# BRIDLINGTON UNION.

# RURAL

SANITARY AUTHORITY.

# REPORT for the Year 1899,

OF

# WILLIAM A. WETWAN, M.R.C.S.,

Member of the Sanitary Institute,

Medical Officer of Health for the District.

#### BRIDLINGTON:

RICHARD BROWN, PRINTER, STATIONER, ETC., 3, KING STREET.

MDCCCC.

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# REPORT, 1899.

Bridlington, February 10th, 1900.

GENTLEMEN,

I have the honour to present to you my Annual Report on the Health of the Rural Sanitary District of Bridlington.

The Rural District includes the three Registration Sub-Districts of Rural Bridlington, Hunmanby, and Skipsea It has an area of over 60,000 acres, or a little more than 100 square miles, and a population by estimation of 8,647, very unevenly distributed, varing in density and in numbers from 13 at Auburn to nearly 1,300 at Hunmanby village. The superficial contour of the ground is on the North hilly and bold, consisting of that spur of the Wolds which runs East to terminate in Flambro' Head, and towards the South shelves gradually in the low-lying undulating country The geological features are varied, but mostly consist of of Holderness. the upper and middle chalk on the wolds, with Speeton and Kimmeridge clays near Hunmanby and post tertiary deposits on the South—there is a good sub-soil of sand and gravel covered by a fairly thick alluvial deposit. With the exception of Flamborough, which has a moiety of the population engaged in fishing, the inhabitants are mostly occupied with agriculture and its subsidiary avocations.

The actual number of the populations in Rural Districts at this period of the inter-censal epoch must be always and everywhere very uncertain. If we take the 1891 Census return and allow emigration to balance immigration, we shall by natural increase—that is excess of births over deaths—be entitled to estimate our population at 8,647, and I have adopted this number for the purpose of calculating the various birth and mortality rates. It seems unlikely that there has been as great a loss of population during the current as in the previous decennium, although the low birth and death-rates point in this direction.

#### TABULAR SYNOPSIS.

-	Sub-District.	Estimated Population	Births in		aths	Death Rates in 1899.			
		in 1899.	1899.		Under 1 year	General	Zymotic	Infantile	
C. Land	Rural Bridlington		60	40	11	14.18	0.70	183 3	
	Hunmanby Skipsea	1000	$\begin{vmatrix} 120 \\ 39 \end{vmatrix}$	47	$\begin{array}{c c} 11 \\ 4 \end{array}$	11·8 7·5	$\begin{array}{c} 1.7 \\ \text{nil.} \end{array}$	$\begin{vmatrix} 91.6 \\ 102.5 \end{vmatrix}$	
	Skipsea						1111.	107.9	
1.0	Rural District	8647	219	101	26	11.68	1.04	118.9	

# VITAL STATISTICS OF ENGLAND AND WALES.

The birth-rate in England and Wales in 1899 was 29.3 per 1000 of the population, which is lower than that in any other year on record; compared with the average in the ten years 1889-98, the birth-rate in 1899 shows a decrease of 1.0 per 1000.

The death-rate in 1899 was 18.3 per 1000, which is higher than the rate in either of the three years immediately preceding, but 0.1 below the average rate in the ten years 1889-98.

The rate of mortality amongst infants under one year of age to 1000 registered births was 163, which is 12 per 1000 above the mean proportion in the ten years 1889-98. The death-rate among persons aged between one year and sixty years was 9·1 per 1000, and that among persons aged 60 years and upwards was 72·6 per 1000, of the estimated populations at the respective groups of ages.

The deaths attributed to the seven principal Zymotic diseases correspond to a rate of 2.21 per 1000 living, against 2.21, 2.17, and 2.22 respectively in the three preceding years.

ANNUAL DEATH-RATES PER 1,000 FROM ALL CAUSES, AND FROM SEVERAL ZYMOTIC DISEASES DURING THE YEAR 1899.

	All Causes	Principal Zymotic Discases	Small Pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhœa	Deaths under 1 year per 1000 reg. births
Cols	1	2	3	4	5	6	7	8	9	10
England and										
Wales	18.3	2.21	0.01	0.31	0.12	0.29	0.30	0.20	0.98	163
33 great Towns	20.2	2.81	0.01	0.46	0.13	0.40	0.38	0.22	1.21	181
67 other large										
Towns	18.0	2.45	0.00	0.28	0.12	0.28	0.32	0.23	1.22	178
England and										
Wales	17.1	1.71	0.00	0.21	0.10	0.21	0.25	0.18	0.76	124
Less the 100 Towns								1	1	l)

The above paragraphs and table are taken from the Registrar General's Report for the final quarter of 1899, and will serve usefully as a means of comparison with our own statistics. With the exception of the Infantile death-rate in Rural Bridlington Sub-District, all our rates of mortality are well below those above set out. In England and Wales, less the 100 towns, there is no death-rate from Small Pox, and in our District we have had no case of the disease notwithstanding the very free intercommunication between our District and the City of Hull,

	Population	at Census in	Deaths	in 1899.
Name of Parish.	1881	1891	All Causes.	Zymotic.
Auburn	12	13	1	
Bessingby	80	87	$\frac{1}{2}$	
Carnaby	180	200		
Boynton	156	128	3	
Easton	23	32		
Hilderthorpe	26	41		
Wilsthorpe	13	16		
Sewerby & Marton	343	331	3	1
Buckton	151	141	1	
Flamborough	1355	1288	26	1
Bempton & Newsome	309	310	4	
Rural Bridlington	2648	2587	40	2
Hunmanby	1351	1309	13	$oxed{2}$
Connection	160	151	1	4
Grindale	179	157	6	4
Argham	39	40		1
Rudston	604	578	9	
Thwing	439	367	1	
Wold Newton	310	292	$\frac{1}{6}$	- 1
North Burton	543	425	7	
Reighton	254	252	4	
Fordon	57	38		
Hunmanby Sub-Dist.	3936	3609	47	7
Burton Agnes	342	321	3	
Haisthorpe	123	121	1	
Thornholme	110	115	2	
Gransmoor	84	68		
Lissett	90	105		
Ulrome	194	198	2	
Dringhoe, Upton and				
Brough	157	156		
Skipsea	398	341	5	
Barmston	198	213	1	
Fraisthorpe	104	95		
Skipsea Sub-District	1800	1733	14	
Rural District.	8384	7929	101	9

I am glad to be able to present a modest report of a quiet, uneventful year. The mildness of the winter months at both ends of the year, and fine summer, naturally conduce to low death-rates amongst the very young and those of advanced years, for in the absence of epidemic Zymotic disease, the climate is generally the determining factor as to a fatal or favourable termination in such sickness as customarily rules during the mid-winter and mid-summer months amongst these two classes at the extremes of life. We had a considerable amount of Influenza during the early months, but owing to the shortness of the spells of extreme cold and foggy weather the mortality was lighter than in some other years. There has also been less of the common type of Zymotic disease—we have had scattered cases of Scarlet Fever and Measles, and half-a-dozen cases of Enteric Fever, but with scarcely an exception the disease has been confined to the particular house in that neighbourhood in which it first appeared. Diphtheria, however, is an exception to this optimistic review there have been 13 cases notified, with five deaths occurring in Grindale, Hunmanby and Wold Newton being the largest number since 1891 when there were 14 cases but only one death. With the exception of Grindale, where a possible source of infection may have been a school girl who had returned from a visit with a suspicious throat, I could find no plausible local means of breeding the disease in the other centres unless it be in a somewhat primitive method of slop-water disposal, and the very free access which the ground air has to the interior of all the houses where the disease occurred (Thorne-Thorne). No means were taken to verify the diagnosis of bacteriological examination, and so far as the ground-air theory is concerned, it is singular if that be the cause, that we have so few cases, as the great majority of the smaller houses in the Rural District are defectively constructed in this particular. The times of year when most of the Zymotic disease occurred will be found in the Notification Table:

#### MARRIAGES.

There were 68 marriages in the Rural District in 1899, as compared with 37, 51, and 55 in the three immediately preceding years. These figures give a rating for the year of 15.72 persons married for each 1000 persons living, being 0.32 above mean average rate of England and Wales for the past ten years.

#### BIRTHS AND BIRTH-RATES.

There were 219 births registered in the Rural District in 1899 against 198, 223, and 228 in the three immediately preceding years. The District birth-rate of 25.32 per 1000 being 3.98 below that of England and Wales for 1899. The Sub-District birth-rates were 21.27, 30.29, and 20.9 for Rural Bridlington, Hunmanby, and Skipsea respectively.

TABLE OF QUARTERLY TOTALS.

		1899.			1898.		
BRIDLINGTON SUB-DISTRICT.	Males.	Females.	Total.	Males	Females.	Total.	
1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	7 8 9 7	9 5 7 8	16 13 16 15	8 7 11 7	5 5 12 1	13 12 23 8	
Totals	31	29	60	33	23	56	
HUNMANBY SUB-DISTRICT.							
1st Quarter 2nd Quarter 3rd Quarter 4th Quarter	16 22 19 15	10 8 15 15	26 30 34 30	22 13 12 10	14 13 11 11	36 26 23 21	
Totals	72	48	120	57	49	106	
SKIPSEA SUB-DISTRICT.							
1st Quarter 2nd Quarter 3rd Quarter 4th Quarter Totals	4 4 2 8 18	$ \begin{array}{c c} 6 \\ 7 \\ 1 \\ 7 \\ \hline 21 \end{array} $	10 11 3 15 39	$ \begin{array}{c c} 3 \\ 2 \\ 4 \\ 1 \\ \hline 10 \end{array} $	$ \begin{array}{c c} 6 \\ 10 \\ 8 \\ 2 \\ \hline 26 \end{array} $	9 12 12 3 3	
Totals for Rural District	121	98	219	100	98	198	

#### DEATHS AND DEATH-RATES.

There were 101 deaths registered in the Rural District in 1899, as compared with 120, 111, and 94 in the years 1898, 1897, and 1896 respectively. The District mortality for 1899 was 11.68 per 1000 living, and is 5.42 below the mortality-rate of Rural England and Wales for 1899, and 5.52 below the average of the past ten years for the country generally. The deaths of children under one year of age were in the proportion of 118.9 deaths to each 1000 registered births—the average proportion in England and Wales having been 163 in the past year, which is 12 per 1000 above the mean average of the past ten years.

The Sub-District Rates of mortality at all ages were Rural Bridlington 14:18, Hunmanby 11:8, and Skipsea 7:5 per 1000. The highest infantile death-rate was Rural Bridlington with 183:3 per 1000.

TABLE OF QUARTERLY TOTALS.

	and the second second	1899.			1898.	
Bridlington Sub-District.	Males.	Females.	Total.	Males.	Females.	Total.
1st Quarter 2nd Quarter 3rd Quarter 4th Quarter Totals	$     \begin{array}{r}       7 \\       8 \\       2 \\       \hline       3 \\       \hline       20     \end{array} $	$     \begin{array}{c c}                                    $	$     \begin{array}{c}       14 \\       13 \\       7 \\       \hline       6 \\       \hline       40     \end{array} $	3 3 2 7 15	$     \begin{array}{r}       7 \\       8 \\       \hline       1 \\       \hline       16     \end{array} $	10 11 2 8 31
Hunmanby Sub-District.						
1st Quarter 2nd Quarter 3rd Quarter 4th Quarter Totals	$\begin{bmatrix} 4\\10\\7 \end{bmatrix}$	$ \begin{array}{ c c c } \hline 10 \\ 4 \\ 5 \\ 5 \\ \hline 24 \\ \hline \end{array} $	$ \begin{array}{ c c }  & 13 & 8 \\  & 15 & \\  & 12 & \\ \hline  & 47 & \\ \end{array} $	$\begin{bmatrix} 8\\12\\7\\6\\33 \end{bmatrix}$	$egin{array}{c} 4 \\ 9 \\ 10 \\ 9 \\ \hline 32 \\ \end{array}$	$ \begin{array}{c c} 12 \\ 21 \\ 17 \\ 15 \\ \hline 65 \end{array} $
SKIPSEA SUB-DISTRICT.	A CONTRACTOR OF THE PARTY OF TH	Mark 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		To prove the prove the state of the state o	Profession (Control of Control of	
1st Quarter 2nd Quarter 3rd Quarter 4th Quarter Totals	$\frac{3}{2}$	$\begin{bmatrix} 2\\2\\2\\-\\6 \end{bmatrix}$	$\begin{bmatrix} 5 \\ 5 \\ 2 \\ 2 \\ -6 \end{bmatrix}$	5 6 - 3 1 t	$ \begin{array}{ c c } 2 \\ 2 \\ 1 \\ 5 \\ \hline 10 \end{array} $	7 8 1 8 24
Totals for Rural District	62	58	120	58	53	1111

### CAUSES OF DEATHS.

The accompanying table shows the gross mortality of the District classified according to disease, age, locality, sex, and quarter of the year.

Disease.—Of the 9 deaths attributed to the "principal Zymotic diseases" represented here by Diarrhœa, Diphtheria, and Enteric Fever, Hunmanby Sub-District, a large one, takes 7, and has a Zymotic mortality-rate of 1.7 per 1000; Rural Bridlington contributes 2 deaths and a rate of 0.70, whilst Skipsea Sub-District is in the happy condition of having none at all. The Rural District Zymotic rate is 1.04 per 1000 being 0.24 below that of the previous year, and 0.67 below that of Rural England and Wales for the year 1899. Influenza claimed 5 victims against 8 the year before, whilst Cancer took 5 as compared with 3 and 6 in the two immediate preceding years. Tuberculosis was responsible for 8 deaths against 13 and 6 for the same preceding years. Disease of the Brain and Spinal cord and of the Heart and Blcod-vessels took 9 and 3 victims in 1899, as compared with 16 and 5 respectively in 1898. Acute

		Total.	699866112398811555155	101
		4th Quarter.	:0101::001::1::01	20
ter of	Year.	3rd Quarter.	200::	22
Quarter of	χ	2nd Quarter.	- : : : : : : : : : : : : : : : : : :	28
		1st Quarter.		31
X.		Females.	20:01-100-08:-14663	40
SEX.	2	Males.	nn-n4 : : : : : : : : : : : : : : : : : : :	52
ion	ict.	Skipsea.		14
Registration	Sub-District,	Hunmanby.	1 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	63
Reg	Sub-	.notgailbird	16 3 2 3 1 3 2 3 3 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	40
	From 60 upwards.			44
		From 25 to 60.		20
E.	From 15 to 25.		:::::::::::::::::::::::::::::::::::::::	4
AGE.		From 5 to 15.	: 8 : : : : - 67 - : - : : : : : : : : : : : : : : : :	6
		From 1 to 5.	- n n n n n n n n n n n n n n n n n n n	9
		Under 1 year.	2 : : : : : : : : : : : : : : : : : : :	27
		DEATH.	ver  Anæmia  Brain & Spinal Cord Feart & Blood Vessels Pneumonia, &c. tomach & Bowels Kidneys  Kidneys  Natural Causes  Traumatic Causes	•
		OF D	ver  Nnæmia  Srain & Spinal ( Feart & Blood Ve Pheumonia, &c. tomach & Bowe Kidneys  Marasmus  Sirth & Teething  Natural Causes  Traumatic Caus	Totals
		CAUSE	Diarrhœa  Diphtheria Typhoid Fever Influenza Cancer Diabetes Pernicious Anæmia Tuberculosis Disease of Brain & Spinal Cord Disease of Heart & Blood Vessels Bronchitis, Pneumonia, &c. Disease of Kidneys Child-birth Debility & Marasmus Premature Birth & Teething Old Age. Inquests  [Natural Causes]	

Disease of the Respiratory System was fatal to 12, and Diseases affecting the Alimentary Canal to 11 in 1899, against 15 and 12 respectively in 1898. The other chief groups, with the exception of Inquests and Senile Decay, also show smaller numbers than in the previous year. Inquests were numerous, especially in the matter of death by some form of violence—that is death by other than natural causes.

AGE.—There were 33 deaths of children under five years of age in 1899 against 41 in 1898, and 29 had attained to 60 years and upwards, leaving 39 in the midele period of life; in the first case being 15 below the number for 1898, and in the second 5 in excess of the figures for that year.

DEATHS FROM CERTAIN DISEASES IN THE YEARS 1892-99.

			1892	1863	1894	1895	18ç6	1897	1898	1890
Diarrhœa			4	5		4			3	8
Measles			2			5			_	
Enteric Fever			2	1	2	_	1		2	1
Scarlet Fever				1		1		2	5	
Diphtheria				1				1		2
Influenza			3	4	2	1	_	1	8	÷
Childbirth			1		1	1	3		_	1
Bronchitis. Pne	umon	ia	14	12	20	S	9	12	15	12
Tuberculosis			ō	2	15	6	7	6	13	8
Cancer		• • •	3	7	4	7	õ	6	3	ě

## VACCINATION.

In the six months ended 30th June, 1899, there were registered in the Bridlington Registration Sub-District 198 births, of these 140 have been successfully vaccinated, that is from one to four insertions have been made in each case, and a proportion of these varying in like manner from one to four have "taken" sufficiently to enable a medical man to fill up a certificate. Whether this vaccination comes within the term successful or not is of course a matter of opinion—the generally accepted criterion amongst medical men, experienced in vaccination and the treatment of Small Pox, is that the resultant area of vaccinal cicatrisation to be of use as a prophylactic must measure at least half-a-square inch-many of the successful cases I have seen in the District would not measure nearly this area; and the actual value of the operation can only be tested by exposure to infection. A method of ensuring an approximate uniformity of result is very desirable, for I have yet to meet with any scheme for the isolation of variolous patients which does not depend for its efficiency on the cordon of persons protected either by vaccination or a previous attack of Small Pox. There wers 11 certificates of conscientious objection, 6 of insusceptibility, 20 children died unvaccinated, 1 was postponed by medical certificate, 1 was moved to a district known and the vaccination officer thereof duly apprised, 3 were removed to places unknown, leaving 16 unaccounted for-or 9.58 per centum-a considerable improvement on some past years.

Year.	Births.	Successfully Vaccinated.	Insusceptible.	Died Unvaccina (ed.	Postponed by Medical Certificate.	Removed to Districts known.	Removed to Districts unknown.	Unaccounted for.	Per cent lost sight of or un- accounted for.
1888	299	239		29	3	2	4	22	8.3
1889	310	191		37		2	6	54	17.4
1890	275	214		25	1	$\overline{2}$	7	26	9.4
1891	324	245	_	36	2			40	12.3
1892	290	206		24		1		59	20.0
1893	326	202		33		$\overline{2}$	<del></del> .	89	27.3
1894	309	192		32	2	4	10	67	24.9
1895	308	147		35	2			124	40.26
1896	327	212	2	42	1	2	11	57	20.7
1897	344	213	3	33		2	1	89	26.7
1898	348	222	7	52	1	3	7	51	16.6

"The Small Pox was imported into Mexico, it is said, by a negro in the fleet of Nartaeg. It first broke out in Cempolla; from Cempolla it spread rapidly into the neighbouring country, and penetrating through Tlascala, reached the Aztec capital, where Montezuma's successor, Cuitlahuca, fell, one of its first victims. Then it swept down towards the borders of the Pacific, leaving its path strewn with the dead bodies of the natives, who, in the strong language of a contemporary, perished in heaps like cattle stricken with the murrain."—Prescott.

The recent little epidemic in Hull has cost that city £15,000, to say nothing of individual loss of work and trade.

INFECTIOUS DISEASES (NOTIFICATION) ACT.

I received 63 certificates under this Act in 1899 as follows:—

Disease	Rural District	SU Brid- lington	B-DISTR Hun- manby	ICT Skipsea	ıst Quar- ter	2nd Quar ter	3rd Quar- ter	4th Quar- ter
Diphtheria	25	5	4	16	13	6	2	4
Enteric Fever	7		7	_	1	1	4	1
Scarlet Fever	16	2	14		2			14
Erysipelas	13		13	-			7	6
Measles	2			2				2
Totals	63	7	38	18	16	7	18	27

The total number is considerably less than half that of 1898, and the actual morbidity of the diseases notified, with one exception, seems not to have been so intense. Very careful attention was given to the Fever and Diphtheria cases; whenever it seemed necessary I made personal investigation of the *locus* of infection, and gave instructions as to isolation and disinfection.

# NOTIFICATION STATISTICS FOR EIGHT YEARS, 1892-99.

Disease			1892	1893	1894	1895	1896	1897	1898	1899
Diphtheria	•••	• • •	3	2			1	3	3	13
Enteric Fever	• • •	• • •	14	8	3	16	7	3	8	7
Typhus Fever	• • •					_			_	
Scarlet Fever	• • •	• • •	4	1	5	19	7	67	78	25
Puerperal Feve	r	• • •			_	1	3	1		
Erysipelas		• • •			5	1	7	5	4	2
Measles		• • •				24	103	4	47	16
Small Pox	• • •	• • •	1		_					—
-			!			]				

The accompanying handbills were sent to all cases of the diseases to which they relate.

# INFECTIOUS DISEASES (ANIMALS) ACT.

I am without any detailed information of the working of this Act in your District, but I trust its importance is not lost sight of, and that due attention is given to Dairies and Cowsheds. Seeing to what an alarming extent Tuberculosis permeates herds in this country, and the huge annual tax it levies on human life, Sanitary Authorities cannot well take too serious a view of their responsibilities under this Act and cognate regulations. Your bye-laws relating to the same should be freely distributed, systematic inspection of cow-byres should be practised and every endeavour made to encourage the better management of milch-cows and the segregation of such as are found to be suffering from Tuberculosis. I would strongly recommend the appointment of a Veterinary Officer to help in this work.

#### SANITATION.

The Mere at Flamborough has had a certain amount of mud removed from its bottom and some of it plastered around the sides, but its dimensions have been in no wise curtailed and its depth very little affected.

The drainage of this village gives rise to a good deal of complaints in hot weather, some of the man-holes I have noticed emitting very powerful stenches. Further means of flushing and additional means of ventilation are obviously required. The final section towards the outfall can get very little flushing, and no attempt is made to deal with the sewage at the outfall.

The attempt at providing an additional water-supply appears to have collapsed, and the village is mostly dependent on the water-cart and rain-water tub for its domestic supply.

I have very fully dealt with the village of Hunmanby in a special report, and need not further labour this section.

I am, Gentlemen,

Your obedient Servant,

W. A. WETWAN,

Medical Officer of Health.

To the Rural District Council and Sanitary Authority, Bridlington.

## Handbill No. 1.

### DISTRICT OF BRIDLINGTON.

#### RURAL DISTRICT COUNCIL AND SANITARY AUTHORITY.

#### SCARLET FEVER OR SCARLATINA.

Scarlet Fever and Scarlatina are one and the same disease. It is a very infectious fever of varying intensity, mostly spreading amongst the young. Mild cases are quite as infectious as the most severe, and will equally beget the severe type. Infective material is given off from the throat and skin—from the throat chiefly during the early period of the disease—from the skin mostly during the later or peeling stage. A patient is infectious from six to eight weeks from the appearance of the rash or initial symptoms. The particles of skin shed during desquamation will retain their virulence for months and years.

The patient should be separated from the rest of the family, and placed in a light and airy, but warm room at the top of the house; all unnecessary furniture and carpets should be removed from the room and staircase; a sheet should be hung outside the bedroom door, quite covering the aperture, and kept constantly wet with some fluid disinfectant. The attendant should *invariably* remove her outer garment (of washable print) before going to other parts of the house, or leaving the patient's room; and should pay very particular attention to her own head as well as the patients' frequently washing both with warm soap and water containing Carbolic Acid.

The 126th Section of the Public Health Act imposes heavy penalties on any person exposing himself—or other infected person—or exposes clothes or things generally which have been exposed to infection, and not properly disinfected.

Handbill No. 2.

#### DISTRICT OF BRIDLINGTON.

# PRECAUTIONS IN CONSUMPTION, DIPHTHERIA, AND TYPHOID FEVER.

In "Consumption" and Diphtheria, all expectoration should be on to pieces of rag or carbolised tow, which should be burned at once; or into some glazed vessel containing a powerful antiseptic. The atmosphere of the sick room being kept saturated with a volatile disinfectant.

The patient should occupy an airy, moderately warm, well ventilated room.

In "Typhoid Fever" as in Cholera—English and Asiatic—the infection is in the bowel discharges, and these should at once be destroyed by fire, or by some powerful bactericide. All linen soiled by these discharges should at once be placed in disinfecting solution.

It is most essential in all these complaints that articles of food and drink should be kept out of the reach of any chance of infection—only such as may be required by the patient should be allowed in the sick room.

Handbill No. 3.

# DISINFECTION AFTER SCARLET FEVER, DIPHTHERIA, MEASLES, &c.

The chimney, crevices of windows and doors of the infected room should be stopped; the stuffing of the bed and mattress taken out and burnt; and the bed-tick and mattress-cover, together with bedclothes, carpets, drapery, &c., hung over lines stretched across the room, and the whole well fumigated with sulphur-fumes. At least one pound of sulphur should be burned to every thousand cubic feet of space. This is best done over night, the fumes being left in the room until morning, when it should be cautiously entered and the window opened, the mouth and nose being protected whilst in the room. The washable contents of the room should then be boiled and washed, the wall paper stripped off, and the whole of walls, floor, and ceiling be well washed with carbolic acid and water.



# THE TWENTY-SEVENTH

# ANNUAL \* REPORT

- OF THE -

# Sanitary Condition of Bridgwater and the Rural Districts

FOR THE YEAR 1899.

PREPARED DY

FRANCIS J. C. PARSONS, Medical Officer

BRIDGWATER !---

Printed and Published by Oliver Bridges & Son, Cattle Market.

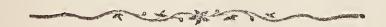


# The Twenty-Seventh Annual Report

- OF THE -

# SANITARY CONDITIONS OF BRIDGWATER AND THE RURAL DISTRICTS,

FOR THE YEAR 1899.



Mr. Mayor and Gentlemen,

In presenting to you my Annual Report for the year 1899, I regret that the vital and mortal statistics compare somewhat unfavourably with those of the year previous.

The birth rate has slightly diminished. The death rate in a measure increased, but this increase is in no way dependent on conditions over which, as a Sanitary Authority, you have any special control, in fact the reverse appears the case, since deaths that have resulted from diseases of a zymotic character are particularly few, and nothing that can bear the trace of an epidemic has found favour within this Borough.

# STATISTICS.

	Area 923 A	cres.	Pop	14,000.		
					1899.	1898.
Birth	Rate	* # *		<b>4 • •</b>	34.3	36.3
Death	Rate	4.0.1	• • •	+ + 3	21.6	18.2
Zymot	ic Rate	• • •	• • •	• • •	0.7	1.0
Infant	Mortality	per 1	000 Bi	rths	106.02	115.9

For the sake of uniformity I shall adopt the plan I have hitherto taken in these reports.

The deaths registered in this Borough during the past year numbered 303, as against 256 in 1898, equivalent to an annual death rate of 21.6 per 1000 of the estimated population. If we deduct 13 deaths that occurred in the Infirmary, and 51 in the Union Hospital, 239 deaths remain representing an annual rate of mortality of 17.0, as against 14.07 in 1898.

The year 1898 was a very exceptional year, and this comparison has no great value, particularly when the lengthened period of life and the diminished rate of infantile mortality are taken into consideration.

Year.	Population.	Deaths.	Rate per 1000. District.
1897	14,000	283	Western 125 Workhouse 34 Eastern 104 Infirmary 20
1898	14,000	256	Western 110 Workhouse 45 Eastern 87 Infirmary 14
1899	14,000	303	$ \begin{array}{c} \text{Western} & 141 \\ \text{Workhouse} & 51 \\ 21.6 & \text{Eastern} & 98 \\ \text{Infirmary} & 13 \\ \end{array} $

As regards this lengthened period of life, no less than 118 persons died aged 65 and upwards as against 84 in 1898, and 51 children under one year of age, 8 less than in the year previous, or at the rate of 106·02 as against 115·9 per 1000 births registered in 1898. These two important factors are of much value in determining from statistics the relative position one year bears to another. And yet a third remains, viz:—the Zymotic death rate, which was 1·0 in the year 1898 as against 0·7 in 1899. It will readily, therefore, be conceded that from an analysis of the year as regards its mortal statistics, it possesses much for congratulation.

Of the various causes of death, 19 resulted from Phthisis, 56 from Pneumonia, Bronchitis or Pleurisy, 16 from Heart Disease, and 9 from Injuries. In 15 cases Inquests were held.

The large number of deaths from Lung complications—more than double that in 1898—is due to the presence of Influenza during the last quarter of the year.

Eleven deaths were registered from the seven chief Zymotic Diseases, viz:—2 from Diphtheria, 1 from Typhoid Fever, and 8 from Diarrhæa, these latter occasioned, no doubt, by the extreme heat that prevailed during June and July.

These 11 deaths are equivalent to a Zymotic Death Rate of 0.7 per 1000 of the population, as against 1.0 in 1898, or 26.4 per 1000 deaths as against 54.6 in that year.

# Infectious Diseases' (Notification) Act, 1889.

We gain much assistance from the above Act, and by the liberal supply of Disinfectants, and the enjoinment of Sanitary precautions have been successful in checking the spread of any Infectious Disease.

The following cases were notified to me during the year: Scarlatina 12, Diphtheria 4, Membraneous Croup 1, Typhoid Fever 3, Puerpural Fever 1, and Erysipelas 3.

With reference to the Administrative Sanitary Work of the Town, we have the honor to report that during the year ending on the 31st December, 1899, 288 Notices had been issued as against 378 the year previous. These Notices may be classified as follows:—

Miscellaneous Notices	• • •	74
Notices brought before the Health Committee	4 4 4	148
Defective Water Fittings	•••	66
		288

The Notices brought before the Health Committee had reference to a total of 201 defects, which may be summarized as follows:—

Re	eported.	Abated.	In hand.
Defective Drains	18	17	1
,, Closets	46	37	9
,, Yard Gullies	17	13	4
,, Shuting and Rain Water Pipes	48	32	16
" Condition of Inhabited Houses	28 .	21	7
Dirty Condition of Inhabited Houses	24	19	5
Overcrowding	4	3	1
Accumulation of House Refuse	8	7	1,

			ported.	Abated,	In hand.
Animals and Birds kept in an	Unsa	initary	*		
Condition			6	5	1
Dangerous Buildings .			1	1	
Obstructive Buildings	• • •		1	1	

Attention should be called to the general dirty condition that some Houses and Back Courts are kept in. Much might be done to greatly improve matters by more frequently whitewashing the walls. We have also to call attention to the habit of depositing ashes and other house refuse in back gardens. With the house-to-house bi-weekly collection of refuse throughout the town, there is no necessity for any such deposit, and the timely removal of same will in future be more strongly insisted on.

# Slaughter Houses.

In consequence of the notice sent out by the Health Committee to all Butchers, various improvements have been made to the Slaughter Houses, but there is still other work required to be done.

## Dairies.

Occasional inspections have been made, and the premises found clean and wholesome. No complaints have been received, and about 18 different samples of milk taken at various times and from different salesmen, have been submitted to the Borough Analyst, but all were found free from adulteration.

## Bake-Houses.

These have been regularly inspected, and found to be kept in good order.

# Workshops and Factories.

No complaints have been received under this heading.

# Food and Drugs.

No complaints have been received as to the quality or condition of Food supplied to the Town, but attention should be called to the Act which came into force on the 1st of this month, and seriously affects the position of Tradesmen selling Food and Drugs in Parcels or Tins. For instance: Margarine or Margarine Cheese sold by retail must be covered by a paper wrapper, on which must be printed Margarine, or Margarine Cheese, as the case may be, in capital block letters not less than half an inch long. No other printed matter must appear on the wrapper. All tins or other receptacles containing Condensed Separated or Skimmed Milk, must bear a label clearly visible to the purchaser, on which must be printed Machine Skimmed Milk, or Skim Milk, as the case may require. All Milk Sellers must have their name and address conspicuously inscribed on any vehicle or receptacle used by them in the selling of milk. A printed Abstract of the Act, signed by the Town Clerk, has been posted up at the various stations.

# Drainage.

Amongst the many works taken in hand by the Town Council, are the construction of a New Sewer between the two Taunton Roads, and the final completion of the several works mentioned in our report for the year 1898.

# New Streets and Buildings.

During the past year 106 Plans affecting New Streets and Buildings have received the consideration of the Plans Committee, which may be summarized as follows:—

New Streets and Sewers		11
Dwelling Houses		62
Additions and Alteration	ns .	17
Stores		1
Additions to Factories		3
Warehouses		1
Workshops		1
Business Premises		$\frac{6}{2}$
Sheds		3
Stables and Cart Houses		1
		7.00
		106

# House Inspection.

We mentioned in our last Annual Report that every new house previous to occupation was carefully inspected, and in accordance with the Bye Law governing such cases, 108 houses and buildings have been inspected this year. At first some trouble was caused by the houses being occupied previous to the inspection being made, but that has now righted itself.

## Rainfall.

As in past years, Tables are appended, showing the Rainfall at Ashford and Bridgwater, for the last of which we are again indebted to Mr. Henry Corder.

# Water Supply.

For years past we have been able to congratulate the town on the thoroughly satisfactory character of the Water Supply, both as to quantity and quality. At the same time warnings without number have been given, both verbally and in these Reports, reminding the inhabitants that they are subject to an artificial supply, and that, if certain circumstances should occur in combination, grave inconveniencies might happen. In August last such combinations did occur, with the result that the greater portion of the town was without water for some hours. Luckily, by the prompt action of the Committee, proper remedial measures were taken, and, although the droughty weather continued for some time after, no further inconvenience was felt, but the lesson to be learnt from this, that the inconvenience, slight as it was, occurred through the consumers own fault. It was nothing but reckless waste, and this is proved by the fact that the weeks following the stoppage the water pumped into the town only amounted to about two thirds the quantity consumed previous to such occasion, notwithstanding that the weather was just as hot and dry.

# Conclusions.

The year just passed has seen a still further extension of the town, although not quite so active as the year previous. The roadways in Washington Terrace, Washington Gardens, and Lyndale Avenue, have been completed, and lastly, but not by any means least, the right of the town to discharge Sewage into the tidal waters of the River Parrett has been set at rest by the decision of the House of Lords.

Your obedient Servants,

FRANCIS JNO. C. PARSONS,
Medical Officer of Health.

FRANCIS PARR,
Sanitary Inspector.

ASHFOR			FORD.				BRIDGWATER.		
Month	Total Depth	Greatest	Fall in 24 hours.	No. of days on which 'l or more rain fell.	Total Depth.	Greatest	Fall in 24 hours.	No. of days on which: or more rain fell.	
January February — March — April — May — June — July — August — September — October — November —	Inches 5·12 3·85 ·59 3·79 1·94 ·57 3·00 3·06 3·17	Depth '80 '72 '28 1:26 '38 '31 '25 '68 '95 '98	Date 10 16 26 14 16, 24 19 1 4 7 2 4	19 13 4 15 12 4 6 6 19 10 13	Inches 4·21 3·07 ·52 3·17 1·29 ·81 ·37 2·94 2·73 2·25 3·01	Depth -55 -70 -22 1-12 -27 -32 -27 1-88 -45 -55 1-01	9 15 25 13 16 32 22 7 6 27 9	19 13 9 17 13 5 5 8 19 11	
December — Total —	$\frac{3.22}{29.44}$	1.28	29 Dec 29	19 140	$\frac{2.59}{26.96}$	1.88	28 Aug 7	150	

# BIRTHS IN THE URBAN SANITARY AUTHORITY

DURING THE YEAR 1899.

1st Qr. 2nd Qr. 3rd Qr. 4th Qr. Total. Bridgwater... 129 101 481 118 Rate per 1000.....34.3. BIRTHS DURING THE YEAR 1898.

Bridgwater... 132 118 132 127 509 Rate per 1000.....36.3.

# Table shewing Birth and Death Rate, Infantile Mortality and Zymotic Death Rate.

Birth Rate per 1000	Death rate per 1000	Infant N	Iortality.	Deaths from Zymotic Diseases.		
Population.	Population	Per 1000 deaths	Per 1000 births.	Per 1000 Population	Per 1000 Deaths.	
868 36.3	18.2	230.4	115.9	1.0	54.6	
6681	21.6	168:3	106.02	0.7	26.4	

TABLE OF DEATHS during the Year 1899, in the Bridgwater Urban Sanitary District, classified according to Diseases, Ages and Localities.

Membh   Laberic   Laberi
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Enterior
Crocketic   Croc
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Enteric Diarrho
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WESTERN EASTERN WORKHOUS INFIRMARY
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218 Totals. NUMBER OF DEATHS IN EACH MONTH. Decem. 32 77 000000H Movem. 15 00 07 H 62 October 22 co co co CJ Septem. 18 10 07 00 9 dsugua 40000 07 -Ing C1 17 182281 June CJ CJ 07 07 May 16 10 m m 9 00 m **LingA** 133 m 07 E F Mar. 26 でまるまる CJTABLE SHEWING THE VARIOUS CAUSES AND .deH 15 Jon. 16 07 PO 07 PO PO 0 9 . . 9 1 0 0 3 6 0 9 \$ \$ • 9 9 Diseases Apoplexy and Paralysis Renal and Bladder Debility from Birth Acute Rheumatism Heart Disease Enteric Fever Erysipelas ... Old Age ... Bronchitis ... Diphtheria ... Pneumonia ... Convulsions Accidents Diarrhea Phthisis Cancer

ANALYSIS OF BIRTHS AND DEATHS REGISTERED IN BRIDGWATER DURING YEAR 1899.

Totals.	481 239 102 49 1 8 220 15	13
Dec.	31 F 50 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	40
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Oct.	44H 424H 450	\$
Sept.	44 00000000000000000000000000000000000	ಣ
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Lint	4011 01100 11 1	H 01
əunr	864 84 86 94	HCJ
May	20 20 20 20 20 20	OH -
lingA	851 860 84 84 84	H 70
Магер	4600 100 100 100 100 100 100 100 100 100	07 00
Feb.	25 4 8 H 4 H	H 70
.nst	4 m m m m m m m m m m m m m m m m m m m	H 41
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	Births Deaths aged 60 1 Yes ver (E) ce ce Causes t Cases	rater
	Total Births Total Deaths Died aged 60 and Under 1 Year Of Fever (Enteric) Diarrhæa Violence Violence Violence In Public Inst	Bridgwater Bridgwater
	PO Y D D D D D D D D D D D D D D D D D D	ÄÄ

# PORT SANITARY AUTHORITY.

Number and Tonnage of Vessels belonging to the Port of Bridgwater for the year 1898-99.

•	1899.	1898.
Number of Sailing Vessels	 91	93
Tonnage of same	 5815 tons	6050 tons
Number of Steam Vessels	 10	9
Tonnage of same	 614	430

Number and Tonnage of Sailing and Steam Vessels which entered Bridgwater River for trading purposes.

				1899.	1898.	
Number of	Sailing and	Steam	Vessels	2305	2118	
Amount of	Tonnage		14'	7,318 tons	162,629 ton	ıs

The number of Foreign Vessels in 1899 was 40, and the British 2255, thus making up the above total of 2305.

As the Sanitary Inspection of all Ports on the British Coasts become more general, it is impossible for the vessels to lapse into the dirty and unsanitary condition extant previously to the institution of the Authority, and therefore complaints involving structural interference become fewer.

The general statistics of the Sanitary work may be summarized as follows:—

Number	of	Vessels	inspected		476
			reported	0 0 4	14
Number	of	Deaths	reported		1

The Sanitary Defects reported to the Committee are as follows:—

Wet and Dirty	Quarters	• • •	• • •	10
Dirty W.C.s	• • •			4

It is satisfactory to point out that no case of Sickness has been reported to the Authority during the whole of the year, and that only one death has been reported, which was occasioned by an accident at a Foreign port.

Your obedient Servants,

FRANCIS JNO. C. PARSONS,
Medical Officer of Health.

FRANCIS PARR,
Sanitary Inspector.

# RURAL SANITARY AUTHORITY.

Mr. Chairman and Gentlemen,

Notwithstanding the very gratifying returns it has been my good fortune to present to you in my previous Annual Reports, none can compare so favourably to that which I now lay before you for the year 1899. Not only is the Death Rate particularly low, but the Zymotic Death Rate is comparatively nil.

I shall not depart from the course I have hitherto adopted in the arrangement of the statistical portion of my Report.

Area 60,168 Acres.	Pop	ulation	19,000.
		1898.	1899.
Birth Rate		24.4	23.0
Death Rate	2 2 4	14.0	12.9
Zymotic Rate		1.1	0.4
Infant Mortality per 100	0 Births	90.3	99.5

The above table shows at a glance the relative position of the two years 1898-99.

To more closely analyse the table we find that 246 Deaths were registered during the year, as against 267 in 1898, or 17 less than the average number of Deaths for the past 10 years. Of these Deaths 114 occurred aged 65 and upwards, and 43 under one year of age, figures identically the same as that in 1898.

In the Western Division of the District 126 Deaths were registered, and 120 in the Eastern, giving an annual Death Rate of 11.8 and 12.9 respectively per 1000 of the population.

The general causes of Death are as follows:—15 resulted from Phthisis, 53 from Pneumonia, Bronchitis or Pleurisy, and 26 from Heart Disease, in 8 instances Injuries proved fatal.

From the seven Zymotic Diseases 8 Deaths only were registered, as against 14 in 1898. Scarlatina claimed 1 victim and Diphtheria 1, whilst 6 children died from Diarrhœa. The Zymotic Death Rate is represented by 0.4 per 1000 of the population, as against 1.1 in 1898, and 38.6 per 1000 Deaths as against 78.6 in 1898.

The Births numbered 432, as against 465 in 1898, equivalent to an annual Birth Rate of 23.0 per 1000 of the population, as against 24.4 in 1898. This diminished Birth Rate is in a measure due to a decrease in the rural population, and also to the fact that the extension of the Borough of Bridgwater has absorbed many of the inhabitants of Wembdon. It is difficult

indeed, to estimate the population of Wembdon, but the exceedingly low Death Rate and Birth Rate do not represent their true value, and if multiplied by three their statistical character would be more in keeping with that recorded in past years.

We have derived much assistance from the Infectious Diseases' (Notification) Act. Scarlatina, that was somewhat prevalent in 1898, became even more so in 1899. The Villages particularly affected were North Petherton, Middlezoy, and Nether Stowey. In all, 42 cases were notified to me. It was of an exceedingly mild type, one death only having resulted, still, I thought it wise to order the Schools to be closed in each village during the prevalance of this disease.

As regards the Sanitary work of the year the following represents the various Notices that have been issued and complied with, either wholly or partially, and the steps we have taken for the protection and advancement of the Public Health.

# SANITARY INSPECTOR'S REPORT.

Herewith I hand you my Report as Inspector of Nuisances for the Bridgwater Rural District Council, for the year ending the 31st day of December, 1899.

During the year I have visited and inspected 315 houses and premises. I found the undermentioned Sanitary Works required to be carried out:

2 Cottages Overcrowded.

16 Cottages required Cleansing and Whitewashing.

2 Dangerous Buildings.

6 Cattle and Manure kept in close preximity to Dwelling House. 6 Privies required Cleansing and Repairing.

18 Drains not Trapped.

20 Drains required Cleansing and Repairing.

4 Privies without Cesspits.
3 Privies required to be New.

- 47 Closets required Pans and Traps. 4 Cesspits required Cleansing.
- 26 New Drains required.3 New Cesspits required.
- 45 Privies required to be connected with Main Sewer, with Pans and Traps and Glazed Stoneware Socket Pipes.

202

Notices to abate the above-named Nuisances have been issued to the Owners and Occupiers, a portion of which has been carried out, and the remainder will be completed forthwith.

Many more Nuisances have been abated by the Owners and Occupiers

by calling their attention to them without notices.

During the year I have taken 75 Samples of Water, and handed the same to you for Analysis.

10 of these samples were taken from Wells at Bawdrip, 4 of these samples were returned by you as unfit for human consumption.

2 of these samples were taken from Wells at Polden Hill, in the Parish of Chilton Polden, both of these samples were returned by you as unfit for human consumption.

- 1 of these samples was taken from a Well at Othery, this sample you returned as unfit for human consumption.
- 2 of these samples were taken from Wells at Fiddington, both of these samples were returned by you as unfit for human consumption.
- 16 of these samples were taken from Wells at Chedzoy, 7 of these samples were returned by you as unfit for human consumption.
- 5 of these samples were taken from Wells at North Newton, in the Parish of North Petherton, 2 of these samples were returned by you as unfit for human consumption.
- 39 of these samples were taken from Wells at North Petherton, 16 of these samples were returned by you as unfit for human consumption.

75

Notices were served on Owners of Polluted Wells in the Parishes of Bawdrip, Chilton Polden, Othery, Fiddington, Chedzoy, and North Petherton. The Owners have had the Wells cleaned and protected.

I am of opinion that the undermentioned Parishes are greatly in need of a pure water supply, viz.—North Petherton, Bridgwater Without, Chedzoy, Bawdrip, Puriton and East Huntspill.

On the 9th October last I found 38 Houses at North Petherton had no Water Supply, only what the tenants fetched from the brook.

Dunwear has had no water for any house since the 20th October last. The District Council has arranged with the Bridgwater Corporation to supply them with 990 gallons of the Company's Water weekly, this quantity is delivered to the inhabitants of Dunwear 3 times per week, at the rate of 530 gallons each time.

The District Council have a Water Scheme now before them in respect of all the before-named parishes. I hope it will not be long before they will be in a position to supply the necessary water that is so much needed in the district.

There are 76 Cow-keepers, Dairymen, and Purveyors of Milk in the District. I have visited a great portion of them during the year, I found the Dairies and Cowsheds kept in a very satisfactory condition.

I have during the year prepared Plans, Sections and Specifications for several sections of New Sewers that have been laid under my supervision in the undermentioned Parishes:—

- 1. Three sections of 12 and 6 inch Glazed Stoneware Socket Pipe Sewers, Manholes, and Settling Tanks in the Parish of Puriton, at a cost of £148 3s. 4d.
- 2. A scetion of 9 inch Glazed Stoneware Socket Pipe at Castle Hill, Nether Stowey, at a cost of £15 15s.
- 3. A section of 6 inch Glazed Stoneware Soeket Pipe at Westonzoyland at a cost of £13 10s. 6d.
- 4. Prepared Plans for Alterations for a District Council Room at the Union Office, and superintended the works, also the Alterations to Drains at the Workhouse, at a cost of £145 8s. 10d.
- 5. Prepared Plans for the Feneing of Half-an-Acre of Land at Othery for the New Cemctery, at a cost of £260.
- 6. A section of 6 inch Glazed Stoneware Socket Pipe at Middlezoy, at a cost of £27 5s.

Several sections of other Main Sewers in the District have been cleaned and repaired during the year. There have been many New Houses built in the Parishes of Bridgwater Without, Huntspill, and North Petherton. These houses have been built under the Council's Bye-Laws, and carried out to my satisfaction.

I remain, Yours obediently,

# WILLIAM COLES,

2, Grosvenor Villas, Wembdon Road, Bridgwater, 2nd February, 1900.

Inspector of Nuisances.

# Births in the Rural Sanitary Authority during 1899.

Stowey North Pether Middlezoy Huntspill Polden Hill Durleigh Wembdon Chilton Trini	• • •	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Qr. 24 31 12 22 18	_	400	Total  96 115 49 82 74 3 11 2	Rate 1899 22·7 23·0 26·8 18·0 18·8 31·2 9·2 14·1	per 1000. 1898 21.5 23.6 32.8 18.8 26.1 31.2 15.0 14.1
	V					432	23.0	24.4

# Table shewing Birth and Death Rate, Infantile Mortality, and Zymotic Death Rate.

Birth Rate per 1000	Death rate per 1000	Infant M	lortality.	Deaths from Zymotic Diseases.			
Population Population	Population Population	Per 1000 deaths	Per 1000 births.	Per 1000 Population			
868 24.4	14.0	157.3	90.3	1.1	78.6		
668 } 23.0	12.9	174.7	99.5	0.4	32.5		

I am, your obedient Servant,

FRANCIS JNO. C. PARSONS.

TABLE OF DEATHS during

TABLE OF DEATHS during the Year 1899, in the Bridgwater Rural Sanitary District, classified according to Diseases, Ages and Localities.

45	Total.	14	42	48	_		10	17	51 6	56 190
distinguishing deaths of lears of age.	All other Diseases.	=	61	24	_		70	သ က	% 4 <del>1</del>	38
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ishing age.	Heart Disease		=					4	ಣ -	26
inguis of a	Pneumonia, etc		9 -	01			CJ 7C	භ <del>4</del>	2 - ×	2 4
distin Years	Phthisis	-	70	ಣ				_	က င	1 14
Sauses,	Rheumatic Fever									-
h Can ler F	Diarrhæa and Dysentery			63				provide	-	c) 4
joined (	Diphtheria								-	-   -
om subj Children	Scarlatina									
Mortality from subjoined Causes, Children under Five		ہے ا		~~~	S		70		g) 71	
ality		r G	5 upwards Under 5	nder 5	upwards nder 5	5 upwards Under 5	upwards nder 5	5 upwards Under 5	upwards nder 5 nnwards	nder 5 upwards
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	Spackan parcy	$\sim$	5					31	16	14
	65 and under 69	13 28	8  26				5		11 16	
	25 and under 65	13 28	9 18 26	:	:			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{vmatrix} -1 \\ 3 \end{vmatrix} = \begin{vmatrix} 65 \\ 11 \end{vmatrix}$
	25 and under 65	13	18	:		:	. 5 1		Ξ	65 1
	25 and under 65	13	20 61 81	:	:	:		1 17	:	8 3 65 1
	S and under 5  S and under 25  Sand under 25  Sand under 65	4 1 13	22 23 18	:			:	2 1 17		13   8   -3   65   1
	Under I year    5 and under 5    5 and under 25    25 and under 25	10 4 1 13	12 2 2 18	:		:	6 4 1	8 3 2 1 17	4 2 2 11	$  \frac{43}{13}   \frac{8}{8}   \frac{8}{3}   \frac{65}{1}  $
Mortality from all causes at subjoined ages.	S and under 5  S and under 25  Sand under 25  Sand under 65	4 1 13	22 23 18	:	:	:	1	3 2 1 17	2 2 11	13   8   -3   65   1
Mortality from all causes at subjoined ages.	At all ages.  Under I year  I and under 5  S and under 25  15 and under 25	56 10 4 1 13	60 12 2 2 18	:	2	:	27 6 4 1	62 8 3 2 1 17	35 4 2 2 11	$  \frac{43}{13}   \frac{8}{8}   \frac{8}{3}   \frac{65}{1}  $
Mortality from all causes at subjoined ages.	Under I year    5 and under 5    5 and under 25    25 and under 25	10 4 1 13	12 2 2 18				6 4 1	8 3 2 1 17	4 2 2 11	$  \frac{43}{13}   \frac{8}{8}   \frac{8}{3}   \frac{65}{1}  $
	Census  At all ages.  Under I year  I and under 5  5 and under 25  15 and under 25	56 10 4 1 13	4995 60 12 2 2 18		2	141 3 1	1826 27 6 4 1	. 4071 62 8 3 2 1 17	3370 35 4 2 2 11	$   $ $  246  $ $  43  $ $  13  $ $  8  $ $  3  $ $  65  $ $  1  $
Mortality from all causes at subjoined ages.	Census  At all ages.  Under I year  I and under 5  5 and under 25  15 and under 25	4229 56 10 4 1 13	4995 60 12 2 2 18	96 1 1	1193 2 1	141 3 1	1826 27 6 4 1	. 4071 62 8 3 2 1 17	3370 35 4 2 2 11	$   $ $  246  $ $  43  $ $  13  $ $  8  $ $  3  $ $  65  $ $  1  $
Mortality from all causes at subjoined ages.	At all ages.  Under I year  I and under 5  S and under 25  15 and under 25	56 10 4 1 13	60 12 2 2 18		2		27 6 4 1	62 8 3 2 1 17	35 4 2 2 11	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$

# Deaths in the Bridgwater Rural Sanitary Authority, During the Year 1899.

TOTAL EASTERN		EASTERN. POLDEN HILL.		EASTERN. HUNTSPILL		EASTERN. MIDDLEZOY.	TOTAL WESTERN		Western Part.		WESTERN. PETHERTON.		WESTERN. —— STOWEY.	1899 DISTRICT.
		Moorlinch Chilton Polden Stawell Sutton Mallett Rilington Catcott Burtle Shapwick (part of) Greinton Ashoott Chedzoy		Pawdrip Puriton Pawlett Huntspill Woolavington Cossington		Othery Middlezoy Westonzoyland			Durleigh		Enmore Geathurst Broomfield Thurlox ton St. Michael Church North Petherton(pt) Lyng		Aisholt	PARISHES.
9267	3370	249 363 167 119 482 559 559 352 108 656 656	±071	340 733 483 2004 293	1826	575 592 659	10654	1430	96 1193 141	4995	285 253 384 210 26 3552 285	4299	74 422 634 249 122 478 1147 191	Population.
120	<u>85</u>	w=4	62	1 35 9 8 6	23	9717	126	6	± 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	64	4-3::84	9 56	74 422 7 422 7 634 10 249 5 249 5 122 1 147 1147 111 1147 1191 1147 1191 1191	Total Deaths from all
12.9	10.3	4 0 19 0 5.9 8.4 2 0 7.1 14.1 9.2 9.5	15.2	17.6 10.9 18.6 17.4 10.2 4.5	12.5	12.1 11.8 13.6	11.8	4.8	10.4 1.0 21.2	12.6	14.0 3.9 5.2 14.9	13.0	18.0 16.5 20.0 8.1 19.5 9.5 14.2	Diseases.  Rate per 1000.
1.9	18	: 0:0: ::	35	19 19 19	Ξ	e 4 4	66	ಒ	2-:	32	: 28: : -: 6	31	١٠: ٩٥٠ : ١٠٠	Total Deaths ages 60, and above.
16	4	-:: -: : : :	∞	+	4	& ⊢ :	26	ಒ		13	2E:::.:	10	0::: 10::::	Total Deaths ages 1 year & under.
:	<u>: i</u>		:	11:11:	:	<u>:::</u>		:			11111	_	111111	Scarlet Fever
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	-	<u> </u>	<u>:  </u>		<u>:                                    </u>	<u>::::</u>	-	<u>:  </u>	<u> </u>		1111111	:		Diphtheria
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10	<u>co  </u>	ω		11211		<u> </u>	<u></u>	:	:::	6	<u> </u>	to	] ] ] ] ] ] [ ] [	Pheumonia
28	6	(a) (b) (b)	15	1:000001	7	51 <u></u>	2	22	10:::	O.	<u> </u>	_0,	:::-0:::	Bronchitis
7	-		_ 23	11111101	ا ده	10: 1-	10	:	:::	oc	F4:::::	=	ω:: Ν:: Νω-:	Heart Disease
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FRANCIS JNO. C. PARSONS.