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**Contributors**

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ANNUAL REPORT

— OF THE —

PUBLIC HEALTH

— OF THE —

NEWTON ABBOT

(Rural) and

WOLBOROUGH AND DAWLISH

(Urban)

SANITARY DISTRICTS

FOR 1893.

BY

W. HARVEY, F.R.C.S.

*Medical Officer of Health.*

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NEWTON ABBOT:  
DANIEL VILE, "ADVERTISER" OFFICE,  
MARKET STREET.



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PLACES 1893.	Birth-rate	Annual Death-rates per 1,000 of population.								Deaths under one year to every 1000 births	
		Total Death-rate	From seven Zymotics	Small-pox	Measles	Zearthna	Diphtheria	Whooping Cough	Continued Fever		Diarrhoea
England and Wales .....	30.8	19.2	2.47	.05	.36	.23	.30	.33	.23	.26	159
Newton, rural .....	24.4	14.7	.08	...	.08	.11	.26	.08	.15	.15	107
Welborough .....	26.9	15.9	1.36	...	.11	.34	.23	.11	.57	.147	147
Dawlish .....	26.6	18.9	.23	...	...	.23	...	...	...	...	96
		16.8*									

\* Excluding visitors.

# ANNUAL REPORT,

## 1893.

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### NEWTON AEBOT (RURAL).

VITAL STATISTICS.—The number of deaths registered in the above district during the year 1893, amounted to 391, including 186 males and 205 females, equal to an annual rate of 14.98 per 1000.

Under the age of one year there were 70 deaths—between 1 and 5 years, 32—between 5 and 15 years, 10—between 15 and 25 years, 22—between 25 and 35 years, 22—between 35 and 45 years, 22—between 45 and 55 years, 25—between 55 and 65 years, 38—and over 65 years, 150.

The infantile death-rate, the deaths under one year per 1000 births, was 107, against 84 in 1892.

Probably in working out the above rates the population is somewhat underrated, for in Cockington alone, in 1892, sixty new houses were built, and in 1893 forty-one others.

Although the death-rate is more than one per 1000 less than in the preceding year, yet in all other respects the figures are not an improvement; the birth-rate is rather lower, indeed the lowest yet attained, and the fluctuations in regard to the senile and infantile rates are in the adverse direction: the zymotic rate also (although still very low) has increased; this, however, was to be expected, 1892 being the lowest record in this respect. For the same reason, an increase in consumption was also inevitable, as with such a low figure last year, a strong fluctuation was assured. A very satisfactory decrease, however, continues to be shewn under the head of "other tubercular diseases." This is a very important figure and in plain

language broadly means tubercle in children, for of the deaths so certified only one was in an adult. During the few years that this figure has been given, it has been serially downwards to the present year, 18, 15, 12, 11, and now 7. I am disposed to look on this continuous reduction year by year as a hopeful circumstance, as the inference to be drawn is that children are being reared under better hygienic conditions.

Death-rate, &c., in each parish.												
PARISHES.	Ordinary Zymotics.					Influenza	Consumption	Other Tubercular Diseases	Apoplexy	Cancer	Inanition	Total Death-rate per 1000.
	Whooping Cough	Diarrhoea	Diphtheria	Continued Fever.	Scarlatina							
Ashburton .....	1	2	..	..	1	..	9	..	3	4	2	19.9
Abbotskerswell .....	..	..	..	..	..	..	..	..	..	..	..	13.9
Bickington.....	..	..	..	..	..	..	2	..	1	..	..	21.7
Bishopsteignton .....	..	1	..	..	..	..	4	1	1	1	1	16.6
Bovey Tracey .....	..	1	..	..	..	2	5	..	6	1	2	13.8
Buckland .....	..	..	..	..	..	..	..	..	..	..	..	14.0
Broadhempstone .....	..	..	..	..	..	..	..	1	..	2	..	15.2
Cockington .....	2	..	1	..	..	..	3	1	..	1	..	15.5
Coffinswell.....	..	..	..	..	..	..	..	..	..	..	..	10.0
Coombe, Haecombe .....	..	..	..	..	..	..	..	..	..	2	..	11.0
Chudleigh .....	1	..	..	..	..	..	2	1	1	1	..	11.5
Denbury, Torbrian .....	..	..	1	..	..	1	..	..	2	..	..	21.3
Dawlish .....	..	..	..	..	..	..	2	..	1	1	..	9.8
The Ogwells .....	1	..	..	..	..	..	1	..	..	..	..	6.5
Highweek .....	..	..	1	..	..	..	..	1	5	1	1	12.2
Henock .....	..	..	..	..	..	..	..	..	1	1	..	8.8
Ipplepen .....	1	..	..	..	..	..	1	..	2	..	1	17.0
Ilington.....	1	..	..	..	1	..	1	..	1	1	..	14.0
Ilford .....	..	..	..	..	..	..	..	1	2	..	..	21.0
Kingskerswell .....	..	..	..	..	..	..	2	..	2	1	1	16.5
Kingsteignton .....	..	..	..	2	..	..	..	..	2	1	1	10.5
Lastleigh .....	..	..	..	..	..	..	..	..	..	..	..	2.5
Moreton .....	..	..	..	..	..	..	2	1	1	2	..	17.5
Manaton .....	..	..	..	..	..	..	1	..	..	..	1	15.3
Stoke .....	..	..	..	..	..	..	1	..	..	..	1	13.7
Trusham .....	..	..	..	..	..	..	..	..	..	1	..	6.2
Teigngrace .....	..	..	..	..	..	..	..	..	..	..	..	17.6
Woodland .....	..	..	..	..	..	..	..	..	..	..	..	5.4
North Bovey.....	..	..	..	..	..	2	1	..	1	..	..	24.0
Widdicombe .....	..	..	..	..	..	..	..	..	..	..	..	9.4
	7	4	3	2	2	0	5	7	32	21	11	..

Violent deaths, of which no less than 6 were in Kingsteignton, are not included, and the rural part of St. Marychurch is wholly omitted in the death rate.



The other chief causes of fatality beyond those given in the table were constitutional diseases (other than tubercle) 31, of which 22 were from cancer—the developmental group, 29, of which 20 were assigned to old age—diseases of the nervous system, 59, including 33 from apoplexy—of the digestive organs, 34; and of the urinary, 14. Influenza is credited with 5 deaths, 2 being in the second, and 3 in the fourth quarter; in the preceding year 37 were directly attributed to it: this alone accounts for the diminished death rate.

The number of deaths in each quarter was consecutively 98, 104, 89, and 100.

In a meteorological sense 1893 has been a very exceptional year and the singular mildness of the spring is reflected in the small mortality during the first quarter, which was actually exceeded in the second. The middle of the year was characterized by a drought of about 70 days duration and the whole by rather a low rainfall.

The births of 314 boys and 338 girls give a rate of 24·4 per 1000, the lowest figure yet recorded. Adding to the deaths 18 in the workhouse, which were referable to the rural parishes, the natural increase, that is the excess of births, was 243.

**ZYMOTIC DISEASES.**—From the seven ordinary diseases of this type 18 deaths have resulted, viz., typhoid fever, 2; whooping cough, 7; scarlatina, 2; diphtheria, 3; diarrhoea, 4; giving a rate of 0·68 per 1000.

**MEASLES.**—A few cases in Chudleigh, in June, alone came under notice.

**WHOOPIING COUGH.**—Although 7 deaths appear from this, it has not extensively prevailed in the epidemic sense, but towards the end of the year, and with the advent of winter was threatening to become so. The third quarter of the year shews one death from this cause, the others two each and Moreton was the only sub-district in which it produced no fatality. It was therefore pretty widely distributed both in respect of time and locality.

**DIPHHTHERIA.**—This has been the really alarming disease of the year and the sporadic manner in which it manifested itself in places several miles apart rendered dealing with it more difficult than in ordinary limited epidemics such as hitherto have been experienced in this district. The fatal cases were in every instance the earliest ones, and those following were never severe. This (as in Scarlatina, to be noted later), would point, I consider, to a high degree of receptivity of the infection on the part of those first affected, whereas the later ones, with the poison of the disease diffused in their houses, but having less constitutional inclination, suffered slightly. The first cases (5 in number) were in January in an unwholesome block of buildings, known as the Island, in Moreton; some epidemic tendency through the medium of a servant was here shewn, which was, however, readily suppressed. The next case (boy,



attained a maximum in London, 1893, and their diffuseness in South Devon may be in association with this, the locality receiving large numbers of visitors and convalescents. All attempts to cope with it by means of isolation seem hopeless under present conditions, but it by no means follows that this will always obtain.

**TYPHOID FEVER.**—The first case to which my attention was drawn was at Kingsteignton, in July. Of 11 or 12 noted, eight, including both deaths shewn in the tables, were in this village. For years past, it has yielded more typhoid than the whole of the remainder of this vast district of 173 square miles. Impurification of the soil around the houses, and a bad system of sewerage dependent almost entirely on rainfall for cleansing, are no doubt the causes of this, causes that would be intensified during the prolonged drought of 1893. The village is without a public supply of water and the amount carried is as nothing for flushing purposes in its vast and capacious sewers. The Authority is showing a decided disposition to remedy this evil; a special paragraph on the subject is given later.

**DIARRHŒA.**—Notwithstanding the high temperatures and unusual climatic conditions that have prevailed, there does not seem to have been any marked excess of this.

**SANITARY WORK.**—In October, the Authority appointed an additional inspector of nuisances, retaining his services four days a week: plenty of employment has been found for him, yet the local authorities are so circumspectly directed as they might be. A good deal of inspection of drains and routine work are done, but the real and urgent sanitary improvements and the notices of the Authority require to be carried out in individual houses or groups of houses. For example, we are still without full information as to whether the notices with reference to Wear's Cross, Kingskerswell manor and other places, are properly responded to. It is, I consider, most important that all premises, in which disease has actually happened, should be visited on expiry of a notice and reported on: this is sanitation of a very direct sort. Moreton has been supplied with water at a cost of £1800 and a scheme for the modernization of its sewers awaits the approval of the Local Government Board. The supply for Torbryan has not yet been introduced, but the business difficulties of the negotiation have, I understand, been overcome. A house to house inspection of Moreton has been carried out, and a list of defects supplied to the Local Committee, who seem disposed to deal energetically with them. A similar inspection of Ashburton has been commenced. Considerable extensions of water mains have been made at Bovey. Improvement in water supplies or other considerable work involving groups of houses have been effected in Dicker's court, Kingsteignton; in Orchard and Whitehill terraces, Highweek; in the Island at Moreton,

Record of Water Analyses.									
No	Source.	Date.	Grains per Gall.		Parts per 1,000,000			Oxygen taken.	REMARKS.
			Total Solids	Chlorine.	Free Ammonia.	Albuminoid Ammonia.	Nitrogen from Acids		
1	Foot's Court Spring, Ashburton.	Feb.	21	23	.03	.05	...	Small	Good quality.
2	Horswell's well, Ipplepen.	Dec.	63	10.5	.01	.03	...	Moderate	Suspicious.
3	Holywell, in Lord Clifford's Park.	Dec.	30	1.12	.00	.00	.01	Almost none.	A very pure water from the limestone.

at Hackney, at Dawlish water, at Wear's Cross and sundry lesser places. In nearly all the cases of diphtheria, &c., detailed in preceding pages, something useful has been effected in the premises concerned: these are too numerous to be specifically given here: amongst them several farmhouses have received a better supply of water. A house to house disinfection of Kingsteignton was undertaken in August, and the group of cowsheds and other nuisances at Chapel Hill, Highweek, has disappeared. The continued and rapid growth of Cockington has caused the cesspits of the earlier built houses and the insufficiency of certain sewers to be assailed. The question of the slaughter houses there has also received attention, but at present all these are at a long distance from the houses, and the matter is not therefore urgent, although the new constructions at the head of Sherwell valley are approximating one of them. The formation of a Local Board for this place has been sanctioned and will forthwith be elected.



remunerative, consumers being numerous and the original cost small. It is a defect of course that the water is only given for 40 years, but this is unavoidable, and the debt will be paid off long before the expiry of that term: probably too by that time the pipes will be worn out, so that the full value will have been secured. Forty years is a long period, admitting many changes, and to suppose the village without water at its expiry is too much. Moreover, Lord Clifford's successor will probably be as magnanimous as himself. Be this, however, as it may, how many cases of typhoid fever, how many deaths, how many injured constitutions, how much domestic misery even apart from disease, will be saved to Kingsteignton during 40 years by its fever rate being reduced to that which holds in adjoining parishes? The great convenience also is to be considered of having water on the premises, of having w.c.'s instead of filthy privies and the myriad advantages to be derived from an abundant supply of good water, instead of the precarious and inferior sort got from wells sunk in a doubtful soil, or instead of the limited supply necessarily obtained when brought from any distance, and impurified by storage in a dwelling house. The advantages of a public supply are such that once introduced they can never again be done without.

Mr. S. Segar, Surveyor and Sanitary Inspector, reports the following details of work:

The construction of the Moreton water works; the completion of the Lustleigh and Wreyland drainage scheme; the drainage &c. of the National School at Bovey renovated, and the sinking of a new public well at Ipplepen, a much needed work—125 official notices and innumerable verbal ones—7 new wells—many wells practically closed by introduction of public water supply—60 old houses connected with sewers; new houses are connected as a matter of course if sewers are available—22 new water closets and 20 supplied with water or otherwise improved—many new sinks—1 overcrowding—2 houses unfit for habitation—15 pigs removed. Kingsteignton, Highweck and Bishopsteignton disinfected by visiting every house—all public stand-pipes have been removed from Bovey streets since the new water has been introduced—slaughter houses visited regularly and whitewashing required quarterly—7 local committees attended—visitation of diaries rapidly progressing under assistant-inspector.



## WOLBOROUGH (NEWTON ABBOT).

During 1893, there were registered in this urban district 139 deaths, 68 in males and 71 in females, giving an annual rate of 15·9 per 1,000. Three visitors are included in the total. In the successive quarters of the year, the numbers were 30, 36, 33 and 40. Other causes of fatality beyond those given in the tables were constitutional diseases (excluding tubercle) 10 deaths, of which 9 were from cancer—diseases of the nervous system 10, of which 7 were assigned to apoplexy, and 2 to convulsions—diseases of the digestive organs 12—of the urinary 5—2 were caused by the accidents of child-birth, and one only was assigned to influenza. Four were attributed to premature birth, and 9 to old age.

Of these deaths, 35 were under one year of age, 8 between 1 and 5 years, 4 between 5 and 15 years, 12 between 15 and 25 years, 38 between 25 and 65 years, and over the latter age 42.

The infantile mortality, that under one year, as measured by the births was 147, against 116 in the previous year. The chief causes of this high rate were diarrhœa, 5 deaths; premature birth, 4; diseases of the respiratory organs, mostly bronchitis and pneumonia, 10; teething, 4; convulsions, 2; inanition and ill-defined causes, 6.

The births of 130 male and 108 female children, equal a rate of 26·9 per 1,000.

Building has been going on very actively in the town during the year, the locality of Beaumont-road alone about 100 houses have been built and three-fourths of them occupied. It is probable therefore that the above rates are worked out on too small a population, and that both birth and death rates are higher than they should be.

In the Workhouse, situated in Wolborough, there were 60 deaths, 32 in males and 28 in females, have the following local distribution among the various sanitary districts comprised in the union; Torquay, 20; Wolborough, 8; Teignmouth, 7; St Marychurch, 5; Dawlish, 2; and the rural parishes, 18.

ZYMOTIC DISEASES.—No less than 12 deaths assigned to the 7 ordinary diseases of this class, alone giving a rate of 1.36 per 1,000. In the absence of an epidemic of measles or whooping cough, this the highest figure reached for several years. Five deaths were due to diarrhœa, 3 to diphtheria, 2 to whooping cough, and one each to scarlatina and typhoid fever.

	1893	1892	1891	1890	1889	1888	1887
Smallpox . . . . .	...	...	...	...	...	...	...
Measles . . . . .	...	1	13	1	...	...	5
Scarlatina . . . . .	1	1	...	...	1	...	1
Diphtheria . . . . .	3	...	4	1	...	...	...
Whooping Cough . . . . .	2	1	...	13	...	4	2
Continued Fevers . . . . .	1	1	...	1	3	...	...
Diarrhœa, &c. . . . .	5	2	...	...	2	1	1
<i>Deaths from 7 chief Zymotics</i> )	12	6	17	16	6	5	9
Phthisis . . . . .	13	7	4	8	12	18	12
Other Tubercular . . . . .	3	1	3	5	9	3	...
Bronchitis, Pneumonia, &c....	26	23	25	24	18	19	23
Heart Disease . . . . .	10	14	26	16	14	7	7
Violence . . . . .	4	3	4	2	1	2	3
Other Diseases . . . . .	71	79	55	72	75	60	85
TOTAL FOR EACH YEAR	139	132	144	143	135	114	139
General Death-rate per 1,000	15.9	15.3	16.9	16.2	15.5	13.4	16.7
Zymotic death-rate . . . . .	1.4	0.7	2.0	1.8	0.7	0.6	1.1
Birth Rate . . . . .	26.9	26.0	25.2	24.3	23.3	23.6	20.6
Deaths under 1 yr to 1000 births	147	116	121	136	90	90	191

There was some influenza in the town during the last quarter, but it was much less than in the preceding year, and only one death was registered from it. Several cases of diphtheria were notified, and, as in the rural districts, appeared rather in sporadic than in epidemic form. Early in October there were two cases at the College, not associated with visible sanitary deficiencies: one of these ended fatally, and the other was clearly contracted therefrom. Later in the same month a child in Lower St. Paul's Road suffered slightly, and towards the end of November a death was caused by it in the Grove. During December another case in Queen Street, and 2 in the same family at King's Cottages, Lemon road, were observed. There was no connection to be in any way traced between these and no personal condition or circumstance in common influencing them. The case in the Grove was in one of a numerous family, necessitating the removal of the unaffected children. Scarlatina has been essentially the disease of the year, at all events since the beginning of March. The number affected has been great, and as in point of severity, the disease graduated downwards to the merest sore throat, it is impossible to give an estimate with any approach to accuracy; certainly those notified were only a minority of those attacked. It is not necessary to repeat here the general remarks made in the rural part of this report with reference to diphtheria and scarlatina.

Although one death appears from typhoid fever, yet 1893 has in my estimation been the best year in this respect in the sanitary annals of the town, for only one case has occurred with any pretensions to an indigenous origin, and for the first time none have been observed in Quay road or terrace: this last circumstance may have been due to certain drainage improvements in this locality in the previous year. In October a recruit at the police station, ill on arrival from Exeter, was three days later taken to the Cottage Hospital suffering from this disease. There was, however, one severe and instructive outbreak at Albion Hill, of which the following are briefly the details:—These houses are of modern construction, and although small, containing 6 rooms, are well built and arranged in groups of three. The family consisted of parents and nine children. The eldest son (not included in the nine) was married, had one child and lived at Brixham, earning his living as a trawler. Feeling ill he naturally enough, seeking a change, visited his parents at Newton. A day or two later, early in September, he developed typhoid fever, and one of the larger rooms was given up to him; having a relapse he went through more than the average tedious phases of the disorder. During his illness, his wife came from Brixham to nurse him, and as she could not leave her baby behind, that also was added to the population of the house, which at this juncture therefore became crowded with 14 inhabitants, one suffering from typhoid fever. On November 6th, four other children were suddenly and simultaneously struck down with the infection, and I found three of them in a small room having only about 500 cubic feet of space. This was a very serious condition of things, necessitating urgent action, and in a few hours, through the cordial energy of two members of the local Authority, an empty and isolated house was hired and the required furniture bought and placed therein. The sick could not be removed, and to this house therefore the unaffected members of the family were alone taken, the mother and elder daughter (the latter against advice) remaining to do the nursing. A little later this daughter contracted the disease, and was the only one who succumbed. The action of the two gentlemen and myself was somewhat ultra vires, but there was no help for it, as matters were urgent and the Local Board could not legally be assembled without two day's notice: the latter on meeting unanimously approved the action that had been taken. This case affords a good illustration of the use of an

isolation hospital, and is likely to lead to one being constructed: certain it is, if the young man from Brixham had early been removed to such a place, the others of the family would not have taken the infection and the young woman's life would not have been lost. There is, however, another side to the picture, for it is not always easy to induce friends to assent to the removal of a sick person, and a magistrates' order on the ground, as in this case, of insufficient accommodation and overcrowding, might have been met by a medical certificate that such a proceeding would endanger the patient's life. In one of the cases of diphtheria, the child having died just before I entered the house, it was found impossible to induce the mother to consent to the body being taken to the adjacent mortuary, and here too the expedient of removing the other children was adopted. This course although it has not received official recognition is in small communities often preferable and certainly easier than carrying an infected person to an isolation hospital.

Wells have been closed at 8, 9 and 10 Courts, Wolborough Street; in Sun Court, in No. 2 Court, East Street, and at 73, Wolborough Street, the town water being substituted. Great improvements in the way of drainage, paving and closet accommodation have been effected in White's Court, in Sun Court, and in 2, Court, East Street. In the latter of these the renovation was complete so far as the local conditions allowed, and was carried out by the Local Board, the cost being duly apportioned, in preference to more expensive and cumbrous action under the Houses of the Working Classes Act. Insanitary conditions in several houses in upper and lower St. Paul's Roads, in Courtenay Street, Belgrave Terrace, Courtenay Park, Quay Terrace, etc., have been remedied. In September a house-to-house disinfection was carried out; this in some degree served the purpose of a house-to-house inspection also, and a notable diminution in the number of nuisances existing was found.

The following are the chief items in the report for 1893 of Mr. L. Stevens, Surveyor and Inspector of Nuisances.

The new sewer from Decoy to the Marsh includes 1,300 feet of 9 inch, 1,970 of 10 inch, and 360 of 12 inch pipes. This sewer, which serves a new district, is very flat, but impounding the water of the adjacent stream has enabled it to be effectually flushed, near its head also an automatic flush is fixed and settling tanks are constructed in its course. Two new storm relief sewers have been made, the growth of certain districts, especially Beaumont Road and Bowden Hill having made them necessary to relieve the existing sewers. Large improvements in the way of w.c.'s and drainage, amounting frequently to complete renovation, have been effected in 2, Court East Street, in Sun Court, at 4 houses in Quay Road, at 3 in Belgrave Terrace, at 3 in upper St. Paul's Road, at No. 7, Courtenay Street, at Nos. 129 to 135, Queen Street, at Powderham Villa, at the National Schools, and in many lesser properties. Altogether 28 new closets were constructed or old ones thoroughly improved. The smoke test has been applied on 24 occasions, and the larger machine which has recently been purchased renders satisfactory aid: seeing is believing, smoke is visible and impresses the minds of those who see it coming through their floors. Twenty-seven notices have been served, of which 24 referred to foul privies, structures which, speaking generally, should not be allowed to exist, whether foul or not. A house-to-house visitation and disinfection with perchloride of mercury has been made on three occasions and special attention has been given to the purification of street gullies. The cleansing of the main sewers has entailed much time and labour. This work extended as far up as the river behind Victoria Place, and a vast amount of deposit was removed.

## \* DAWLISH. \*

The number of deaths registered in this urban district during 1893 was 81, of which 34 were in males and 47 in females, equal to a rate of 18·92 per 1,000 of population: excluding 9 visitors the rate falls to 16·8. This is rather a high figure and the chief cause was the great fatality in December, in which month no less than 20 deaths were registered, and for the first time one attributed to influenza: in no previous month in my experience has the number of deaths exceeded fourteen and the increase therefore was enormous. A large addition to the death rate, more than 1·0 per 1,000 has arisen from violent deaths; of the five so certified four weeks accidental and one suicidal. The quarters of the year gave consecutively 20, 14, 18 and 29 deaths.

Under the age of one year, there were 11 deaths—between 1 and 5 years, 7—between 5 and 15 years, 4—between 15 and 25 years, 2—between 25 and 65 years, 27—and over the latter age, 30.

The other principal causes of fatality, besides those detailed in the table, were constitutional diseases (other than tubercular) 9 deaths—diseases of the nervous system, 5, of which 4 were from the apoplexy—of the digestive and the urinary organs, 2 each. One each also was assigned to influenza, confinement and premature birth, 4 to old age and 2 to ill-defined causes in infants. Diseases of the respiratory organs were exceptionally destructive, causing 26 deaths, of which 19, as shewn in the table, were due to bronchitis and pneumonia.

The births of 61 male and 53 female children give an annual rate of 26·6 against 24·7 in the preceding year, the highest figure for many years. The natural increase of population, the excess of births over deaths, was therefore 33. The infantile mortality as measured by the births was 96 per 1,000 against 94 in the previous year.

**ZYMOTIC DISEASES.**—In the fourth quarter of the year influenza seems to have been more severe than hitherto and one death was induced by it. Probably the heavy mortality in December was in some degree due to its presence. On the

subject of zymotic diseases there is little to record, only one death having been caused thereby, giving a rate of 2·3 per 1,000. Indeed for three successive years, the death-rate from any of the seven ordinary zymotics as regards the inhabitants of the town has been nil.

	1893	1892	1891	1890	1889	1888	1887	1886
Smallpox	...	...	...	...	...	...	...	...
Measles	...	1	...	3	...	...	...	3
Scarlatina	...	...	...	...	...	1	1	3
Whooping Cough	...	...	...	3	6	2	...	1
Diphtheria	1	1	...	2	...	...	...	...
Continued Fevers	...	...	...	1	2	...	...	1
Diarrhoea	...	1	...	...	...	...	...	1
<b>Deaths from 7 chief Zymotics</b>	1	3	...	9	8	3	1	9
Phthisis	7	6	8	4	9	8	8	9
Others Tubercular	2	...	2	5	6	2	...	...
Bronchitis, Pneumonia, &c.	19	12	8	5	4	12	11	9
Heart Disease...	12	7	12	14	8	8	4	4
Violence	5	5	2	4	2	...	2	1
Other Diseases	45	40	39	41	38	41	57	50
<b>TOTAL FOR EACH YEAR.</b>	81	73	71	82	75	74	83	82
General Death-rate per 1,000	18·9	17·2	16·8	18·7	17·3	17·2	19·5	19·5
Ditto (excluding visitors)	17·0	13·2	14·1	14·2	14·5	15·8	17·4	17·0
Zymotic Death-rate	2	7	0	2·0	1·8	·5	2	2·1
Birth-rate	26·6	24·7	23·1	23·7	21·3	25·9	22·8	26·2
Deaths under 1 yr to 1000 Births	96	94	51	106	163	81	144	127





