[Report 1905] / Medical Officer of Health, Bilston U.D.C.

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

With Dr. T. Ridley Bailey's

Compliments.

BILSTON URBAN DISTRICT COUNCIL.

1905.

ANNUAL REPORT

OF THE

Medical Officer of Health,

T. RIDLEY BAILEY, M.D., EDIN.,

Fellow of the Incorporated Society of Medical Officers of Health, and Ex-President of the Midland Branch.

PRINTED BY ORDER OF THE SANITARY AUTHORITY.

BILSTON:
PRINTED BY JOHN PRICE & SONS, MARKET PLACE.

TO THE CHAIRMAN AND MEMBERS OF THE BILSTON URBAN DISTRICT COUNCIL.

Gentlemen,

I beg to present to you the following Report on the Health and Sanitary condition of the District under your control, together with the vital Statistics for the year 1905; this being my Twenty-first Annual Report.

Enteric Fever—Twelve cases of Enteric or Typhoid Fever (one of which proved fatal) in 8 houses were notified during the year, as compared with 4 in the year 1904, 11 in 1903, 12 in 1902, and 18 in 1901 and in 1900. Two came from the New Town Ward, 4 from High Town, 5 from the Town Hall Ward, and 1 from Ettingshall.

Scarlet Fever.—Fifty cases of Scarlet Fever, in 42 houses, were notified during the year, as compared with 155 in the previous year, 244 in the year 1903, 56 in 1902, 34 in 1901, 41 in 1900, and 20 in 1899. None of these terminated fatally. Five cases were notified in January, 8 in February, 4 in March, 7 in April, 5 in May, 3 in June, 4 in July, 1 in August, 2 in September, 4 in November, and 7 in December. Nine came from the New Town Ward, 5 from the High Town Ward, 16 from the Town Hall Ward, 2 from Bradley, and 18 from Ettingshall.

Nineteen of these cases were removed to the Fever Hospital; 1 from the New Town Ward, 2 from the High Town Ward, 7 from the Town Hall Ward, and 9 from Ettingshall.

Measles.—One death in a child under 1 year of age was registered as due to Measles. It occurred in the month of December, in Bradley. In the previous year there were 14 deaths from the same cause, 6 in the year 1903, 20 in 1902, 2 in 1901, and 35 in 1900. There were a few cases in the Town at the end of the year, chiefly in the Ettingshall Ward.

Diphtheria and Membranous Croup.—Five notifications were received during the year, 4 of Diphtheria in 4 houses, and 1 of Membranous Croup, which last had a fatal ending. In the previous year 5 notifications, with 1 death, were received; 13, with 6 deaths, in 1903; 17, with 7 deaths, in 1902; and 13 in 1901, with 6 deaths.

Whooping Cough—Two deaths, both in children under 5 years of age, were due to Whooping Cough. One of these occurred in August, and 1 in December. In the previous year there were 10 deaths, 7 in the year 1903, 5 in 1902, and 27 in 1901.

Small Pox.—No case of Small Pox has occurred during the year.

Diarrhœa.—Nine deaths from Diarrhœa, 7 being in infants under 1 year of age, were reported during the year, as compared with 39 in the previous year, 33 in 1903, 24 in 1902, 58 in 1901, and 30 in 1900. The following gives the number of deaths below and above 5 years of age, and the mortality rate per 1,000 of the population for the past ten years :—

Deaths from Diarrhœa.	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896
Children under 5 years ...	7	33	32	23	56	29	58	59	63	26
Above 5 years	2	6	1	1	2	1	2	2	6	3
Rate per 1,000	·37	1·6	1·3	·99	2·4	1·2	2·5	2·5	2·9	1·2

In December, at the request of the Local Government Board, I prepared a special report on the subject of Diarrhœa, of which the following is a copy :—

"The term 'Diarrhœa' includes what is known as 'Epidemic Diarrhœa' (or 'Infective Enteritis') and certain conditions of the alimentary tract, such as Gastro-Enteritis, Gastric Catarrh, etc. Therefore some cases of death that would previously have been excluded are now included under this general term.

The following Table gives the total of these deaths in each month of the past 5 years, distinguishing those of infants under 1 year, of children between 1 and 5 years, and those above 5 years :—

	1901.				1902.				1903.				1904.				1905.			
	Under 1 year.	1 and under 5.	5 and upwards.	Total.	Under 1 year.	1 and under 5.	5 and upwards.	Total.	Under 1 year.	1 and under 5.	5 and upwards.	Total.	Under 1 year.	1 and under 5.	5 and upwards.	Total.	Under 1 year.	1 and under 5.	5 and upwards.	Total.
January ...	4	1		5		1		1	4	1		5	1			1	1			1
February ...	1			1		1	1	2						1		1	1			1
March ..	1			1	1			1									2			2
April ...	1			1		1		1	1	1	1	3			1	1	1			1
May .	1	1		2		1	1	2												
June ...					1			1	1	1		2	1			1	1			1
July ...	4			4	2	1		3	2	1		3	4		1	5	8		1	9
August ...	9	6	2	17	3			3	3	1		4	22	3	3	28	12	4	3	19
September	15	5		20	1	5	1	7	5	4	3	12	11		1	12	5			5
October ...	6	1		7	1	1		2	6	2		8	2		1	3	1		1	2
November	2	1		3	2	1		3	2	2		4	2	1		3				
December...	2	1		3	3	3		6					3		1	4				
	46	16	2	64	14	15	3	32	24	13	4	41	46	5	8	59	32	4	5	41

It will be thus seen that the number of deaths varies considerably in different years, but that as a rule it is greatest in the months of July, August and September, the period when the heat is most trying. An examination of the record during the past decade shows that most deaths were recorded in 1897, viz. : 69 ; and fewest in 1902, viz. : 32.

During the present year, to the end of November, 42 deaths were registered, 33 occurring in the three months, July, August, and September, 21 of these being in infants under 1 year, and four more in children between 1 and 5.

This is the invariable rule—that the fatality falls almost entirely on infants.

Causes.—It is generally recognised that infantile Diarrhœa is largely the result of certain meteorological conditions, acting together with certain conditions of the soil. In the year 1897 when the deaths were excessive, the heat was very great from the end of June to the beginning of August, and most of the deaths occurred in this period ; whereas in 1902, when the number was so small, there was practically no hot weather.

Numerous observations have shown that a loose porous soil, charged with organic matter, favours diarrhœal diseases, and that the tendency of these diseases is at the maximum when the temperature of the soil reaches 56° F., at a depth of 4 ft. from the surface ; a certain degree of moisture of the soil is also requisite.

In open districts, with good ventilation, the diarrhœal mortality is very low, compared with that of more crowded localities.

Among infants and young children other causes are at work, especially in a district like this. To quote Dr. Hope, "Investigation proves incontestably that the deaths of infants from this cause are closely associated with the method of feeding, putrefying food being the medium by which the specific poison is commonly introduced. The deaths amongst children under three months of age, either wholly or partially fed on artificial foods, are 15 times as great as they are amongst an equal number of infants fed upon breast-milk : *e.g.*, investigation has tended to prove that out of every 1,000 infants under 3 months of age, naturally fed upon breast-milk alone, 20 die of Autumnal Choleraic disease ; but if the same number of infants at the same age are artificially fed, then instead of 20 dying, as many as 300 die from this cause."

Errors of diet and want of proper care and cleanliness are great causes here. Examples of improper feeding are of daily occurrence ; such things as bread, rusks, biscuits, etc., being constantly given to very young babies, the idea that the mother's milk is insufficient being very generally held.

Remedies.—It is absolutely essential therefore that the soil be kept as free from impurities as possible, and that poisonous emanations from the soil be shut off from the houses. The former condition is attained by having all sewage matter carried away from the houses as rapidly as possible, without soaking in the soil, and the latter condition is satisfied by having a layer of concrete at least 6 inches thick on the surface of the ground below every dwelling-house, in addition to the usual damp-proof courses. These two conditions, as also the provision of ample means of ventilation, in and about and underneath dwelling-houses, should be insisted upon whenever possible, and especially in all new dwellings.

The appalling ignorance amongst mothers as to the proper feeding of infants is most difficult to deal with. Various means have been suggested, such as the issuing of leaflets, giving simple instructions in plain language—a method that, on my suggestion, has been tried here for some years past, with, I fear, little benefit; and the appointment of women-inspectors to visit the houses and explain to the mothers; and further, the provision of lectures on the subject.

These have all been more or less failures, for it is hopeless to expect to overcome the ignorance of the mothers in the present day. The only hope is to educate the children in the Schools, and for that purpose the Teachers themselves should be taught at least the elements of Hygiene—general and domestic—and thereby become equipped for the proper instruction of the children.

Erysipelas.—Thirty cases of Erysipelas, none of which had a fatal ending, were notified during the year, as compared with 37 in the previous year, 41 in 1903, 39 in 1902, and 49 in 1901.

Influenza—Two deaths were attributed to Influenza, as compared with 7 in the previous year, 12 in the year 1903, 9 in 1902, and 2 in 1901.

Puerperal Fever.—No case of Puerperal Fever was notified during the year.

Zymotic Diseases.—Sixteen deaths, 9 being in children under 1 year of age, and 2 in children between 1 and 5 years, were attributed to the seven principal Zymotic Diseases, as compared with 75 in the previous year, 63 in 1903 and in 1902, 99 in 1901, 90 in 1900, 91 in 1899 119 in 1898, and 99 in 1897.

The subjoined Table shows the number of deaths from each of these causes for the past year and the previous ten years, and gives the rate per 1,000 of the population.

Deaths from	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	Average 1895-04	1905
Scarlet Fever ...	1	10	8	6	1	4	2	5	8	11	5·6	
Small Pox	1										·1	
Measles	51	7	11	19		35	2	20	6	14	16·5	1
Whooping Cough ...	3	17	6	6	9	8	27	5	7	10	9·8	2
Enteric Fever ...	8	7	1	22	15	4	4	2	3		6·6	3
Diphtheria and Membranous Croup	12	11	4	5	6	9	6	7	6	1	6·7	1
Diarrhœa	42	29	69	61	60	30	58	24	33	39	44·5	9
Totals	118	81	99	119	91	90	99	63	63	75	89·8	16
Rate per thousand...	5·02	3·4	4·02	5·06	3·8	3·6	4·1	2·6	2·6	3·09	3·7	·65

Vaccination.—The returns of the Vaccination Officer are given for the 10 years 1895-1904, and for the first half of the year 1905 :—

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	Half Year to June 30 1905
Births Registered ...	955	864	963	934	959	892	878	939	895	899	490
Succ'ssf'llyVaccinat'd	670	613	633	688	829	769	760	838	801	816	435
Insusceptible ...	6	4	3	1	11	7	3	3	1	1	
Died Unvaccinated...	133	118	167	143	94	96	91	70	77	66	47
Postponed	29	12	8	5	1	1		5		1	2
RemovedfromDistrict	53	29	26	10	10	6	10	13	4	4	3
Certificates of Conscientious Objectors			5	12	8	6	14	10	12	11	3
Unaccounted for ...	64	88	121	75	6	7					
	955	864	963	934	959	892	878	939	895	899	435

Infectious Diseases (Notification) Act, 1888.

During the year 97 certificates under this Act were received, as compared with 205 in the previous year ; viz. : 50 of Scarlet Fever, 12 of Enteric Fever, 30 of Erysipelas, 1 of Membranous Croup, and 4 of Diphtheria.

In the year 1903 there were 316 notifications, 124 in 1902, 115 in 1901, 116 in 1900, and 139 in 1899.

The following Table shows the number of notifications of each disease received in each month of the year, and also the totals for this and the previous ten years :—

	Scarlet Fever	Enteric Fever	Puerperal Fever	Diphtheria and Membranous Croup	Erysipelas	Smallpox	Total
January	5	1			2		8
February	8	1			4		13
March	4			2	6		12
April	7				2		9
May	5				1		6
June	3			1	2		6
July	4				2		6
August	1	2			2		5
September	2	1		1	1		5
October		1			1		2
November	4	4			5		13
December	7	2		1	2		12
1905	50	12		5	30		97
1904	156	4	1	5	37	2	205
1903	244	11	7	13	41		316
1902	56	12		17	39		124
1901	34	18	1	13	49		115
1900	41	18	1	11	45		116
1899	20	71	1	11	36		139
1898	91	92	2	8	34		227
1897	112	9		6	19		146
1896	118	31		23	13		185
1895	48	30		11	17	3	109

Notifications received from each of the five wards of the township in each month of the year :—

	New Town Ward.	High Town Ward.	Town Hall Ward.	Bradley Ward.	Ettingshall Ward.
January ...		2	3	1	2
February ..	3	1	3	1	5
March	2		1	4	5
April	1	1		4	3
May	1		1	1	3
June			2	1	3
July	1	1	3	1	
August ...		2		2	1
September ...			2	1	2
October ..			1	1	
November ...	3		7		3
December ...	5	3	3		1
	16	10	26	17	28

Infectious Diseases Hospital.

On the last day of 1904 there were 10 patients suffering from Scarlet Fever in the iron building, and during the year 19 more cases from 17 houses were received. Of these no case proved fatal. The average number of days' sojourn of the cases admitted was 51.

Last year I reported that a new Isolation Hospital was about to be erected in Mountford Lane. This has been completed, and was formally opened on the 7th inst. (February) by the Chairman of the Council.

The site purchased was some 6 acres in extent, 3 of which have been appropriated for the Hospital purposes, and enclosed by a closed boarded fence, 6ft. 6in. high, which is in no case less than forty feet from any Building containing infected persons or things, in accordance with the Local Government Board's regulations.

The site, a disused pit bank, was levelled by the Council's workmen, who prepared a surface for the foundation of the hospital at an elevation of about 470 feet above sea level, a Carriage-drive being formed from Mountford's Lane, with an average gradient of 1 in 13.

The Building is an Iron and Timber Framed Structure, lined with matchboards, and with a frontage of 86 feet.

Underneath the floor the whole site is covered with a layer of concrete six inches thick, and the Building rests upon brick foundations laid on a concrete foundation 1ft. 6in. thick.

The walls of the Building are lined throughout with two thicknesses of felt. The floor boards are tongued and grooved. The ventilation of the Building is provided for by having the Galvanized Iron Ridge and the matchboard lining so fixed as to allow ventilation along the entire length of the roof. The top portion of the windows are hinged and are regulated by a cord.

There are two Main Wards, each of which has both a Northerly and a Southerly aspect, providing accommodation for 14 and 10 beds respectively, an Observation Ward for doubtful cases, which can also be used as a day room for Convalescents, a Doctor's Room, Nurses' Sitting and Bed Rooms, a commodious Kitchen, Scullery, Pantry, Linen Closet, Laundry and Mortuary.

The whole of the Plumbing and Sanitary Work was executed by the Council's own plumbers, who also installed the apparatus which supplies hot water to the baths and sinks. Each Ward has two baths (one for Adults and one for Children), two Sinks, one Bed Pan, and two W.C's. A separate Bath and W.C. are provided for the use of the Hospital Staff. Hot, cold, and waste water pipes are connected to four inch earthenware pipes, discharging into a sedimentation Tank, the effluent from which is brought on to two Continuous Filters or Percolating Beds, each capable of dealing with 150 gallons of sewage per square yard per 24 hours, the clarified effluent being turned into a Brook Course which adjoins the rear of the Site. The W.C's. are fitted with Doulton's Metallo Keramic joint.

The Floors throughout the Building have been treated with a floor-polishing composition known as "Ronuk." The Passage Floors have been covered with linoleum.

The heating of the Building is accomplished by means of stoves which are fitted with fresh air induction flues passing under the floors to the outside, where they are covered with iron gratings. A Range is provided in the Scullery for cooking purposes.

The Hospital throughout is lighted by Electricity, which is supplied from the mains of the Midland Electric Corporation for Power Distribution, Ltd., by means of overhead Cables from their Sub-Station on Mount Pleasant.

The Water supply is derived from the Mains of the Council, a Valve being fixed on the Wall in each Ward, to which is connected a swinging cradle containing sufficient hose to reach to all parts of the Building, so as to enable the Hospital Staff to deal with an outbreak of fire until the arrival of the Brigade. Communication with the firemen's houses can be effected from the Police Station with which the Hospital is connected by a private line. Hydrants are also fixed in the carriage-drive in front of the Building.

The total cost of the Hospital and Buildings will amount to about £2,600, or £108 per bed, exclusive of the cost of the land. The mean cost of brick built structures is about £250 per bed, but the cost of site makes a very material difference in the cost of carrying out a Hospital. In this instance the cost of 6 acres of land, including enfranchisement, was £428, but only 3 acres have been appropriated for Hospital purposes. Assuming that the whole cost of the land is borne by the Hospital, the expenditure will amount to about £3,000, or £125 per bed.

Disinfecting Apparatus.—It is, I am glad to add, intended also to erect a high pressure Steam Disinfector etc.

Meteorology.—The total rainfall for the year ending 31st December, 1905, was 22·43 inches, as against 20·6 inches in the previous year, and 35·05 inches in 1903. The rainfall of 1905 is 3·64 inches below the average of the previous 20 years.

RAINFALL OF 1905, 1904 AND 1903.

	Inches in 1905.	Inches in 1904.	Inches in 1903.
January ...	·78	2·37	2·28
February ...	·61	3·37	1·61
March ...	2·95	1·47	4·93
April ...	1·89	1·19	1·78
May ...	·48	2·29	2·4
June ...	2·98	·36	1·67
July ...	1·85	1·93	1·6
August ...	4·63	2·2	5·47
September ...	1·73	1·96	3·66
October ...	1·37	·48	5·94
November ...	2·4	1·39	2·02
December ...	·76	1·59	1·69
Totals ...	22·43	20·6	35·05

Sewerage.—On 27th June last the Contractor signed his contract in connection with the New Sewerage Scheme. The cost of the work is close upon £40,000; good progress is being made, the first sod being cut on the site of the Engine House by the Chairman of the Council on 20th July.

The provision of a Dust-destructor has been discussed and is in abeyance. One is much needed and will undoubtedly have to be erected in the near future.

Insanitary Dwellings.—During the year 10 houses were certified under the "Housing of the Working Classes" Act as unfit for habitation and were closed after Court proceedings by Magistrates' order; 18 more were closed under the Public Health Acts.

98 dwellings were cleansed, 34 repaired and made rain-proof, 81 provided with spouting, and 8 cases of overcrowding abated. 7 wash-houses were repaired, 50 ashpits roofed over, 9 new ashpits built, 53 privies repaired and 13 new privies built; 4 defective privy vaults were covered; 12 defective yards were paved and 8 obstructed drains were opened and cleansed. Nuisances were also remedied arising from 11 cases of animals being improperly kept, and also from 98 pigs being too near to dwellings.

The number of new houses certified as fit for human habitation during the year was 114. Plans were also submitted and approved for 4 buildings of the warehouse class, for 10 alterations and additions to premises, and for the Council Schools at Stonefield. The last named will be a great acquisition to the educational equipment of the town and will provide accommodation for 1200 children.

I have made special inspection of several streets in the different Wards and the necessary notices for the abatement or prevention of various nuisances have been issued by the Inspector.

Dairies, Cowsheds and Milkshops.—There are 30 Milkshops and Dairies, and 23 Cowsheds on the Register. They have been regularly inspected and notices served when required for the correction of any defects.

Lodging Houses and Slaughter Houses.—There are 3 Lodging-houses and 20 registered Slaughter-houses. All have been regularly inspected. Verbal notice only was required for the abatement of nuisances and for lime-washing.

Factories, Workshops and Bake-houses.—There are 125 Workshops (including 28 bake-houses) on the Register—an increase of 17 on the previous year. All have been regularly visited by the Inspector or myself, and have on the whole been found satisfactory; some instances of want of cleanliness and ventilation were at once attended to. The lists of outworkers are the same as last year.

Vital Statistics.—The population of the district at the last census (1901) was 24034, 12,026 males and 12,008 females; and the area is 1867 acres. The population to the middle of the year 1905 is estimated at 24,300, giving an average of 13 people to the acre. At the census were recorded 5050 tenements, including 3372 tenements of less than 5 rooms. Of these latter 10 were tenements of 1 room, 533 of 2 rooms, 1214 of 3 rooms and 1615 of 4 rooms.

Births.—937 births, 456 males and 481 females, were registered during the year, being an increase of 38 on the previous year and giving a birth-rate of 38·5 per thousand. The following gives the number of births, male and female, for the past 3 years:—

	1905.			1904.			1903.		
	Males.	F'ales.	Total	Males.	F'ales.	Total.	Males.	F'ales.	Total
First Quarter	131	128	259	127	112	239	99	107	206
Second ,,	111	120	231	118	96	214	126	124	250
Third ,,	106	122	228	120	131	251	111	110	221
Fourth ,,	108	111	219	100	95	195	108	110	218
	456	481	937	465	434	899	444	451	895

Table showing the number of Births and Birth Rates for the decade 1895—1904.

Year.	Males.	Females	Total.	Av'ge per 1000 of Population.
1895	485	472	957	40·7
1896	459	408	867	37·02
1897	502	445	947	40·2
1898	490	445	935	39·7
1899	489	465	954	40·5
1900	440	452	892	36·4
1901	456	425	881	36·5
1902	442	492	934	38·7
1903	444	451	895	36·9
1904	465	434	899	37·07
Yearly Average 1895-04	467·2	448·9	916·1	38·3
1905	456	481	937	38·5

For purposes of comparison the birth-rate of the whole country and of the Staffordshire Urban and Rural Districts for the same years (1895-1904) are added together with the corresponding rates for England and Wales and of the large towns of England :—

Districts.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Staffs. Combined Urban & Rural	35·1	34·2	33·5	34	33·4	32·8	32·8	34	32·5	32·5
Staffs. Urban	36·2	35·4	34·8	35	34·5	33·9	34·1	35	33·4	33·7
Staffs. Rural	32	31·2	30·3	31·1	30·3	29·8	29·5	31·3	30·1	28·4
England & Wales	30·3	29·7	29·7	29·4	29·3	28·9	28·5	28·6	28·4	27·9
Large Towns in England ...	31·2	31·2	30·6	30·2	30·1	29·4	29·5	30	29·7	29·1
Bilston	40·7	37	40·2	39·7	36·4	36·5	38·8	38·7	36·9	37·07

Deaths —During the year 429 deaths were registered from all causes, 217 males and 212 females, being a decrease of 31 as compared with last year and giving a death-rate of 17·6 per thousand of the population. The average yearly number of deaths for the decade 1895-1904 was 506·5, and for the last half of that period 474·2. 41 deaths of residents occurred during the year in the Workhouse, and 3 in the Wolverhampton Hospital ; thus raising the death rate to 19·4.

Table giving the number of deaths in each quarter of the year, classified according to age and sex :—

1905.	Males	F'ales.	Total at all ages.	Under 1 year.	1 and under 5	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
First Qua'ter	64	67	131	54	14	2	3	26	32
Second ,,	37	39	76	25	6		6	25	14
Third ,,	56	54	110	49	15	1	2	27	16
Fourth ,,	60	52	112	44	10	4	5	27	22
	217	212	429	172	45	7	16	105	84

Table of Deaths classified according to Diseases, distinguishing Deaths of Children under 5 Years of Age for the past Ten Years.

Years.	Age.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup (not 'spasmodic')	Whooping Cough.	Cont'd. Fevers: Typhus.	Cont'd. Fevers: Enteric or Typhoid.	Cont'd. Fevers: Other or Doubtful.	Diarrhœa and Dysentery.	Diseases of Alimentary Organs.	Cholera.	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Phthisis.	Diseases of Respiratory Organs.	Heart Disease	Inquests.	Uncertified.	Influenza.	All Other Diseases.	Totals at Ages Stated.	Total at all Ages.	Death-rate per thousand.
1896	Under 5		7	9	4	7	17		2		26				2				2	56		5	3		110	250	460	19·5
	5 upwds.			1					5		3					1			19	53	11	12	1	3	100	210		
1897	Under 5		10	7	1	2	6				63								11	48		9	12	2	132	304	582	24·7
	5 upwds.		1	1	1		3		1		6			1					16	81	25	19	3	7	116	278		
1898	Under 5		19	6	1	1	5		2		59				1				7	50		8	3	1	151	314	549	23·3
	5 upwds.			2	2	1	1		20		2						1		15	49	19	15	1	5	102	235		
1899	Under 5			1		3	8		2		58									47		12	1		115	247	469	19·9
	5 upwds.				2	1	1		13		2								19	55	13	21	3	4	88	222		
1900	Under 5		34	2	1	5	8				29				1				2	67	2	15		1	152	319	557	22·7
	5 upwds.		1	2	2	1			4		1			1		1	1		17	55	24	13	1	15	99	238		
1901	Under 5		2		3	2	2	6	1		56								3	45		6	2		135	281	499	20·7
	5 upwds.				2	1	1		3		2				2				28	52	19				6	218		
1902	Under 5		20	4	4	2	5				23				2				2	40		9		2	104	217	427	17·71
	5 upwds.			1	1				2		1								33	46	26	6		7	87	210		
1903	Under 5		6	4	1	3	7				32								6	46	1	9		3	85	203	428	17·6
	5 upwds.			4	1	1			3		1				2		1		24	40	29	26		9	84	225		
1904	Under 5		14	11		1	10				33				1				7	58		7		2	118	262	460	18·9
	5 upwds.										6								17	42	29	15		5	84	198		
1905	Under 5		1			1	2				7	30							4	54	1	4			113	217	429	17·5
	5 upwds.								3		2	3							16	53	21	19		2	93	212		

For purposes of comparison the death-rate of the whole country and of the Staffordshire Urban and Rural Districts for the past 10 years are given together with the corresponding rates for England and Wales and of the large towns in England :—

District.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Staffs. General	18·5	17·2	17·8	17·7	17·2	18·7	17	15·8	15·2	16·4
Staffs. Urban	19·1	18	18·6	18·4	17·8	19·3	17·6	16·3	15·8	17·2
Staffs. Rural	16·9	15·2	15·7	15·5	15·4	16·8	15·4	14·4	13·5	14·4
England and Wales	18·7	17·1	17·4	17·6	18·3	18·3	16·9	16·3	15·4	16·2
Large towns in England ...	20·5	19·2	19·1	18·3	20·2	19·5	17·7	17·4	16·3	17·2
Bilston	26·9	19·5	24·7	23·3	19·9	22·7	20·7	17·7	17·6	18·9

Table of deaths during the past decade classified according to age and sex :—

Year	Males.	F'ales.	Total at all Ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards
1895	327	307	634	215	163	22	15	96	123
1896	244	216	460	157	93	18	17	112	63
1897	308	274	582	214	90	13	21	154	90
1898	276	273	549	214	100	17	23	124	71
1899	263	206	469	181	66	14	11	122	75
1900	294	263	557	198	121	14	18	110	96
1901	270	229	499	195	86	14	20	108	76
1902	229	198	427	142	75	17	18	117	58
1903	229	199	428	141	62	14	22	106	83
1904	250	210	460	198	64	7	8	109	74
Yearly Average 1895-1904.	269	237·5	506·5	185·5	92	15	17·3	115·8	80·9
1905.	217	212	429	172	45	7	16	105	84

(For the year 1895 the figures given are "under 60 years" and "above 60 years," instead of under and above " 65 years.")

Diseases of the Respiratory System—One hundred and seven deaths were registered as due to the Respiratory System, 54 being in children under 5 years of age. There were 100 deaths in the previous year, 86 in the years 1903 and 1902, 99 in 1901, and 122 in 1900. Twenty-six occurred in January, 12 in February, 9 in March, 5 in April, 9 in May, 3 in June, 2 in July, 5 in August and in September, 6 in October and in November, and 19 in December.

Tuberculosis or Consumption—Twenty-seven deaths, 16 being in people over 5 years of age, were attributed to Tubercular Disease or Consumption, 20 being ascribed to that form affecting the Lungs (Phthisis Pulmonalis). There were 24 deaths in the previous year, 30 in 1903, and 41 in 1902.

The following table shows at a glance the number of deaths due to this disease since 1888, distinguishing those of children under 5 years of age :—

DEATHS FROM PHTHISIS.

Year.	Under 5 years.	5 and upwards.	Total.	Rate per 1000.
1888		21	21	·89
1889	1	23	24	1·02
1890	2	14	16	·68
1891	4	29	33	1·4
1892	1	14	15	·63
1893	1	15	16	·68
1894		17	17	·72
1895		19	19	·808
1896	2	19	21	·89
1897	11	16	27	1·1
1898	7	15	22	·93
1899		19	19	·79
1900	2	17	19	·79
1901	3	28	31	1·2
1902	6	35	41	1·7
1903	6	24	30	1·2
1904	7	17	24	·98
1905	11	16	27	1·1

The notification of cases of Phthisis has for some time been under consideration by various authorities. In St. Pancras a scheme has been developed by the Medical Officer of Health, and Medical men have been invited to notify, with the patient's consent, cases of Consumption of the Lungs. These will be registered and the information regarded as strictly confidential, so that no harm can be done to the patient in his employment. The Borough Council will send by post :—

(1) A leaflet upon means of preventing the spread of the disease—for the benefit of the patient.

(2) A list of Sanatoria for advanced cases.

(3) A form for disinfection. These latter are designed to protect the public To suppress Tuberculosis, Professor Koch contends that at least all advanced cases should be notified and then as far as possible, isolated in suitable hospitals. Such provision is impossible for all cases, but there is reason to believe that a diminution in the extent of the disease would be attained, though by slower stages, by isolation of an increased proportion of the dangerous cases, as it is in the last stage of the disease that the patient is most liable to be a source of infection. For the important class of cases in which the disease has made too much progress for Sanatorium treatment to be successful, though the patient is not sufficiently ill to be unable to carry on his work, there should be systematic house visitation by persons competent to instruct the patient and his relatives in means of preventing the dissemination of infective material.

Inquests.—Twenty-three enquiries, 4 being in children under 5 years of age, were made by H. M. Coroner during the year, as compared with 22 in the previous year. In 1903 there were 35, 15 in 1902, 28 in 1901 and in 1900.

Uncertified Deaths—For the fifth year in succession it is gratifying to note that no death occurred which was not certified either by a medical man or the Coroner.

Infantile Mortality.—One hundred and seventy-two children died in the first year of life, as compared with 198 in the previous year, 141 in 1903, 152 in 1902, 195 in 1901, and 198 in 1900; being equal to an Infantile Mortality of 183·5 per 1000 registered births.

The following Table gives the figures for the ten years 1895-1904 for Bilston, for the Urban Districts of Staffordshire, and the large towns of England :—

Deaths in Children under 1 year per 1,000 registered births :—

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	Mean Rate.	1905
Bilston ..	224	181	226	228	189	221	221	152	157	220	201·9	183·5
Urban Districts in Staffs.	181	171	187	181	179	176	171	147	147	165	170·5	
Large Towns in England ..	182	161	177	178	181	172	168	145	145	160	166·9	140

TABLE giving the births, deaths, rate of infantile mortality, &c., for each of the five Wards of the town.

	Area (in Acres)	Population. Census 1901.	Births	Deaths	Deaths of Infants per 1000 Births.	Deaths from Diarrhœa.	Deaths from Tuberculosis.	No. of Notifications of Enteric Fever.
Whole Town ...	1867	24034	937	429	183·5	9	27	12
New Town Ward	289	5548	241	124	215·7	3	10	2
High Town Ward	115	5207	189	78	174·6	2	5	4
Town Hall Ward	520	5003	190	90	221	3	8	5
Bradley Ward ...	499	4221	151	69	158·9	1	2	
Ettingshall Ward	444	4055	166	68	126·5		2	1

The year on the whole has shown further progress. The general death-rate is lower, the number of deaths more than 70 below the average of the past 10 years. The birth-rate which throughout the country continues to show a steady and most serious diminution has somewhat increased. The Zymotic death-rate is the lowest on record—·65 only per thousand as compared with 3·7 per thousand for the decade; this is the most satisfactory feature in this Report. The Infantile Mortality though far from what it should be is also less than the average for the past decade. Provision for the prompt and efficient isolation of Small-pox is now practically perfect, and the New Fever Hospital will render us able to deal more satisfactorily than before with any epidemic of Scarlet Fever. The number of new houses erected during the year constitutes almost a record and many of the old houses have been closed or repaired.

Appended are the Tables required by the Local Government Board and the Staffordshire County Council, together with the Sanitary Inspector's Statement, which gives a summary of the work done in his department during the year. In many cases statutory notices were not served as a verbal one was found to be sufficient.

I am, Gentlemen,

Yours faithfully,

T. RIDLEY BAILEY, M.D., EDIN.,

Medical Officer of Health.

Bilston,

February 20th, 1906.

TABLE I.

Vital Statistics of Whole District of Bilston during 1905 and previous Years.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in District				Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.	
				Deaths under One Year of Age		Deaths at all Ages. Total.				
		Number	Rate per 1000	Number	Rate per 1000 Births regist'd	Number	Rate per 1000		Number.	Rate 1,000
1895	23,500	957	40·3	215	224	634	26·7			
1896	23,500	867	36·4	157	181	460	19·3			
1897	23,500	947	39·6	214	226	582	24·3			
1898	23,500	935	39·09	214	228	549	22·9			
1899	23,500	954	39·7	181	189	469	19·5			
1900	23,500	892	37·1	198	221	557	23·1			
1901	24,034	881	36·5	198	221	499	20·7			
1902	24,100	934	38·7	142	152	427	17·7			
1903	24,200	895	36·9	141	157·5	428	17·6			
1904	24,250	899	37 07	198	220·2	460	18·9			
Averages for years 1894-1903	23,758	916	38·1	185·8	201·9	506·5	21·07			
1905	24,300	937	38·5	172	183·5	429	17·6	44	473	19·4

Area of District in acres—1,867.
(Exclusive of area covered by water).

Total population at all ages—24,034
(At Census of 1901).

Number of inhabited houses—5,092.

Average number of persons per house—4-71.

Institutions outside the District receiving sick and infirm persons from the District—(1) Wolverhampton General Hospital; (2) Union Infirmary.

Is the Union Workhouse within the District? No.

In recording the facts under the various headings, attention has been paid to the notes on the Tables.

T. RIDLEY BAILEY, M.D.,
Medical Officer of Health.

Table II. Vital Statistics of Separate Localities in 1905 and previous years.

Names of Localities.	Whole District.				New Town Ward.				High Town Ward.				Town Hall Ward.				Bradley Ward.				Ettingshall Ward.			
Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1895 ..	23,500	957	634	215																				
1896 ...	23,500	867	460	157																				
1897 ...	23,500	947	582	214																				
1898 ...	23,500	935	549	214																				
1899 ...	23,500	954	469	181																				
1900 ...	23,500	892	557	198																				
1901 ...	24,034	881	499	198	5,548	220	143	54	5,207	115	119	48	5,003	175	83	34	4,221	173	77	27	4,055	162	77	32
1902 ...	24,100	934	427	142	5,564	227	119	39	5,222	186	78	28	5,017	190	76	21	4,233	163	94	28	4,064	168	60	26
1903 ...	24,200	895	428	141	5,584	218	105	39	5,246	200	93	29	5,040	165	85	28	4,240	156	58	23	4,090	156	87	22
1904 ...	24,250	899	460	198	5,594	224	113	56	5,256	175	92	39	5,050	184	94	34	4,240	159	83	29	4,110	157	78	40
Averages of years 1894 to 1904 ...	23,758	916·1	506·5	185·8																				
1905 ...	24,300	937	429	172		241	124	52		189	78	33		190	90	42		151	69	24		166	68	21

Table III. Table of Infectious Diseases notified during the Year 1905.

Notifiable Disease.	Cases notified in whole District.							Total cases notified in each locality					No. of Cases removed to Hospital from each Locality				
	At all Ages	Under 1 Year	1 to 5 Years	5 to 15 Years	15 to 25 Years	25 to 65 Years	65 years & upwards	New Town Ward	High Town Ward	Town Hall Ward	Bradley Ward	Ettingshall Ward	New Town Ward	High Town Ward	Town Hall Ward	Bradley Ward	Ettingshall Ward
Small-pox ...																	
Diphtheria ...	4		3	1						1		3					
Membranous Croup	1		1								1						
Erysipelas ...	30		2	2	6	17	3	5	1	4	14	6					
Scarlet Fever ...	50		12	30	5	3		9	5	16	2	18	1	2	7		9
Enteric Fever ...	12		1	2	5	4		2	4	5		1					
Puerperal Fever ...																	
Totals	97		19	35	16	24	3	16	10	26	17	28	1	2	7		9

Isolation Hospital.—Yes.

Table IV. Causes of, and Ages at, death during the Year 1905.

Cause of Death.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Deaths at all ages of "Residents" belonging to localities, whether occurring in or beyond the District.					Total deaths whether of Residents or non Residents in public Institutions in the district.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	New Town Ward.	High Town Ward.	Town Hall Ward.	Bradley Ward.	Ettingshall Ward	
Measles	1	1									1		
Scarlet Fever													
Whooping-cough	2		1	1				1				1	1
Diphtheria and membranous croup ...	1			1							1		
Fever { Typhus													
Fever { Enteric	3				2	1		1	1	1			1
Fever { Other Continued													
Epidemic Influenza	2				1	1		2					2
Diarrhœa	9	7					2	3	2	3	1		
Enteritis	33	26	4			2	1	12	5	6	2	8	1
Erysipelas													1
Other septic diseases													
Phthisis	20	2	2		3	12	1	6	5	5	2	2	2
Other tubercular diseases	7	4	3					4		3			2
Cancer, malignant disease ...	11					7	4	2		1	6	2	2
Bronchitis	76	27	12		1	17	19	28	15	13	10	10	9
Pneumonia	31	5	10	3	2	9	2	9	3	2	10	7	4
Alcoholism (Cirrhosis of Liver) ...	2					2		1			1		
Venereal diseases													1
Premature birth	15	15						2	5	3	2	3	
Diseases and accidents of parturition	5				1	4		3	2				
Heart Disease	22	1		1	1	8	11	4	5	6	3	4	3
Suicides	3					3				1	1	1	
Inquests	20	3	1		1	11	4	3	2	5	2	8	7
All other causes	166	80	11	3	4	28	40	43	33	41	27	22	33
All causes	429	172	45	7	16	105	84	124	78	90	69	68	69

Table V. Infantile Mortality during the year 1905.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-2 months.	2-3 months.	3-4 months.	4-5 months.	5-6 months.	6-7 months.	7-8 months.	8-9 months.	9-10 months.	10-11 months.	11-12 months.	Total deaths under 1 year.
Common Infectious Diseases.																	
Measles																1	1
Whooping Cough								1									1
Diarrhœal Diseases.																	
Diarrhœa, all forms						2	1	1	1				2				7
Enteritis (*not Tuberculous*) ..			1	1	2	4	2	1		5	1	2	6	1		2	26
Wasting Diseases.																	
Premature birth	15		1		16												16
Congenital defects	18	7	5	1	31	6	3	1		1							42
Want of Breast-milk						1											1
Atrophy, Debility, Marasmus ...	1	1			2	1	6	3	1	2	1		1			1	18
Tuberculous Diseases																	
Tuberculous Meningitis ...								1									1
Tuberculous Peritonitis : Tabes Mesenterica ...											1						1
Other Tuberculous Diseases ...												1					1
Meningitis (*not Tuberculous*) ...						1				1			1	1	1		5
Convulsions	1	1	1		3		2	1			2	1					9
Bronchitis	2				2	3	6	2		5	1	1	2	2	1	1	26
Pneumonia	1				1						1	1		2			5
Other causes	1	2	1		4	2	2	1			2		1				12
	39	11	9	2	61	20	22	12	2	14	9	6	13	6	2	5	172

TABLE VI. SUMMARY OF SANITARY WORK DONE IN THE NUISANCE INSPECTOR'S DEPARTMENT DURING THE YEAR 1905, IN THE URBAN DISTRICT OF BILSTON.

		Inspections and Observations made.	Formal Notices by Authority.	Nuisances Abated after Notice.
Dwelling-Houses and Schools.	Foul Conditions, Houses cleansed	98	16	114
	Structural Defects, Spouting 81 House Roofs 34, Ashpits Roofed 50	165		165
	Overcrowding	8		8
	Unfit for Habitation	28	28	28
	Lodging houses	31		
	Dairies and Milkshops	62		
	Cowsheds	66		
	Bakehouses	97		
	Slaughter-houses	79		
	Canal Boats	43		
	Ashpits & Privies, 13,056, 11,312	24,368		
	Deposits of Refuse and Manure	17		
	Water Closets			
House Drain'ge	Defective Traps			
	No disconnection			
	Other Faults, obstructed drains	27		
	Water Supply plentiful supply of tap			
	Pigsties too near dwell'g houses	98		
	Animals improperly kept			
	Offensive Trades			
	Smoke Nuisances			
	Other Nuisances, yards paved 12 cesspools covered 3, new privies 13, privies repaired 53, new ashpits 9, privy vaults covered 4, wash-houses repaired 7	101		
	Totals	25,283		

Seizures of unwholesome Food (one carcase of Beef)	1
Sample of Food taken for Analysis	
,, ,, found Adulterated	
Sample of Water taken for Analysis	
,, ,, condemned as unfit for use	

Precautions against Infectious Diseases.

Lots of Infected Bedding Disinfected or Destroyed,	
Houses Disinfected after Infectious Disease	Yes
Schools ,, ,, ,, ,,	
Prosecutions for not Notifying Existence of Infectious Disease	
Convictions ditto ditto	
Prosecutions for Exposure of Infected Persons or Things	
Convictions ditto ditto	

NOTE.—When an Inspection or Notice embraces more than one defect, it may be enumerated separately as regards each such defect.

Signed —**WILLIAM H. WELLS,**

February 7th, 1906. Inspector of Nuisances.

Table VII. Factories, Workshops, Laundries, Workplaces, and Homework.

1.—INSPECTION.

Including Inspection made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Workshops (including Workshop Laundries)	222		

2.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts:—				
Want of cleanliness	None.			
Want of ventilation	,,			
Overcrowding	,,			
Want of drainage of floors ...	,,			
Other nuisances	,,			
Offences under the Factory and Workshop Act:—				
Illegal occupation of underground bakehouse (s. 101)	,,			

3.—OTHER MATTERS.

Class.	Number.	
Underground Bakehouses (s. 101)—	One	
Certificates granted during the year	None	
In use at the end of the year	1	
Homework :—		
Lists of Outworkers:	Number of	
	Lists.	Outworkers
		Residing in our District
Lists received	6	2
Addresses of outworkers { forwarded to other Authorities	None	
Addresses of outworkers { received from other Authorities	None	
Workshops on the Register (s. 131) at the end of the year		
Important classes of workshops, such as workshop bakehouses, viz. :—		
Dressmakers	29	
Joiners	12	
Boot repairers...	12	
Millinery	7	
Bakehouses	28	
Coachbuilders	2	
Others	35	
Total number of workshops on Register ..	125	

T. RIDLEY BAILEY,

February 20th, 1906. *Medical Officer of Health.*