[Report 1921-1923] / Medical Officer of Health, Ipswich County Borough.

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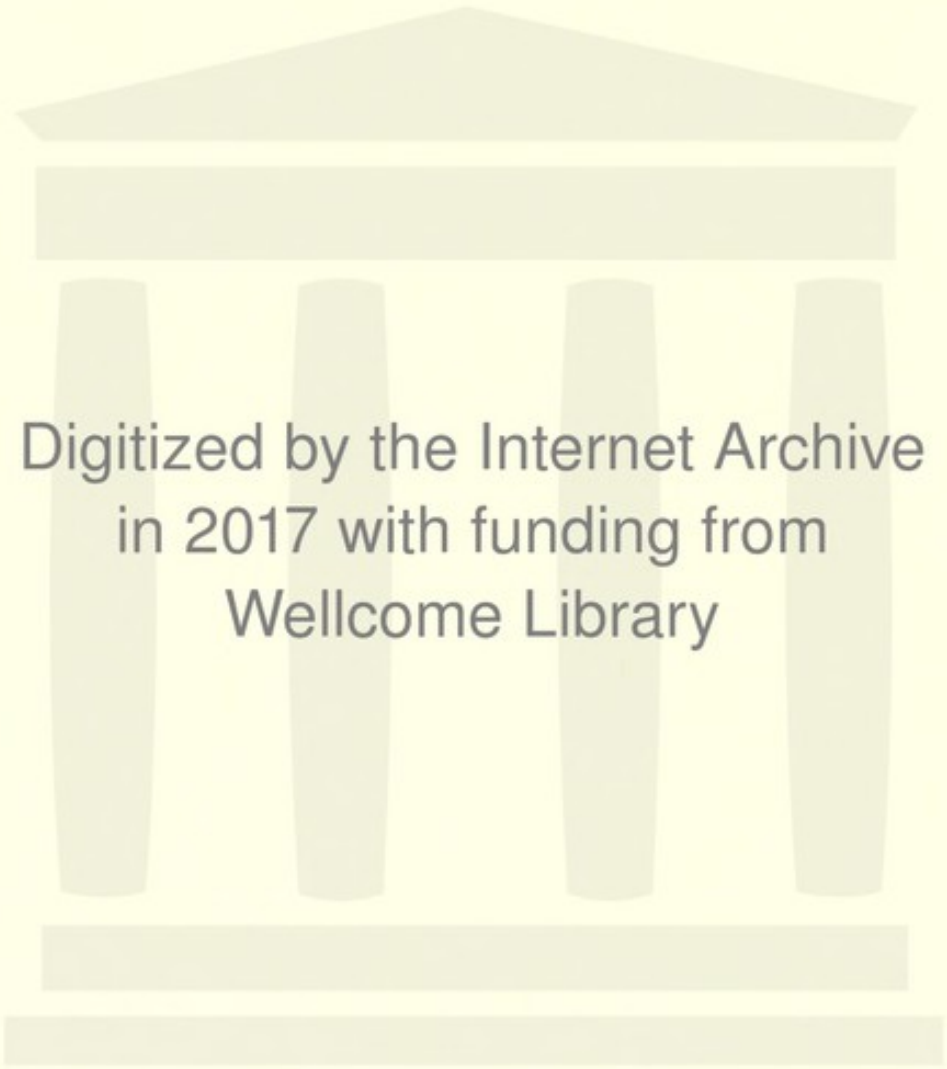

COUNTY BOROUGH OF IPSWICH.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

YEARS 1921, 1922 & 1923.

BY

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PUBLIC HEALTH DEPARTMENT,
ELM STREET,
IPSWICH.

November, 1924.

LADIES AND GENTLEMEN,

I have the honour to present to you my Report on the Health of Ipswich during the years 1921, 1922 and 1923.

I take the opportunity of congratulating you upon the position now occupied by the Borough of Ipswich in respect of matters pertaining to the Health of the people.

The general Death-rate stands at the lowest point recorded within the known history of the Borough.

The Infant Death-rates for the years 1922 and 1923 reached and maintained a level undreamt of even a few years ago.

On the other hand the Birth-rate continues to decline with obviously purposeful regularity.

I beg to offer my thanks to the Public Health Committee for their support in the conservation of the Public Health.

I desire once again to bear testimony to, and to record my thanks for, the unfailing and faithful service in the cause of the Public Health rendered by my Staff.

I am, Ladies and Gentlemen,

Your obedient Servant,

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

Medical Officer of Health.

INDEX.

THE CENSUS, 1921.

The following Table indicates the changes that have taken place in the Population of Ipswich since the first Census in 1801.

Year.	Census Population.			Increase.		Excess of Births over Deaths.	Migration.		Females per 1,000 Males.
	Males.	Females.	Persons.	No.	%		Gain.	Loss.	
1801	4984	6293	11277	—	—	—	—	—	1262
1811	6064	7606	13670	2393	21.2	—	—	—	1254
1821	7831	9355	17186	3516	25.6	—	—	—	1194
1831	9169	11032	20201	3015	17.5	—	—	—	1203
1841	11894	13490	25384	5185	25.6	—	—	—	1134
1851	15474	17440	32914	7530	29.6	2822	4708	—	1127
1861	17667	20283	37950	5036	15.3	4075	961	—	1148
1871	20047	22900	42947	4997	13.1	4373	624	—	1143
1881	23608	26712	50320	7373	17.1	5290	2083	—	1131
1891	26658	30712	57360	7040	13.9	7033	7	—	1151
1901	31181	35449	66630	9270	16.1	6610	2660	—	1136
1911	34980	38952	73932	7302	10.9	8232	—	930	1113
1921	37359	42012	79371	5439	7.4	5979	—	540	1124

It is seen that the rate of increase of the population has been inconstant and marked by several periods of very considerable immigration. It is doubtful whether the immigration figure for 1851 is correct, as the excess of Births over Deaths during that decennium is open to many sources of error, although corrected to some extent by the percentage figure.

It is of interest that the only periods showing a loss by migration were those ending in 1911 and 1921. That for 1921 is easily understood.

THE 1921 CENSUS AND HOUSING.

The Census revealed that in June 1921 there were 18,923 private families in Ipswich, comprising 76,664 persons out of the total enumerated population, and occupying 17,764 structurally separate dwellings containing 95,821 rooms, or 1·25 rooms per person.

As compared with the 1911 Census there was an increase of 1926 private families or 11·03%, whereas the number of structurally separate dwellings increased by 1,127 or 6·8%. The number of families per dwelling was 1·07, and the number of persons per family 4·05 as compared with 4·18 in 1911.

The number of persons per house remained at 4·3 as in 1911.

Since 1801 the number of persons per inhabited house has fallen from 5·2 to 4·3.

There has been a continuous, but varying, fall in the number of persons per family over a long period of time. The lowest point was reached in 1921.

In view of the present Housing shortage the annexed Table is of interest.

No of Houses of	1-3 rooms.	4-5 rooms.	6-8 rooms.	9 rooms. +	Total Dwellings.
No. of Dwellings	1025	8840	7216	683	17764
No. of Private Families	1034	9242	7847	800	18923

This Table is to be read so that 1,034 Private Families occupied 1,025 Private Houses with from one to three rooms and so on.

We may further examine this matter by considering the subjoined more detailed analysis of the above Table.

Houses of Rooms	1-3	4-5	6-8	9 +	Total
Houses Occupied by 1 Family	1017	8455	6653	605	16,730
,, ,, by 2 Families	7	372	515	53	947
,, ,, by 3 or more ,,	1	13	48	25	87

Thus 5·8% of the Private Houses in the Borough were occupied by more than one family in 1921.

In 1911, 889 persons, or 1·3%, were living two or more in one room. In 1921 this number had increased to 3,134 or 4·1%.

These figures prove conclusively that the Housing needs of the town had not been met at the date of the Census.

There is ample evidence at the moment of writing that the Housing requirements of the people are still far from being satisfied.

Age and Sex Distribution of the Population at the 1921 Census.

Examination of the Census figures appears to show that the effects of the War upon the numbers of the Population ceased about the age of 40.

At the Census of 1911 there were 52,6 8 persons under 40 years of age as compared with 52,933 in 1921, a difference of only 315 persons.

On the other hand in 1911 there were 21,314 persons of 40 and over as compared with 26,438 in 1921, a difference of 5,124 persons.

For practical purposes therefore, the whole of the increase of population between 1911 and 1921 concerned those over 40 years of age.

The greatest loss of population in 1921 occurred under 5 years of age, the diminution as compared with 1911 being 987 persons. This was due of course to the lowered number of Births during the War period.

There was a diminution of 320 persons between 5 and 10 years for the same reason.

Between 10 and 15 years of age there was an increase of 476 persons, of 211 between 15 and 20 years, and of 386 between 20 and 25 years.

There was thus a total increase of 1,073 persons between 10 and 25 years of age, of whom 468 were males.

Between 25 and 30 years there was a loss of 77 persons as compared with 1911. Of these 56 were males.

Between 30 and 35 there was an increase of 80 persons, representing a loss of 73 males, but an increase of 158 females.

Between 35 and 40 there was an increase of 544 persons, of whom 267 were males.

Thus, so far as the Census figures go, there was not only the actual loss of lives due to War casualties between 18 and 40 years of age, but an even greater loss under 10 years of age, owing to the fall in the number of Births.

ESTIMATED POPULATION.

The following are the Registrar General's estimates of Populations for the years 1921 1923:—

1921	...	...	...	80,100
1922	...	...	...	80,950
1923	...	...	...	81,710

The Census of 1921 was taken on the 19th June and showed, for Ipswich, a population of 79,371.

The Registrar General's estimate of the population at the end of June, 1921, allocates some 700 persons to the Borough, absent on the 19th June either on holiday or business.

The effect of this distribution will be to influence the population estimates until the next Census, with the result that all Birth-rates, Death-rates, etc. based on these estimated populations will carry an additional source of error.

MARRIAGES.

The following Table indicates the behaviour of the Marriage Rate in Ipswich since 1841:—

Period.	No. of Marriages.	Marriage Rates per 1,000 Living. Ipswich.	England & Wales.
1841—1850	2,815	19·4	16·1
1851—1860	3,302	18·6	16·9
1861—1870	3,550	17·6	16·6
1871—1880	4,143	17·7	16·2
1881—1890	4,152	15·3	14·9
1891—1900	4,777	15·3	15·6
1901--1910	5,209	14·7	15·5
1911—1920	6,819	17·8	16·6
1911	559	15·0	15·2
1912	596	15·8	15·6
1913	586	15·4	15·7
1914	604	15·8	15·9
1915	856	22·2	19·4
1916	653	16·9	14·9
1917	606	15·7	13·8
1918	706	18·3	15·3
1919	898	23·1	19·7
1920	755	19·1	20·2
1921	701	17·3	16·9
1922	635	15·6	15·7
1923	662	16·1	—

The Marriage Rate declined on the whole at a rather irregular rate between 1841 and 1910; the lowest average level being reached between 1900—1910.

There was an appreciable check to the rate of fall between 1911 and 1914.

In 1915 War conditions caused a sudden sharp rise, followed by a relapse in 1916 and 1917.

In 1918 the rate began to rise, reaching the maximum recorded point in 1919. Since then it has once more fallen back until, in 1923, it reached a position only slightly above the average rate obtaining between 1911 and 1914.

BIRTHS

The following Table indicates the variations in the Ipswich Birth-rate since 1841.

Year.	No. of Births.	Birth-rates	
		Ipswich.	England and Wales.
1841—1850	9,391	32·7	32·6
1851—1860	11,925	33·7	34·1
1861—1870	13,295	33·2	35·2
1871--1880	15,611	33·4	35·4
1881—1890	17,104	31·6	32·4
1891—1900	17,787	28·7	29·9
1901—1910	18,798	26·8	27·2
1911—1920	16,538	21·6	21·8
1901	1,903	28·4	28·5
1902	1,877	27·8	28·5
1903	1,958	28·6	28 5
1904	1,926	27·9	28·0
1905	1,954	28·0	27·3
1906	1,914	27·2	27·2
1907	1,860	26·1	26·5
1908	1,813	25·2	26·7
1909	1,806	24·8	25·8
1910	1,787	24·3	25·1
1911	1,772	23·9	24·3
1912	1,750	23·3	23·9
1913	1,813	23·9	24·1
1914	1,800	23·5	23·8
1915	1,617	21·0	21·9
1916	1,666	21·7	20·9
1917	1,315	17·1	17·8
1918	1,379	17·8	17·7
1919	1,423	18·3	18·5
1920	2,003	25·5	25·5
1921	1,724	21·5	22·4
1922	1,586	19·5	20·6
1923	1,548	18·9	19·7

This Table shows that there was but little variation in the Birth rate from 1841 to 1880.

Between 1881 and 1890 decline began, at first slowly, but from 1891 to 1900 with marked acceleration.

From 1901 to 1910 the fall was maintained, though not quite at the same rate.

Between 1911 and 1914 the rate remained fairly steady at the lowest point recorded in the history of the Borough.

The experience of the War years has already been considered in my last Report.

It was perhaps not unnatural to expect after the sharp rise in the Birth-rate in 1920, that the fall in the rate had received a check, but the experience of the years 1921-1923 clearly shows that that year was merely an accidental interruption of a process which has been going on for over 40 years with a definiteness and certainty that removes the problem altogether from the accidental.

The fall is the result of a number of causes, economic, social, educational and otherwise, the net result of which is that there has arisen amongst the people a policy of limitation of families.

There is no need for propaganda by Birth Control Enthusiasts. The knowledge of the fact that Birth Control is possible and of the methods whereby it can be secured has spread amongst the people, and will continue to spread and to be practised so long as the economic position renders it impossible to rear and educate children in a condition of comfort reasonable alike for parents and children.

This view of the case implies that voluntary limitation of the family will be most likely to be practised by that class of people who are possessed of forethought, and who desire to secure the best possible upbringing and education for the number of children for whom they are able to provide, and experience shows that this is precisely what does occur.

On the other hand it is a matter of common knowledge that the worst educated, the most thriftless, the least efficient, and the most shiftless, live in slumdom and propagate their species with apparent indifference as to how their families are to be reared and educated.

The number of Births registered in Ipswich between 1911 and 1920 was 2,260 less than between 1901-1910. This loss was due largely to war conditions but not entirely. Voluntary limitation played its own part.

DEATHS.

I append a Table showing the Death-rates for Ipswich from 1841 – 1923, which renders it possible to appreciate immediately the changes that have taken place, more particularly since the beginning of the present century.

Years.	No. of Deaths.	Death Rates per 1,000 Living. Ipswich.	England & Wales.
1841—1850	6,569	22·67	22·4
1851—1860	7,850	22·21	22·2
1861—1870	8,920	22·12	22·5
1871—1880	10,318	22·08	21·4
1881—1890	10,070	18·62	19·1
1891—1900	11,177	17·99	18·2
1901—1910	10,568	15·00	15·4
1911—1920	10,557	13·80	14·3
1901	1,185	17·65	16·9
1902	969	14·34	16·3
1903	1,049	15·31	15·5
1904	1,085	15·73	16·3
1905	1,041	14·90	15·3
1906	1,070	15·08	15·5
1907	1,089	15·24	15·1
1908	1,060	14·73	14·8
1909	991	13·57	14·6
1910	1,029	13·99	13·5
1911	946	12·76	14·6
1912	1,138	15·13	13·3
1913	1,055	13·92	13·8
1914	1,065	13·93	14·0
1915	1,161	15·09	15·7
1916	1,027	13·35	14·4
1917	1,055	13·71	14·4
1918	1,146	14·87	17·6
1919	1,015	13·09	13·7
1920	949	12·05	12·4
1921	892	11·06	12·1
1922	974	12·03	12·8
1923	838	10·25	11·6

If we confine attention to the decennial rates from 1841—1920, it becomes evident that there are two quite definite periods inviting consideration :—

(1) Between 1841 and 1880 the average Death rates remained remarkably constant at fractions over 22·0 per 1,000 living. The total fall in the rates during this period amounted to about 3 %.

(2) Between 1881 and 1920 on the other hand there was a very marked decline in the rates amounting to a little over 36 %.

Thus $\frac{12}{13}$ of the total recorded decline in the average Death-rates occured since 1880.

Between 1921 and 1923 the decline continued, the average rate being less than half of that of the average experience obtaining between 1841 and 1880. The number of deaths from 1921 to 1923 was, in round figures, 2,700, producing a death-rate of 11·13, whereas had the death rate remained at the same height as that of the average experience of 1841—1880, then the number of deaths in the three years would have exceeded 5400. This remarkable result is the monoply neither of the Medical Profession nor Health Authorities, but is the product of their co-operation, together with some support from public opinion.

Great results have followed the modern treatment of disease, as much Medical as Surgical, though the more spectacular work of the surgeon has earned him a disproportionate degree of appreciation in the popular estimation.

On the other hand the preventive work of Sanitary Authorities has also conferred great benefits on the community, as for instance, the campaign against Tuberculosis, Infant Welfare, the control of Infectious Diseases, School Dentistry, etc., etc.

These proceedings have already produced incalculable results in the promotion of the well-being of the State. These results are the dividends of Health Authorities. It is unfortunate that the better the work of disease prevention the less obvious are its effects. Complete success in the treatment and prevention of disease would mean complete health for everyone until he or she had reached the alloted span. It is not inconceivable that Medical and Preventive Science could achieve such a result if allowed, but it is inconceivable that the ignorance of the Public both about their own construction and the phenomena of disease would permit it.

So much has been accomplished in the last forty years or so that a slowing down in the rate of progress, if not an actual

retrogression, is to be expected. Death-rates cannot continue to fall indefinitely.

The most fertile hope for future progress lies in the attempt to arouse the interest of the Public to their part in the Health Crusade.

The Table given shows that the death-rates for 1921, 1922 and 1923 were the lowest ever recorded, and that the rate for 1923 was by far the lowest yet reached. It remains now to enquire wherein this fall in the death-rate has occurred from the point of view of (1) the age at death, and (2) the cause of death.

1. Ages at Death from all causes.

The test of the value of a falling death-rate is that the fall shall occur at the correct ages, the ages at which the individual is of the greatest value to the state. These ages obviously are the younger. and the younger the better.

When the ages at death in Ipswich are examined at three selected decennial periods the following Table results:—

A Table showing the proportional ratios obtaining between the death-rates at selected age periods for the decennial periods 1841-1850, 1871-1880 and 1911-1920, the death-rates for 1841-1850 being taken as 100.

Age Periods.	1871—1880	1911—1920
0—5 Years	86	43
5—10 ,,	63	40
10—15 ,,	68	47
15—20 ,,	74	39
20—25 ,,	77	47
25—30 ,,	88	43
30—35 ,,	103	50
35—40 ,,	102	46
40—45 ,,	97	54
45—50 ,,	116	65
50—55 ,,	127	81
55—60 ,,	103	70
60—65 ,,	110	80
65—70 ,,	119	95
70—75 ,,	92	78
75—80 ,,	118	89
80—85 ,,	100	90
+ 85 ,,	110	85
All Ages	97	61

These Decennial periods have been selected because 1841—1850 was the earliest possible period, 1871—1880 the last Decennial period with a Death-rate practically the same as that of 1841—1850, and 1911—1920 for obvious reasons.

This Table shows that although there was only a fall of 3% in the rate at all ages in 1871—1880 as compared with 1841—1850, nevertheless there was already beginning a very definite fall at the younger ages, as much even as 37% at ages 5--10, and 32% at 10--15, and that at all quinquennial age periods under 30 years there was definite improvement.

At ages above 30 there was, on the other hand, at nearly all ages an increase in the Death-rates, neutralising the gain at the lower ages.

The column of figures dealing with 1911—1920 shows that at all ages under 50 there has been a very great improvement indeed, most marked at ages under 20, only slightly worse under 30, but becoming less as the years advance.

The Table shows that the improvement in the Death rate at the present time is in the right place—viz., the earliest years of life.

Further light is thrown on this matter by examination of the following Table:—

A Table showing the ages at death of all deaths registered during each of the eight Decennial periods since 1841, arranged so as to show the ages at which 25%, 50% and 75% of the deaths from all causes occurred.

Decennium	25 per cent.	50 per cent.	75 per cent.	Remainder.
1841—1850	Under 1 Yr.	Under 20 Yrs.	Under 57 Yrs.	Over 57 Yrs.
1851—1860	„ 1 „	„ 22 „	„ 59 „	„ 59 „
1861—1870	„ 2 Yrs.	„ 24 „	„ 61 „	„ 61 „
1871—1880	„ 2 „	„ 30 „	„ 63 „	„ 63 „
1881—1890	„ 2 „	„ 32 „	„ 65 „	„ 65 „
1891—1900	„ 1 „	„ 35 „	„ 69 „	„ 69 „
1901—1910	„ 2 „	„ 43 „	„ 70 „	„ 70 „
1911—1920	„ 12 „	„ 54 „	„ 72 „	„ 72 „

This Table brings out in a very graphic manner the enormous death rate amongst the young in the earlier years. It is really appalling to contemplate that in 1841-1850 one half of the deaths registered during the 10 years were of persons between birth and 19 years of age, only a small proportion of persons reaching ages of 70 years and upwards.

It is notable that whatever were the variations in the death-rates at all ages, the deaths under 2 years of age from 1841 to 1910 still provided 25% of the deaths from all causes. Whilst this was so, there was a very decided lengthening of the number of years required to provide the next 25%, the age period rising from under 20 to under 43 years.

It is only since the beginning of this century that even as much as 25% of the people who died reached the allotted span.

The period 1911-1920 is unique in the extraordinary rise in the 25% group, an additional 10 years having to be taken into account in order to provide the number of deaths necessary. At the other end more than 25% of the deaths were of people over 70 years of age, a still greater proportion thus reaching the prescribed allowance.

We now come to the consideration of the second part of our examination, viz. the cause of death.

2. The Cause of Death.

For the purpose of rendering comparison more useful I have selected the four years 1867-1870 for contrast with 1919-1923. The reasons for this selection are that the number of deaths recorded in 1923 was the lowest since 1868, and the number of deaths recorded in each of the periods was practically identical.

In each period the deaths are classified according to the International list of 1912, but with slightly different arrangement. I should state that the figures given for the years 1867-1870 are fair samples of the average experience for each group at that period.

Table showing the Death-rates per 1,000 living from various groups of Diseases during 1919-1923 as compared with 1867-1870 :—

Group.	Death-rates per 1,000 living.	
	1867-1870	1919 1923
Seven Principal Zymotics ..	2·10	·40
Other Infections	·20	·27
Tuberculosis	3·32	1·16
Cancer	·52	1·35
Other General Diseases	·40	·41
Diseases of Nervous System ..	2·90	1·22
,, Circulatory ,, ..	1·06	1·49
,, Respiratory ,, ..	3·24	1·85
,, Digestive ,, ..	·87	·45
,, Genito-Urinary System	·45	·41
Puerperal Diseases	·10	·08
Diseases of the Skin	·13	·05
,, ,, Bone	·00	·01
Malformations	·11	·10
Diseases peculiar to Early Infancy	2·11	·59
Old Age	1·43	·94
External Causes	·53	.45
Ill Defined	1·59	·09
All Causes	**21·15**	**11·43**

If we turn our attention to the Diseases or groups of Diseases contributing materially to the Death rate, two facts stand out, viz.: (1) the large and definite decrease in each instance with the exception of two, and (2) the large increase in the case of Cancer, and to a less extent in diseases of the Heart and other parts of the Circulatory System.

The greatest decrease recorded is in the case of the Ill-Defined group, which has almost disappeared, merged now in all the other groups.

The Table indicates decreases of about 80% for the 7 Principal Zymotics (Smallpox, Scarlet Fever, Diphtheria, Enteric Fever, Measles, Whooping Cough and Diarrhœa under 2 years of age), 72% for the diseases peculiar to Early Infancy and 66% for Tuberculosis.

It is, I think, not without significance that it is possible to record the greatest decreases in those diseases or groups of diseases upon which the greatest amount of preventive energy has been expended, and I think the claim that no inconsiderable part of the decrease is the direct result of the work done will be endorsed by all knowledgeable people. This applies with particular force to the case of the Zymotic diseases and the diseases peculiar to Early Infancy. In the case of Tuberculosis the position is not so strong, because the Death rate from this disease has been falling steadily since 1841, apart altogether from any direct attack. Nevertheless, there is evidence that the local campaign has not been without influence.

Substantial decreases are recorded in the cases of diseases of the Nervous System, 58%; Diseases of the Digestive System, 48%; and Diseases of the Respiratory System, 43%.

The decrease in the case of Respiratory Diseases is of particular importance, as this group is responsible for a higher Death-rate than any other. Therefore, a diminution of as much as 43% represents a very substantial number of lives and is suggestive of further improvement.

The Death-rate from all causes shows an improvement of about 46%, a very definite amount indeed.

The reverse side of the picture is revealed by the rise in the Death-rate from Cancer of about 160%, a very great alteration for the worse. It is a matter for argument as to how far the rise is true, but it is quite safe to say that the present Death-rate from Cancer is pretty near the truth.

The increase in the case of Heart Diseases is unquestionably due to more accurate certification.

DEATHS FROM TUBERCULOSIS.

I give a Table showing the decennial Death-rates from Tuberculosis from 1841, together with the annual rates since 1911.

Period.	Males.	Females.	Persons. Ipswich.	Persons. England and Wales.
1841—1850	3·88	3·96	3·92	—
1851—1860	3·27	3·50	3·39	3·47
1861—1870	3·31	3·19	3·28	3·25
1871—1880	3·21	2·92	3·05	2·87
1881—1890	2·80	2·57	2·68	2·43
1891—1900	2·43	1·95	2·17	2·01
1901—1910	2·12	1·57	1·82	1·65
1911—1920	1·69	1·35	1·50	1·42
1911	1·71	1·35	1·52	1·46
1912	2·00	1·34	1·64	1·37
1913	2·00	1·28	1·62	1·35
1914	1·70	·99	1·32	1·36
1915	1·69	1·16	1·41	1·51
1916	1·89	1·38	1·62	1·52
1917	1·83	1·54	1·69	1·62
1918	1·64	1·66	1·65	1·69
1919	1·31	1·29	1·30	1·25
1920	1·18	1·46	1·33	1·13
1921	1·16	1·19	1·17	1·12
1922	1·20	·97	1·08	1·12
1923	1·22	·83	1·01	1·06

The number of deaths from Tuberculosis in 1921 was 95, in 1922, 88; and in 1923, 83. Each of these numbers in succession was the lowest recorded to date since 1841.

The Death-rate Table shows the statistical position so clearly that comment would be superfluous, save to point out that the decline in the Death-rate from Tuberculosis has being going on for as long as our records go.

Locally the direct compaign began in 1910, and I think there is evidence of acceleration. In this relation the average Death-rate from Tuberculosis in England and Wales has for many years been appreciably below that of Ipswich, until the last year or two, when the Ipswich rate has been practically the same as that of the ocuntry as a whole. This means that the Tuberculosis Death rate in Ipswich has fallen more rapidly of recent years than that of England and Wales.

CANCER.

The annexed Table explains the Cancer Death-rates:—

Period.	Males.	Females.	Persons. Ipswich.	Persons. England & Wales.
1841—1850	·08	·32	·21	—
1851—1860	·12	·42	·28	·31
1861—1870	·24	·66	·47	·38
1871—1880	·43	·77	·61	·47
1881—1890	·45	·84	·66	·59
1891—1900	·62	·90	·77	·75
1901—1910	·87	1·11	·99	·90
1911—1920	1·10	1·39	1·24	1·11
1911	·96	1·24	1·11	·99
1912	1·04	1·31	1·18	1·02
1913	1·11	1·45	1·34	1·06
1914	1·15	1·31	1·23	1·06
1915	1·06	1·53	1·31	1·12
1916	1·31	1·28	1·30	1·16
1917	1·20	1·47	1·35	1·21
1918	·79	1·32	1·07	1·21
1919	1·20	1·22	1·21	1·14
1920	1·02	1·72	1·39	1·16
1921	1·11	1·31	1·21	1·21
1922	1·33	1·44	1·39	1·22
1923	1·01	1·70	1·38	1·26

This Table shows at a glance the present position.

Whilst it would be wrong to make the statement that Cancer is the one single disease that has increased, it is quite correct to state that its increase is far in excess of that of any other single disease, dwarfing into insignificance the minor increases recorded for certain other diseases.

As already stated, the Statistical increase is due to increased accuracy of diagnosis to a large extent.

By far the greatest increase is recorded for Cancer of the Stomach, Intestines, Rectum and Liver.

In the decennium 1911—1920, one half of the total Male Cancer deaths were ascribed to these organs.

RESPIRATORY DISEASES.

Since 1860 this group of diseases has consistently levied the heaviest toll upon the inhabitants. Between 15% and 16% of the mortality from all causes has been, and continues to be, due to Bronchitis, Pneumonia and other diseases of the Respiratory System.

In 1921 the group contributed 14·14% of the total mortality from all causes, 18·58% in 1922, and 17·90% in 1923, thereby maintaining its position at the head of affairs in each year.

The Respiratory Death-rate in 1921 for persons was 1·56 per 1,000 living, 2·22 in 1922 and 1·83 in 1923. The figure for 1921 was the lowest recorded since 1841, with the exception of 1911, which was very slightly lower.

In examining the Respiratory Mortality figures since 1841, three definite periods become evident. In the first period, from 1841—1880, the Respiratory Death-rate for persons remained stationary at a fraction over 3·30 per 1,000 living. The Male Death-rate was consistently higher than the Female, the rates for each sex remaining remarkably constant. Whilst this was the case great variations took place in the internal group classification. Thus Bronchitis increased fourfold, whilst Pneumonia fell nearly one half, and all other forms of Respiratory disease more than one half. On the face of it this probably represents increased accuracy of certification.

There was a close relation between the sex mortality in the case of Bronchitis, but in that of the Pneumonia group and all other forms the male mortality was considerably higher.

The second period includes the 20 years 1881—1900. Here there was a definite drop in the fatality for persons, but when the sex mortality was examined it was found that the fall was almost confined to females.

The chief group contributing to the fall in this case was that of All Others.

The third period comprises the years since the commencement of this century. Here there has been a real and substantial drop contributed to by both sexes, but much more distinct in the case of Males.

The main contributor to the decline in this period was Bronchitis, which showed for the whole period a substantial reduction in mortality, together with an almost identical sex Mortality.

The Pneumonia group remained stationary, with very marked mortality incidence upon the Male sex.

The All Others group declined, and in this case the sex mortality was also about equal.

I give a Table showing the decennial total Respiratory Death-rates since 1841 and the annual Rates for the last three years.

The behaviour of the Respiratory Death-rate should be noted with particular interest as it shows one more of the great triumphs achieved in the treatment and prevention of disease.

Table showing the Death-rates per 1,000 living since 1841 from Bronchitis, Pneumonia, and all other forms of Disease of the Respiratory System.

	Bronchitis.	Pneumonia.	All Others.	Total.		
Year.	Persons.	Persons.	Persons	M.	F.	Persons.
1841-1850	·49	1·50	1·35	3·69	3·06	3·36
1851-1860	·82	1·49	1·05	3·84	2·97	3·38
1861-1870	1·18	1·31	·88	3·67	3·15	3·37
1871-1880	1·94	·80	·64	3·81	3·03	3·39
1881-1890	1·82	·89	·52	3·65	2·78	3·19
1891-1900	1·90	·98	·30	3·67	2·77	3·18
1901-1910	1·08	·92	·24	2·38	2·15	2·25
1911-1920	1·06	·96	·16	2·35	2·04	2 18
1921	·70	·75	·09	1·64	1·50	1·56
1922	1·18	·88	·14	1·93	2·49	2·22
1923	·91	·64	·26	1·97	1·70	1·83

DEATHS FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES.

In order to emphasize the unique character of the Zymotic Mortality figures of recent years I give a Table showing the decennial average mortality experience of the Borough since 1841.

Periods.	No. of Deaths.	Death-rates per 1,000 Living.	Per cent. proportion of Deaths from all causes.
1841—1850	784	2·70	11·93
1851—1860	909	2·57	11·58
1861—1870	1,062	2·61	11·90
1871—1880	1,425	3·04	13·80
1881—1890	1,042	1·92	10·34
1891—1900	1,425	2·29	12·74
1901—1910	929	1·31	8·79
1911—1920	644	·83	6·09
1921	38	·47	4·26
1922	32	·39	3·27
1923	10	·12	1·19

From this Table it would appear that about 12% of the deaths from 1841 to 1900 from all causes were due to the group of the seven Principal Zymotics—viz., Typhoid Fever, Smallpox, Measles, Whooping Cough, Scarlet Fever, Diphtheria and Diarrhœa under two years of age.

The Table shows the dramatic change that has taken place since the beginning of this century.

In reading the above Table it is necessary to be cautious in accepting the value of the older statistics. Claims to approximate accuracy can be made with regard to Smallpox, Measles, Scarlet Fever, Whooping Cough and Diarrhœa, but the Typhoid Fever and Diphtheria figures are open to very considerable suspicion.

The Typhoid figures very much understate the experience from 1841—1870, and the Diphtheria figures undoubtedly greatly understate the case up to about the early seventies.

Therefore, the present position is even better than the Table would indicate.

At the present day Smallpox has ceased to contribute to the Zymotic Mortality, the last death from this disease having been registered in 1893.

Typhoid Fever caused six deaths in the 10 years, 1911 1920, as compared with 119 in the previous 10 years.

In 1921 Typhoid caused one death and one also in 1922.

In the case of **Measles,** though there has been the usual biennial Epidemic, the high mortality experience which had been the characteristic since 1887, ceased with the Epidemic of 1912.

Subsequently to this the services of a specially trained visitor, supplemented by Nurses from the Nurses' Home, were utilised for the purpose of spreading knowledge as to the nature of Measles, Whooping Cough, etc., and the proper methods of management of cases of these diseases. Whether, in consequence of these proceedings or not, the fact remains that the mortality experience of all the Epidemics since 1912 has been extremely low.

Thus the years 1916, 1918, 1920 and 1922 were each Measles years.

In 1916 there were 933 known cases with seven deaths a case fatality of 0·7%. Of these deaths six were under 5 years of age, the case fatality being highest at under one year.

In 1918 there were 2,308 known cases with 19 deaths, a case fatality of 0·8%. In this case also the case fatality was highest under 1 year. Sixteen of the deaths were under 5 years of age.

In 1920 there were 1,905 known cases with 13 deaths, a case fatality of 0·6%. Here again the fatality was highest under 1 year. All the deaths were under 5 years of age.

In 1922 there were 1,219 known cases with three deaths, a case fatality of 0·2%. The case fatality was highest under 1 year of age. Two of the deaths were under 5 years of age.

The net result is that the death rate from Measles has been reduced to a very great extent. Thus in the 10 years 1911 1920 there were 122 deaths from Measles (51 in 1912) as compared with 193, 182 and 196 respectively in the three preceding decennia.

In the case of **Whooping Cough** there has been also a very definite and gratifying improvement in the Mortality experience. Thus between 1841 and 1890 there was little variation in the Death-rate, which stood at a high figure, fully justifying the position of Whooping Cough as the second most fatal of the 7 Zymotic Diseases.

Since 1891 the mortality has steadily improved, the position now being an average more than 60% below the average experience of 1841—1890.

1921 was the first year since 1841 in which there was no death from Whooping Cough.

The same scheme of visiting has been applied to Whooping Cough as in the case of Measles, and in my opinion with equally beneficial results.

In 1917 there were 737 known cases of Whooping Cough with twelve deaths, a case fatality of 1·6%.

All the deaths were under 5 years of age and the case fatality was greatest in the first year.

In 1918 there were 625 cases with 17 deaths, a case fatality of 2·7%. The highest case fatality was again in the first year. Sixteen of the deaths were under 5 years.

In 1919 there were 261 cases with eight deaths, a case fatality of 3·1%. All the deaths were under 5 years, and the highest fatality again in the first year.

In 1920 there were 222 cases with 5 deaths, a case fatality of 2·2%. The highest fatality occurred in the first year.

In 1921 there were 163 cases, but no deaths.

In 1922 there were 987 cases with 15 deaths, a case fatality of 1·5%. All the deaths were under 5 years of age, and the highest fatality was, as usual, in the first year.

In 1923 there were 122 cases with one death, a case fatality of ·8%. In this instance the death took place at 3 years of age.

It is to be noted that in the case of both Measles and Whooping Cough, the figures given refer to known cases only. There must have been many more not discovered. The deaths on the other hand are all known.

During the last 80 years the Mortality Statistics of **Scarlet Fever** in Ipswich shew two well defined phases:

(1) From 1841 to 1880, a period of high fatality. This period was characterised by repeated Epidemics of great fatality, notably that of 1863.

(2) A period from 1881 to the present day characterised by consistently low mortality, the Death rates even in Epidemic years being far below previous experience.

There are no signs at present of return to the former degree of virulence.

In round figures Scarlet Fever mortality is at the moment less than one eight of its former degree. I cannot separate this experience from Hospital isolation, which as carried out locally, has contributed something to the alteration in type, and much to the success of treatment.

In the case of **Diphtheria** comparative statistics are misleading owning to the lack of recognition of the disease in former years.

It is possible to make the generalisation with truth that Diphtheria is more frequently diagnosed under modern conditions. Coupled with this there has been a definite and appreciable diminution in the mortality coinciding with the introduction of Antitoxin.

The Diphtheria Death-rate for 1921 was slightly in excess of the average experience of the previous 10 years, but that of 1922 was much below it.

The mortality experience of 1923 was the lowest recorded since comparatively reliable data became available.

I think the type is milder than it was, and I have no doubt that at present it is much milder than it was in the Epidemic year 1920.

The actual Diphtheria Death rates in 1921, 1922 and 1923 were respectively 0·18, 0·06 and 0·03 per 1,000 living.

Finally it falls to consider the remarkable local change in **Diarrhœa** experience. In this instance, only the deaths from Diarrhœa of persons under two years of age are considered.

I give a Table showing as decennial totals the numbers of Diarrhœa Deaths, and the Death-rates from 1841 to date.

Period.	No. of Deaths under 2 Years.	Death-rates per 1,000 Living.
1841—1850	262	·90
1851—1860	370	1·04
1861—1870	308	·76
1871—1880	516	1·10
1881—1890	325	·60
1891—1900	714	1·14
1901—1910	374	·53
1911—1920	208	·27
1921	22	·27
1922	5	·06
1923	1	·01

This Table shows the enormous toll levied upon the young by Diarrhœa in the past.

It is notable that the highest recorded Death-rate from Diarrhœa occurred in the last 10 years of the 19th century.

The greatest known number of Deaths from Diarrhœa recorded in any one year since 1841 was 139 in 1899, followed by 123 in 1895, 120 in 1898 and 104 in 1880. These figures give some idea of the violence of former Epidemics of Summer Diarrhœa.

The real fall in the Diarrhœa mortality synchronised with the commencement of Infant Welfare Work in the Borough, and in my opinion it is to a large extent a case of cause and effect.

Naturally at first the improvement was not so marked, especially during Diarrhœa years such as 1911, but since that date there has been a very remarkable change, emphasised by the low rate of mortality experienced in 1921, in which year according to the teaching of experience there should have been high Diarrhœa mortality.

The Diarrhœa mortality for 1923 was far below all previous experience.

INFLUENZA 1921–1923.

In 1921 Influenza was not much in evidence, but in 1922 there was a severe outbreak in January and February. There were 41 deaths from Influenza in 1922, of which 30 occurred in January and eight in February.

As a matter of fact this Epidemic was one of unusual fatality, though of course small as compared with 1918 and 1919. When compared, however, with all the other epidemics since 1890 it occupies a high position so far as deaths are concerned.

As in all Influenza epidemics, there was excessive mortality from Respiratory diseases at the same time.

In 1923 there was practically no fatal Influenza, there being six deaths in the whole year, five in March and April.

INFANT MORTALITY.

The following Table indicates the behaviour of the Infant Death-rates in Ipswich since 1841.

The figures from 1841—1920 are shown as decennial averages: those from 1901 onwards are also given as Annual Rates.

Years.	No. of Deaths.	Death-rates.	Proportional Ratios.
1841—1850	1,656	176	100
1851—1860	2,055	172	97
1861—1870	2,125	160	91
1871—1880	2,399	153	87
1881—1890	2,342	137	77
1891—1900	2,763	155	88
1901—1910	2,367	126	71
1911—1920	1,502	90	51
1921—1923	292	60	34
1901	320	168	95
1902	223	118	67
1903	271	138	78
1904	270	140	79
1905	284	145	82
1906	272	142	80
*1907	193	104	59
1908	199	109	62
1909	162	90	51
1910	173	96	54
1911	181	102	58
1912	196	112	63
1913	174	96	55
1914	188	104	59
1915	151	93	52
1916	134	80	45
1917	119	90	51
1918	114	82	47
1919	100	70	40
1920	145	72	41
1921	128	74	42
1922	85	53	30
1923	79	51	29

* Infant Welfare Scheme commenced.

Whilst the rate recorded for 1921 was very satisfactory indeed, when the character of the Summer is taken into consideration, the rates for 1922 and 1923 were altogether outside previous experience, and represented a fall of 70% when compared with 1841 – 1850, or 66% as compared with 1891 – 1900.

This result has been obtained in spite of the poverty stricken condition of large numbers of people in the Borough, and of the fact that in this old town large numbers of people are housed under conditions definitely prejudicial to the survival of young children, not only because of the insanitary state of houses themselves, but of the over crowding so frequently present.

The number of Infant deaths registered in 1922 and 1923 were in each case the lowest recorded since 1841.

From the point of view of causes of death, the most striking feature of the Infantile Mortality of the last three years was the absence of Diarrhœa. In 192 there were 22 deaths from Diarrhœa under one year of age, three in 1922 and one in 1923.

The year 1921 was one in which all previous experience would have indicated a high Diarrhœa Mortality. In the past Ipswich has had a consistently high mortality rate from Diarrhœa, to which many factors have contributed, not the least being the fact that this particular part of the East Coast has a very low rainfall, and tends to have long hot Summers, conditions usually accepted as playing a prominent part in the production of Epidemic Diarrhœa.

Locally these conditions prevailed in Ipswich in 1921. The rainfall in that year was far below the average, and during the Diarrhœa months there was a drought. Yet the Diarrhœa Mortality rate only slightly exceeded the average.

In 1911, the previous Epidemic Diarrhœa year, there were 54 deaths under one year from Diarrhœa.

The three deaths in 1922 included one transferable death. There were thus only two locally, both in June.

The single death in 1923 occured in July.

We have thus reached the position that in normal years there has been recently an almost complete absence of fatal Diarrhœa, and in Epidemic years an incidence which compares very favourably with the average non-epidemic figures of the past.

As to the cause of this remarkable change there is no doubt of the part played by Infant Welfare work.

It is perhaps significant that the recent sharp decline in Diarrhœa mortality coincides with the increase in the use of dried milk.

Whatever views may be held as to the nutritive value of dried milk, it is at least clean, and can be kept clean. Cows milk, on the other hand, is very frequently not clean to start with and is kept in the homes of the poorer classes under conditions rendering further contamination inevitable.

Infantile Diarrhœa is a food disease.

Infant Death-rates of 53 and 51 in consecutive years indicate that, if further reductions are to made, search must be made to discover in what directions improvement may be possible and practicable.

By far the highest proportion of Infant deaths at the present time are due to the group of diseases of Early Infancy, including Prematurity, Congenital Defects and Atrophy, Debility and Marasmus, and the deaths in this group are most numerous amongst the youngest Infants.

This study of the exact ages of death of young Infants becomes of value in relation to two great factors—viz., ante-natal conditions and the influence of the act of Birth upon the probability of survival of the Infant.

I give a Table showing the Death rates at various ages under one year, together with the proportion of deaths at these ages and the total deaths under one year. The figures are decennial averages since 1841.

INFANT DEATH RATES.

Age Periods.

Periods.	Under 3 months.	3 to 12 months.
1841—1850	89·3	87·0
1851—1860	81·3	90·9
1861—1870	77·1	82·7
1871—1880	67·9	85·7
1881—1890	65·7	71·6
1891—1900	74·3	81·5
1901—1910	70·9	55·0
1911—1920	54·3	36·4
1921—1923	42·2	17·9

Here it is seen that the Mortality of the first three months of life from 1841 1890 showed a progressive fall. During the same period there was evidence of the same downward tendency at ages over three months, but not to the same degree. During this period the Mortality at the higher ages exceeded, but not to a very great extent, the Mortality during the first three months of life.

From 1890—1900 the downward tendency was checked at both age periods, and in each case in about the same proportion. The cause was the excessive prevalence of Summer Diarrhœa during this decennium. The Mortality from 3 – 12 months still exceeded that under three months.

From 1901 onwards there has been a progressive fall in the Mortality at both age periods, but to a far greater extent in the period from 3 12 months. During this period the Mortality of the later months of life has been much below that still recorded for the first three months.

Infant Mortality has been definitely checked at from three months of age onwards and brought within a measure of control.

Infant Mortality during the first three months of life has also been checked to a considerable and highly satisfactory degree, but to nothing like the extent of the experience of that of from 3—12 months.

Examination of the detailed features of the Mortality reveals the fact that the Mortality of the first day of life is far higher than that of any other; that of the first week than any other week, and of the first month than any other month.

Period.	Under One Week.		Under One Month.		Under Three Months.	
	Death rate per 1,000 Births.	% of Deaths under one year.	D.R.	%	D.R.	%
1841—1850	28·8	16·2	51·0	28·9	89·3	50·6
1851—1860	27·2	15·7	45·9	26·6	81·3	47·3
1861—1870	25·0	13·8	44·6	27·9	77·1	48·2
1871—1880	21·3	17·8	39·7	25·8	67·9	44·2
1881—1890	24·3	15·6	39·4	28·7	65·7	47·9
1891—1900	24·2	21·2	41·5	26·7	74·3	47·8
1901—1910	26·7	25·3	45·2	36·7	70·9	56·3
1911—1920	22·9	31·2	36·3	40·0	54·3	59·8
1921—1923	21·8	36·3	30·8	51·3	42·2	70·2

The Death rates per 1,000 Births at ages under one week show that there has been very little improvement in recent years.

For the first month improvement is distinctly more pronounced than in the case of the first week, but still much below that of later months.

Further light is thrown on the matter by the proportion borne by the number of deaths at these particular age periods to the total recorded under one year of age for each of the periods under review.

Thus, from 1841—1890, the deaths under one week constituted about 16% of the total deaths under one year. From 1891 onwards this proportion increased, at first slowly, but latterly with greater rapidity, until in 1921—1923 over 36% of the total deaths under one year occurred under one week.

Similarly with the total deaths under one month. From 1841—1900 the average proportion of the total deaths under one year was about 27·4. Since 1901 the proportion has risen sharply to 51·3 in 1921—1923.

In the case of the total deaths under three months, from 1841—1900 the proportion averaged 47·6%. Since 1901 the proportion has risen to 70·2 in 1921—1923.

Thus it has been proved that the weak spot in the Infant Mortality experience of the present day is the comparatively high Mortality still prevailing in the earliest days of life.

As to the causes, the deaths during the first week are almost all referred to Prematurity, Debility and Congenital Defects.

Under one month about 75% of the deaths are due to the same causes.

Between one and two months about 30% of the deaths are due to this group, and about 12% between two and three months.

At these ages Bronchitis, Pneumonia, Diarrhœa, Convulsions, Syphilis, &c., begin to make their weight felt. With regard to these diseases the general methods that have proved so successful at the higher ages can be applied, and with improving chances of success.

With regard to Prematurity and Debility, the position is not quite the same. In many of these cases the Infant is in the nature of things unfitted for survival.

How far ante-natal work is likely to improve early Mortality statisties time will show, but in any case it is unlikely to be very considerable.

In my opinion the case is stronger against the actual act of Birth itself, and for this reason improvement in the Midwifery service seems worthy of close consideration.

Notifications of Infectious Disease, 1921—1923.

The following Table shows the prevalence of notifiable infectious diseases in the period under review.

Summary of Cases of Infectious Diseases notified during the years 1921, 1922 and 1923.

Disease.	Year.		
	1921.	1922.	1923.
Diphtheria	441	146	94
Scarlet Fever	73	126	127
Enteric Fever	5	3	4
Erysipelas	21	18	21
Puerperal Fever	5	5	10
Ophthalmia Neonatorum	18	17	7
Cerebro-Spinal Meningitis ..	3	—	—
Anterior Poliomyelitis	5	—	1
Encephalitis Lethargica	3	—	—
Acute Polio-Encephalitis	1	—	—
Chicken Pox	406	117	506
Influenza and Pneumonia ..	78	169	79
Malaria	9	9	—
Dysentery	2	—	—
Total	1070	610	849

Without entering into details the salient features of the Table are the diminution of the Diphtheria endemic, so that in 1923 the number of cases notified reached the average experience; the disappearance of Cerebro-Spinal Fever; the small number of notifications of Typhoid Fever; the low degree of prevalence of Scarlet Fever, and the almost complete absence of Encephalitis Lethargica.

Chicken Pox may be disregared as it is included as a notifiable disease, not for its own sake but on account of Smallpox.

The Pneumonia notifications are unsatisfactory and represent only a part of the truth, as numbers of cases are not notified.

For purposes of comparison I give the annual number of notifications of Diphtheria from 1916—1923 inclusive.

Year.	Notifications.	Attack-rates per 1000 living.
1916	71	0·92
1917	107	1·39
1918	150	1·94
1919	328	4·23
1920	492	6·04
1921	441	5·46
1922	146	1·79
1923	94	1·14

Thus the excess of the local Diphtheria endemic lasted three years at least, rising slowly to its maximum, and declining slowly.

It is worthy of note that **Ophthalmia Neonatorum** reached its lowest level in 1923.

I give the following Table :—

Year.	Notifications of Ophthalmia Neonatorum	Attack-rates per 1,000 Births.
1916	26	15·8
1917	18	13·6
1918	16	11·6
1919	18	12·6
1920	18	9·0
1921	18	10·4
1922	17	10·7
1923	7	4·5

There would thus appear to be substantial improvement of recent years, a possible argument in favour of the view of the diminution in the prevalence of venereal disease. On the other hand it may be evidence of a gratifying increase in the care of the Infant's eyes at the time of birth.

Each case, as it is notified, is followed up with vigilance in order to secure adequate treatment, both medical and nursing. The medical treatment is provided either by the Private Practitioner or the Medical Staff of the Hospital ; the nursing either by the Hospital Staff, Nurse Pepper, or the nurses of the Ipswich Nurses Home.

In general terms the prevalence of Notifiable Infectious Disease in Ipswich has been unusually low during the whole period under review, but particularly so in 1923.

SUMMARY OF CASES OF TUBERCULOSIS during the years 1921, 1922 & 1923.

Situation of Disease.	Year.		
	1921.	1922.	1923.
Pulmonary	304	154	136
Abdominal	6	5	10
Cerebral	5	5	7
General	1	1	2
Bones	13	3	11
Joints	19	9	13
Glands	16	11	17
All other forms of T.B. ...	16	11	15
Total ...	380	199	211

The above Table gives the notifications of the various forms of Tuberculosis during 1921--1923. The figures correspond closely with the average with the exception of the notification of Pulmonary Tuberculosis for 1921. Here there was a large excess due entirely to re-organisation of methods of book keeping, and the final clearing up of arrears of classification of observation cases accumulated during the War period. These, in order to save time, were all allotted to 1921, though they should have been spread over the War period.

In round figures the average experience of the distribution of the notifications of the various forms of Tuberculosis in Ipswich gives 78·6% to the Pulmonary variety, and 21·4% to all the other forms.

So far as local evidence is concerned there is ground for the view, both from the mortality and notification rates, that Tuberculosis continues to diminish slowly but steadily.

TUBERCULOSIS DISPENSARY.

The following is a brief summary of the work carried out at the Dispensary :—

Year.	No. of Patients Attending Dispensary	No. of Visits made by Patients.
1921	529	2,566
1922	495	3,091
1923	525	2,999

The Tuberculosis Nurse paid 2,435 home visits in 1921, 2,353 in 1922, and 2,492 in 1923.

WELFARE CENTRE.

The following is a very brief summary of some of the work carried out at the Welfare Centre from 1921—1923.

HOME VISITS.

Year.	Infants.	Children from 1—5.	Total.
1921	2,726	1,024	3,750
1922	2,249	2,364	4,613
1923	2,062	2,452	4,514

VISITS OF CHILDREN TO THE CENTRE.

Year.	Infants.	Children from 1—5.	Total.
1921	9,632	3,432	13,064
1922	7,902	3,132	11,034
1923	7,406	3,098	10,504

In addition, numerous special visits to homes were made for many and various special purposes, including the supervision of cases of Ophthalmia Neonatorum, enquiries with regard to Puerperal Fever, etc.

The usual routine visits have been paid in connection with Midwives Practice.

The Medical Officer in connection with the Clinic examined 533 children in 1921, 313 in 1922 and 443 in 1923.

As to Ante Natal work, the Clinic is now established and is being taken advantage of to a certain extent, but progress in a thing of this kind is necessarily slow.

MATERNITY HOME.

The annexed Table shows the number of cases admitted from the Borough of Ipswich to the Maternity Home between 1921 and 1923.

Year.	No. of cases admitted.
1921	77
1922	60
1923	71

The average number of days spent in the Home by each case was 11·6

As before, the majority of the women making use of the Home were living in lodgings, where a confinement would have been extremely inconvenient to say the least, so that in these cases the Home was used more from necessity than choice.

On the other hand, several women have returned to the Institution for their confinements in preference to staying in their own homes.

As before, the poorest make the least use of the Institution.

BOROUGH ISOLATION HOSPITAL.

The following Tables give the number of cases admitted to, and treated in the Isolation Hospital during 1921—1923.

TABLE A.

Cases of Infectious Disease or suspected Infectious Disease other than Tuberculosis.

Year.	No. in Hospital on Jan. 1st.	Admissions.	Total Treated.	Number Discharged.	No. of Deaths.	No remaining on Dec. 31st.
1921	81	592	673	589	28	56
1922	56	348	404	355	20	29
1923	29	311	340	315	13	12

TABLE B.

Cases of Tuberculosis.

Year.	No. in Hospital on Jan. 1st.	Admissions.	Total Treated.	Number Discharged.	No. of Deaths.	No. remaining on Dec. 31st.
1921	21	68	89	52	14	23
1922	23	45	68	34	18	16
1923	16	75	91	59	17	15

TABLES A and B COMBINED.

Year.	No. in Hospital on Jan. 1st.	Admissions.	Total Treated.	Number Discharged.	No. of Deaths.	No. remaining on Dec. 31st.
1921	102	660	762	641	42	79
1922	79	393	472	389	38	45
1923	45	386	431	374	30	27

For comparative purposes I give a Table showing the admissions to the Fever Hospital, and the number of cases treated since 1901. This shows in a graphic manner the extensive use made of the Isolation Hospital.

Thus in the three years, 1921—1923, 88% of the cases of Diphtheria occuring in the Borough were removed to the Hospital, and 90% of the cases of Scarlet Fever.

Year.	Admissions.	Total Treated.
1901	144	180
1902	294	341
1903	169	203
1904	210	225
1905	188	203
1906	185	206
1907	132	158
1908	163	187
1909	154	178
1910	129	145
1911	261	267
1912	316	348
1913	405	444
1914	717	776
1915	635	777
1916	613	670
1917	620	698
1918	703	750
1919	660	717
1920	814	893
1921	660	762
1922	393	472
1923	386	431

A brief summary is appended touching the numbers of some of the chief forms of Infectious Disease admitted during the years under review.

(a) **Diphtheria** In 1921 there were 341 actual cases admitted from Ipswich, and 10 from adjacent districts, with 14 deaths = a case mortality of 4·1%.

In addition there were 61 Positive contacts and Carriers admitted for treatment purposes.

In 1922, 125 cases were admitted, of whom 7 died – a case Mortality of 5·6%.

In addition 11 Positive contacts were isolated.

In 1923, 77 cases were admitted with 4 deaths – a case Mortality of 5·2%.

Four Positive contacts were isolated.

(b) **Scarlet Fever.** In 1921, 68 cases were admitted with no deaths. In 1922, 123 cases were admitted with 2 deaths, a case Mortality of 1·6%, and in 1923, 113 cases with 2 deaths, or a case Mortality of 1·7%.

(c) **Enteric Fever.** In 1921, 4 cases were admitted and all recovered. In 1922, 2 cases were admitted with one death, and in 1923, 5 cases were admitted, all recovering.

(d) **Cerebro-Spinal Fever.** Five cases were admitted in 1921, with one death, and one case in 1922.

(e) **Encephalitis.** Three cases were admitted in 1921 with one death, and one fatal case in 1922.

In addition to the above, numbers of cases of Measles, Whooping Cough, Erysipelas, Influenza, Pneumonia, Septic Infections, Chicken Pox, etc. were dealt with, whilst many cases of doubtful nature were admitted for observation and isolation.

The Tuberculosis figures are shown in Table B.

It is customary in some quarters to question the utility of Isolation Hospitals, and in areas where isolation is perfunctory, the Hospital management slipshod, and the accommodation insufficient there is, no doubt, justification for this attitude of mind.

On the other hand in cases where isolation is definitely enforced, where the Hospital management is sound, and the Hospital is equipped with ample accommodation, and above all, with ample Cubicle accommodation for the isolation of doubtful cases, mixed Infections, septic cases and so forth, there is, in my opinion, complete justification for the view that such Isolation Hospitals are essential elements in the prevention of Epidemics and their control when established, two phases of use which are not quite the same.

I believe that the local Isolation Hospital has contributed in no small degree to the low degree of prevalence of Infectious Disease at the present time.

In so far as the treatment of the cases admitted is concerned, there is no question at all but that the Hospital has been the means of restoring to health large numbers of children and adults who could not possibly have received either adequate Medical supervision or nursing management in their own homes.

I beg to thank the Matron and the Staff of the Hospital for their admirable assistance during the period under review.

IPSWICH SMALLPOX HOSPITAL.

This Hospital continues to be maintained in a condition fit for immediate opening in the case of need.

So far, no Ipswich patients have been admitted, as there has been no Smallpox in Ipswich since the Hospital was built.

Recent experience of Smallpox in other parts of this country indicates all too clearly that no community can afford to neglect to be prepared to deal with the disease at almost any moment.

The neglect of Vaccination so much in evidence at the present time, is the product of the immunity conferred on civilised races by Vaccination, and nothing but the fact of the recurrence of Smallpox will rouse the people from their lethargy.

Under these circumstances Smallpox Hospitals are not only essential, but should be built so as to be capable of rapid extension.

Here again is the Community provided with an object lesson of the cost of ignorance and indifference.

REPORT ON VENEREAL DISEASES CLINIC for the Years 1921, 1922 & 1923.

By Dr. F. FOWLER WARD.

(Medical Officer in Charge, Venereal Diseases Centre).

This Treatment Centre is at the East Suffolk and Ipswich Hospital, and serves the areas of the Borough of Ipswich, and to a considerable extent of the County Councils for East and West Suffolk and Essex.

The diseases treated are grouped under the headings of "Syphilis," "Gonorrhœa" and "Other Diseases." While the first two groups consist of definite infective diseases the third group "Other Diseases" is important. Under this heading come cases for diagnosis and observation, those where risk of infection has recently occurred, and others in which, although there has been no suggestion of infection, advice is asked. The percentage of this group is relatively high, but shows the willingness of patients to avail themselves of the opportunities offered for diagnosis, &c.

Table I.

NEW CASES.

Year.	Syphilis		Gonorrhœa.		Other Diseases.		Total. Clinic.			Ipswich only.
	M.	F.	M.	F.	M.	F.	M.	F.	Persons	Persons
1921	90	49	91	24	56	44	237	117	354	235
1922	62	33	56	14	50	16	168	63	231	164
1923	45	31	49	8	29	18	123	57	180	121

It will thus be seen that the numbers of cases treated for the first time are progressively diminishing. This is in agreement with the figures for the whole country. The chief cause would seem to be financial stringency, particularly as regards alcohol. In Ipswich shortage of shipping undoubtedly affects the number of imported cases.

A disturbing element is the small number of cases of Gonorrhœa in women which present themselves for treatment.

Table II.

TOTAL OUT-PATIENT ATTENDANCES.

Year.	Syphilis.		Gonorrhœa.		Other Diseases.		Total.			
							Clinic.			Ipswich only.
	M.	F.	M.	F.	M.	F.	M.	F.	Persons.	Persons.
1921	1,838	847	2,466	244	117	67	4,421	1,158	5,579	4,186
1922	1,465	701	1,951	310	65	26	3,481	1,037	4,518	3,699
1923	1,418	854	1,221	139	63	54	2,702	1,047	3,749	2,803

Table III.

OUT-PATIENT ATTENDANCES.

		Males.	Females.	Total.
1921	(a) For individual attention by Medical Officer ..	2,949	1,101	4,050
	(b) For intermediate treatment	1,472	57	1,529
1922	(a) For individual attention by Medical Officer ..	2,173	924	3,097
	(b) For intermediate treatment	1,308	113	1,421
1923	(a) For individual attention by Medical Officer ..	1,937	1,019	2,956
	(b) For intermediate treatment	765	28	793

The Medical Officer holds three Clinics weekly, and thus each patient has his individual attention (see a). There is also a daily subsidiary clinic (see b), at which the male orderly or nurse gives the necessary treatment, chiefly injections in cases of Gonorrhœa.

Experience has shown that Gonorrhœa is much more amenable to treatment when given daily under trained supervision than it is when treated at home; its duration is much shorter and complications far less frequent. Consequently every effort is made to persuade patients to attend daily, and usually this advice is followed by people residing in the Borough or contiguous districts.

Table IV.

The following Table gives the number of days spent by Patients in Hospital.

Year.	Total for Clinic.			Ipswich only.
	M.	F.	Persons.	Persons.
1921	749	447	1,196	719
1922	380	188	568	253
1923	379	147	526	227

EXAMINATIONS OF SPECIMENS.

Table V.

Year.	For Spirochetes.	For Gonococci.	For Wassermann Reaction.	"606" Substitutes. No. of Doses.	
				Clinic.	Ipswich only.
1921	79	249	476	1,556	1,036
1922	31	235	319	1,350	971
1923	22	111	290	1,493	1,021

Specimens are examined either at the Treatment Centre or County Laboratory.

It will be seen on reference to Table I "New Cases," that the number of doses of "606" Substitutes or Arsenobenzol Compounds, given in the treatment of Syphilis, is considerably larger in comparison with the number of new cases treated than formerly.

It is found that a certain number of cases of treated Syphilis return with, if not active symptoms, an unsatisfactory Wassermann Reaction. In an attempt to rectify this a large number of doses of Arsenobenzol Compounds are given. It is economically correct.

One of the chief difficulties in connection with Venereal Disease is the non continuance of attendance of infected persons. The number of cases discharged as "cured" is very small. To a certain extent this can be accounted for by the standard of cure insisted upon. The ideal attempted is high, as it must be in dealing with diseases of such far reaching effects, and many cases, though not officially discharged as "cured," are so in all probability.

A considerable number are undoubtedly rendered non-infective, and, in the case of Syphilis, very quickly so, only it may be to become a burden to themselves or the State in future years.

The principal stumbling block appears to be the apathy or ignorance of the individual. Combined with this is the widespread, but totally erroneous conception, that every individual, man, woman or child, suffering from Venereal Disease whether infective or not, is a moral and physical leper, and should be treated as such. In contradistinction to the above it is gratifying to note that public bodies are becoming more alive to their responsibilities. This is evidenced by the number of attendances at the children's Clinic. It maintains its average for the last three years and is not decreasing as in the adult Clinics; not because there is more disease among children but because more attention is being given to the possibility of congenital Syphilis as the origin of various illnesses and disabilities.

The treatment of expectant mothers and children is a subject of far reaching importance and cannot be too strongly insisted on.

F. FOWLER WARD, M.B., B.C., Cantab.

Medical Officer in charge of
Venereal Diseases Centre.

CHIEF SANITARY INSPECTOR'S REPORT

1921, 1922, 1923.

Inspector under the Food and Drugs Act, Inspector of Butter Factories, Inspector under Dairies, Cowsheds and Milkshops Order, Inspector of Common Lodging Houses, Inspector under the Shop Acts, Inspector under Contagious Diseases (Animals) Act Inspector under the Rats and Mice (Destruction) Act 1919.

	1921	1922	1923
No. of Inspections of Private Houses ...	11,775	17,566	13,514
,, ,, ,, House to House...	1,574	1,122	1,268
,, ,, ,, Houses Let in Lodgings ...	44	40	40
Total ...	13,393	18,728	14,822
No. of Inspections of Van Dwellings ...	427	461	139
,, ,, ,, Common Lodging Houses ...	435	385	202
,, ,, ,, Overcrowded Houses ...	22	45	63
,, ,, ,, Houses with defective evestroughing	218	248	114
,, ,, ,, Damp Houses ...	218	378	115
Total ...	458	671	292
No. of General Repairs to Houses ...	326	664	240
,, Yards concreted	166	324	283
,, Sculleries concreted ...	76	116	319
,, Rooms ventilated ...	10	60	51
,, Roofs repaired	45	263	324
,, Eavestroughing repaired ...	52	131	262
,, Wash Houses repaired ...	110	101	261

	1921	1922	1923
Drains Inspected, relaid, tested and work carried out.			
No. of Smoke Tests	608	523	630
,, Water Tests	449	239	305
,, Above surface drain inspections	347	416	389
,, Drains reconstructed ...	204	90	101
,, Drains unlocked and cleansed...	241	143	96
,, Gullies fixed	184	122	191
,, New sinks and Wastes provided	113	315	201
,, Inspection Chambers provided	101	84	48
,, Inspection Chambers repaired	51	31	41
,, Vent Shafts provided ...	54	61	42
,, Dead Wells filled in ...	10	6	16
,, New W.C.'s provided ...	38	31	95
,, New W.C.'s pans provided ...	117	129	177
,, Privies done away with ...	4	5	16
,, Pail Closets done away with ...	—	7	2
,, Foul W.C.'s cleansed ..	119	105	61
,, Inspections of Dairies and Milk Shops	246	429	344
,, Inspections of Purveyors of Milk	278	417	357
,, ,, ,, Cow Sheds ..	158	166	108
Total ...	682	1,012	809
No. of Inspections of Slaughterhouses	1,638	1,400	1,063
,, Slaughter and Bake Houses lime whited	89	165	45
,, Removals of animals ...	26	51	22
,, ,, ,, manure ...	104	65	70
,, Manure Bins repaired ...	20	14	10
,, Ash Receptacles supplied to Private Houses ...	344	504	486
,, Inspection of Public and Private Urinals	447	405	376
,, Urinals repaired aud cleansed	69	44	37
,, Inspections of Offensive Trade Premises	490	253	247
,, Inspections of Smoke Nuisances	51	39	25
,, Inspections under the Cantagious Disease Animals Act ...	3	1	5
,, Visits to places of Entertainment	265	262	217
,, Complaints investigated ...	457	480	443
,, Letters issued	487	716	489

	1921	1922	1923
PROGRESS OF NOTICES.			
Preliminary.			
Served	573	478	465
Completed	531	457	451
Statutory.			
Served	4	2	4
Completed	4	2	4
Verbal.			
Given	193	182	338
Completed	202	180	331
INFECTIOUS DISEASES.			
Cases removed	531	273	226
Enquiries made	822	294	251
FACTORIES AND WORKSHOPS.			
Premises Inspected.			
Factories and Workshops ...	282	294	162
Contractors	36	2	10
Outworkers	141	107	32
Bakehouses	982	723	670
SHOPS' ACT.			
Visits	3,761	2,121	2,214
New shops registered ...	60	80	39
Transfers...	17	31	26
SAMPLES OBTAINED.			
Water	10	15	18
Food and Drugs	62	66	132

WATER SUPPLY.

	1921.	1922.	1923.
Samples taken from Corporation Supply for Chemical Analysis ...	10	7	12
Samples taken fron Private Supplies ...	—	8	6

Two samples taken from a Well were found to be heavily polluted with vegetable debris and sewage, and totally unfit for drinking purposes, This Well was closed for drinking purposes, and the Town Supply laid on to the two cottages.

SALE OF FOOD AND DRUGS.

The following Tables show the samples taken during the years, 1921, 1922 and 1923.

1921.

Milk	20
Margarine	24
Butter	16
Cream	2
Total ...	62

Of the total samples 19 were formal and 43 informal.

1922.

Milk	49
Margarine	7
Butter	7
Jam	1
Cocoa	1
Flock	1
Total	66

There were four prosecutions of Milk Vendors. One was fined £5, one £2, one £2 10s. 0d., and one case dismissed.

Cautions – one.

One sample of Jam was heavily contaminated with zinc; the whole boiling was destroyed.

1923.

Milk	42	Cheese	7
Potted Meat ...	1	Tea	5
Margarine ...	37	Condensed Milk ...	3
Butter	20	Camphorated Oil ...	4
Cream	3	White Precipitate Ointment	3
Jam	3		
Chocolate ...	2	Total ...	132
Coffee	2		

One Milk Vendor was fined 20/- and 20/- costs.

FOOD INSPECTION.

The under-mentioned Food-Stuff was condemned as unfit for human consumption during the year 1921.

Carcase of Veal		...	...	1
Carcases of Beef		...	...	9
Sides of Beef		...	...	3
Carcase of Sheep		...	...	1
Sheeps' Plucks		...	...	1
Carcases of Pork		...	...	26
Sides of Pork		...	...	4
Frozen Beef	(lbs.)	...	...	595
Frozen Mutton	,,	...	...	156
Ox Tongues		...	...	5
Cooked Hams		...	...	1
Flour	(lbs.)	...	...	20
Swedes	tons	...	...	2
Pigs Plucks		...	...	194
Corned Beef (6 lb. tins)		...	...	120
Corned Beef (1 lb. tins)		...	...	11
Butter	lbs.	...	...	263
Ox Liver		...	...	1
Boiled Beef (6 lb. tins)		...	...	3
Ox Cheek	,, ,,	...	...	2
Bacon	lbs.	...	...	704
Pineapple	tins	...	...	2
Tomatoes	,,	...	...	8
Peaches	,,	...	...	2
Salmon	,,	...	...	5
Sardines	,,	...	...	2
Pickles	bottles	...	...	18
Shrimps	pecks	...	...	1
Haddock, wet	lbs.	...	...	164
Haddock, dry	,,	...	...	196
Haddock, fillets	,,	...	...	381
Herring	,,	...	...	416
Strawberries	trays	...	...	12
Raspberries	tubs	...	...	26

The under-mentioned Food-Stuff was condemned as unfit for human consumption during the year 1922.

Carcases of Beef		...	...	15
Beef, sides		...	...	4
Beef, quarters		...	...	10
Beef, middles		...	...	4
Beef, flanks		...	...	2
Beef	lbs.	...	...	240
Frozen and Chilled Beef	lbs.	...	...	1,332
Carcases of Pork		...	...	55
Pork ...	lbs.	...	...	142
Carcases of Mutton		...	...	10
Pigs' Plucks		...	...	158
Pigs' Heads		...	...	129
Pigs' Offal		...	...	51
Corned Beef (6 lb. tins)		...	...	32
Cray Fish	tins	...	...	2
Salmon	,,	...	...	14
Potted Meats, various,	tins	...	...	460
Shrimp Paste	,,	...	...	9
Herring	stones	...	...	9
Crabs		...	...	240
Lobsters		...	...	3
Salmon		...	...	1
Whiting and Hake	lbs.	...	...	84
Mackerel	boxes	...	...	17
Mackerel	stone	...	...	12
Kippers	boxes	...	...	3
Ox Liver	cases	...	...	6
Milk	tins	...	...	11
Smoked Ham		...	...	1
Ox Tongue	tins	...	...	1
Bacon	lbs.	...	...	26
Tomatoes	,,	...	...	134

The under-mentioned Food-Stuff was condemned as unfit for human consumption during the year 1923.

Carcase of Veal	...	...	...	1
Carcases of Pork	...	...	...	68
Pork	lbs.	...	...	297
Frozen Beef	,,	...	...	916
Ox Heads	...	...	...	1
Ox Kidneys	lbs.	...	...	41
Ox Livers	...	...	...	8
Frozen Mutton	lbs.	...	...	386
Kippers	boxes	...	...	3½
Herring	lbs.	...	...	426
Herring	barrels	...	...	6
Mackerel	,,	...	...	1
Tomatoes	cases	...	...	1
Corned Beef, 6 lb. tins		...	...	22
Condensed Milk	tins	...	...	29
Bacon	lbs.	...	...	2,208
Cray Fish	tins	...	...	2
Potted Meat	,,	...	...	4
Rabbit	,,	...	...	1
Sprats	,,	...	...	251
Herring	cases	...	...	1
Salmon	tins	...	...	18
Soup	,,	...	...	10
Salmon, Bloater, Salmon and Shrimp Paste	tins	...	...	1,145
Pigs' Plucks	...	...	...	2,321
Pigs' Heads	...	...	...	381
Pigs' Offal	...	...	...	247

PORT OF IPSWICH SANITARY AUTHORITY.

I.

Year.	No. of Vessels Inspected.	No. of Re-visits.	Total.
1921	371	425	796
1922	380	229	609
1923	357	107	464

II.

Nationality and Class of Vessel.	1921.	1922.	1923.
British Steamships ...	72	69	65
British Sailing Ships ...	11	10	—
British Barges ...	230	244	232
Foreign Steamships ...	43	50	51
Foreign Sailing Ships	15	7	9
Totals ...	371	380	357

Fumigation of Vessels.

Vessels arriving from infectious or suspected ports are fumigated for the purpose of Rat Destruction. The following number of vessels were fumigated :—

Year.	No. of Vessels
1921	61
1922	31
1923	33

Owing to the fact that practically all vessels clear from the port whilst under fumigation it has been found impossible to keep a record of the number of rats destroyed, although it is interesting to note that 253 rats were recovered from a French barque fumigated in 1922. On one other occasion 170 mice were obtained from a similar source.

Sickness.

1921	...	Nil
1922	...	Nil
1923	...	One case of Observation Typhoid occurred on the voyage and was transferred to the Borough Infectious Hospital.

BUTTERMAN'S BAY.

This is the name given to a portion of the River Orwell situated about six miles below the Ipswich Dock. Some of the vessels of recent years, trading to Ipswich, have been too large to enter the dock, so that they have had to discharge the whole of their cargo at the deep-water berth constructed at the bay.

The following vessels were inspected in Butterman's Bay from 1921 to 1923 inclusive:—

1921	...	...	...	33
1922	...	...	...	13
1923	...	...	...	22

Several vessels berthed during this period were too large to enter the dock.

Sanitary Condition of Vessels.

The general sanitary condition of the vessels was very satisfactory, and a marked improvement has been recorded since the commencement of the inspection of vessels in 1908.

The following Table shows the number of Intimation Notices issued during the period under report:—

	1921.	1922.	1923.
British Vessels ...	10	4	7
Foreign Vessels ...	1	4	2
Total ...	11	8	9

MORTUARY.

	1921	1922	1923
Number of Bodies removed to Mortuary	19	15	19
Number of Post Mortem Examinations ...	5	4	5

A. T. MEARS,

Chief Sanitary Inspector.