

[Report 1918] / Medical Officer of Health, Padiham U.D.C.

Contributors

Padiham (England). Urban District Council.

Publication/Creation

1918

Persistent URL

<https://wellcomecollection.org/works/dp65segz>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



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



Urban District Council of Padiham.



REPORT

OF THE

Medical Officer of Health

ON THE HEALTH AND SANITARY CONDITION

OF THE

URBAN DISTRICT OF PADIHAM

For the Year 1918.



The Urban District Council of Padiham.

1918.

Chairman—DAVID RUSSELL, Esq., J.P.

Members of the Council :

ALFRED BLEZARD, Esq., J.P.
 MOSES EDMONDSON, Esq. (since deceased).
 MAJOR HARGREAVES, Esq.
 STEPHEN HEBDEN, Esq.
 JOHN HOWARTH, Esq.
 DR. O. F. JOYNSON.
 DR. JOHN A. MACKENZIE.
 HERBERT NOBLE, Esq., J.P.
 CHARLES NUTTER, Esq.
 JOHN CHARLES WEBSTER, Esq.
 J. H. WHITTAKER, Esq.
 ERNEST WIGGINS, Esq.
 JAMES WILSON, Esq.
 B. H. M. WORSWICK, Esq.

*Medical Officer of Health and Medical Officer to the Maternity and
 Child Welfare Centre :*

N. R. DHARMAVIR,
 F.R.C.S. (Edin.), L.R.C.P. (Edin.), L.F.P.S. (Gl.), D.P.H. (Camb.)

Sanitary Inspector and Cleansing Superintendent :

ROBERT RATCLIFFE, Assoc. M.Inst. C.E., A.R.San.I.,
 Certified Food and Meat Inspector.

Health Visitor :

MRS. LOTTIE READ, Trained Nurse,
 Certif. Roy. San. Inst., C.M.B.

Surveyor and Water Engineer :

JOHN GREGSON, Assoc. M.Inst., C.E.

The Urban District Council of Padiham.

To the Chairman and Members of the Urban District Council, Padiham.

GENTLEMEN,

I have the honour to submit for your consideration my Twelfth Annual Report, which deals with the year 1918.

The Death Rate for the year was again high, being 16.9 per 1,000 population, as against 14.64 for 1917, and the Birth Rate was lower, as was expected, being only 13.1, as against 15.15 in 1917.

The Infantile Mortality Rate rose slightly, being 141 per 1,000 births, whereas in 1917 it was 140.6.

The year under review was conspicuous in many respects in comparison with previous years:—

1. During the first three months Measles was rampant, involving very strenuous work on the part of the Sanitary Inspector and the Health Visitor, no less than 607 cases having to be dealt with.

2. In the summer months, especially during June and July, the presence of Influenza caused an unusual amount of sickness and considerable alarm, and again in autumn an epidemic of much greater magnitude appeared, causing a number of deaths.

3. No case of Scarlet Fever or Typhoid Fever occurred—a very unusual circumstance. The absence of these diseases has not been recorded before.

4. Very many complaints of the poor quality of food, especially margarine, meat, bacon, and ham reached the Health Office, and on investigation the reports were discovered to be well founded, especially in the case of bacon and ham. Much serious illness was avoided by promptly dealing with these cases.

5. The temporary suspension of slaughtering in the private slaughter-houses was an important change during the year. All the butchers of this district were compelled to obtain their supplies from a Burnley Abattoir. Much better supervision of slaughtering was thus obtained. Much less opportunity is afforded to unscrupulous persons of disposing of unsuitable meat when the slaughtering is done in a Public Abattoir.

6. The Bye-laws relating to the erection of piggeries were temporarily relaxed in the district, but in spite of this relaxation only seven applications were received for permission to keep pigs.

7. The work under the Housing, Town Planning Act, 1909, was practically suspended.

I beg to record my very sincere regret at the loss of Councillor Moses Edmondson, who was, until his death last March, a member of the Health Committee. His genial disposition, his calm temperament, unruffled by the most irritating conflict of opinion, his genuine devotion to high ideals and public service, made him one of the most useful members.

In conclusion, I wish to express my sincere thanks to the Members of the Mothers' and Babies' Welcome Committee, the members of the Health Committee and the Officials of the Council, for their willing assistance in the discharge of my duties.

I am, Gentlemen,

Your obedient Servant,

N. R. DHARMAVIR,

Medical Officer of Health.

SUMMARY OF STATISTICS.

Area of District in Acres	970
Population at Census of 1911	13637
Number of Inhabited Houses at Census of 1911	3204
Average number of persons per house in 1911	4
Estimated Civilian Population in the middle of 1918	10548
Density of Population (persons per acre)	18
Number of Houses in 1918	3170
Rateable Value of Padiham Urban District, 1918-1919	49,447
Number of Births registered: M., 92 (Leg., 79; Illeg., 13); F., 64 (Leg., 58; Illeg., 6)	156
Birth Rate	13.1
Number of Deaths registered (M., 81; F., 98).....	179
Death Rate	16.9
Number of Deaths under one year (M., 16; F., 7)	23
Infantile Mortality Rate.....	141
"Zymotic" Death Rate	1.89
Respiratory Death Rate	3.5
Phthisis Death Rate	1.04
Death Rate from all forms of Tuberculosis	1.32
Malignant Disease Death Rate	.92

REPORT.

DWELLING-HOUSES AND HOUSE ACCOMMODATION.

There were 3,170 dwelling-houses at the end of 1918. No new houses were built, nor were any demolished as being unfit for human habitation.

In the early days of the war many houses of various kinds became empty in consequence of the wives of soldiers and sailors having broken up their homes and returning to live with their parents. Gradually the families living in poor and low-rented dwelling-houses left them for better class and more modern ones. Thus although there are now many houses empty, there does not seem to be any demand for this class of house; on the other hand, there is an actual dearth of good modern houses and there is great difficulty in procuring them. Many people have had to buy in order to acquire a suitable house to live in. It is estimated that there is a shortage of about 100 good houses.

THE HOUSING, TOWN PLANNING, ETC., ACT, 1909.

The work under this Act has been temporarily suspended, and no work of reconstruction could be carried out owing to the shortage of labour and materials, and to the restrictions imposed by the Ministry of Munitions on the release of necessary materials and on the sums of money permitted to be spent on building work.

The property in Double Row and Dame Fold was inspected and reported on as unfit for human habitation, but no action was taken in consequence of the above-mentioned conditions. It is therefore unnecessary to give a tabulated summary of the work done as required by Article V. of the Housing) Inspection of District) Regulations 1910.

SANITARY ACCOMMODATION AND SCAVENGING.

The scavenging in the District consists of the removal and disposal of night-soil from pails, removal and cremation of all house and trade refuse in the Destructor, and the cleansing of all roads and streets.

The night-soil is collected during the night and the pails are emptied weekly over a chute into a large sewer.

During the year seven new W.C.'s were constructed and one wooden pail was converted into a fresh-water closet. One galvanised iron closet pail was replaced by a wooden one. There were provided in addition two wooden ash-pails, and one galvanised ash-pail. Below is a tabulated record of Sanitary conveniences for the past four years:

Type of Sanitary Accommodation.	Year 1915	Year 1916	Year 1917	Year 1918
No. of Clean Water Closets	459	470	473	481
„ W.W. Closets (Tippers).....	1562	1562	1562	1562
„ Pails (galvanised iron)	11	11	11	10
„ Closet Pails (wooden)	1428	1420	1417	1417
„ Ash-tubs (wooden)	2299	2266	2264	2266
„ Ash-bins (galvanised iron)	605	651	653	654
„ Ash-pits	27	27	27	27

I may here point out that out of the total number of closets, 3470, there are only 481 fresh water closets, and out of the remaining 2989 closets, 1417 are wooden pails from which excreta is carried by night-soil men in covered carts and emptied into the chute. It will be seen that the provision of fresh water closets still remains a pressing sanitary requirement in the District.

SEWAGE AND DRAINAGE.

The sewerage and drainage of the District is constructed on the combined system; storm, surface and sub-soil water being taken together as far as possible to the Sewage Works. The gradients are good and the sewers consequently do not require flushing.

DISPOSAL OF SEWAGE.

The Sewage Works, which are situated on the south side of the River Calder, cover an area of 10 acres. They consist of (1) two screening chambers, (2) six settling tanks, each 40 feet by 40 feet and 5 feet deep, (3) three storm water tanks, 40 feet square by 5 feet deep, (4) three continuous percolating filters of graded furnace slag, varying from $\frac{1}{2}$ in. to 2 in., each 100 feet in diameter and 4 feet 3 inches deep, with a perforated containing wall of brick, and (5) three sludge pits having an area of 2,340 square yards. The Sprinklers have a $10\frac{1}{4}$ in. head; the flow is automatically governed by a dosing chamber.

From the filters the sewage is carried on to $8\frac{1}{2}$ acres of alluvial land which is under-drained. The effluent finally flows into the River Calder. A copy of the analyses of the samples of Effluent taken during the year is given below. These appear in the Report presented to the Ribble Joint Committee by the Chief Inspector, Edward Halliwell, Esq., F.I.C. :—

ANALYSIS OF EFFLUENT.

PARTS PER 100,000.

Sample No.	Taken	Treatment	Chlorides in terms of Chlorine	Ammonia		Nitrates in terms of Nitrogen	Oxygen absorbed		After Incubation			
				Free	Alb.		In three minutes	In four hours	Oxygen absorbed in three minutes	Nitrates in terms of Nitrogen	Odour	
W. 6537	1918 Mar. 5	Septic Sprinklers and Irrigation	4.6	.11	.05	1.30	.22	.52	.16	1.60	No H2S	Good
W. 6580	May 1	(1) Septic Sprinklers and Irrigation ; (2) Septic & Irrign.	4.0	.37	.10	.80	.28	.76	.26	Nil.	„	Good
W. 6596	May 23	(1) Septic Sprinklers and Irrign ; (2) C. Settlement	5.2	.29	.10	1.42	.46	1.04	.42	1.54	„	Good
W. 6647	Aug. 12	Septic Sprinklers and Irrigation	7.2	.05	.06	2.0	.26	.68	.22	1.9	„	Good
W. 6697	Oct. 24	Septic Sprinklers and Irrigation	4.4	.34	.09	.96	.22	.62	.24	1.08	„	Good

WATER SUPPLY.

The Water Supply of Padiham is good and is provided by the Council. It is primarily upland surface water. In addition there is a continuous flow of spring water all the year round.

There are two gathering grounds, viz., Churn Clough Area of 254 acres, and Stainscombe Area of 186 acres, both situated on the south side of Pendle Hill at an elevation of 800 to 1500 feet above Ordnance Datum, and composed of millstone grit and yoredale rock. The Stainscombe Reservoir, which when completed will have a holding capacity of 20,000,000 gallons, is intended mainly as a compensation reservoir in order to supply 115,800 gallons per day to Woodhouse Brook. The surplus will be impounded in the reservoir at Churn Clough. The Churn Clough Reservoir has a holding capacity of 121,000,000 gallons and receives about half the available supply from Stainscombe. When full, the depth of the water is 63½ feet.

According to the Padiham Urban District Council Act, 1908, the construction of the Compensation Reservoir should have been completed by the year 1921, but arrangements as to the extension of time are being negotiated. The question of the adequacy of the water supply is also engaging the attention of the Council.

DAIRIES, COWSHEDS AND MILKSHOPS.

There are 14 of the above-named premises within the District, and 91 visits have been paid by the Sanitary Inspector.

Some cowkeepers remain indifferent to the necessity of the cleansing of floors, stalls and passages; also insufficient attention is paid to the cleanliness of the hands and clothing of the persons engaged in the work of milk production.

LIGHTING.

The Council supply coal gas to the District. This is used for lighting, heating, cooking and power.

SLAUGHTERHOUSES.

These premises have been visited 86 times. There are 7 private slaughterhouses within the district.

The use of these premises for slaughtering purposes is temporarily suspended. The English meat consumed in this district is supplied from a Burnley Public Abattoir. The frozen meat is supplied from the Burnley Cold Air Store. The quality of both English and frozen meat has been very much below the usual standard of meat sold in this district. During the early part of the year the bulk of the meat supplied was frozen imported meat, and in addition to the carcasses, boneless beef in boxes or bags was supplied. Much of this was of very inferior quality and great difficulty was experienced by the butchers in finding a sale for it. On several occasions the frozen meat was transported from Liverpool to Padiham in open railway trucks unsheeted, with the result that those portions of the meat which were exposed to the sun were rendered very soft and liable to rapid decomposition. 218lbs. of beef, 40 lbs. of veal, and 6 hams were condemned in consequence of their being decomposed or otherwise unfit for human food.

BAKE-HOUSES.

There are 26 Bake-houses on the Register, 21 for Retail Trade and 5 for Wholesale Trade. A new Bake-house has been constructed in Back Institute Street. There are two underground Bake-houses, both of which comply with the general requirements relating to such bake-houses as laid down in Sections 97 to 101 of the Factories and Workshops Acts, 1901. The Bake-houses have been visited and were found to be conducted satisfactorily.

OFFENSIVE TRADES.

There are three tripe-boiling works in the district, which have been conducted in a reasonably satisfactory manner.

COMMON LODGING-HOUSES.

There are three registered houses. 33 visits have been made by the Sanitary Inspector, who found that the premises were kept clean and regularly limewashed. The houses were not fully occupied.

HOUSES AND ROOMS LET FURNISHED.

The Sanitary Inspector visited these premises, including the two houses No. 2, Bank Street and the "Swan Boarding House" in Church Street. Most of these premises are not quite so clean as the common lodging-houses.

TRAVELLING VANS.

Thirteen travelling vans have been inspected and were found to be well kept, and all the occupiers in good health and free from infectious ailments. No case of overcrowding was noticed.

STABLES AND MANURE MIDDENS.

There have been 58 Stables in use during the year. On the whole these have been kept clean and the stable manure was not allowed to accumulate during the spring and summer months. This contributed very markedly to the prevention of the breeding of flies, for it is well known that the stable manure-heap is one of the best breeding places for flies owing to the heat and moisture found there. The Sanitary Inspector paid 58 visits during the year.

The following is an abridged Summary of the work carried out during the year January 1st to December 31st, 1918 :—

	No. Regstd.	No. of Visits.	Defects.	Letters Sent.	Ab't'd.
Factories	56	56	8	8	8
Workshops	85	89	—	—	—
Workplaces (including Fried Fish Shops, &c.)	23	23	1	1	1
Common Lodging Houses	3	33	2	2	2
Furnished Rooms	25	23	—	—	—
Travelling Vans	Nil.	13	—	—	—
Dairies, Cowsheds and Milkshops	14	91	6	6	6
Slaughterhouses	7	86	—	—	—
Stable and Manure Pits	58	58	1	1	1
Infectious Disease Cases	18	42	—	—	—
Measles Cases	607	—*	—	—	—
Tuberculosis Cases	17	15	—	—	—
Rooms Disinfected					69
Nuisances (including Bedding and Clothing disinfected or destroyed)					375

* Not recorded.

Smoke Observations (limit exceeded 5 times)	56
Whitewash Brushes loaned	450
Ash-pails and Excreta-pails repaired	593
Letters to abate Nuisances sent out	108
Letters of Special Requirements	178
Legal Notices Served	10
Report to H.M. Inspector of Factories	1

SALE OF FOOD AND DRUGS ACTS.

The Lancashire County Police is the Authority for the purposes of these Acts. Through the courtesy of Superintendent Thompson, I am able to give the following Report :—

SAMPLES TAKEN : Milk (all genuine).....	6
Miscellaneous	47
Total	53

Prosecutions—Nil.

RAG FLOCK ACT 1911.

Every workshop where flocks were used for any purpose named in the above Order, have been inspected and no case of infringement of the Order was discovered.

LOCAL ACTS AND ADOPTIVE ACTS.

The following are the adoptive Acts in force in the District :—

1. The Infectious Disease (Prevention) Act, 1890.
2. The Public Health Acts (Amendment Act) 1890,

Local Acts :—

1. The Padiham Local Board Act, 1876.
2. The Padiham Waterworks Act, 1854.
3. The Padiham Water Act, 1874.
4. The Padiham Local Board Act, 1882.
5. The Padiham Local Board Act, 1889.
6. The Padiham Water Act, 1896.
7. The Padiham Urban District Council Act, 1908.

BIRTHS AND BIRTH RATE.

The number of births registered was 156, of which 92 were male and 64 female. Nineteen births were illegitimate, 13 being male and 6 female. The birth-rate for the year is 13.1, being the lowest recorded birth-rate. The average birth-rate for 10 years (1908-1907) was 21.2. The following are the number of births and the birth-rates from 1908 to 1918 :—

Year.	No. of Births.	Birth Rate per 1,000 Population.
1908	363	26.05
1909	342	24.60
1910	316	22.57
1911	307	22.45
1912	292	21.12
1913	334	23.85
1914	312	22.08
1915	240	19.28
1916	219	17.11
1917	192	15.6
1918	156	13.1
1918 Birth Rate for England and Wales ...		17.7

NOTIFICATION OF BIRTHS (EXTENSION) ACT, 1915.

The total number of births notified under the above Act was 156. Of these notifications 46 were sent by doctors, 109 by midwives, and one by an un-certified midwife.

Out of the total number of 156, 7 infants were still-born, 3 being male and 3 female; the sex of the seventh was not stated. Out of the 149 infants born alive, 87 were male and 62 female. Twenty of those infants born alive were illegitimate and out of the twenty mothers of these illegitimate children, 13 were married women and 7 unmarried girls. In the previous year the number of illegitimate births was 7.

DEATHS AND DEATH RATE.

The total number of deaths of residents in and outside the District during 1918 was 179, 81 being male and 98 female, representing a death-rate of 16.9 per 1,000 civil population. The Death Rate of England and Wales for the same period was 17.6. The number of deaths and the death-rate for the year 1917 were 161 and 14.6 respectively. The average death-rate for 10 years (1908-1917) was 15.4.

The following Table gives the causes of death :—

Cause.	Males.	Females.	Total.
Measles	7	7	14
Whooping Cough	3	1	4
Diphtheria and Croup	—	1	1
Influenza	2	7	9
Pulmonary Tuberculosis	4	7	11
Tuberculous Meningitis	—	1	1
Other Tuberculous Diseases	2	1	3
Cancer, Malignant Disease	4	6	10
Meningitis	2	5	7
Organic Heart Disease	3	9	12
Bronchitis	11	10	21
Pneumonia (all forms)	7	6	13
Other Respiratory Diseases	1	2	3
Diarrhœa, etc. (under 2 years)	1	—	1
Cirrhosis of Liver	1	—	1
Nephritis and Bright's Disease	2	1	3
Parturition (apart from Puerperal Fever) ...	—	1	1
Congenital Debility, etc.....	6	3	9
Violence (apart from Suicide)	1	1	2
Suicide	1	1	2
Other defined diseases.....	22	24	46
Causes ill-defined or unknown	1	4	5
Total	81	98	179

INFANTILE MORTALITY.

The total number of children who died before they were twelve months old, was 22, 16 of these were male and 6 female. Among these deaths one was that of an illegitimate female child. This number represents the Infantile Mortality Rate of 141 per 1,000 births. The Infantile Mortality Rate for England for the year 1918 was 97.

The following Table gives the Infantile Mortality Rate and the number of Infant Deaths for 8 years, and the Infantile Mortality Rate for England and Wales as shown in the last column :—

Year.	No. of Infant Deaths.	Infantile Mortality Rate	
		Padiham.	England and Wales.
1911	52	169	130
1912	34	116	95
1913	49	146	109
1914	44	141	105
1915	27	112	110
1916	25	114	91
1917	27	140	97
1918	22	141	97

It will be seen that the Infantile Mortality Rate is slightly higher than that for the year 1917. The following is a list of causes of death among the infants :—

Disease.	No.
Whooping Cough	2
Bronchitis and Broncho-Pneumonia	5
Gastric Catarrh and Gastritis	2
Dentition	1
Malnutrition	3
Meningitis	1
Premature Birth	3
Congenital Debility	2
Complete Sigmoid Stenosis & Imperforate Anus	1
Hypertrophic Sclerosis of Pylorus	1
Ophthalmia Neonatorum	1

In looking through the above list, one finds that five deaths were due to congenital causes and 3 due to Premature birth. In the present state of our knowledge and our progress in Child Welfare work, these 8 deaths may be looked upon as inevitable. Of the remaining 14, 2 were due to Whooping Cough and 5 to Bronchitis and Broncho Pneumonia. These are causes which are peculiar to the climatic conditions and industrial life of the district. Of the remaining 7, at least 6 were due to errors in feeding and hence were avoidable.

Every effort is being made to save infants who are found to be suffering in consequence of errors in feeding and similar causes, but at best it is a very slow and patient work to rescue gradually sinking lives when they are in charge of persons who neither know how to feed an infant nor are capable of learning.

MATERNITY AND CHILD WELFARE WORK.

This work is carried on by the Local Sanitary Authority through its officials (1) a Medical Officer to the Maternity and Child Welfare Centre, and (2) a Health Visitor; also by a voluntary agency called "The Mothers' and Babies' Welcome Committee."

INFANT CONSULTATIONS.

Consultations were held as usual on Wednesdays at 2-30 p.m. in West Bank House. During the year 56 babies were seen, putting in 603 attendances.

Out of this number 28 infants were brought to the Centre for the first time in 1918. In the previous year 92 children attended, paying 874 visits, and 63 of these children were new visitors. The cause of the decrease in the number of babies and their attendances is to be found in the great decrease in the birth rate, the epidemics of Measles and Influenza necessitating the closure of the Centre for nine Wednesdays, and also the inclement winter weather.

The Centre was closed for six Wednesdays from Jan. 30th to March 31st, on account of the epidemic of Measles, and for three Wednesdays, from Dec. 11th to 25th, on account of the epidemic of Influenza. On July 13st, it was closed in consequence of the Annual Holiday.

Out of the 28 babies, 8 were breast-fed for six or more months, and 19 were artificially fed. The reasons for artificial feeding were as follows:—

1. Milk did not agree	2
2. Insufficient breast milk	12
3. Mother compelled to work	1
4. Mother's ill-health	1
5. Mother did not want to breast feed	1
6. No reason given	2

The following are some of the common reasons for which advice was sought:—

Reasons.	No. of Cases.
Cough	4
Sores on body	4
Malnutrition with or without constipation and sickness	9
Excoriated buttocks	1
Constipation	4
Eczema with Constipation	1

In most of the cases mismanagement in the feeding and care of children is the cause of the trouble. Constipation, diarrhœa, flatulence, sickness, the pangs of hunger with consequent misery and pain, and the constant crying that a child has to endure, are the ills which mainly accompany bottle feeding. The mother, in her anxiety to relieve her child of suffering, resorts to all sorts of patent foods and drugs. These measures aggravate the condition, and tragic is the spectacle of a child, crying and pining day and night with growing emaciation, in spite of all the care and attention of the mother, who spares no expense and trouble in procuring or doing whatever she is advised to get or do. Small wonder that such a mother, exhausted by want of rest and sleep, and worry and anxiety, finds little enjoyment in married life and dreads the prospect of having any more children, and one cannot help sympathising with her in her desire to restrict the number of children. There is a conflict between the natural desires of motherhood and the haunting dread of the consequences, viz., pregnancy, childbirth, and the bringing up of the child. Such cases are found in all walks of life, ignorance in the feeding of children being equally common among the educated and uneducated, rich and poor.

When on account of some trivial cause, such as sore nipples and early insufficient milk, the mother resorts to artificial feeding and deprives her offspring of the natural article of diet, she little knows the amount of sickness and disease she brings to the child, and misery, trouble, anxiety and wakeful nights to herself.

The moral is that one should spare no pains in seeing that the child is breast-fed, and it is the duty of midwives and doctors to impress upon the mother the advantages of breast feeding and to assist in every way in its management. Fortunately nature is a great healer and the infant's innate vitality overcomes numerous pitfalls and indiscretions in artificial feeding. One does come across a child lying in his cradle, merrily sucking from a long tube, milk diluted 3 or 4 times with water, and another consuming boiled bread and milk at the tender age of 2 or 3 months. These are exceptional cases, and very few infants would survive on a diet of this description, and those who do survive, suffer malnutrition, rickets and other diseases which leave their stamp on the health for the rest of the life.

The golden rule in artificial feeding is to keep as near as possible to the condition of breast feeding. Patent foods should be looked upon with distrust. The quality of the milk, which should be clean, and which should be diluted according to the age of the child; the quantity, which should vary according to the age of the child, clean bottles without a tube; and the feeding as far as possible, at regular hours, are the essentials.

The consultations at the Centre in a large number of cases, consist of advice on these points, and it is remarkable to see the progress, which is very conspicuous in some cases. A child aged $3\frac{1}{2}$ months and weighing only 6lbs. $9\frac{1}{2}$ ozs., was brought to the Centre for consultation on March 20th, 1918. Careful instructions were given as to his feeding. On March 27th he was weighed again and it was found that instead of gaining weight, he had lost $4\frac{3}{4}$ ozs. The mother was asked to bring the child to the Centre daily in order that he might be fed and nursed by the Health Visitor, and to take him home for the night. He was fed in the Centre for 19 days, during which time he gained $19\frac{1}{4}$ ozs. He continued to grow well ever since, and has developed into a fine sturdy boy.

At the first visit of a child to the Centre, it is thoroughly examined and any defects or diseases are noted. During these examinations, in addition to the ailments for which consultation was sought, the following defects and diseases were found:—

Enlarged Tonsils	1
Phimosis	10
Umbilical Hernia	2
Adenoids.....	2
Hereditary Syphilis	1

In the case of nine older children, operation was recommended for Enlarged Tonsils and Adenoids, and in the case of one child for Phimosis. Only four operations were performed—3 for Adenoids and 1 for Phimosis.

HEALTH VISITING.

The Health Visitor paid 1,782 visits, 30 of which were for the benefit of expectant mothers, and the remainder were paid to infants and children. In addition, part of January and February was mainly spent in visiting cases of Measles. In the Measles epidemic, she not only assisted the Sanitary Inspector in paying the first visits, but also revisited serious cases.

At the first visits paid about a fortnight after birth, it was ascertained that of the 149 babies born alive, 84 were breast fed and 58 artificially fed, and in the case of the remaining 7, the mode of feeding was not ascertained. Only two out of the 20 illegitimate children were breast fed. Artificial feeding consisted of:—

Cow's milk, 46; Glaxo, 1; Milk and Sage, 1; Dr. Allinson's food, 2; Allenbury's food, 1; Neave's food, 2; Cow and Gate, 3; Nestlé's Milk, 2.

The reasons why artificial feeding was adopted in the case of these 58 infants were found to be as follows:—Insufficient breast milk, 24; mother returning to work, 14; advice of midwife, 3; mother did not wish to breast feed, 4; mother considered herself too weak, 3; feeding caused mother pain, 1; abscess of breast, 1; depressed nipples, 1; mismanagement or lack of perseverance, 6; not stated, 1.

Out of the 149 mothers, 80 were housewives, 52 weavers, 4 workers in spinning factories and 8 followed miscellaneous occupations. Among the 56 mothers working in connection with the cotton industry, 9 worked occasionally and of the remainder, the majority ceased work at the seventh month of pregnancy, and the others at the sixth, 9th and eighth month.

THE MOTHERS' AND BABIES' WELCOME COMMITTEE.

This Committee has continued to carry on their admirable and useful work during the year.

At the weekly consultations the members have discharged cheerfully and well their duties, which consisted in weighing the babies, keeping records, looking after the toddlers, serving tea to mothers, etc.

The Committee, in addition, keep drug and clothing stalls. These goods are either given away to necessitous cases, or sold at cost price.

I quote below from a letter of the Chairman, the Hon. Miss R. B. Kay-Shuttleworth, supplying details of the work done during the year:—

“On September 14th, 1918, the Annual Party was held. Owing to uncertain weather, it took place at Horeb School. The entries for competitions in (a) knitted garments, (b) cut-down trousers, (c) cut-down dress or coat, (d) novelties, (e) hats and caps, (f) toys (in which fathers were also allowed to exhibit), were numerous, and there was also a section for laundry.

In January the Mothers had a Christmas Treat. In February the committee of the Babies' Welcome had a Whist Drive to augment their funds.

The Mothers have enjoyed some special “talks,” Mrs. Ewbank, the Hon. Mrs. Kay-Shuttleworth, Mr. F. Crossley and others having given addresses.

The department for loans of prams and fenders to Mothers has been extended to include Baths, a gift of one from Councillor Coe having been made. Arrangements have been made for Mothers and children attending the Welcome to use the excellent bath-room there on payment of 2d., if they give due notice and bring towels and soap. This will, we hope, prove a boon of which the Mothers will take full advantage.

A “Woolly Brigade” is being formed of ladies who will give time to knitting wee vests and other garments for infants, to be sold or given at West Bank House. Several members have already offered to help.

The sewing has proceeded much as before and is under Mrs. Hargreaves' care, the Mothers going to her house to consult her, in addition to the classes she has held in the Welcome. Considerable progress is noticed in the garments produced by the Mothers and in the general make and design of the children's clothes.

Mrs. Rollinson has taught the Mothers to sing lullabies and glees on the first Wednesday in each month and this is very popular. A Library is being formed of books for Mothers and workers.

The Association of Infant Welfare and Maternity Centres is now able to supply the centre with wool and flannel at a reduced cost, such pieces are made up into approved patterns of model garments by the Mothers and are especially useful for expectant mothers.

The Mothers' and Babies' Welcome Committee have passed a resolution in favour of Mothers' pensions, and forwarded it to the Member of Parliament.

The League of Guardian Mothers is making good progress, and the Mothers not only enlist new members, but have raised several sums by holding jumble sales, which they devote to the welfare of mothers and children. Several Mothers have in this way been provided with holidays, and a subscription to the Milk Fund was also made by them. Each member is enrolled and promises "to fight dirt, disease and dummies."

Mrs. Knapton reports that "at the date of our last milk report, 1st September, 1918, 3 Mothers were receiving milk." One of these ceased in April and another replaced her, so that there are still three Mothers in receipt of milk.

Mrs. Wightman reports that £2 3s. 9½d. has been made by drugs being sold and that also several small gifts have been made, such as small boxes of ointment, cough mixture and lactagol to needy Mothers.

Mrs. Rixon reports that 6 Maternity Bags have been lent during the past year, but one is missing, the borrower having left the town, and so far steps to recover it have not been successful. She considers the reason for there being so few applications is "less poverty and the Mothers having been taught to sew and make babies' garments themselves." Several new model garments have been received by the "Welcome" and these are shown to the Mothers, some of them being copied.

I should like to mention how well all the Committee and helpers have worked. Whenever I am able to be present at the Centre, I am struck by the harmony and happy spirit which prevails. The growing appreciation by the Mothers of the help they receive should encourage all engaged on this vital work for the future citizens of the nation."

NOTIFIABLE INFECTIOUS DISEASES.

The following table gives the number of cases of Notifiable Infectious Diseases that occurred in the district, those removed to Hospital or Sanatorium, and the number of deaths occurring in the Sanatorium:—

Infectious Diseases.	No. Notified.	No. sent to Sanat'm.	Deaths in Sanat'm.
Diphtheria and Membranous Croup	13	9	Nil.
Erysipelas	2	—	—
Cerebro-Spinal Meningitis	2	1	—
Ophthalmia Neonatorum	1	—	—
Pulmonary Tuberculosis	11	7	—
Other forms of Tuberculosis	6	—	—
Measles and German Measles ...	607	—	—

DIPHTHERIA AND MEMBRANOUS CROUP.

Thirteen cases of this disease were notified, and 9 of them were sent to the Sanatorium. They occurred in the endemic form; no connection was traceable from one case to the other.

CEREBRO-SPINAL FEVER.

Both the cases that were notified as Cerebro-Spinal Fever died. The spinal fluid, which was taken in one case before death, and in the other case after showed no Meningococci, and one of them was really a case of Hereditary Syphilis, affecting the Meninges. It is extremely doubtful if either of the cases was genuine.

MEASLES AND GERMAN MEASLES.

A very severe epidemic of Measles occurred in the early part of the year and 607 persons were known to suffer. Most of them were notified by medical men and the others were discovered either by the Sanitary Inspector or the Health Visitor, or were notified by parents and friends. Although cases of this disease occur practically every year, the only epidemic of similar magnitude was that which occurred in 1908. The disease in that year was not notifiable, and I have no reliable record of the total number of cases. From investigation in schools it was found that 550 scholars were attacked, of whom about 300 belonged to Infant Schools.

The first case of Measles was notified on November 21st, 1917. This case returned from the Sanatorium after an attack of Diphtheria on account of which he was sent there. He was discharged on the 16th, commenced to sicken on the 17th and developed the rash on the 21st. The case was evidently infected with Measles while in the Sanatorium. The second source of infection was a child who developed the rash on January 7th, 1918. She had visited a house in Nelson on December 25th, 1917, and the boy in the house developed rash two days after viz., 27th December. This incidentally shows that Measles is infectious before the appearance of rash on the body.

There seemed to be another source which contributed to the rapid spread of the epidemic. On December 26th, 1917, a woman aged 30, developed a rash. In this case one could not say where she caught the infection. She may have been infected in a train, tram-car or place of amusement. However, as far as one could judge, there were two definite avenues, viz., Burnley and District Sanatorium and a certain house in Nelson, from which the disease came to Padiham.

The first case was sent back to the Sanatorium the day after the appearance of the rash. Three other children from the same house, who developed the disease, were removed on December 4th. The schools were closed on account of Christmas holidays from December 22nd to January 6th (both dates inclusive) and from December 10th to January 7th 10 persons developed Measles, only one of whom was of school age, and immediately the schools opened the epidemic began to spread rapidly. As the incubation period of Measles is 7 to 18 days, it is evident that the cause of this rapid spread of Measles among children is to be sought in their promiscuous meetings during the holidays, at home, outside their homes, in picture palaces, post office gatherings, etc. The children under school age were attacked before it appeared in school children. Taking about 16 days as the incubation period, 133 cases were notified which had contracted the disease during the holidays. It is evident that the closing of the schools did not check the epidemic. Most of the cases occurred among children aged 5 years and under 5 years, and the older children were not affected to a considerable extent.

Measles is generally serious in winter months in consequence of lung complications being then more common. Fourteen children succumbed to it, seven being male and seven female. They were all over twelve months old.

The Sanitary Inspector and Health Visitor visited all the cases and revisited most of them. The disease spread so rapidly that it was very hard to cope with the cases. All necessary advice was given and disinfectants were supplied freely.

In the present extent of knowledge it seems to me hopeless to prevent an epidemic of this disease in Urban districts where there are great opportunities for promiscuous gatherings. It is extremely infectious among children who have not had the disease before and it is so at its early period, viz., before the development of the rash, when even the disease is not suspected. Toys, clothes, etc., have been known to convey the infection. The disease has been known from time immemorial, it has not modified in its type or form and it appears wherever children exist. No amount of knowledge that medical science has given to the world as to the nature or treatment of infectious diseases, has made an iota of difference in the prevention, modification or cure of this disease. Nothing whatever is yet known as to the causative agent of Measles.

INFLUENZA.

Two epidemics of this disease occurred. The first commenced about the middle of June, reaching its climax about the commencement of July and disappearing in the middle of the month. The attacks were short and sharp, the acute illness lasting two or three days and leaving debility, sometimes for weeks. Two deaths occurred from the disease. Very few cases of Influenza Pneumonia were observed.

The second epidemic made its appearance slowly in September and October, and increased in intensity from the middle of November to the second week of December. It then rapidly declined and was practically over at the end of the month. This epidemic was of a severer type, a larger number suffering from Pneumonia. The number of deaths was higher, five dying from Influenza and some of the ten ascribed to Bronchitis and Pneumonia were undoubtedly due to this disease.

The scholars and teachers having been affected, the schools were closed for various terms in both epidemics, and when the epidemic was raging at its worst in December, scholars were excluded from picture palaces and Sunday Schools from December 9th to the end of the Christmas holidays. Large posters were posted and notices were printed in the local paper advising the best mode of prevention of the disease and care of sufferers.

Altogether nine deaths occurred during the year ; two of them were male and seven female. The district fortunately did not suffer in the death toll to the same extent as neighbouring towns, and the severe cases were not many, especially those which rapidly proved fatal. None but a medical man knows how enormous a number of families was stricken one after another with the disease, and how friends, relatives and nurses coming to care for the patients rapidly became victims themselves ; how parents and their young children lay in bed without any assistance, and how sick members tried to nurse the others. Never were such pictures of misery, agony and despondence seen on sufferers' faces in such large numbers in one day. It was impossible to engage persons in order to nurse the sick, and some were afraid of undertaking the nursing for fear of themselves catching the disease.

Since the close of 1918 another epidemic of even still severer type visited the district and the country, and everyone interested in the problem of the prevention and cure of this disease has had time to study and investigate and form a definite judgment. I have considered the problem as far as it lay in my power. These epidemics appear to me most bewildering. One feels absolutely helpless. No measure taken for the prevention of this disease has had any effect. The theories propounded as to the cause of this world-wide deadly epidemic are not convincing. Measles merely affects the child population, and one attack brings immunity to the patient against further attacks, nor is it so deadly as Influenza. This latter disease has been Pandemic, involving all the four quarters of the globe, sparing neither age, sex, nor nationality, spreading like wildfire, having only one or two days as incubation period and striking millions of the young population of the globe dead. No wonder it seems, to an ignorant mind, like the weird visitation of an unpropitious deity. Fortunately for the human race these Pandemics are not frequent. The last one visited this country in 1889-1890.

TUBERCULOSIS.

Eleven cases of Pulmonary Tuberculosis were notified and eleven deaths (4 male and 7 female) occurred from this disease. The Phthisis death-rate was 1.04, while for the year 1917, it was 1.18. There were six cases of Tuberculosis (other than Pulmonary) and three deaths, giving a Non-Pulmonary Tuberculosis death-rate of .28. The death-rate from all forms of Tuberculosis was 1.32 and it was 1.45 in 1917.

CANCER AND MALIGNANT DISEASE.

This disease accounted for 10 deaths (4 male and 6 female) representing a Malignant Disease death-rate of .92 per 1,000 population. The death-rate from this disease was 1.0 in 1917.

REPORT ON BACTERIOLOGICAL SPECIMENS SENT TO THE PUBLIC HEALTH LABORATORY, MANCHESTER.

	Diphtheria.		Typhoid Fever.		Human Tuberculosis Sputum	
	Total.	+	Total.	+	Total.	+
January .....	...	.....	...	.....	1	...
February .....	...	.....	...	.....	2	...
March .....	...	.....	...	.....	1	...
April .....	...	.....	...	.....	...	...
May .....	...	.....	...	.....	...	...
June .....	...	.....	...	.....	1	...
July .....	...	.....	...	.....	...	...
August .....	...	.....	1	...	...	...
September ...	1	...	1	1	...	...
October .....	...	.....	...	.....	...	...
November	1	...	...	.....	—	...
December .....	...	.....	...	.....	...	...
Total ...	2	—	2	1	5	—

VARIOUS INVESTIGATIONS.

Date.	Nature.	No.
January	Blood—Complete Exam....	1
April	Naso-Pharyngeal Swabs ...	8

The total number of specimens submitted for examination was 18.

STATISTICS SUPPLIED BY THE REGISTRAR GENERAL.

	Per 1,000 of Population.				Rate of Deaths under 1 year to 1000 Births.	
	Birth-rate.	Death-rate.	Epidemic Death-rate.	Phthisis Death-rate.		
1918	13.1	16.9	1.89	1.04	...	141
1917	15.6	14.6	0.63	1.18	...	140
Mean of 10 years (1908-1917)	21.2	15.4	1.22	0.98	...	138
Increase or Decrease in 1918 on						
Previous Year	—2.5	+2.3	+1.26	—0.14	...	+1
Ten Year's Average ...	—8.1	+1.5	+0.67	+0.06	...	+3

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1918.

(Provisional figures. Populations estimated to the middle of 1918 have been used for the purposes of this Table)

	Birth-rate per 1000 Total Population.	Annual Death-rate per 1,000 Civil Population.								Rate per 1,000 Births.		Percentage of Total Deaths*			
		All Causes.	Ent'ric Fever.	Small-pox.	Meas-les	Scarlet Fever	Whoop ing-cough	Diph-theria	Violence	Diar'hœa and Enteritis (under 2 years)	Total Deaths under One year.	Deaths in Public Institutions	Certi-fied Causes	Inq'est Cases	Uncer-tified Causes of Death
England and Wales	17.7	17.6	0.03	0.00	0.28	0.03	0.29	0.14	0.49	10.99	97	24.3	93.3	5.4	1.3
96 Great Towns, including London (Census populat'ns exceeding 50,000)	17.6	18.2	0.02	0.00	0.36	0.04	0.34	0.15	0.49	14.46	106	28.4	93.4	5.8	0.8
148 Smaller Towns (Census popul'tns 20,000—50,000)	17.9	16.1	0.03	—	0.25	0.02	0.25	0.14	0.38	9.73	94	15.4	94.5	3.9	1.6
London	16.1	18.9	0.02	—	0.42	0.03	0.43	0.17	0.56	15.67	107	45.0	92.5	7.3	0.2

*Non-civilians are included in these figures for England and Wales but not for other areas.



