of the body, and is therefore, the best material for undergarments, whilst cotton, being a good conductor of heat, causes too rapid cooling, and the child is apt to "catch cold" easily.

Cleanliness.

	Admissions.		Age 5.		Age 9.		Age 13.		All Ages.	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No	Per cent.	No.	Per cent.
Males	22	7·7	27	5·4	32	5·6	26	5·2	107	5·7
Females ..	19	6·1	20	4·4	25	4·9	29	6·3	93	5·3

These figures are somewhat higher than in 1912, and are probably accounted for by the fact that year by year the standard taken by the Inspector and Nurses increases in severity.

It should again be pointed out that the parents have notice that their children are to be medically inspected, and the children are, therefore, in many cases, specially prepared. The numbers given as to children who are normally in a dirty and neglected condition are consequently very much understated, but, speaking generally, great improvement is being made.

In cases where children are found to be dirty after notices of inspection have been sent to parents, it is taken as a distinct indication that the home conditions are far from what is to be desired. Special attention is therefore paid to these children, and in many cases the homes are visited by the School Nurses and the necessary directions given to parents.

As in previous years, the parents have been invited to attend at school at the examination of their children, and the results in this direction still continue to prove satisfactory as the following figures will show :—

PRESENCE OF PARENTS.

During 1913, parents attended the examination of 79% of the children.

The percentage at the various ages varied from 88% in the case of infants, to 59·1% among the boys of 13.

These figures show a slight increase on 1912, and are very satisfactory, apart from any other feature, as proving the great interest the parents take in the Medical Inspection of their children.

It is no uncommon thing to find that the children of parents who do not attend the examination are in a dirty or neglected condition.

Skin Diseases and Verminous Condition.

Age group.	Sex.	Number examined.	Head.			Body.				
			Pediculosis.	Ringworm.	Other Diseases.	Pediculosis.	Petechiæ.	Ringworm.	Impetigo.	Other Diseases.
Admissions	Males	285	5	—	—	—	2	—	1	1
	Females	309	33	1	—	1	1	—	1	—
5 years	Males	502	6	—	—	2	8	—	3	3
	Females	457	45	2	--	3	2	1	—	2
9 years	Males	572	11	1	1	1	7	—	—	2
	Females	510	55	—	1	5	2	—	—	—
13 years	Males	499	5	1	1	2	6	—	2	3
	Females	463	50	—	1	1	6	—	—	2
Totals	Males	1858	27	2	2	5	23	—	6	9
	Females	1739	183	3	2	10	11	1	1	4

Verminous conditions of the head still continue to be a very great source of trouble in spite of the fact that an enormous amount of work has been done by the Staff in this direction.

The figures given in the above Table do not show the true condition of things, for they are only the results obtained from the examination of children, at the special age groups, whose parents have been notified of the intended examination.

On the other hand a true condition cannot be presented by examining special children selected as suspected of being verminous, as this method would give an abnormally high percentage.

To obtain true figures it is necessary to pay surprise visits to the schools and examine the heads of all the female children. This is being done to an increasing extent.

It is hoped that the Report for the year 1914 will give exact figures of these surprise examinations.

We feel that not only for the welfare of the individual children is it essential that they should be kept in a clean and non-verminous

condition, but, that it is, perhaps, of even greater importance from the point of view of the clean and well cared for children attending the same schools.

There are attending the Ipswich Schools hundreds of children coming from poor homes who are kept in a perfectly clean condition, and who reflect great credit on their parents. It is, therefore, of the utmost importance that every effort should be made to prevent these children from becoming contaminated by other children who, owing to neglect on the part of their parents, are in a verminous condition.

During the year, 1206 children were found to have Pediculosis of the head, necessitating special supervision. The name of every verminous child is entered on a special card, and at each examination a note of the condition is made where necessary. Notices are also sent to the parents, together with directions for cleansing.

It was found necessary to exclude from school for verminous conditions	226 children
Average number of days each child was excluded for verminous conditions	11 days
There were served on parents, legal 24 hours' notice to cleanse in	81 cases
The number of children cleansed by the Education Authority was	35
Legal proceedings under the Children's Act were taken in	3 cases
Convictions obtained	3

Ringworm.

5 cases of Ringworm of the head and one of the skin were found at Routine Inspection. This figure is low for the reason that the majority of the cases of Ringworm are either brought to the "Inspection Clinic" by their parents, or are sent from the schools by the teachers.

The exclusion register shows that 45 cases of Ringworm of the head, and 31 of the skin were excluded during 1913. (For further particulars see under "Inspection Clinic.")

The following Table shows the prevalence of Ringworm in the schools since 1909.

Year.	1909	1910	1911	1912	1913
Number of cases of Ringworm ..	236	126	139	93	76

The present low figure for Ringworm among the children is very satisfactory when compared with 1909 (see table above).

Ringworm of the skin is a disease which is easily cured ; Ringworm of the scalp, however, is a most difficult condition to cure by ordinary means of treatment in the home, for the reason that the "germ" of the disease travels down the hair to its "root" in the scalp. The only satisfactory rapid method of treatment is by means of short exposures to the X-rays, after which, in about three weeks, the hair over the area thus treated falls out. It is then a simple matter to make an antiseptic application to the scalp for a few days and the disease is cured.

It is necessary to effect as rapid a cure as possible for several reasons.

First, because the condition generally tends to spread in the scalp. Secondly, it spreads to other members of the family, and lastly, by the older and slower methods of treatment unnecessary havoc is played with school attendance with consequent loss to the child and also to the ratepayers in form of grant.

It not infrequently happens that after many weeks of ordinary treatment the parent has at last to obtain X-ray treatment before a cure is obtained.

HEIGHT AND WEIGHT.

An enquiry has been conducted for the three years 1911, 1912 and 1913 with a view to the determination of a local standard of height and weight for both sexes at selected age periods.

The taking of three years' records has enabled us to include a sufficient number of the children in school at each age period, so that the final result shows practically what is the present standard height and weight for each sex at each age.

The ages taken were the usual 5 years, 9 years, and 13 years.

In each case the measurements were taken very near the actual birthday so that variations due to such haphazard methods as

the inclusion of children of say 5 years and 10 months of age in a group designed to show the height and weight of children at 5 years of age have been avoided. All the children included in the tables are practically of identical age, within 2 weeks on either side of their actual birthday, a variation so small as not to vitiate the result.

There are certain general observations that may be made in relation to these results.

(1) For both sexes the younger the group the less is the variation ; an expression, of course, of the fact that the vast majority of children start very nearly on a level.

(2) Only a small proportion of children of either sex are the actual average height and weight and the proportion diminishes as the age increases.

(3) Amongst children of the same height or weight there is a well marked tendency to vary in weight or height within certain, on the whole, fairly equal degrees. Thus at 5 years of age the variation in weight in males of 39 inches was from 30 lbs. to 44 lbs. whilst at 41 inches the weight variation was from 33-48 lbs.

Exactly the same tendency to variation is exhibited as between weight on the one hand and height on the other. Thus a boy of 5 years weighing 35 lbs. may vary from 36-42·5 inches in height and one of 41 lbs. from 37·5-44 inches.

The same thing applies to the higher ages, only that in their case, the variation in height and weight is much greater. Thus at 5 years of age the total variation for height as between the shortest and the tallest boy was 14 inches and the variation of weight 25 lbs., whilst at 13 years of age the variation in height was from 45-74·5 inches and the weight variation was from 50-129 lbs.

In proportional terms, males of 5 varied 42% in height and 92% in weight, whilst at 13 years the variations were 65% and 158% respectively.

Lastly the table of 9 year old boys shows a precisely intermediate position in its general features as between 5 and 13 years, indicating of course the substantial accuracy of both these Tables.

Thus we may prepare the following Table:—

Males.	5 Years.	9 Years.	13 Years.
Average height	40·18 in.	48·58 in.	55·5 in.
Average weight.. ..	37·51 lbs.	53·52 lbs.	74·24 lbs.
Lowest height	33 in.	36·5 in.	45 in.
Greatest height.. ..	47 in.	59·5 in.	74·5 in.
% variation in height ..	42%	63%	65%
Lowest weight	27 lbs.	31 lbs.	50 lbs.
Greatest weight ..	52 lbs.	76 lbs.	129 lbs.
% variation in weight ..	92%	145%	158%
Total No. of Children..	1708	1937	1592

If we compare the average heights and weights at the three age periods, boys of 9 years are found to have increased 28% in height as compared with boys of 5 years, whilst boys of 13 increased 14% as compared with boys of 9 years. Weight on the other hand increases to the extent of 42% in the case of 9 year old boys contrasted with 5 years old, whilst the increase between 9 and 13 years of age averages 38%.

With respect to girls, if we adopt similar figures to those taken for boys, we find that girls of 5 years of age, 39 inches high, varied in weight from 29 - 44 lbs., whilst at 41 inches the variation was from 31 - 46 lbs.

Again, if we take Weights a girl of 5 weighing 35 lbs. may vary from 35 - 43 inches in height, whilst one of 41 lbs. may vary from 39 - 44 inches.

In the case of girls as with boys the degree of variation in height and weight increases rapidly as the age increases.

Thus the total variation in height in girls of 5 years was from 31·5 - 49·5 inches, and the weight from 20 - 52 lbs.

At 13 years of age height varied from 42·5 - 65 inches, and weight from 43 - 124 lbs. Thus in proportional terms girls of 5 years varied 57% in height and 160% in weight.

At 13 years of age girls varied 50% in height and 188% in weight.

As for the girls of 9 years of age they again hold an intermediate position between the 5 and 13 years age periods.

The following Table of average heights and weights for the three age periods for girls will enable a contrast to be made with the corresponding Table for boys :—

Females.	5 Years.	9 Years.	13 Years.
Average Height ..	39·96 in.	48·38 in.	56·06 in.
Average Weight ..	36·76 lbs.	52·10 lbs.	76·41 lbs.
Lowest Height ..	31·5 in.	37·5 in.	42·5 in.
Greatest Height ..	49·5 in.	58·5 in.	65 in.
% variation in Height	57%	56%	50%
Lowest Weight ..	20 lbs.	34 lbs.	43 lbs.
Greatest Weight ..	52 lbs.	81 lbs.	124 lbs.
% variation in weight ..	160%	138 %	188%
Total Number of Children	1603	1757	1504

This Table shows the girls of 9 years have increased 21% in height as compared with girls of 5, whilst girls of 13 increased 15% over those of 9.

As to weights the increase as between 5 and 9 years is 41% whilst between 9 and 13 it is 46%.

If we contrast the Table for boys and girls, we find that boys of 5 are slightly taller and heavier than girls of 5, and that the same holds good at 9 years.

On the other hand girls of 13 years af age are on the average about $\frac{1}{2}$ inch taller and 2·2 lbs. heavier than boys of the same age.

NUTRITION.

Age Period.	Sex.	Good.	Fair.	Bad.	Number of Children Examined.
		Per cent.	Per cent.	Per cent.	
Admissions	Males ..	85·3	14·4	·4	285
	Females	89·6	10·4	—	309
	Total ..	87·5	12·3	·2	594
5 Years ..	Males ..	84·9	14·5	·6	502
	Females	88·0	11·8	·4	457
	Total ..	86·3	13·3	·4	959
9 Years ..	Males ..	82·2	17·1	·7	572
	Females	83.9	15·7	·4	510
	Total ..	83·0	16·4	·6	1082
13 Years ..	Males ..	82·8	15·2	2·	499
	Females	86·8	11·2	2·	463
	Total ..	84·7	13·3	2·	962
All Ages ..	Males ..	83·5	15·5	1·	1858
	Females	86·7	12·5	·8	1739
	Total	85·2	14·0	·8	3597

The question of Nutrition is a very large one.

Malnutrition may be brought about by many conditions, some of which are Tuberculosis. Enlarged Tonsils and Adenoids, Gastric or Intestinal Disturbances (whether due to Faulty Diet, Intestinal Parasites, or slight and often unsuspected attacks of recurrent Appendicits), and very many other pathological conditions.

Apart from discoverable disease, it is no uncommon thing to find children coming from homes, where there is no question of unsuitable or insufficient food, who appear under-nourished.

These cases are of no particular moment from the point of view of Medical Inspection, but when the same type of child is examined from a home where there may be a possibility of insufficient or unsuitable food, it at once becomes a matter for earnest consideration.

It is very difficult to say when a child is under-nourished from lack of food, especially if the child is apparently well cared-for as to clothing and cleanliness. It is a well recognised fact that children are often in a state of extreme neglect as to clothing and cleanliness, but are, judging from weight and appearance, well nourished.

In the majority of cases it is impossible for the Medical Inspector to say that the child is underfed merely from examining and weighing the child.

He can only say that the child appears under-nourished, that there is no evidence of disease, that the condition as to clothing and cleanliness is good or is bad. The Teacher, Attendance Officer or Nurse, can then often add the necessary information needed to settle the matter, and that information can only be obtained from an intimate knowledge of the home conditions.

In cases where under-feeding does occur it often proves on investigation that it is due to drunken habits on the part of the parent or parents, and not to poverty in its real sense.

The proper feeding of children is not alone a question of poverty or neglect. Very many parents who should know better still send their children to school after a meagre breakfast of tea and bread and butter, whereas, by a little forethought, Scotch Oatmeal could be cooked in the evening and heated up for breakfast and served with a little hot milk and sugar, if desired. This would provide a nourishing and wholesome food, though it may be rather more trouble to prepare than the tea and bread and butter.

With regard to the question of the provision of meals for necessitous children, the amount of the Voluntary Fund in existence in Ipswich is adequate to the calls made upon it.

There is, however, substantial reason to believe that the administration of the Fund is not such as commands the confidence of the public.

The time has arrived when the Education Committee should take steps to secure adequate control of the administration of the Fund.

Whilst this step is a right and proper one, I give the warning that no Fund, no Act of Parliament, and no Administration devised by the wit of man will ever secure the feeding of all necessitous children.

TEETH.

Age period.	Sex.	Number of Teeth Decayed.			Number of Children Examined.
		0	1—4 inclusive.	5 or more.	
		Per cent.	Per cent.	Per cent.	
Admissions	Males	37·5	50·5	12	285
	Females	38·6	48·2	13·2	309
	TOTAL	38·1	49·3	12·6	594
5 Years.	Males	43·2	41·4	15·4	502
	Females	47·3	37·9	14·8	457
	TOTAL	45·2	39·8	15·	959
9 Years.	Males	28·9	50·5	20·6	572
	Females	26·3	55·3	18·4	510
	TOTAL	27·6	52·8	19·6	1082
13 Years.	Males	34·5	58·5	7·	499
	Females	36·9	57·3	5·8	463
	TOTAL	35·7	57·9	6·4	962
All Ages.	Males	35·6	50·2	14·2	1858
	Females	36·8	50·	13·2	1739
	TOTAL	36·2	50·1	13·7	3597

This Table shows that 63·8% of the children examined at Routine Inspections had one or more decayed teeth.

Dental or Alveolar Abscess.

	Admissions.	5 Years.	9 Years.	13 Years.	All Ages.
Males ..	4	11	5	3	23
Females ..	2	9	6	4	21
Total ..	6	20	11	7	44
Per centage	1%	2%	1%	0·7%	1·2%

The above table shows that 1·2% of the children examined at Routine Inspections in the schools had abscesses in connection with decayed teeth.

The figures are probably understated as it was not until the middle of the year that this condition was systematically recorded.

The causes of decayed teeth are numerous :—

Acute and chronic illness, soft foods and hot drinks, heredity, local infection from one decayed tooth to another, may be mentioned as frequent causes.

The effects are also numerous :—

Abscesses in the gums, enlarged glands in the neck, inflamed throats, bronchitis, general debility, inability to masticate food properly with consequent results on general nutrition.

Prevention lies in many directions. Attention to general health, avoidance of soft foods and hot drinks, cleansing of the teeth from debris, especially before retiring to bed, are points worthy of attention.

An attempt has been made in some of the Ipswich schools to introduce teeth cleansing as part of the routine of school work.

Theoretically the idea is excellent but one has only to examine the mouths of a few hundred children to realise that there are conditions of the teeth and gums in which an attempt to cleanse the teeth with a brush is not only painful but in some cases even harmful in that it may cause an intense inflammation of the gums.

It is much to be desired that, with the consumption of modern soft and fine foods which adhere to the gums and crevices between the teeth, children should be taught to cleanse their teeth, but it is insufficient unless at the same time active measures are taken to deal with decayed teeth present.

The question of carious teeth is, in the vast majority of cases at the present time, passed over for the reason that there is no charitable institution in Ipswich which can deal with the matter, and the vast majority of parents simply cannot afford to pay for adequate dental treatment. Apart from childhood, the amount of ill health in later life which is directly traceable to bad teeth is daily becoming more and more recognised by the medical profession, and the time has arrived when a dental treatment centre for the school children should be established.

At the present time the only elementary school children in Ipswich who receive systematic dental treatment are the children who come under the care of the Guardians.

There are in the United Kingdom 29 areas in which Local Education Authorities have received Sanction to incur expenditure for the treatment of dental disease, and there are 35 dental clinics working in various parts of the country.

ENLARGED TONSILS AND ADENOIDS.

The subject of Enlarged tonsils and adenoids in Children is a most important one.

It is most essential for the general well being of the child that the upper air passages should be in a normal and healthy condition.

Adequate aeration of the blood in the lungs is an essential factor, not only to the proper growth and development of the child, but to life itself.

The nose is the proper inlet for air before it passes into the lungs, and the air, in passing down the nose and throat, is filtered of dust and germs, warmed, and moistened.

If a child, owing to obstruction of the upper air passages by enlarged tonsils and adenoids is obliged, even though it be only when asleep, to breathe through the mouth, it loses the benefit of this natural filter with consequent ill effects to the lungs and general health.

Another effect of enlarged tonsils and adenoids is that a blockage of the Eustachian tube leading from the throat to the ear is caused, which results in deafness.

Enlarged tonsils and adenoids very frequently cause defective speech.

In cases of Chronic ear discharge it is usually hopeless to expect a cure if there are enlarged tonsils and adenoids present.

Catarrhal conditions in the lungs are often found to clear up very rapidly after thorough removal of tonsils and adenoids.

Absorption of toxins from chronically enlarged tonsils is a common cause of general debility.

In young children inability to draw air easily through the nose, frequently causes a sucking in and deformity of the chest wall, with consequent ill effects on the lungs.

Enlarged glands in the neck arise as often from enlarged tonsils as from decayed teeth.

In outbreaks of Scarlet Fever and Diphtheria it is almost always children with enlarged tonsils and adenoids who are attacked most severely by the disease; moreover a child with a perfectly healthy nose and throat is not nearly so liable to contract these diseases.

Finally it should be mentioned that pathologists have definitely proved that the tonsils act as one of the greatest portals for the entrance of the Tubercle bacillus (the germ of consumption) into the body. The tonsils from cases of gland tuberculosis have been examined and as many as 14% have shown the presence of tuberculous disease in the tonsil itself.

This fact alone, apart from the other facts enumerated above, shows the great need for attention to this important subject.

It is our custom to recommend surgical treatment for all cases of very marked enlargement of tonsils and adenoids.

In moderate cases surgical treatment is only recommended when some of the above mentioned factors are present.

The attitude of the majority of parents is that they are willing to adopt any reasonable measures for the benefit of their children.

Some are quite prepared to take the opinion of the Medical Inspector, some need to have the matter carefully explained first, whilst others, unfortunately, will not be advised at all.

It is most essential that the Authority recommending the necessary operation shall be in a position to provide the treatment.

It is not easy to explain to a parent the need for treatment when they can quote cases in which the treatment has been incomplete and therefore, usuallly quite useless.

Partial removal of enlarged tonsils and adenoids is useless, and unless complete removal can be assured, it is better not to put children and parents to the anxiety and inconvenience of treatment.

The operation, in expert hands, is a simple one, and the benefits to the child cannot be exaggerated.

Tonsils, Adenoids and Glands.

Age Period.	Sex.	Enlargement of Tonsils.		Adenoids.	Enlargement of Neck Glands.		Number of Children Examined.
		Moderate.	Marked.		Moderate.	Marked.	
		Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	
Admissions	Males	13·3	2·4	2·1	17·9	·7	285
	Females	12·6	2·9	5·1	11·	—	309
	TOTAL	13·	2·7	3·7	14·3	·3	594
5 years	Males	12·9	1·8	4·2	15·3	·4	502
	Females	10·9	2·4	3·3	10·9	·8	457
	TOTAL	12·	2·1	3·8	13·2	·6	959
9 years	Males	11·7	2·1	3·5	13·4	·3	572
	Females	10·2	2·8	2·9	8·8	1·2	510
	TOTAL	11·	2·4	3·2	11·2	·7	1082
13 years	Males	7·6	2·	3·4	8·6	—	499
	Females	8·	2·6	3·7	6·2	·2	463
	TOTAL	7·8	2·3	3·6	7·5	·1	962
All Ages	Males	11·2	2·	3·4	10·3	·3	1848
	Females	10·2	2·6	3·6	9·	·6	1739
	TOTAL	10·7	2·3	3·5	9·7	·4	3597

Glands.

The percentage of moderately enlarged neck glands = 11·3%

Marked enlargement of neck glands = ·5%

Marked Deviation of the Nasal Septum.

2 cases were recorded.

Hearing.

Age Period.	Moderate Deafness.	Marked Deafness.	Number Examined
Admissions ..	3	—	594
5 Years ..	9	1	959
9 Years ..	9	2	1082
13 Years ..	14	2	962
All Ages ..	35	5	3597

From these figures it would appear that roughly 1% of the children showed some degree of deafness.

It is probably somewhat understated, for there is considerable difficulty in testing children of 5 years and under.

The majority of cases of deafness are due to obstruction of the Eustachian Tube by enlarged tonsils and adenoids; the minority are due to Middle Ear Disease.

Otorrhœa or Discharging Ears.

Age Period.	Otorrohœa.	Number Examined.
Admissions ..	2	594
5 Years ..	6	959
9 Years ..	3	1082
13 Years ..	4	962
All Ages ..	15 = ·4%	3597

These figures are satisfactory.

As has been before pointed out, the condition of Otorrhœa is a very difficult one to deal with. Beyond removal of tonsils and adenoids, where present, and keeping the external ear clean and dry, there is little to be done. Operative procedures, except in special cases, are often useless and not to be recommended. The condition lasts from a few weeks to months, and sometimes years.

It is usually found necessary to exclude children with discharging ears from school for a few days until the mothers have been taught how to carry out the necessary treatment.

Defects of Speech.

These were noted in 30 cases or ·8%.

Cleft Palate.

Four cases were recorded (3 at the age of 5 years, and 1 at the age of 13).

One case only obtained operative treatment.

EXTERNAL EYE DISEASES.

(found at Routine Examinations in School).

30 cases of External Eye Disease were found, giving a percentage of ·8.

	Age 13 Years.				Age 9 Years.				Age 5 Years.				Admissions.				All Ages.			
	Lids	Conjunctiva	Cornea	Percentage of External Eye Diseases	Lids	Conjuctiva	Cornea	Percentage of External Eye Diseases	Lids	Conjunctiva	Cornea	Percentage of External Eye Diseases	Lids	Conjunctiva	Cornea	Percentage of External Eye Diseases	Lids	Conjunctiva	Cornea	Percentage of External Eye Diseases
Males	4	1	0	1·0	1	0	3	·7	4	0	0	·8	1	1	0	·7	10	2	3	·8
Females	3	1	1	1·0	6	1	2	1·5	0	0	0	0	1	0	0	·3	10	2	3	·9
Total	7	2	1	1·0	7	1	5	1·2	4	0	0	·4	2	1	0	·5	20	4	6	·8

Cataract.

There were two cases of Cataract.

SQUINT.

60 cases of Squint were found; the highest percentage—2·6—being among the children at 5 years of age.

The total percentage, for all ages, was 1·7.

Sex.	13 Years.		9 Years.		5 Years.		Admissions.		All Ages.	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Males	5	1·0	8	1·4	11	2·2	6	2·1	30	1·6
Females	3	·6	10	1·9	14	2·0	3	·9	30	1·7
Totals	8	1·8	18	1·6	25	2·6	9	1·5	60	1·7

Errors of Refraction.

Age.	Sex.	Defect R. eye only. Per cent.	Defect L. eye only. Per cent.	Defects both eyes. Per cent.	Total with any defect Per cent.	Number Examined
13 years.	Males	4·0	5·2	5·6	14·8	499
	Females	3·5	4·3	10·8	18·8	463
	Total	3·8	4·8	8·2	16·9	962
9 years.	Males	5·1	4·2	9·4	18·7	572
	Females	3·1	4·5	9·0	16·6	510
	Total	4·1	4·3	9·2	17·7	1082
Total all ages.	Males	4·6	4·7	7·7	17·0	1071
	Females	3.4	4·4	9·8	17·6	973
	Total	4·0	4.6	8·7	17·3	2044

The total percentage of defects shown in this table is almost identical with the figure for 1912.

The figures denote the percentage of children with any defect however slight.

Cases with vision less than $\frac{6}{12}$ are referred for further examination as a routine procedure.

Cases of squint, blepharitis, and headaches after reading, are also referred for further examination.

Particulars of these examinations will be found under "treatment."

MENTAL CONDITION.

Age Group.	Bright.		Fair.		Dull.		Mentally Deficient
	Number	per cent.	Number	per cent.	Number	per cent.	
Admissions	66	11·1	497	83·7	30	5·1	1
5 years ..	53	5·5	881	91·9	21	2·2	4
9 years ..	97	9·0	868	80·2	116	10·7	1
13 years ..	115	12·0	754	78·4	90	9.4	3
All ages ..	331	9·2	3000	83·4	257	7·1	9=·3%

Particulars of the mental capacity of each child are supplied, as formerly by the teachers.

It is not infrequently found on examining children said by the teachers to be dull that there is present either deafness or defective vision, and in some instances both conditions are present.

The above figures are almost identical with those for 1912.

The subject of mentally deficient children is, at the present time, under special consideration by the Education Committee — further remarks on this subject will therefore be deferred.

DISEASES OF THE HEART.

	Males.	Females.
Admissions ..	3	5
5 Years ..	9	7
9 Years ..	8	9
13 Years ..	5	9
TOTAL	25	30

In cases where Heart Disease is found it is the custom to inform the teachers in order that, where necessary, physical exercises may be restricted or dispensed with entirely.

A certain proportion of the children are chronic invalids, and these are excluded from school for longer or shorter periods according to the necessity of the case.

Many of the teachers now submit children to the Medical Inspector before commencing instruction in swimming. It is needless to point out the wisdom of this step, more especially in connection with Diseases of the Heart.

Diseases of the Lungs (all forms) discovered at the Routine Inspection.

	Males		Females.	
	Number of Diseased Lungs.	Number Examined.	Number of Diseased Lungs.	Number Examined.
Admissions ..	20	285	9	309
5 Years ..	38	502	29	457
9 Years ..	21	572	9	510
13 Years ..	8	499	5	463
TOTAL	87	1858	52	1739

Percentage among males = 4·6.

Percentage among females = 2·9.

Total Percentage = 4·4.

School Contacts of Pulmonary Tuberculosis.

Number of Contacts examined (55 boys and 74 girls) = 129.

	Contacts.	Routine Examination of Children of all ages.
Number Examined	129	3597
	Per cent.	per cent.
NUTRITION—Good ..	93·0	85·2
Fair ..	6·2	14·0
Bad ..	·8	·8
Tonsils and Adenoids ..	12·4	17·5
Enlarged Submax or Cervical Glands	17·0	11·8
LUNGS—(*a*) Phthisis ..	2·3 (3 cases)	·2
(*b*) Abnormal breath sounds ..	7·7	4·3
(*c*) Catarrh, etc. ..	7·7	

Analysis of Pulmonary Tuberculosis and suspected Pulmonary Tuberculosis at end of December, 1913.

	1911	1912	1913
Returned to School ..	30	18	10
Still Excluded ..	8	22	6
In Hospital ..	1	4	2
Dead	1	1	—
Left School ..	6	—	1
Total under observation in each year ..	46	45	19

Total notified to Medical Officer of Health up to end of year 1913 = 79.

Tuberculosis Non-Pulmonary.

Age Group.	Males.	Females.
Admissions ..	2	2
5 Years ..	3	1
9 Years .	7	7
13 Years ..	2	2
TOTAL ..	14	12

Total percentage of children examined at Routine Inspection = ·7%.

DISEASES OF THE NERVOUS SYSTEM.

17 cases of defects in the Nervous System were found during the Routine Inspections.

RICKETS.

17 boys and 9 girls showed evidence of rickets in early life.

As has been mentioned in previous reports rickets is a disease of early life and the effects only are seen in children of school age.

DEFORMITIES.

Routine Inspection. Total Examined.	Chest.	Spine.	Upper Extremity.	Lower Extremity.
Males (1858)	11	2	—	1
Females (1739)	6	1	—	1

These figures are not of much value in connection with spinal deformities as it is in only certain cases that the children are stripped to the waist for examination; the accommodation in the schools, in winter at least, does not permit of this as a routine method; it is obvious therefore that slight curvatures of the spine, not infrequently, go un-noted.

VACCINATION.

Age group.	Number examined.	Per cent un-vaccinated
Admissions.	594	41·2
5 years	969	54·7
9 years	1082	37·7
13 years	962	41·5
TOTAL	3597	43·8

The figures for unvaccinated children are higher than for the previous year. The total percentage of children examined found to be unvaccinated in 1912 was 39·8.

INFECTIOUS DISEASES.

During 1913 the following cases of Infectious Disease were notified by the teachers :—

Measles.	Mumps.	Whooping Cough.	Chickenpox.
106	28	3	4

Besides the above 1 Scarlet Fever was notified, also 1 Diphtheria, 4 Sore Throats, and 1 Ringworm.

The following list gives the number of children maintained by the Ipswich Education Committee at Special Schools.

Deaf and Dumb Children.		No. of children in attendance.
Royal Institution for the Instruction of Deaf and Dumb Children, Edgbaston, Birmingham	5.	(1 sent in 1913)
Royal Schools for the Deaf and Dumb, Old Trafford, Manchester	1.	(sent in Jan. 1914)
Homerton Residential School for the Deaf ...	1.	
Blind Children.		
Barclay Home and School for Blind Girls, Brighton	1.	
L.C.C. Powis Street Blind School, Woolwich	1.	(sent in 1913)
Mentally Deficient Children.	Nil.	
Epileptic Children.	Nil.	

TREATMENT & FOLLOWING UP.

This is the first year in which "following up" the children found to be defective and in need of treatment has been undertaken and owing to the changes in the Medical Staff in the first half of the year the time that elapsed between the first discovery of defect in the child and the next "following up" was often considerable.

With many parents it is only necessary to point out the defect and the remedy, for the condition to receive immediate attention. In a certain proportion of cases it is necessary to give repeated notices to the parents before the various conditions receive treatment, whilst in a still further proportion of cases the parents seem absolutely indifferent.

There is no doubt that parents are far more ready to carry out advice when they know the individual who is advising them. Most parents are sceptical, and quite rightly, of taking advice from a stranger.

There are, of course, many other factors entering into this apparent apathy on the part of the parents towards attending to the Medical and Surgical needs of their children. It is first necessary to convince them of the need for treatment: it is then necessary, in the case of poor people, to help them to obtain treatment. Finally, it is essential that the treatment obtainable shall be thorough and efficient.

Return of Cases "Followed Up."

Defect.	Treated.	Untreated.	No Report (i.e. left school or town).
Enlarged Tonsils and Adenoids	15	2	2
Enlarged Tonsils	35	5	4
Adenoids	10	4	1
Defective Vision	112 (glasses)	12	—
External Eye Disease ..	59	—	—
Catarrhal and other conditions of Lungs	33	—	—
Deafness or Otorrhœa ..	23	—	—
SKIN DISEASES—			
Ringworm	76	—	—
Impetigo, etc.	78	—	—
Scabies	21	—	—
Tuberculosis of Glands or Bones	27	—	—
Pulmonary conditions ..	80	—	—
Debility, Anæmia, etc. ..	82	—	—
Carious Teeth	13	8	—
Other Defects	93	—	—
Somewhat Enlarged Tonsils or Adenoids kept under observation	33		
Pediculosis	1206		

The above Table refers to defects discovered at Routine and Special Examinations in school, and also to examinations at the Inspection Clinic.

EYE CLINIC.

In October, 1913, Dr. Sinclair resigned the work of the Eye Clinic.

The Education Committee, therefore, appointed the Medical Inspector to carry out the work from December 6th, 1913.

The following is the summary for the year 1913 :—

Total number examined	203
Glasses prescribed (including 8 to be changed)	124
Cases in which no glasses ordered ...	33
Cases examined as to suitability of present glasses, but found satisfactory	8
Glasses obtained	112
Glasses not obtained	12
Records incomplete	38

Nature of Defects found.

Hypermetropia	75
Hypermetropic Astigmatism ...	47
Myopia	20
Myopic Astigmatism	31
Mixed Astigmatism	13
Cataract	3
Corneal Opacities	4
No error	10
	203

INSPECTION CLINIC.

The Inspection Clinic is one of the most important units in the Medical Examination of School Children. It is conducted each morning from 9·30 to 10.30, at the Offices at No. 1, Arcade Street.

The purposes of the Inspection Clinic are as follows :—

(1). To keep under observation all children excluded from school for various reasons, and to see that medical advice is obtained, and that the treatment is being carried out.

(2). To examine all children sent from school by teachers for various ailments, including suspected Infectious Disease, and to advise the parents to obtain medical treatment where necessary.

(3). To examine children brought or sent up by Attendance Officers in cases where it is doubtful whether a child should, or should not, attend school.

(4). To examine children when brought by parents for various ailments.

(5). To keep under observation all children whose names have been removed from the school register owing to protracted illness.

(6). To examine children prior to admission to convalescent homes.

(7). To examine children referred by Medical Practitioners for exclusion from school.

(8). To examine children concerning whom special reports may be required by the Education Committee.

To sum up the whole matter, the purpose of the Inspection Clinic is to ensure that no child attends school when unfit to do so, and that no child is kept away from school unnecessarily.

SCHOOL "INSPECTION CLINIC."

Number of Examinations made in 1913 ...	4701
Number of Children excluded from School ...	891

The causes of exclusion were as follows :—

Verminous and Dirty Conditions	226
Impetigo, Sores, etc.	78
Scabies	21
Ringworm of the Scalp	45
Ringworm of the Skin	31
External Eye Diseases	59
Bronchitis	46
Pulmonary Tuberculosis	34
Tuberculosis of the Glands or Bones ...	27
Otorrhœa	14
Sore Throats	72
Scarlet Fever	2
Diphtheria	5
Whooping Cough	8
Chicken Pox	17
Mumps	30
Debility, Anæmia, etc.	82
Other causes	93
TOTAL	891

It should be pointed out that the number 891 includes children who previous to the introduction of the Medical Inspection were absent from school without any medical supervision.

Disease.	Number of Cases excluded.	Average Number of days excluded.	Maximum Number of days excluded.	Minimum Number of days excluded.
All causes	891	32	341	12
Ringworm of Scalp ..	45	56	169	7
.. .. Skin ..	31	31	99	7
Scabies (Itch) ..	21	43	225	19
Pediculosis and Dirty Conditions	226	11	40	1

It is hoped that with the extra nurse now available, and with the recent increase of the Staff of Attendance Officers, it will be possible by greater "following up." to reduce considerably the number of days of exclusion from school in the case of what must be described as preventable diseases (such as Ringworm, Scabies and Pediculosis).

THE WORK OF TH SCHOOL NURSES.

Visits paid to the schools for the purposes of routine and special examinations	225
Visits to the children at their houses	686
Re-visits	244
TOTAL -	1155

It has gradually become more and more apparent that with the growth in scope of medical inspection one nurse could not adequately cope with the work. The Education Committee therefore in November 1913, appointed Miss Whitbread as assistant School Nurse.

It is impossible in a tabular statement to do justice to the work of the school nurse owing to its great variety. She is the most valuable connecting link between the Medical Inspection Department and the homes of the children, and the variety of points on which the nurse is consulted when visiting among the homes of the poor, is an index of the high appreciation in which she is held.

(1) Children notified by teachers as suffering from Infectious Disease such as Measles and Whooping-cough are visited and advice given.

(2) Dirty or neglected children are followed up, and if necessary cleansed, and should the home require it the Nurse informs the Sanitary Department, which then deals with the house. During 1913 co-operation with the S.P.C.C. has proved of value in very bad cases of neglect.

(3) Children found defective at medical inspection, or excluded from school for illness, are visited. The School Nurse is able to bring many cases into touch with voluntary agencies for the provision of treatment, and more especially after-care.

(4) From her knowledge of home conditions the School Nurse is of great value, helping to decide which children require assistance with food or clothing, or both.

In conclusion, we would take this opportunity of thanking Nurse Sandbach and Nurse Whitbred for the enthusiasm and efficiency with which they have carried out their many duties during 1913.

CO-OPERATION OF TEACHING STAFF.

In order that the fullest benefit may be derived from Medical Inspection, the hearty co-operation of the teachers is absolutely necessary. Fortunately in most cases in Ipswich this is forthcoming, and for the help thus given the Medical Staff take this opportunity of expressing their grateful thanks.

The teacher, in daily contact with the children, acquires a knowledge of them, their habits and their home circumstances, which when placed at the disposal of the Medical Officer, is of great value in the examination of cases of Debility, Malnutrition or Tuberculosis.

With regard to personal hygiene, the influence of the teacher is paramount, and may be made to yield most valuable results. To take only two instances,— in the case of the teeth, the teaching of hygiene may be made to take a practical turn with tooth-brush drill, and rewards for the best kept teeth; and again a handkerchief parade and handkerchief drills are not impracticable in infant classes. If every infant possessed a handkerchief and knew how to use it properly, a great many of the coughs and colds of young children would be abolished forthwith.

SCHOOL ATTENDANCE OFFICERS.

It is very pleasing to state that, as in previous years, the help rendered to the Medical Department by the Attendance Officers has been very considerable. Attendance Officer and Medical Inspector are very much interdependent; the help which each can render the other is invaluable, and the result is benefit to the children and more efficient work all round.

SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.

We have again to record the very valuable help which the Inspectors of this Society have rendered on frequent occasions during the past year. It has been necessary in several instances to refer cases to the supervision of this Society.