

[Report 1920] / School Medical Officer of Health, Burnley County Borough.

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Burnley (England). County Borough Council.

Publication/Creation

1920

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COUNTY BOROUGH OF BURNLEY.

Local Sanitary Authority.

Report on the Public Health

AND

Sanitary Administration

FOR THE YEAR 1920,

TO WHICH IS ADDED THE

Annual Report to the Local Education Authority.

THOMAS HOLT, M.D.,

Medical Officer of Health.

BURNLEY:

JOHN DIXON, LTD., BOROUGH PRINTING WORKS, MANCHESTER ROAD.

Health Committee.

HIS WORSHIP THE MAYOR (Alderman Edwin Whitehead, J.P.)

§††*ALDERMAN SINCLAIR, J.P., O.B.E., *Chairman.*

§††*COUNCILLOR CLEGG, *Vice-Chairman.*

§††*ALDERMAN HAWORTH.

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* „ WHEWELL.

* Standing Sub-Committee.

† Housing Sub-Committee.

‡ Tuberculosis Sub-Committee.

§ Venereal Diseases Sub-Committee.

The above members of the Health Committee along with

MRS. J. F. HEAP

MRS W. H. WATSON

form the Maternity and Child Welfare Committee.

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COUNTY BOROUGH OF BURNLEY.

HEALTH DEPARTMENT.

MEDICAL OFFICER'S REPORT

For the Year ended 31st December, 1920.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE,
COUNTY BOROUGH OF BURNLEY.

GENTLEMEN,

I have the honour to present the Annual Report of the Medical Officer of Health for the year 1920.

The general Death Rate appears to be the lowest recorded, and the Birth Rate shows a great increase on the average for the previous 10 years.

Though higher than last year, there still remains a great improvement on the Infantile Mortality Rates of the past. A chart, giving our record for 39 years, will be found in the body of the Report, and, on examination, it will be seen that the present improvement commenced about 15 years ago. This is coincident with our first real and persistent attempts to grapple with this serious problem. About that time the Milk Depot was opened, because extensive epidemics of Diarrhoea were found to be one of the main causes of this high rate. Another cause of our high rate was a want of knowledge on the part of many parents of how to rear their infants. To this end Health Visitors were appointed, and it is to this system of Health Visiting that we must attribute almost entirely our success. Personal and individual instruction has been held, and found to be our most effective means of saving the infants.

As pointed out last year, our position, though much improved, is far from satisfactory, and it is only by a continuation and improvement in our present system that we can hope to bring our rate of infant mortality within reasonable dimensions.

By Health Visiting and Infant Consultation Centres, and means of a similar nature we have to instruct mothers, so as to prevent those conditions which lead to the deaths of so many infants. More efforts are being made, and more success is being attained in getting at the expectant mother, and thus we hope that the child, when it is born, will have a better chance of surviving. That this part of the work is of vital necessity is shewn in the great number, year after year, of deaths under the heading of "debility" and "prematurity." Mothers do not appear to fully grasp the fact that child-bearing is the most important function of their lives, and that everything should give way to that. Ante-natal care and the rearing of the infant are equally important, and it has to be the object of the Local Sanitary Authority to instruct both the mother and the public generally that this is so.

The destruction by fire of the Crown Point Hospital in the early part of the year raised again the question of the permanent provision of hospital accommodation for Tuberculosis. As a temporary measure, the Joint Hospital Board allowed the Local Sanitary Authority to use one of their pavilions at the Infectious Diseases Hospital in Marsden Road. This Hospital, locally called the "Sanatorium," is situate two miles from the centre of the Town, on a main road. It is some 600 to 700 feet above sea level. It has a S.W. aspect, and overlooks the town. The trams run within 200 to 300 yards of the entrance to the grounds.

The Health Committee, though recognising that this arrangement could only be a temporary measure of accommodation, were impressed with the situation, especially as to its suitability for the accommodation of the advanced case. A request was made to the Joint Hospital Board that they allow the land in their possession, which adjoins the present Hospital, to be used for this purpose. The Joint Hospital Board agreed to this, and plans of a suggested Hospital and Sanatorium have been submitted to the Ministry of Health for their approval.

This site is an admirable one for the advanced case, but, owing to its easy access, it is equally admirable for the accommodation of that kind of case which in practically all schemes seems to be forgotten—that is, the case which requires observation. It is only by providing a place which is near their homes that you can possibly get the majority of persons to place themselves under observation. Every medical man knows the great number of cases in which the disease is well advanced before a diagnosis can be made, and he also knows in how many cases where suspicion is aroused that no effective measure can be taken, because a definite diagnosis cannot be made.

When we get power for the compulsory isolation of Tuberculosis, it will be necessary to provide suitable Hospital accommodation, and probably there is no site as suitable as the one suggested, which it is possible to get for that purpose. The question of danger to the community by having an institution of this kind so near to a large centre of population can be regarded as negligible, and the advantage of having an institution so near, especially for the class of cases mentioned, is incalculable, for, though we may obtain power to compulsorily isolate a case of Tuberculosis, it is hoped with an institution where patients can be within such easy reach of their relatives, that no compulsion will be necessary to secure the isolation which is so requisite in order to deal effectively with this disease.

In the Appendix will be found an account of the work at Papworth, where Tuberculosis is dealt with on the Colony System. The Colony System, however, will not touch the bulk of the cases we get. We must have locally a place for the isolation of bedfast, or practically bedfast cases, or for those who are not able to work. We ought to have also accommodation for suspected cases who may only be required to be detained for short periods, and even in some cases allowed—when they have suitable work—to continue at that work, though residing at the Sanatorium. The injunctions to suspected Tuberculosis patients; that they occupy a room to themselves; that they always have a window open; that they keep regular hours; or that they have a shelter erected in the backyard of the home and sleep in that, are, in the main, disregarded. If we had an institution such as proposed, we could do more than give good advice—we could see that it was carried out. The scheme of having a suitable place for observation of suspected Tubercular cases practically at the door of the Dispensary, which is the headquarters of the district for dealing with this disease, and under the supervision and care of the Tuberculosis Officer, who is the Medical Man specially qualified to deal with it, appears to offer immense possibilities for good, and gives some hope of a real solution of the difficulty of getting the disease at its early stage.

I wish to record my appreciation of the assistance I have received both from the Committee and the Staff of the Department.

I have the honour to be, Gentlemen,

Your obedient Servant,

THOS. HOLT,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
ST. JAMES'S STREET, BURNLEY,
June, 1921.

SUMMARY OF VITAL STATISTICS ETC., FOR 1920.



POSITION, LATITUDE.....	53°, 47', 30" N. and	LONGITUDE 2°, 14', 30" W.
MEAN HEIGHT above Sea Level		465 feet.
AREA		4,629 acres.
POPULATION (Census 1911).....		106,337
ESTIMATED POPULATION TO THE MIDDLE OF 1920 (Registrar-General's Estimation)		105,030
NUMBER OF HOUSES IN OCCUPATION, Dec. 31st, 1920		25,797
NUMBER OF HOUSES EMPTY but not to let		35
NUMBER OF HOUSES CERTIFIED FOR OCCUPATION DURING YEAR		11
DENSITY (per acre)		22.6
BIRTHS	{ Males, 1213... Females, 1243 }	2,456
Birth Rate, 23.3.		
DEATHS	{ Males, 742 ... Females, 745 }	1,487
Death Rate, 14.16.		
INFANTILE MORTALITY		129 per 1,000 births.
PHTHISIS DEATH RATE		0.72 per 1,000 of population.
RATEABLE VALUE (March, 1921)		£587,350
BURNLEY UNION: —		
Amount of out-door relief for Burnley		£5680

REPORT.

1. General Information.

Occupation.—The occupation of the population is mostly in the cotton weaving trade. It is estimated that considerably over 30,000 people are actually engaged in this in Burnley. It finds employment for children as “half-timers” who must be over twelve, and adults, both men and women. The estimated number employed in this way are given in the following table. The hours the cotton operatives work are 7 to 8-15, 8-45 to 12-30, and 1-30 to 5-15. Saturdays, 7 to 8-15, 8-45 to 11-15.

The numbers of males and females given in the Census report of 1911 is as set out below :—

	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>
Weavers	10,396	...	15,482	...	25,878
Winders, Spinners and others.....	3,609	...	4,256	...	7,865
	<u>14,005</u>	...	<u>19,738</u>	...	<u>33,743</u>

The average number of “half-timers” in the Borough during 1920 was 1,443.

Houses.—These are for the most part substantially built of sandstone, and the nature of them is as follows :—

One-roomed Houses	113
Back-to-back and Single Houses	2,246
Other Houses	23,473
TOTAL	<u>25,832</u>

The great bulk of the houses are four-roomed, self-contained and commodious, each having its own back-yard, which in the newer houses, must have an area of at least 120 square feet.

There are baths in 3,919 of the houses, compared with 3,703 in 1919.

The Water Supply, owned by the Corporation, is entirely of upland water. It is of good quality and the supply is constant. The present capacity of the reservoirs is 440,000,000 gallons, taken from a gathering ground of about 2,000 acres, in which there is no cultivated land. The water is contained in five reservoirs, which are all situated within three or four miles of the centre of the town. The construction of another reservoir capable of holding 320,000,000 gallons is now in progress. The water from Cant Clough, being often discoloured by peaty matter, is filtered, part of it through mechanical filters and part of it through filter beds. Cant Clough reservoir is 924 feet above sea level and Swindon 802 feet. The new reservoir will be 840 feet above sea level.

The main supply of water is from two sources, Swinden Valley and Cant Clough. The water varies somewhat in character from these two sources. Both are of good quality and free from contamination. The water from Cant Clough has a tendency to show an acid reaction owing to the peaty matter which it contains. This acidity is neutralized by means of lime water in order to counteract the effects the water may have on the lead pipes through which it has to flow. The lime water is added during the process of mechanical filtration.

The Consumption of Water during the year 1920 was 872,439,609 gallons, with an average daily consumption per head of 22·8 gallons for all purposes.

The Rainfall for 1920 at Swinden gathering ground was 50·13 inches, at Cant Clough gathering ground 48·61 inches, and at Queen's Park 42·80 inches.

The Sewage System.—The excreta is disposed of chiefly by the water-carriage system, and is carried by gravity to the sewage works at Wood End and Altham. The sewage is passed into septic tanks, the deposit being afterwards pressed and used as manure. The effluent, after passing through the clinker beds, is discharged into the river.

The following are some of the particulars regarding the Sewage Disposal Works :—

Total Area of Sewage Works	82 acres
Area of Bacteria Beds.....	26 acres
Capacity of Septic Tanks	3,000,000 galls.
Average daily dry weather flow of Sewage	2,500,000 galls.

There are in Burnley :

Clean Water Closets	9,965
Waste Water Closets	18,444
Latrines—517 Closets	2,244
Wall, Earthenware, and Pail Privies	275
Number of Public Urinals	39

Disposal of Refuse.—This is disposed of at the Destructor, which is centrally situated, and at tips in various parts of the town.

The Cleansing Department, which is responsible for the disposal of the Refuse, supply the following figures with regard to ashpits and ashbins, and the amount of refuse dealt with during the year ending March 31st, 1921. The figures show a steady increase in the number of ashbins used.

	<i>Tons.</i>	
Total amount of refuse destroyed		8775
Total amount of refuse tipped		14,686
TOTAL		23,461
Clinker tipped		3486
	1920.	1921.
Ashpits	15,352	14,745
Ashbins	9,628	10,289

Public Institutions.—In accordance with the Provisional Orders Confirmation (No. 4) Act, 1886, accommodation is provided for the Notifiable Infectious Diseases by a Joint Hospital Board appointed by the following Authorities : Burnley County Borough, Burnley Rural District, Brierfield Urban District, and Padiham Urban District. The Board have provided the **Sanatorium**, which is a permanent and modern institution, with pavilions capable of accommodating 116 patients. It is situated on the North side of the town, about two miles from the centre. For the isolation of Small-pox the Board possess temporary buildings at Crown Point, a hill on the South side of the town, about 1,000 feet high, and just outside the Borough. The site is an excellent one as regards isolation, being quite remote from other habitations, the nearest dwelling—a farmhouse—is a quarter of a mile distant.

This hospital was used during the early part of the year for the reception of Consumptive patients. The main part of the building was destroyed by fire in January, and since that time no patients have occupied this hospital.

Temporary arrangements have been made for the reception of smallpox patients or contacts, in case there is a sudden call for that purpose.

The Victoria Hospital, which is a charitable institution, has provision for about 100 patients. It is a general hospital and quite a modern building.

The number of patients dealt with at this hospital last year was

<i>In-patients.</i>	<i>Out-patients.</i>	<i>Total.</i>	<i>Daily Average No. of beds Occupied.</i>
1511	1224	2735	89

Other Charitable Institutions.—The Burnley and District Nursing Association is an association for the provision of sick nursing; a matron and four nurses are employed and are supported entirely by voluntary contributions.

Convalescent Home.—The Convalescent Home for Children at St. Annes-on-Sea, was built by the late Sir John Thursby for the children of Burnley and district. There is accommodation for ten boys and ten girls and during last year 228 children were admitted, 178 of these being Burnley children.

Workhouse.—The Workhouse of the Burnley Union, and the Infirmary, are situated within the Borough. The Infirmary will accommodate 1,129 persons, divided as follows:—

	<i>Males.</i>	<i>Females.</i>	<i>Children.</i>
Infirmary	94 ...	89 ...	27
Phthisis Wards	40 ...	— ...	—
Lock Wards	10 ...	10 ...	—
Mental Wards	77 ...	77 ...	—
Casual Wards	21 ...	7 ...	—
Infirm Wards	100 ...	100 ...	—
Cottage Homes	— ...	— ...	153
Other Wards	219 ...	105 ...	—
TOTALS	561 ...	388 ...	180

Schools.—The present total accommodation for children in Public Elementary Schools amounts to 18,839 places. Ten of these schools are quite modern buildings and accommodate about 8,500 children.

2. Vital Statistics.

BIRTHS AND DEATHS.—There are two Registration Sub-Districts in Burnley, East and West Wards.

The East Ward* comprises the municipal wards of St. Andrew's, Daneshouse, Stoneyholme, St. Peter's, St. Paul's, and Fulledge.

The West comprises the municipal wards of Burnley Wood, Healey, Trinity, Whittlefield, Gannow, and Lowerhouse.

In the East Ward there were registered :

Births.....	1268
Deaths	918

In the West Ward there were registered :

Births.....	1184
Deaths	632

Births.—There have been 2,452 births (1,210 males and 1,242 females), of which 11 were born in the Workhouse (6 males and 5 females) ; 2 were born in Hospital (2 females) ; 8 were the children of mothers whose homes were in other parts of the Union, leaving 2,444 births belonging to Burnley. To this number must be added 12 children of Burnley mothers born outside the Borough, making a total number of 2,456 births for the year.

These figures give a birth rate of 23·3, as compared with 19·9 for the previous ten years.

The birth rate for England and Wales for the last year was 25·4, and for the 96 large towns, 26·2.

The birth rate is highest in St. Paul's Ward (33·6) and lowest in St. Andrew's Ward (17·2).

Illegitimate Births.—There have been 164 illegitimate births (78 males and 86 females), as against 134 in 1919. 16 of these were born in the Workhouse, and 3 were the children of mothers whose homes were in other parts of the Union. Of these there were 161 Burnley mothers, as against 131 in 1919.

Deaths.—The total deaths in Burnley were 1,550. Of this number, 130 were of non-residents, most of whose deaths occurred in the Workhouse, Victoria Hospital, or Sanatorium. This leaves 1,420 deaths of residents. To this number has been added 67 deaths of Burnley people who have died outside Burnley, 27 of whom died in the County Asylum at Lancaster.

* All the Public Institutions are in this Ward.

The net deaths, therefore, are 1,487 (males 742 and females 745) giving a death rate of 14.16.

The rate in 1919 was 15.16, the average for the previous ten years being 16.8.

The general death rate for England and Wales in the year 1920 was 12.4, and for the 96 large towns, 12.5.

The particulars of the deaths, with the ages and the wards in which they occurred, are given in the Appendix.

The death rate is highest in St. Peter's Ward (23.5) and lowest in Stoneyholme Ward (11.5).

Inquests.—There were 124 inquests held in Burnley during the year ; the ages and verdicts were as follows :—

Under 1	23
From 1 to 5.....	5
„ 5 to 15	3
„ 15 to 25.....	2
„ 25 to 45.....	16
„ 45 to 65.....	44
„ 65 and over	31
	<hr/>
TOTAL	124
	<hr/>
Accidental	33
Natural Causes	7
Suicides	12
Heart Failure	19
Laryngitis	1
Arterio Sclerosis	1
Pneumonia.....	6
Nephritis	1
Premature Birth	1
Heart Disease	4

Delirium Tremens	1
Convulsions	10
Bronchitis	8
Murdered	1
Old Age	3
Apoplexy	5
Aneurism	1
Congestion of Lungs.....	1
Cancer.....	3
Diabetes.....	1
Cerebral Concussion.....	1
Cellulitis.....	1
Anaemia.....	1
Inanition	1

4 of these were non-residents, leaving 120 inquests held on Burnley people.

There were also 9 inquests held on Burnley residents who died outside the Borough, the following verdicts being returned :—

Congestion of Lungs.....	1
Suicide	3
Accidental Death	2
Drowned (open verdict)	2
Natural Causes	1

3. Causes of Death.

In the table below the causes of death are shewn under certain large divisions but in the following pages some of the more important only are discussed. All deaths of children under one are shewn under the heading of Infantile Mortality.

TABLE 1.

<i>Cause of Death.</i>	<i>No.</i>
RESPIRATORY DISEASES	305
Bronchitis	163
Pneumonia	73
Broncho-Pneumonia	50
Pleurisy	6
Laryngitis	6
Other Forms	7
INFANTILE DISEASES.....	165
Premature Birth	57
Congenital Defects	28
Debility	50
Convulsions	28
Teething.....	1
Injury at Birth.....	1
TUBERCULOSIS	113
Phthisis	76
General Tuberculosis	5
Meningitis	5
Peritonitis	14
Tabes Mesenterica.....	2
Other Forms	11
INQUESTS.....	50
Accidental	28
Natural Causes	9
Suicide	13
OLD AGE	72
INFECTIOUS DISEASES.....	38
MALIGNANT DISEASES.....	128
APOPLEXY	77
DIARRHOEA AND ENTERITIS	47
OTHER CAUSES	492
TOTAL	1487

INFANTILE MORTALITY.

Deaths under one year.....	317
Births	2456
Death Rate.....per 1,000 births	129
Births of Illegitimate children	161
Deaths of Illegitimate children	38
Mortality rate of Illegitimate children	236

Housing of Infants.—The figures relative to the housing of the infants are as follows :—

<i>Dwelling Place.</i>	<i>No. of Notified Births.</i>	<i>No. of Registered Deaths.</i>	<i>Rate per 1,000 births.</i>
Workhouse	26	12	—
Sanatorium	—	1	—
Victoria Hospital	3	7	—
Bank Hall Hospital	68	47	—
Nursing Home.....	4	—	—
Single-room Dwellings	16	1	62
Back-to-Back and Single Dwellings	460	56	122
Other Dwellings (4 rooms and over)	1808	189	104
Not visited	74	4	56
TOTALS.....	2459	317	129

Of the 2,459 births, 2,266 were enquired into by the Health Visitors, and of this number 1280 were the children of working mothers.

Occupation of Mothers.—The following Table shows the occupation of the 2,266 mothers enquired into :—

	<i>Births.</i>	<i>Deaths.</i>
Housewives	986	182
Workers	1280	123

43.5 per cent of the children were born of housewives and 56.5 per cent. of the mothers who went to work.

18.4 per cent. of the housewives children, and 9.6 per cent. of the workers children, died.

TABLE II. CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.

<i>Cause.</i>	<i>No.</i>
Congenital Causes of Death	133
Premature Birth	57
Congenital Defects	28
Debility	48
Respiratory Diseases	63
Bronchitis	36
Pneumonia	4
Broncho Pneumonia	22
Laryngitis	1
Enteritis	27
Diarrhoea	7
Convulsions.....	26
Gastritis	9
Tubercular Diseases	11
Phthisis	1
Peritonitis	4
General	1
Meningitis	1
Tabes Mesenterica.....	1
Other Forms	3
Intestinal Obstruction	2
Syphilis	8
Jaundice	1
Measles	3
Meningitis	6
Natural Causes.....	1
Teething	1
Accidents at Birth	1
Diseases of the Stomach	2
Otitis Media	2
Accidental Death (Suffocated)	1
Anaemia	1
Gastric Ulcer	1
Other Causes	11
TOTAL	317

DIARRHOEA DEATHS UNDER 1 YEAR.

	Number of deaths	34		
	Number enquired into.....	32		
MOTHERS.			FEEDING.	
Housewives	22	Breast		12
Working	9	Artificial		20
Dead	1			
	—			—
TOTAL	32	TOTAL		32
NUMBER OF ROOMS.		STATE OF HOUSE.		
4 or over.....	23	Clean		17
2 or 3	9	Fair		15
	—			—
TOTAL	32	TOTAL		32

Under this heading are included the diseases which are certified under the names of Enteritis, Zymotic Enteritis, Epidemic Diarrhoea, etc.

Congenital Causes of Death.—Premature Birth, Debility from Birth, Marasmus and Congenital Defects. There were 133 deaths from these causes; Premature Birth, 57; Debility, etc., 48; Congenital Defects, 28.

The number of deaths from Congenital causes for the last five years is as follows :—

	1916.	1917.	1918.	1919.	1920.
Number of deaths	83	67	65	69	133
Rate per thousand births	43	44	44	43	54

Respiratory Diseases.—Bronchitis, Pneumonia, and Broncho Pneumonia have caused 63 deaths of children under one year of age; Bronchitis 36; Pneumonia, 4; Broncho Pneumonia, 22. These figures compared with last year show an increase of 16.

Of the 63 infants who have died from Respiratory Diseases, 36 were fed on the breast, 25 on the bottle. In 2 cases the type of feeding was not stated.

Occupation of Mothers :— AT HOME.

Total Mothers.	Cause of Death.	No. of Deaths.	Per- centage.
986 ...	Respiratory Diseases	44 ...	4.4

AT WORK.

Total Mothers.	Cause of Death.	No. of Deaths.	Per- centage.	Not Stated.
1280 ...	Respiratory Diseases	15	1.2	4

3 deaths occurred under one, due to an infectious disease, *i.e.* Measles.

In 1919, 8 deaths occurred in children under one, from infectious diseases.

TABLE III. INFANTILE MORTALITY IN THE LANCASHIRE TOWNS
DURING 1919 AND 1920.

<i>Name of Town.</i>	1920.	1919.
Hindley	147	98
Ince-in-Makerfield	137	129
BURNLEY	129	118
Chorley	124	89
Wigan	124	117
Ashton-under-Lyne	120	119
Stalybridge	117	121
St. Helens	113	123
Liverpool	113	107
Farnworth.....	112	117
Blackburn	110	93
Leigh	106	102
Oldham	105	95
Swinton and Pendlebury.....	103	95
Birkenhead	102	96
Preston	101	103
Bolton.....	98	88
Salford	98	101
Accrington	97	115
Bootle.....	97	94
Manchester	97	94
Stockport	97	98
Rochdale	94	120
Bury	93	90
Darwen.....	93	116
Colne.....	91	120
Rawtenstall	89	58
Widnes	88	92
Bacup	80	103
Barrow-in-Furness	78	96
Lancaster	78	95
Nelson	77	69
Eccles	67	67
	1920.	1919.
Infantile Death Rate for England and Wales.	80	89
Infantile Death Rate for 96 large towns,	85	93

Respiratory Diseases.—Under this heading are included all diseases of the lungs and respiratory passages with the exception of Tuberculosis of the Lungs. These diseases include Bronchitis, Broncho-pneumonia, Pneumonia, Pleurisy, Laryngitis and Asthma.

The Registrar reports that 163 died from Bronchitis, 50 from Broncho-pneumonia, 73 from Pneumonia, 6 from Laryngitis, 6 from Pleurisy, 3 from Asthma, 3 from Congestion of Lungs, and 1 from Abscess of Lung. Total 305.

The age distribution is as follows :—

Under 1	63
From 1 to 5	29
„ 5 to 15	8
„ 15 to 25	8
„ 25 to 45	27
„ 45 to 65	77
Over 65	93

Seasonal prevalence of respiratory diseases as shewn by time of the occurrence of death :—

	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.
Respiratory Diseases	83 ...	93 ...	55 ...	74

OTHER DISEASES : Malignant Diseases.—Cancer caused 118 deaths ; Sarcoma, 10 deaths. Last year the figures were 104 and 1 respectively.

AGE DISTRIBUTION :—

From 15 to 25	1
„ 25 to 45	13
„ 45 to 65	65
Over 65	49

Infectious Diseases.—The various infectious diseases, which are more fully dealt with in another section, caused 38 deaths as follows:—Diphtheria 9, Scarlet Fever 3, Typhoid Fever 2, Erysipelas 3, Puerperal Fever 1, Measles 7, Influenza 11, Encephalitis Lethargica 2. The same diseases last year caused 149 deaths.

AGE DISTRIBUTION :—

Under 1	3
From 1 to 5	9
„ 5 to 15	8
„ 15 to 25	2
„ 25 to 45	5
„ 45 to 65	7
Over 65	4

Old Age.—72 are certified as having died from old age, as against 103 in 1919.

From 65 to 70	4
„ 70 to 75	19
„ 75 to 80	20
„ 80 to 85	17
„ 85 to 90	11
„ 90 to 95	1
TOTAL	72

The lowest age certified under senile decay was 68, and the highest 90.

4. Tuberculosis.

TUBERCULOSIS OF THE LUNGS.—Caused 76 deaths, previous year 94.
The age and sex groups are as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Under 1	—	1	1
From 1 to 5	—	2	2
„ 5 to 15	3	1	4
„ 15 to 25	2	11	13
„ 25 to 45	16	12	28
„ 45 to 65	18	5	23
Over 65	5	—	5
TOTAL	44	32	76

Of the 76 Phthisis deaths, 15 died in the Workhouse, as against 15 last year.

The average age at death was 37.6 as against 35.4 last year.

The following is a list of the occupations of the persons who have died from Phthisis during the year :—

<i>Occupation.</i>	<i>No.</i>
Textile Operatives	18
Labourers	6
Miners	5
Other Occupations—Outdoor	13
„ „ Indoor.....	19
Housewives	—
No Occupation	9
Not Stated.....	—
Children.....	6
TOTAL	76

The following table shows the number of deaths for the last ten years, together with the death-rate per thousand of the population :—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
No. of deaths from Phthisis.....	111	92	105	112	91	95	101	78	94	76
Rate per 1,000 of the population.....	1.04	0.85	0.96	1.02	0.88	0.94	1.00	0.85	0.91	0.72

Notifications.—118 notifications were received during the year. 8 of these were notified twice, leaving 110 new cases coming under the notice of the Health Department. 134 new cases were notified last year.

The ages of the persons notified were as follows :—

	<i>Male.</i>	<i>Female.</i>
Under 1	—	1
From 1 to 5	2	1
„ 5 to 15	4	10
„ 15 to 25	4	14
„ 25 to 45	15	22
„ 45 to 65	17	11
65 and Over.....	7	2
TOTAL	49	61

And 28 of them died before the end of the year.

7 cases were from the Workhouse, and 1 from other Districts, 19 deaths occurred in the Workhouse, 4 of which occurred in patients from other districts.

The following are the occupations of the persons notified.

<i>Occupation.</i>	<i>No.</i>
Textile Operatives.....	50
Labourers	3
Miners	3
School Children	6
Other Occupations	30
Infants	—
Army	1
Not Stated	17
TOTAL	110

22 of these were ex-service men.

The following figures show the length of time between notifications and death of the 76 people who died during 1920 :—

Dead when notified	—
Under one week	8
Between one week and one month	11
Between one month and three months	6
Between three months and six months.....	11
Between six months and one year	14
Between one year and six years	11
Not Notified	15
TOTAL	76

The following figures giving the result of the Nurses' enquiries, shew the usual disregard for the infectivity of Phthisis, and second : **the necessity for regarding the disease as an infectious one and dealing with it accordingly.**

SEX AND STATE OF PATIENTS.

<i>Married.</i>		<i>Single.</i>		<i>Children.</i>		<i>Not Stated.</i>	<i>Total.</i>
<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>		
32	26	15	21	8	8	—	110

NUMBER OF ROOMS IN HOUSES.

2 Rooms	5
3 „	4
4 „	50
Over 4.....	39
Common Lodging House	—
Workhouse	11
Asylum	1
Away or Not Visited	—
TOTAL	110

CONDITION OF PATIENT.

Bedfast	27
At Home, Not Bedfast	59
Working	1
Dead	23
Not ascertained	—
TOTAL	110

SLEEPING ACCOMMODATION.

Room to self	21
Bed, but not Room to self	24
Sleeps with other person	32
Bed in living-room	11
Not ascertained	7
Workhouse	11
Asylum	1
Dead when Visited	3
TOTAL	110

The 32 persons who did not sleep alone are divided as follows, the first-named being the one suffering from the disease :—

Husband with Wife.....	12
Wife with Husband	5
Parent with Child.....	2
Child with Parent.....	1
Children with other Children	4
Adult with Adult.	6
Not ascertained	2
TOTAL	32

DURATION OF ILLNESS :—

Under 3 months	25
6 months	24
9 „	15
12 „	20
2 years	12
3 „	3
Over 3 years	9
Not stated, Indefinite	2
TOTAL	110

It will be seen from the above table that the average duration of the illness which will certainly be understated, works out at 11.0 months.

The duration of the illness of the 32 persons who did not sleep alone averaged at least 10.2 months each. Thus there had been 32 persons exposed daily for a long period in the closest possible manner.

We have no power beyond suasion to prevent this method of infection. In the year 1919 there were 50 persons suffering from the disease who slept with others, and for 1920 there were 32.

As regards isolation of the 110 persons suffering from Phthisis the possibilities of isolation were as follows :—

Good	38
Fair	43
Bad	26
Not Ascertained	3
TOTAL	110

Good means that it was easily possible to have a room to self. Fair means that the patient could have a bed to self, but would have to share the room with one other person. Bad means that though the patient might have a bed to self, the room had to be shared with two or more persons.

OTHER FORMS OF TUBERCULOSIS.—These caused 37 deaths. They are divided in the following way :—

General	5
Larynx	2
Meningitis	5
Peritonitis	14
Knee Joint	2
Abscess	2
Tabes Mesenterica	2
Cervical Adenitis	1
Glands	2
Spinal	2
TOTAL	37

The age groups were as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>
Under 1	8	2	10
From 1 to 5	8	4	12
„ 5 to 15	1	3	4
„ 15 to 25	3	2	5
„ 25 to 45	1	2	3
„ 45 to 65	2	1	3
Over 65	—	—	—
TOTAL	23	14	37

Notifications.—56 notifications were received.

The ages of the persons notified were as follows :—

	<i>Male.</i>	<i>Female.</i>	<i>Totals.</i>
Under 1	4	2	6
From 1 to 5	6	1	7
„ 5 to 15	10	7	17
„ 15 to 25	5	9	14
„ 25 to 45	4	7	11
„ 45 to 65	—	—	—
„ 65 and Over	—	1	1
TOTAL	29	27	56

No cases were notified from the Workhouse.

The following are the number of rooms per house in which these persons were living :—

2 Rooms	—
3 „	2
4 „	22
Over 4 Rooms	17
Hospital	9
Away or not visited.....	6
TOTAL	56

The following are the occupations of the persons notified :—

<i>Occupation.</i>	<i>No.</i>
Textile Operatives.....	14
School Children	14
Others	11
Not Stated.....	15
Infants	2
TOTAL	56

4 of these were ex-Service men. —

SEX AND STATE OF PATIENTS.

<i>Married.</i>		<i>Single.</i>		<i>Children.</i>		<i>Total.</i>
<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
6	6	8	10	15	11	56

CONDITION OF PATIENT.

Bedfast	19
At Home, Not Bedfast.....	13
Working	12
Dead	3
Not ascertained	9
TOTAL	56

SLEEPING ACCOMMODATION. —

Room to self	9
Bed, but not Room to self	5
Sleeps with other person	21
Bed in the living-room	7
Not ascertained.....	4
Hospital	7
Dead when visited	3
TOTAL	56

The 20 persons who did not sleep alone are divided as follows, the first-named being the one suffering from the disease :—

Husband with Wife	5
Wife with Husband	4
Child with Parent.....	2
Children with other Children.....	4
Adult with Adult	6
Not ascertained	—
	—
TOTAL	21
	—

DURATION OF ILLNESS.

Under 3 months	17
6 months	9
9 „	—
12 „	5
2 years	3
3 „	5
Over 3 years	—
Not stated or indefinite	17
	—
TOTAL	56
	—

DURATION OF ILLNESS OF THOSE WHO DID NOT SLEEP ALONE :

Under 3 months	7
3—6 months	2
6—9 „	3
9—12 „	—
1—2 years	3
2—3 „	2
Over 3 „	3
Not stated or indefinite	1
	—
TOTAL.....	21
	—

ISOLATION :—

Good	24
Fair.....	13
Bad.....	8
Not ascertained	11
	—
TOTAL	56
	—

TREATMENT OF TUBERCULOSIS.

The scheme comprises the Tuberculosis Dispensary situate in Elizabeth Street, 8 beds at Meathop Sanatorium, Grange-over-Sands, and 20 beds in one of the Pavilions of the Infectious Diseases Hospital of the Joint Hospital Board, at Marsden Road, Burnley.

The Staff comprises the Medical Officer of Health, who acts as Administrative Tuberculosis Officer, and adviser to the Local Insurance Committee; the Senior Assistant and Deputy Medical Officer of Health, who is the Tuberculosis Officer, and has clinical charge of the patients at the Dispensary; and 2 Tuberculosis Nurses.

During the year 28 patients were sent to Meathop, and 7 were there at the beginning of the year.

Seventy-nine patients were sent to Marsden Road Sanatorium during the year, and 8 were there at the beginning of the year.

In the Tables given the disease of Tuberculosis of the Lungs is divided into stages, as follows :—

1. Early cases where one lobe is affected only.
2. Cases where two lobes, or an area equal to two lobes, or where both apices are affected.
3. Any condition more advanced than the above.

LIST OF PERSONS DEALT WITH IN THE TWO SANATORIA.

1. Meathop.

STAGE OF DISEASE.

	Stage 1.	Stage 2.	Stage 3.	Total.
Males	9	14	—	23
Females	—	5	—	5

RESULTS OF TREATMENT —

	Males.	Females.
Improved	20	3
Still in.....	6	2
Disease Arrested	—	—
Unable to Stand Treatment	3	1
Died	—	—

AGES OF PATIENTS :—	Males.	Females.
From 15 to 20	2 ...	—
„ 20 to 30	8 ...	2
„ 30 to 40	10 ...	2
„ 40 to 50	3 ...	1

28 of these patients were insured.

The average duration of stay was 20 weeks.

Of the 28 patients discharged during the year, the condition at the end of 1920 was :—

	Males.	Females.
Remaining well	8 ...	1
Improvement maintained	5 ...	—
No change	5 ...	1
Improvement not maintained	3 ...	2
Other Tubercular Complications Developed ...	1 ...	—
Disease advancing	— ...	1
Died	1 ...	—
	<hr/> 23	<hr/> 5

2. Marsden Road Sanatorium.

One of the pavilions of the Infectious Diseases Hospital is used to accommodate 20 Tuberculous patients—10 male and 10 female.

LIST OF CASES DEALT WITH AT MARSDEN ROAD SANATORIUM.

There have been admitted during the year :—

Males ... 44, of whom 8 were still under treatment.

Females ... 35, of whom 10 were still under treatment.

Nature of Case.	Males.	Females.
Observation	2	—
Pulmonary, Stage 1	4	6
Pulmonary, Stage 2	13	9
Pulmonary, Stage 3	15	12
	<hr/> 34	<hr/> 27
Pulmonary and Larynx	3	—
Pulmonary and Bone	1	—
Pulmonary and Lupus	1	—
Pulmonary and Glands	1	1
Abdominal	3	3
Bone	1	3
Meningitis	—	1
	<hr/> 44	<hr/> 35

Ages of Patients.

						Male.	Female (includes boys under 7).
From 1 to 5	...	...	...	...	...	—	3
„ 5 „ 15	...	...	...	...	...	9	11
„ 15 „ 20	...	...	...	...	...	4	3
„ 20 „ 30	...	...	...	...	...	9	10
„ 30 „ 40	...	...	...	...	...	7	6
„ 40 „ 50	...	...	...	...	...	12	1
„ 50 „ 60	...	...	...	...	...	3	1
						<u>44</u>	<u>35</u>

Of the 69 whose treatment terminated during the year, the result of treatment was as follows :—

						Males.	Females (including boys under 7).
Improved	...	...	...	...	...	21	14
No Improvement	...	...	...	...	...	7	6
Disease Advancing	...	...	...	...	...	3	4
Died	...	...	...	...	...	8	6
						<u>39</u>	<u>30</u>

The average period of stay in the case of those shewing improvement was—
Males, 13½ weeks ; Females, 17 weeks.

The condition of those discharged, where ascertainable, was at the end of the year :—

						Males.	Females.
Remaining Well	...	...	...	...	...	5	6
Improvement Maintained	...	...	...	...	...	8	7
No Change	...	...	...	...	...	3	3
Improvement Not Maintained	...	...	...	...	...	5	2
Disease Advancing	...	...	...	...	...	3	4
Died	...	...	...	...	...	3	1
Not Ascertainable...	...	...	...	...	...	4	1
						<u>31</u>	<u>24</u>

Summary of New Cases dealt with at the Tuberculosis Dispensary.**PULMONARY TUBERCULOSIS.**

	<i>Males.</i>		<i>Females.</i>		<i>Total.</i>
Under 15	10	...	—	...	10
From 15 to 20	8	...	12	...	20
„ 20 to 25	4	...	7	...	11
„ 25 to 30	6	...	8	...	14
„ 30 to 40	10	...	12	...	22
Over 40	20	...	14	...	34
	—		—		—
TOTAL	58	...	53	...	111
	—		—		—

STAGE OF DISEASE.

Stage 1	19
„ 2	30
„ 3	40
Observation	22
	—
TOTAL	111
	—

These cases were dealt with as follows :—

Sent to Sanatorium	18
Sent to Hospital	29
Observation and Visitation by Nurse	13
Continued Treatment at Dispensary	12
Domiciliary	39
	—
TOTAL	111
	—

Condition of Housing of the Tuberculous Patient.

Examination of the current list of cases of notified Pulmonary Tuberculosis, subject to visits by the Tuberculosis Staff, shows :—

- (1) That there are 159 houses which accommodate more than one notified case.
- (2) That there are 72 houses in which there is a history of one of the family having died of Tuberculosis.
- (3) That there are 63 houses in which, in addition to a notified case of Pulmonary Tuberculosis, there are cases of respiratory disease other than Tuberculosis.
- (4) That there are 27 instances of notified cases whose residence is given as a common lodging-house.

OTHER FORMS OF TUBERCULOSIS.

Nature of Disease :—

Meningitis	3
Peritonitis	13
Spine.....	1
Glands.....	19
Knee	2
Elbow	1
Wrist	1
Foot	1
Hip.....	1
Larynx	1
Bones	11
Skin.....	2
TOTAL	56

Ages :—	Males.	Females.	Totals.
Under 15	21	10	31
From 15 to 20	3	8	11
„ 20 to 25	2	1	3
„ 25 to 30	1	3	4
„ 30 to 40	2	3	5
Over 40	1	1	2
TOTAL	30	26	56

These were dealt with as follows :—

Sent to Sanatorium	4
Sent to Hospital	11
Continued Treatment at Dispensary	15
Observation and Visitation by Nurse	12
Domiciliary	14
TOTAL	56

The following stores have been distributed amongst the 325 patients attending the Dispensary :—

Tins of Izal, 353.

Paper Handkerchiefs, 10,708.

Cod Liver Oil and Malt, 489 lb. tins.

716 persons were provided with cups.

Total number of visits paid to cases of Tuberculosis by the Nurse, 2,238.

The number of Attendances of patients at the Dispensary was 4,727.

In addition to the 182 new cases dealt with at the Dispensary, there have been also 314 from previous years attending at some time during the year.

The following is extracted from some notes on atmospheric pollution in reference to respiratory diseases, written by Dr. Horne, the Tuberculosis Officer :—

“ Habits which have taken generations of a community to shape cannot be altered by legislation of doubtful maturity, but by patient and painstaking education—not by “ crisis ” but by “ lysis.”

That life is dependent on atmosphere is a generalisation understood and accepted. That the daily life is regulated by the daily atmosphere would appear to be not so clearly admitted as a corollary.

Here, in Burnley, the two important regulating atmospheric factors are humidity and suspended solid matter (“ pollution ”).

Humidity has, to a certain extent, determined the dominant trade, and the dominant trade with its consequent numerous chimneys has determined the daily atmosphere, with the result that the standard of atmospheric pollution is relatively high.

One might add the further factor that female labour is an important feature of the dominant trade, to emphasise the departure of this form of daily life from what might be described as the normal.

Brend, in his Special Report to the Medical Research Committee (No. 10, 1917) on “ Mortalities of Birth, Infancy, Childhood,” lays chiefly to the account of the polluted state of the atmosphere, the excess of infantile mortality in industrial towns, centres of large cities, and mining areas.

Still more recently, Professor E. L. Collis (“ Public Health,” March, 1921), has shewn the important influence of atmospheric conditions on the incidence of Phthisis. With special reference to the position of Lancashire in this discussion, Professor Collis shews that this county has in recent years (1910—1912) held unfortunately an easy first place in mortality among coal miners, from Phthisis, Pneumonia, and Bronchitis. Mortality from all causes being taken as 1,000, the comparative Mortality Figure for Lancashire was in each of these diseases, 107, 100, and 88 respectively, as against an average figure for the six coal fields of Notts, Derby, Durham and Northumberland, Monmouth and South Wales, Staffordshire, and Yorkshire, of 69.7, 56, and 44.8 respectively. Professor Collis shews that it is not so much coal dust in itself, but the amount of harmful ingredients—including rock dust—which is the factor determining the rate, and in Lancashire, owing to the lie of the coal, there is a greater proportion of work amongst rock than in most other fields.”

"Trade dusts, ordinarily, may cause Laryngitis, Bronchitis, Bronchorrhoea, Fibrosis, and—a subject which offers a useful field for research with special reference to workers in crude cotton—Broncho-Mycoses, such as Broncho-Moniliasis, and Broncho-Aspergillosis, of which instances have been found (Broncho-Moniliasis, 7; Broncho-Aspergillosis, 1; other fungoid infections, 10) during routine investigations in the Public Health Laboratories of Burnley, in the course of the year under report.

Trade dusts do not cause Tuberculosis, but the respiratory apparatus which is thus debilitated and below par, becomes an easier prey, not necessarily to a fresh aerial infection, but to the organisms of Tuberculosis already possibly lying dormant in the body, and which the constitution in good physiological condition can subdue. We have had definite enough proof of this in the number of instances of opening-up of Tuberculous foci in the so-called "Influenza" pandemic which overran us in 1918-1919.

These may be described as an unfortunate, unavoidable handicap in the economics of trade, but why let us add to the handicap any avoidable element, however trivial?

It has already been suggested that habits formed by generations of a community hold fast root. The firmly-closed window is one of these habits. The street is the convenient receptacle for refuse, sweepings, expectoration, etc. In thousands of Burnley houses, the outer door leads direct from the street into the chief living room. In the chief living room are the food and the food utensils. The incoming, dust-laden air is sucked in over the threshold of the closed door, the living room is the "Sedimentation Chamber," the effluent channel is by the fire-draught up the chimney-flue (in back-to-back houses there can be no alternative). In fact, we have a virtual copy of the physical means that might be successfully adopted by a Laboratory worker in order to concentrate and cultivate the "flora and fauna" of a polluted atmosphere—the jelly of a meat-pie, and the daily milk supply are excellent nutrient media for the purpose.

There may be many micro-organisms in the polluted air, some of them relatively harmless, some of them harmful, and one of them—the bacillus of Tuberculosis—positively appalling in its death-dealing capacity. The simplest elements of hygiene, applied in warding this off, by the most humble among us, cannot be considered as trivial in the sight of Preventive Medicine."

5. Infectious Diseases.

The following diseases are notifiable either under general or local Acts of Parliament :—Smallpox, Cholera, Typhus Fever, Scarlet Fever, Diphtheria, Typhoid or Enteric Fever, Erysipelas, Puerperal Fever, Measles, Cerebro Spinal Fever, Acute Poliomyelitis, and Ophthalmia Neonatorum. The notification of Measles was made permanent at the beginning of the year. Influenzal Pneumonia, Primary Pneumonia, Malaria and Dysentery are notifiable under an Order of the Ministry of Health. The disease of Encephalitis Lethargica was added to the list for one year and at the end of 1919 it was decided to continue the operation of the order until such time as the Minister of Health directs. To this list must be added Tuberculosis, all forms of which are now notifiable, also an infectious disease, but not quite comparable in its infectivity to the others, which are acutely infectious. In practically all cases of Tubercular infection the person who contracts the disease has been exposed on several occasions, but in the others, as far as we know, one exposure is all that is necessary. Tuberculosis has already been dealt with under that heading. The infectious diseases here under review for the year are acutely infectious ones, both the notifiable and non-notifiable. The first table gives the incidence in various Lancashire towns of Scarlet Fever, Diphtheria, Typhoid Fever and Erysipelas. In the 13 large towns given it will be seen that there are only four where the Scarlet Fever rate per thousand of population is lower than Burnley, 3 only of these towns have a lower rate than Burnley for Diphtheria.

TABLE IV.—SHOWING STATISTICS OF THE INCIDENCE OF NOTIFIABLE
INFECTIOUS DISEASES IN LANCASHIRE.

	<i>Estimated Population in the mid- dle of 1920</i>	<i>Rates per thousand of Population.</i>							
		<i>Scarlet Fever</i>	<i>Diph- theria</i>	<i>Enteric Fever</i>	<i>Erysipelas</i>				
County Boroughs:—									
Barrow-in-Furness	76,561	...	—	...	0.22	...	0.02	...	—
Bolton	184,533	...	2.93	...	0.94	...	0.06	...	0.42
Bootle	80,029	...	4.60	...	2.10	...	0.05	...	0.39
BURNLEY	105,030	...	1.68	...	0.91	...	0.08	...	0.73
Liverpool	803,452	...	4.10	...	2.10	...	0.06	...	0.60
Manchester	770,597	...	4.90	...	1.20	...	0.07	...	0.50
Oldham	143,154	...	3.00	...	1.00	...	0.02	...	0.50
Preston	121,950	...	1.29	...	1.36	...	0.14	...	0.25
Salford	235,239	...	4.70	...	1.40	...	0.28	...	0.57
Southport	72,939	...	2.84	...	0.59	...	0.11	...	0.74
Stockport	130,635	...	5.83	...	2.41	...	0.05	...	0.60
Warrington	77,939	...	1.38	...	1.27	...	0.03	...	0.43
Wigan	90,866	...	0.01	...	0.17	...	0.03	...	0.02
Boroughs and Urban Districts:—									
Accrington	45,398	...	0.04	...	0.64	...	—	...	0.02
Bacup	21,053	...	0.47	...	0.94	...	—	...	0.90
Chorley	32,853	...	1.15	...	1.33	...	0.03	...	0.51
Colne	26,876	...	2.49	...	2.41	...	0.07	...	0.22
Darwen	39,182	...	0.94	...	0.45	...	0.05	...	0.23
Heywood	27,226	...	0.68	...	0.53	...	0.07	...	1.33
Lancaster	38,257	...	1.70	...	0.60	...	0.12	...	0.30
Leigh	46,239	...	2.76	...	2.05	...	0.15	...	0.47
Middleton	28,820	...	1.60	...	1.40	...	0.03	...	0.17
Nelson	43,095	...	2.97	...	1.25	...	0.02	...	0.48
Radcliffe	24,384	...	2.40	...	1.50	...	0.08	...	0.20
Rawtenstall	28,470	...	0.39	...	0.46	...	0.04	...	0.25

NOTIFIABLE INFECTIOUS DISEASES.

Scarlet Fever.—There has been an increase in the number of Scarlet Fever cases notified as compared with the previous year, 176 against 127 and 32 the preceding years. There have been 3 deaths compared with 2 last year, giving a mortality rate of 1.7 per cent of cases as against an average of 2.37 for the last ten years.

There has been no time of the year when Scarlet Fever could be called epidemic, for the cases are evenly distributed over the whole of the year.

On page 34 is given a table showing the incidence of Scarlet Fever in various towns.

The following table gives the Morbidity Rate, number of deaths, and the mortality rate from Scarlet Fever for the last ten years :—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Cases per 1,000 of population	2.45	1.09	1.87	2.80	3.99	1.68	.49	.35	1.24	1.68
No. of deaths	4	3	7	10	3	3	2	1	2	3
Mortality rate per 1,000 of population	.03	.027	.064	.09	.029	.029	.021	.011	.019	.028
Mortality rate per 1,000 cases	15	25	34	32	7.25	16.7	43	31.2	15.7	17.0

The following table shows the ages of the persons notified and ages at death :—

	<i>Cases.</i>	<i>Deaths.</i>
Under 1	1	—
From 1 to 5	24	1
„ 5 to 15	131	2
„ 15 to 25	17	—
„ 25 to 45	3	—
Not stated.....	—	—
TOTAL	<u>176</u>	<u>3</u>

The following table shows, as near as could be ascertained, the source of illness :—

No. visited	173
Infection from same house	18
No definite history	155

The following statement shews the comparative length of time that elapsed between the onset of the disease and notification to this office :—

Reported within 6 days of onset	142
Over 6 and within 14 days	26
Over 14 and within 21 days	5
Not Investigated	3
TOTAL	176

In 14 cases the patients were peeling at the time of notification.

The 176 cases occurred in 165 houses. Of these 176 cases, 89 were removed to the Sanatorium.

Diphtheria and Membranous Croup.—Total notified 96, with 9 deaths, against 73 and 5 last year. Like Scarlet Fever, this disease can hardly be said to be epidemic, for the cases are distributed over the whole of the year.

The 96 cases notified occurred in 95 houses, and 52 of the cases were admitted to the Sanatorium. The following table gives the morbidity rate, number of deaths, and the mortality rate from Diphtheria for the last ten years.

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Cases per 1,000 of population.....	1.30	1.11	1.55	1.17	.98	.97	.62	.57	.71	.91
No. of deaths	20	6	19	15	12	16	6	8	5	9
Mortality rate per 1,000 of population	.18	.05	.17	.13	.115	.159	.062	.085	.048	.09
Mortality rate per 1,000 cases	143	50	108	116	117	163	100	144	68	94

The following table shows the ages of the persons notified and the ages at death :—

	Cases.	Deaths.
From 1 to 5	24	4
„ 5 to 15	45	5
„ 15 to 25	14	—
„ 25 to 45	12	—
„ 45 to 65	1	—
TOTAL	96	9

The source of infection of Diphtheria, like Scarlet Fever, is often difficult to find, as will be seen from the following table :—

No. visited.....	93
No. in Public Institutions	3
Infection from same house.....	11
,, neighbour's house	1
No definite history	81

Supply of Diphtheria Anti-Toxin.—94 vials have been supplied to medical men free. The Anti-Toxin can be obtained for any person residing in the Borough on a written order from any medical man. It can be obtained at the Public Health Office during the day and at the Central Police Station, Town Hall, between the hours of 11 p.m. and 7 a.m. Each vial contains 2,000 units.

There were 129 throat swabs examined at the Public Health Laboratory, with 34 positive results.

Typhoid or Enteric Fever.—Nine cases of this disease were notified and there were two deaths. The following table gives the morbidity rate, number of deaths, and the mortality rate of Typhoid for the last ten years :—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Cases per 1,000 of population.....	.27	.30	.17	.20	.20	.30	.05	.066	.065	.086
No. of deaths	8	8	4	3	4	8	—	1	2	2
Mortality rate per 1,000 of population	.07	.07	.04	.30	.083	.079	—	.011	.019	.019
Mortality rate per 1,000 cases	175	250	222	136	190	250	—	166	285	222

The following table shows the ages of the persons notified and ages at death:

	<i>Cases.</i>	<i>Deaths.</i>
From 1 to 5	—	—
,, 5 to 15	1	—
,, 15 to 25	5	1
,, 25 to 45	2	1
,, 45 to 65	1	—
Over 65	—	—
TOTAL	9	2

The 9 cases of Typhoid reported have occurred in 9 houses, and 6 were admitted to the Sanatorium.

During the year 13 specimens of the blood of suspected Typhoid Fever cases were examined in the Laboratory for the serum reaction with the following results :—

Number Examined	13
Positive	6
Negative	7

Puerperal Fever.—There were 3 notifications of this disease, with 1 death. Last year the figure was 10 cases, 5 deaths. The following table gives the morbidity rate per thousand births, the number of deaths, and the mortality rate per thousand cases for the last ten years :—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Mortality rate per 1,000 births	3.67	3.21	2.41	3.47	3.4	1.10	.010	2.06	3.12	.411
No. of deaths	3	5	4	3	3	1	—	1	5	1
Mortality rate per 1,000 cases	330	625	666	333	428	500	—	333	500	333

Erysipelas.—77 cases were notified, as against 79 last year, with 3 deaths, as against 1 last year. Of the 77 cases 5 were admitted to the Sanatorium.

Three cases were notified from the Workhouse Infirmary.

	Cases.	Deaths.
Under 1	—	—
From 1 to 5	1	—
„ 5 to 15	4	—
„ 15 to 25	5	—
„ 25 to 45	26	—
„ 45 to 65	32	2
Over 65	9	1
TOTAL	77	3

Measles.—Total notified : 290, with 7 deaths.

The 290 notified occurred in 275 houses, and 1 was admitted to the Sanatorium. The following table gives the morbidity rate, number of deaths, and the mortality rate :—

Cases per 1,000 population	2.8
No. of Deaths	7
Mortality rate per 1,000 of population	0.07
Mortality rate per 1,000 of cases	24.1

The following table shows the ages of the persons notified and the ages at death :—

	<i>Cases.</i>	<i>Deaths.</i>
Under 1.....	27	3
From 1 to 5	137	4
„ 5 to 15	123	—
„ 15 to 25	3	—
„ 25 to 45	—	—
„ 45 to 65	—	—
TOTAL	290	7

The distribution of the notifications and deaths by months is as follows :—

	<i>Notifications.</i>	<i>Deaths.</i>
January	113	3
February	53	1
March	23	—
April	5	1
May	16	—
June	11	—
July.....	6	—
August	3	—
September	—	—
October	11	—
November	22	1
December	27	1
TOTAL	290	7

Complications of Measles.—Most deaths from Measles are ultimately brought about by some affection of the respiratory tract, and the following table gives the secondary cause of death where one has been entered on the death certificate :—

Broncho Pneumonia..	5
Convulsions	1
Pneumonia	1
TOTAL	7

Notification of Measles.—The Public Health (Measles and German Measles) Regulations of 1915 made Measles compulsorily notifiable. On November 27th, 1919, the Public Health (Measles and German Measles) Regulations 1915, Recission Order 1919, revoked the above. An intimation was received from the Ministry of Health that if the Local Authority wished the original Order to remain in force application could be made to the Ministry. Application was made, and the Borough of Burnley, etc., Measles and German Measles Order of 1920, came into force on March 1st.

Whooping Cough.—There were no deaths this year, and 14 last year.

Chicken Pox.—No deaths; 115 cases were notified from the schools.

Influenza.—11 deaths. The ages were as follows :—

From 5 to 15	1
„ 15 to 25	3
„ 45 to 65	4
Over 65	3

The complications of Influenza which have caused death are as follows :—

Bronchitis	3
Meningitis	1
Syncope	1
Heart Failure	1
Encephalitis.....	1
Gastritis	1
Gastro-Enteritis	1

Ophthalmia Neonatorum.—18 cases of this disease were notified. There were no deaths during the year.

Influenzal and Primary Pneumonia.—91 cases were notified during the year.

Encephalitis Lethargica.—There were 4 cases of this disease notified, with 2 deaths.

Malaria.—42 cases were notified. No deaths.

Dysentery.—2 cases were notified. No deaths.

Poliomyelitis.—1 case of this disease was notified. No deaths.

Table V.—LIST OF NOTIFIABLE INFECTIOUS DISEASES.
SHOWING THE NUMBER NOTIFIED AND THE NUMBER OF DEATHS IN EACH WARD.

Wards and Institutions.	Notifications and Deaths.	Small-Pox.	Scarlet Fever.	Diphtheria and Membranous Croup.	Typhoid Fever.	Puerperal Fever.	Erysipelas.	Tuberculosis of Lungs.	Other Forms of Tuberculosis.	Ophthalmia Neonatorum.	Measles.	*Pneumonia.	Malaria.	Dysentery.	Encephalitis Lethargica.	Polio-Myelitis.
St. Andrew's	Notified Deaths	0 0	41 0	11 3	2 1	0 0	9 0	18 11	5 3	0 0	74 1	11 0	4 0	0 0	0 0	0 0
Daneshouse	Notified Deaths	0 0	20 0	12 1	0 0	0 0	4 2	6 2	3 3	1 0	13 1	8 0	3 0	0 0	1 0	0 0
Stoneyholme	Notified Deaths	0 0	5 1	1 1	0 0	1 0	4 0	2 3	3 2	1 0	9 0	1 0	4 0	0 0	0 0	0 0
St. Peter's	Notified Deaths	0 0	9 1	0 0	1 0	0 0	3 0	14 11	5 5	0 0	11 0	4 0	2 0	0 0	0 0	0 0
St. Paul's	Notified Deaths	0 0	16 0	9 0	0 0	0 0	2 0	10 8	5 4	3 0	21 0	12 0	2 0	0 0	0 0	0 0
Fulledge	Notified Deaths	0 0	11 0	8 0	0 0	0 0	12 0	17 9	6 3	5 0	49 3	18 0	3 0	0 0	1 1	0 0
Burnley Wood	Notified Deaths	0 0	15 1	28 1	0 0	0 0	17 0	14 7	14 5	2 0	17 1	11 0	2 0	1 0	1 0	0 0
Healey	Notified Deaths	0 0	13 0	7 1	1 1	2 1	5 0	3 2	4 3	3 0	20 0	7 0	2 0	1 0	0 0	0 0
Trinity	Notified Deaths	0 0	16 0	2 0	1 0	0 0	6 0	9 3	5 4	2 0	2 0	4 0	2 0	0 0	0 0	0 0
Whittlefield	Notified Deaths	0 0	6 0	6 0	0 0	0 0	1 0	10 6	5 1	0 0	7 0	5 0	3 0	0 0	0 0	0 0
Gannow	Notified Deaths	0 0	9 0	4 0	3 0	0 0	4 1	7 3	6 3	0 0	14 0	7 0	7 0	0 0	1 1	0 0
Lowerhouse	Notified Deaths	0 0	15 0	8 2	1 0	0 0	10 0	8 11	4 1	1 0	53 1	11 0	8 0	0 0	0 0	1 0
†Workhouse	Notified Deaths	0 0	0 0	0 0	0 0	0 0	0 0	3 15	0 5	0 0	0 0	4 0	0 0	0 0	0 7	0 0
†Victoria Hospital	Notified Deaths	0 0	0 0	1 0	0 0	0 0	0 0	7 7	8 6	0 0	0 6	0 0	0 0	0 0	0 0	0 0
†Bank Hall Hospital	Notified Deaths	0 0	0 0	2 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Sanatorium	Admitted Deaths	0 0	89 1	52 4	6 0	0 0	5 0	0 13	0 2	0 0	1 0	7 0	0 0	0 0	0 0	0 0
Total Notified		0	176	96	9	3	77	118	65	18	290	99	42	2	4	1
Total Deaths		0	3	9	2	1	3	76	37	0	7	0	0	0	2	0
Percentage of Deaths to cases		0	1.70	9.37	22.2	33.3	3.9	64.4	57.0	0	2.4	0	0	0	50	0

* The number of deaths under this head is not shown because many of the people who died from Pneumonia had not been previously notified as suffering from Influenzal or Primary Pneumonia to which this notification refers.

† The figures shown opposite these Institutions are also shown in the Wards in which the persons resided.

METHODS OF DEALING WITH INFECTIOUS DISEASE.

The diseases dealt with during the year were Measles, Diphtheria, Erysipelas, Scarlet Fever, Enteric Fever, Puerperal Fever, Ophthalmia Neonatorum, Primary and Influenzal Pneumonia, Malaria, Dysentery, Encephalitis, and Poliomyelitis.

There were no cases of Smallpox, Cholera, Typhus Fever, Relapsing Fever, Continued Fever, or Cerebro-Spinal Fever notified during the year.

Tuberculosis of the Lungs is notifiable under the Local Act of 1908. Tuberculosis, other than that of the lungs, is notifiable under the Public Health (Tuberculosis) Regulations, 1912.

An Inspector is employed solely to deal with Infectious Diseases, to superintend isolation of patients, and the disinfection of infected premises.

On receiving a notification of any of the above diseases, a visit is paid to the house as early as possible. If isolation can not be secured in the home, the matron of the Sanatorium is requested to have the patient removed. The ambulance van, which is the property of the Joint Hospital Board, is kept at the Sanatorium. If isolation can be secured in the home and the relatives are anxious that the patient should remain at home, the Inspector gives advice as to the best means of isolation and secures its efficiency by paying frequent visits.

On removal or recovery of a patient the premises are disinfected, usually by means of the Formalin Spray. The bedding and other articles are removed to the yard in Aqueduct Street and there disinfected by the "Equipex" Steam Disinfector, or by sulphur fumes as may be necessary.

An account of the method of dealing with Tuberculosis is given under that heading.

Information gathered by the Inspector regarding contacts and the isolation of patients who were not removed from their homes is here given concerning Scarlet Fever and Diphtheria.

Scarlet Fever :

Patient the only child in the house	36
Other children sent away	9
Other children had Fever before	5
Efficient Isolation.....	34
Infirmary	3
TOTAL	<u>87</u>

Diphtheria :

Patient the only child in house	16
Other children sent away	—
Dead when visited	1
Efficient Isolation	27
TOTAL	<u>44</u>

The Non-notifiable Infectious Diseases are notified to this Office only from Schools. The majority of these are visited by the Inspector who gives such advice as may be necessary regarding the prevention of the further spread of the disease.

Notification from Schools :—

Chicken Pox	115
Mumps	368
Whooping Cough	33
Other Diseases, such as Ringworm, Sores, Scabies, etc.	41
TOTAL	<u>557</u>

DISINFECTION.—The particulars of the work in this department are as follows.

Visits to Infected Houses	...	...	...	...	1128
Houses Disinfected (Rooms—434)	...	...	...	...	210
Number of times Disinfecting Machine used	...	...	...	...	204
Number of times Institutions Disinfected	...	...	...	...	93
Beds Disinfected	...	...	...	...	58
Mattresses do.	...	...	...	...	15
Pillows do.	...	...	...	...	126
Blankets do.	...	...	...	...	48
Sheets do.	...	...	...	...	16
Coverlets do.	...	...	...	...	51
Other Articles of Clothing Disinfected	...	...	...	...	556
Measles Cases Visited	...	...	...	...	290

Bedding, etc., disinfected from Bank Hall :—

Pillows	...	...	...	...	...	44
Sheets	...	...	...	...	...	32
Blankets	...	...	...	...	...	108
Coverlets	...	...	...	...	...	5
Mattresses	...	...	...	...	...	24
Other Articles of Clothing Disinfected	...	...	...	...	...	98
Library Books	...	...	...	...	...	133
Midwives' Bags and Clothing	...	...	...	...	...	3

Open-Air School :—

Blankets Disinfected	...	...	...	...	...	939
Pillows do.	...	...	...	...	...	83
Pillow Cases do.	...	...	...	...	...	83

Cleansing of Persons Act, 1897.—Under this Act, which the Burnley Local Sanitary Authority has adopted, means of cleansing persons infected with vermin are provided, and during the year 4 persons have been cleansed.

VENEREAL DISEASES.

The arrangements with the authorities of the Victoria Hospital for the carrying out of the treatment of these diseases were continued.

The Medical Officer for Venereal Disease appointed by the Hospital Authorities conducts an out-patient clinic two days in each week (2 sessions on each day), one day being for males and one for females.

The following Table shews the number of new cases dealt with at the Venereal Diseases Clinic in 1919, and the year under review :—

Number of Burnley persons dealt with during the year at or in connection with the out-patient Clinic <i>for the first time</i> , and found to be suffering from :—		1920	1919
Syphilis	... ..	140	146
Soft Chancre	... ..	7	33
Gonorrhoea	... ..	67	78
Conditions other than Venereal	... ..	65	28
Total	... ..	279	285
Total number of attendances at the Out-patient Clinic of patients residing in Burnley			
		3288	2488
Aggregate number of "In-patient Days" of patients residing in Burnley			
		411	369
Number of Doses of Salvarsan { 1. Out-patient Clinic ...			
		1376	847
Substitutes given in the { 2. In-patient Dept. ...			
		64	41
to patients residing in Burnley.			

Supply of Salvarsan, or its Approved Substitutes.

The Borough Council supplies to medical practitioners approved under the Regulations for such purpose, Salvarsan or its approved substitutes free of cost.

The following is a list of Drugs and amounts that were supplied during the year :—

	Amount Supplied, 1920	Amount Supplied, 1919
Galyl	143 doses.	268 doses.
Novarsenobillon	292 "	95 "
Neokharsivan	52 "	9 "

A medical practitioner desirous of having his name placed on the list for the gratuitous supply of Salvarsan, or its approved substitutes, may apply to the Medical Officer of Health, giving the necessary particulars of his training or experience in the administration of these drugs.

PUBLIC HEALTH LABORATORY.

This Laboratory is available to medical men for the examination of throat swabs, of sputa from suspected consumptive persons and for the examination of the blood of suspected cases of Typhoid Fever. In addition to this work, specimens of the hair of school children suspected of suffering from Ringworm are also examined, and the bacteriological examination of milk was carried out by Dr. Horne, who possesses the licence of the Home Office which is necessary for this purpose.

Tabular statement of the work carried out :—

	Nature.	No.
(a)	GENERAL—	
	Sputa for B. Tuberculosis	431
	Throat and Nose Swabs for Diphtheria	129
	Cerebro-Spinal Fluids	8
	Bloods for Typhoid-Dysentery Group, Malaria, etc....	17
	Urines	46
	Pathological Tissues	51
	Blood Films	9
	Dejecta	5
	Pus and Pleural Fluids	13
	Stomach Content	2
	Hairs	1
	Cows Blood for Anthrax	1
(b)	VENEREAL DISEASES—	
	Blood Tests	741
	Cerebro-Spinal Fluids	3
	Smears (Gonorrhoeal)	73
	For Spirochaetes—	
	Placentae	15
	Smears	6
	<i>For Bank Hall Hospital—</i>	
	Bloods, Infant	15
	Bloods, Maternal	3
	Cerebro-Spinal Fluids	1
	Smears	1
(c)	FOR SCHOOL CLINIC—	
	Hairs, for Ringworm	36
	Total	<u>1,607</u>

NOTES.—Of the 431 Sputa examined, 60 were found to contain Tubercle bacilli. The proportion of positive Sputa is lower than formerly, and affords two indications: first, that there is an increasing endeavour to filter out Tuberculosis earlier from among the many forms of respiratory catarrh, and, secondly, that suspicious but negative Sputa are being re-tested.

Of the 129 Swabs, which included an examination of the throats of the scholars at the Open-Air School, 34 were found positive of Diphtheria.

A total of 763 Bloods and Cerebro-Spinal Fluids were examined for indications of Venereal Disease. Of these, 375 were found positive.

Of 80 smears examined for Gonococcal infection, 56 were found positive.

The 36 samples of hair of school children examined, showed 20 to have an active Ringworm infection.

Two autogenous vaccines were prepared and issued for therapeutic use.

X-RAY DEPARTMENT, 1920.

SUMMARY OF RADIOSCOPIC, RADIOGRAPHIC AND RADIO-THERAPEUTIC WORK CARRIED OUT IN 1920.

RADIOSCOPY (SCREEN).

On account of	Chest.	Abdomen.	Spine	Arm.	Wrist	Hand	Total.
Tuberculosis Officer ...	67	1	2	—	—	—	70
School Medical Officer ...	—	—	—	2	2	1	5
Practitioner ...	—	—	—	1	—	—	1
Corporation Accidents ...	—	—	—	1	—	—	1
Total ...	67	1	2	4	2	1	77

RADIOGRAPHY (PLATES).

On account of	Elbow	Wrist	Pelvis	Hip	Leg	Knee	Ankle	Foot	Total
Tuberculosis Officer	1	—	—	3	—	—	1	—	5
School Med. Officer	2	2	1	2	—	—	—	—	7
Practitioner ...	—	2	—	—	—	1	—	—	3
Corporation Accidents ...	—	—	—	1	2	—	2	2	7
Total ...	3	4	1	6	2	1	3	2	22

RADIO-THERAPY (RINGWORM OF HEAD).

Extent.	Returned to School, in Weeks.						Total	Recent Cases still under observation.
	2	3	4	5	6	7		
Whole Head ...	—	—	—	1	—	—	1	1
4-Area ...	—	—	—	—	—	—	—	—
3-Area ...	1	1	—	—	—	1	3	—
2-Area ...	—	4	2	—	2	1	9	2
1-Area ...	1	8	2	3	1	1	16	2
	2	13	4	4	3	3	29	5

6. Departmental Administration.

The Offices are in St. James's Street, and the Disinfecting Station is in Aqueduct Street.

The following is a short summary of the work of this Department :

- (a) The suppression and removal of nuisances, etc.
- (b) The erection or provision of public lavatories and urinals.
- (c) The inspection of canal boats
- (d) The registration and supervision of common lodging houses.

The administration of the following Acts of Parliament, amongst others :—

- Sale of Food and Drugs Acts.
- Dairies, Cowsheds and Milkshops Orders.
- Notification of Infectious Diseases Acts.
- Section 109 of Burnley Borough Improvement Act—Compulsory notification of Tuberculosis of the Lung.
- Public Health (Tuberculosis) Regulations, 1912.
- Midwives Act.
- Factories and Workshops Acts.
- Fertilizers and Feeding Stuffs Acts.
- Housing and Town Planning Act.
- National Insurance Act, 1911. (Sanatorium Benefit).

In addition to these the administration of the " Education (Administrative Provisions) Act," of 1907, (Medical Inspection) is carried out by the staff of this Department. A separate account of the work done under this Act is given at the end of this Report.

Summary of work of Maternity and Child Welfare Committee :

Administration of

- Milk Depot.
- Health Visiting.
- Notification of Births Act.
- Infant Welfare Centres.
- Bank Hall Childrens' and Maternity Hospital.
- Day Nursery.

I.—**FOOD INSPECTION.**—Mr. Kenyon, M.R.C.V.S., who carries out the inspection of Food, makes the following report :—

TABLE I.
NUMBER OF ANIMALS SLAUGHTERED AT THE ABATTOIRS.

1920.	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
January	877	833	715	136	105	2666
February	705	801	248	...	97	1851
March	643	625	235	...	90	1593
April	449	453	307	...	177	1386
May	461	257	258	...	93	1069
June	287	94	279	56	48	764
July.....	372	381	150	1462	124	2489
August	478	539	104	3885	67	5073
September	571	510	126	4945	73	6225
October	410	465	172	2652	65	3771
November	687	1511	285	2655	84	5222
December	685	1992	630	1672	81	5060
Totals—1920 ...	6625	8461	3516	17463	1104	37169
Totals—1919 ...	6647	12824	2599	12136	1915	36121

Compared with last year this table shows an increase of 917 Pigs, 5,327 Lambs; and a decrease of 22 Beasts, 4,363 Sheep, and 811 Calves.

TABLE II.
NUMBER OF CARCASSES AND AMOUNT OF DEAD MEAT BROUGHT TO THE ABATTOIRS

1920.	Carcases.	Sides.	Quarters.	Sheep.	Lambs.	Pigs.	Calves.
January	155	133½	...	9	...	...	...
February	193½	...	...	...	...	...	...
March	180¼	...	...	445	...	...	...
April.....	235	...	...	573	...	...	...
May	229¾	...	...	379	...	...	...
June .....	...	180	...	...	...	...	...
July.....	171¼	...	...	400	...	...	...
August	15	...	...	78	...	...	...
September	7½	...	...	...	...	...	...
October .....	...	...	...	...	...	...	...
November.....	...	...	...	...	...	...	...
December .....	...	18	...	...	...	...	...
Totals 1920	1187½	198	...	1884	...	...	...
Totals 1919	1131½	...	...	532	...	...	...

TABLE III.
NUMBER OF ANIMALS SPECIALLY EXAMINED.

1920.	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
January	10	...	2	...	...	12
February	6	1	1	...	3	11
March	6	...	...	...	1	7
April	16	7	1	...	...	24
May	4	2	...	...	1	7
June	2	...	1	...	...	3
July.....	2	...	2	...	1	5
August .....	...	3	...	...	...	3
September	4	5	2	...	...	11
October	2	3	...	...	...	5
November	2	1	3	...	4	10
December	1	...	1	...	1	3
Totals—1920	55	22	13	...	11	101
Totals—1919	107	28	18	...	47	200

The above figures show a very large decrease in the number of animals specially examined this year.

TABLE IV.
RESULT OF SPECIAL EXAMINATION
PASSED.

1920.	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
January	1	...	...	...	...	1
February	3	...	...	...	...	3
March	3	...	...	...	...	3
April	5	6	1	...	...	12
May	1	1	...	...	...	2
June	1	...	1	...	...	2
July.....	2	...	1	...	...	3
August .....	...	...	...	...	...	...
September	3	3	...	...	...	6
October	2	...	...	...	...	2
November	1	...	2	...	...	3
December .....	...	...	...	...	...	...
Totals—1920 ...	22	10	5	...	...	37
Totals—1919 ...	17	16	5	...	3	41

TABLE V.
RESULT OF SPECIAL EXAMINATION.
CONDEMNED.

1920.	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
January	9	...	2	...	...	11
February	3	1	1	...	3	8
March	3	...	...	...	1	4
April	11	1	...	...	...	12
May	3	1	...	...	1	5
June	1	...	...	...	...	1
July.....	...	...	1	...	1	2
August .....	...	3	...	...	...	3
September	1	2	2	...	...	5
October .....	...	3	...	...	...	3
November	1	1	1	...	4	7
December	1	...	1	...	1	3
Totals—1920 ...	33	12	8	...	11	64
Totals—1919 ...	90	12	13	...	44	159

ORIGIN OF CONDEMNED CARCASES.

Local.				Preston.		Bolton.	Penrith.	Birkenhead.	
Cows.	Sheep.	Pigs.	Calves	Cows.	Sheep.	Cow.	Calves.	Cows.	Sheep.
26	4	8	8	4	2	1	3	2	6

TABLE VI.
CAUSES OF REJECTION.

1920.	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
Tuberculosis	26	...	3	...	...	29
Suffocated .....	...	10	...	...	...	10
Enteritis.....	6	...	...	...	...	6
Wasted .....	...	2	3	...	4	9
Immature.....	...	...	...	...	6	6
Unwholesome	1	...	...	...	1	2
Pneumonia .....	...	...	2	...	...	2
Totals—1920	33	12	8	...	11	64

TABLE VII.
WEIGHT OF CARCASSES CONDEMNED.

	Beasts.	Sheep.	Pigs.	Lambs.	Calves.	Totals.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1920	14143	546	378	...	286	15353
1919	31791	418	723	...	1443	34375

TABLE VIII.
TUBERCULOUS CARCASSES EXAMINED AND REJECTED.

	Cows.		Heifers.		Bulls.		Bullocks.		Calves.		Sheep.		Pigs.		Totals.	
	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.	Examined.	Rejected.
1920.																
January ...	20	8	...	...	...	...	...	...	...	...	...	...	...	...	20	8
February	12	3	...	...	...	...	...	...	...	...	...	...	...	...	12	3
March ...	15	3	1	...	...	...	...	...	...	...	...	...	...	...	16	3
April	17	9	...	...	...	...	...	...	...	...	...	...	...	...	17	9
May	4	1	...	...	1	...	...	...	...	...	...	...	...	...	5	1
June	5	1	...	...	...	...	...	...	...	...	...	...	...	...	5	1
July.....	3	...	...	...	...	...	...	...	...	...	...	...	1	1	4	1
August ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
September	4	...	1	...	1	...	1	...	...	...	...	...	1	1	7	1
October ...	2	...	1	...	1	...	1	...	...	...	...	...	...	...	5	...
November	3	...	2	...	1	...	...	...	...	...	...	...	...	...	6	...
December	1	1	2	...	...	...	4	...	...	...	...	...	1	1	8	2
Totals 1920	87	26	7	...	3	...	6	...	...	...	...	...	3	3	106	29
Totals 1919	176	72	24	...	12	...	3	...	1	1	...	...	4	4	220	77

The above animals which were rejected, and the odds of the animal passed, were removed to the Cleansing Department.

The following is a list of Food Stuffs submitted for inspection outside the Abattoirs :—

- December 30th, 1919, and January 19th, 1920—81 lbs. of Cod Fish and 27 score of Eggs.
- February 16th, 1920—One carcase of Frozen Mutton (weighing 45-lbs).
- March 12th, 1920—One tin of Corned Beef (weighing 6 lbs.).
- March 20th and 24th, 1920—Six tins of Corned Beef (weighing 36 lbs.).
- June 2nd, 1920—One carcase of Frozen Lamb (weighing 33 lbs.).
- June 24th, 1920—Two tins of Corned Beef (weighing 12 lbs.).
- June 28th, 1920—50 lbs. of Frozen Beef and Mutton.
- July 19th, 1920—11 Couplets of Cream.
- August 9th and 16th, 1920—24 stones of Plaice and 1 tin of Corned Beef (weighing 6 lbs.).
- September 9th, 11th and 16th, 1920—10 boxes of Fignon Haddock (weighing 140 lbs.), 2 tins of Corned Beef (weighing 12-lbs.), 36 tins of Salmon, and 26 tins of Tomatoes.
- September 29th, October 1st, 8th and 12th, 1920—4 stones of Mackerel, 1 case of Frozen Rabbits (2 dozen), 2 tins of Corned Beef (weighing 12 lbs.), and 4 cases of Frozen Rabbit (8 dozen).
- October 18th, 1920—A mixed assortment of food stuffs.
- November 8th, 1920—18 scores of Eggs.
- November 13th, 1920—4 lbs. of Black Puddings, and 24 Frozen Rabbits.
- November 15th, 1920—3 tins of Corned Beef (weighing 18 lbs.).
- December 2nd, 1920—19 Frozen Rabbits.

The above articles of food were voluntarily surrendered, and were at once removed to the Cleansing Department.

TABLE IX.

VISITS MADE TO DIFFERENT PREMISES FOR THE INSPECTION OF FOOD STUFFS.

No of Visits to the Abattoirs	488
" " Butchers' Shops	1328
" " Fish Shops	527
" " Fruit Shops	500
" " Wholesale Shops	446
" " Hardacres Yard.....	44
" " Collinges' Yard	39
" " Sunters' Yard	35
" " Stockdale's Yard.....	42
" " Kayley's Yard.....	2
" " Cold Air Stores	32
" " Triperies and Tripe Shops	457
" " Meat Fish and Fruit Market	39
" " Cattle Market	37
" " Knacker's Yard	28
TOTAL	<u>4044</u>

During the time the Fair was held, several extra visits were made to the Cattle Market to inspect the Fruit Stalls. What little fruit I found there was very sound and of a fairly good quality.

ACCIDENTS.

Three cases of alleged damage to horses were investigated, and a report made on the condition of each animal.

TRIPERIES AND TRIPE SHOPS.

Four hundred and fifty-nine visits were made to the above premises, and on each visit the premises were found to be in a very satisfactory condition. The food stuffs examined were, in the majority of cases, sound, and the tubs, tanks, boxes, tins and other utensils were clean.

INSPECTION OF FERTILIZERS AND FEEDING STUFFS.

During the year no samples of the above have been submitted for analysis.

DAIRIES, COWSHEDS AND MILK SHOPS ORDER.

Number of Farms Visited	51
„ Visits to the Farms.....	171
„ Cattle Examined	1908
„ Dairies on the Farms	4
„ Visits to the Dairies	13
„ Milk Shops	108
„ Visits to the Milk Shops	452

INSPECTION OF DAIRIES.

There are four Dairies within the Borough to which 13 visits have been made and on each visit I found the sanitary condition of these premises to be satisfactory. During the year the above premises have been very little used owing to the shortage of milk.

INSPECTION OF COWSHEDS.

There are 51 Farms within the Borough, 46 of which are used for the housing of cattle and remaining 5 Farms for the rearing of either pigs or poultry.

I have made 171 visits to the above premises and inspected 954 cattle.

DISEASED UDDERS OF CATTLE ON THE FARMS.

	Tubercle.	Atrophy.	Hypertrophy.	Fellon.	Mastitis.	Induration.
1920...	...	4	1	...	...	...
1919...	...	6	...	...	...	...

There are 78 cowshed premises on the farms, and the following is a report on the sanitary condition of them :—

SANITARY CONDITION OF THE COWSHED PREMISES.

LIGHT.

Good	70
Fair	3
Bad	5

VENTILATION.

Good	68
Fair	5
Bad	5

DRAINS.

Good	76
Bad	2

FLOORS.

Good	63
Fair	13
Bad	2

AIR SPACE.

Good	64
Fair	8
Bad	6

WATER SUPPLY.

The water supply on all the farms is good, with the exception of one, and on this farm the cattle have to drink the overflow water from two farms above, which runs down the hedge side into a trough situated on this farm. The milk from this farm is not distributed to the public, but is for the use of the farmer.

The general cleanliness of the cowshed premises, cattle, etc., has been more satisfactory than last year, as fewer notices have been sent for nuisances arising on the farms.

The milk vessels, utensils, watering troughs, sieves, etc., on most of the farms have been kept very clean, but in a few instances I have had to complain of the dirty condition of the milking stools and other utensils.

Some of the tanks and manure pits are still badly situated, as they are only a short distance away from the cowsheds; others against the walls of the cowsheds, and, in the latter cases, there are holes in the walls through which the manure is thrown, with the result that that part of the wall round the holes becomes very filthy. In my opinion, all tanks and manure pits should be placed a distance of 20 to 30 feet away from the walls of the cowsheds, for, should there be any bad smells or leakages, there is practically no danger of them penetrating into the cowsheds.

I am pleased to report that the health of the cattle on all the farms has been very good.

No alterations have been made to Causeway End Farm, as the purchase of these premises by the Burnley Corporation has not been completed.

The owner of Higher Plane Tree Farm has decided to make a new tank, and manure pit, at a distance of about 40 feet from the wall of the cowshed.

MILK SHOPS.

During the year 15 persons have been registered as Purveyors of Milk, this bringing up the total number of Milk Shops in the Borough to 108.

It is very satisfactory to report that the general cleanliness of these premises, utensils, etc., has been good, as only 7 notices have been sent for nuisances during the year.

Four hundred and fifty-two visits have been paid to the above shops. Many visits have been made to the Milk Depot in Yorkshire Street, and on each visit the premises, utensils, etc., were found very clean.

CONTAGIOUS DISEASES (ANIMALS) ACT.

During the year there has been a big outbreak of Foot and Mouth Disease in the County, but I am glad to report that there have been no cases of this disease within the Borough.

The only disease to be reported is Parasitic Mange, of which the following are the cases, viz. :—

PARASITIC MANGE ORDER OF 1912.

Date of Notice. 1920.	Name and Address of Owners.	No. of Horses Kept.	No. of Horses Affected	Date when Discharged. 1920.
March 2nd ...	Lancashire & Yorkshire Railway Co., Burnley.	104	4	April 24th.
March 20th	Lancashire & Yorkshire Railway Co., Burnley.	104	1	April 24th.
March 22nd	Messrs. Towler & Coates, Wilton Street.	4	2	May 1st.
June 27th ...	R. Marsden, 20, Pollard Street...	4	4	July 31st.
July 17th ...	H. Cox, 4, Adlington Street ...	4	1	Horse Destroyed.
July 19th ...	A. Hibbert, 107, Gordon St. ...	1	1	August 30th.
August 2nd	R. Wilkinson, 94, Master Street	2	1	Sept. 18th.

All the necessary precautions were at once taken to prevent the disease from spreading.

On many occasions examinations have been made of animals which have died under rather suspicious circumstances, but in none of the cases has death been due to any Contagious or Infectious Disease.

SWINE FEVER MOVEMENT ORDER OF 1907.

No. of Store Pigs licensed into the Borough	500
No. of Fat Pigs licensed from Outside Districts to the Abattoirs into the Borough	2428
No. of Fat Pigs licensed to Abattoirs from Local Lairages...	478
TOTAL	3406

INSPECTION OF PIGGERIES.

No. of Pigs on the Farms	1294
No. of Pigs on the Piggeries	1305
TOTAL	2599

The above pigs were found to be very healthy and the sties were in a satisfactory condition.

FOREIGN DOGS' ORDER.

During the year one Foreign Dog was licensed into the Borough.

POULTRY ACT OF 1912.

Numerous visits have been paid to the Cattle Market to inspect the crates—used for the storage of poultry—all of which were found to be clean. During the inclement weather the birds were well protected with sheets, and no cases of overcrowding were noticed.

SHEEP DIPPING (SCOTLAND AND NORTH OF ENGLAND) ORDER OF 1907.

Owner of Sheep.	Number and Description of Sheep Dipped.	Place of Dipping.	Date of Dipping.	Description of Dip used.
H. Patterson, Brunshaw Farm.	26 Ewes and 12 Lambs.	Brunshaw Farm.	August 28th 1920.	McDougall's.
E. Charlton, 78 Brockenhurst St.	16 Sheep, 8 Ewes, 15 Shearlings, and 40 Lambs.	Brunshaw Farm.	Nov. 13th, 1920.	A. Robertson's Highland Dip.
A. Edmondson, Towneley Farm.	40 Ewes ...	Towneley Farm.	Nov. 13th, 1920.	McDougall's.
J. R. Fernihough, Lower Close Farm.	83 Ewes and 23 Shearlings.	Lower Close Farm.	Nov. 9th, 1920.	McDougall's.
I. Ingham, Bullion's Close.	13 Shearlings & 15 Scotch Lambs.	Bullion's Close.	Nov. 11th, 1920.	McDougall's.

ANIMAL TRANSIT ORDER.

During the year many visits have been made to the Station to examine the trucks which are used for the conveyance of cattle, these being generally found in good repair and fairly clean. The cattle landing premises were also in a satisfactory condition, the pens having been limewashed several times.

TUBERCULOSIS ORDER OF 1913.

Owing to the above Order being suspended on August 6th, 1914, there are no cases of this disease to report.

ORDERS MADE DURING 1920.

The following is a List of Orders made during 1920 :—

- Foot and Mouth Disease (Control of Movement) Order of 1920.
- Epizootic Abortion Order of 1920.
- Foreign Animals (Amendment) Order of 1920.
- Feeding Stuffs and Animal Products Order of 1920.
- Animals (Landing from Ireland) Order, 1920.
- Glanders or Farcy Order of 1920.
- Sheep Scab Order of 1920.

REVOCATION OF ORDERS.

The following Orders have all been revoked :—The Kent ; Norfolk ; Oxford and District ; Gloucestershire and District ; Northumberland ; East Kent ; Flintshire and District ; Wiltshire and District ; Devonshire ; Bedford and District ; Lancashire and District ; Hampshire ; Essex and District ; Durham and Northumberland ; West Sussex and District ; Yorkshire (West Riding) (Sheffield District) ; Warwickshire and District, and Isle of Wight, Foot-and-Mouth Disease Orders ; also the Animals (Landing from Ireland) Order ; Sheep-Dipping (England and South Wales) Order ; North Essex and Suffolk (Muzzling and Control of Dogs) ; Buckinghamshire and District (Muzzling and Control of Dogs) ; Monmouthshire and District (Control of Dogs) ; and the Cornwall and Devon (Control of Dogs) Orders.

INSPECTION OF WHOLESALE CATTLE AND PIG DEALERS' PREMISES.

No. of Visits to Hardacre's Yard	44
„ Stockdale's Yard	42
„ Collinge's Yard	39
„ Sunter's Yard	35
„ Kayley's Yard	2
TOTAL	162

The above premises have been kept in good repair, and clean, and the cattle sheds, sheep pens, and pig-styes limewashed many times during the year.

On July 8th, 1920, the Annual Horse and Cattle Fairs were held in Brunshaw Road and Parker Lane. Two visits were made to the above Fairs to inspect the animals, which were found quite healthy. The quality of the cattle was good, but the horses were much inferior to those shown in previous years.

There was a decrease in the number of horses and a slight increase in the number of cattle exhibited there.

FOOD AND DRUGS ACTS.—The administration of the Food and Drugs Acts is carried out by this Department, and the Chief Inspector of Nuisances has been appointed by the Local Authority an Inspector under the various Food and Drugs Acts.

Details of the nature of the samples collected and the results of the Borough Analyst's investigations are here given :—

NATURE.	FORMAL.		INFORMAL.		TOTAL.	
	Genu- ine	Adul- terated	Genu- ine	Adul- terated	Genu- ine	Adul- terated
Milk	150	6	3	2	153	8
Butter	23	1	...	...	23	1
Almond Oil .....	...	1	7	1	7	2
Preserved Cream	2	...	5	1	7	1
Cream .....	...	...	3	1	3	1
Olive Oil.....	...	...	10	...	10	...
Coffee .....	...	...	23	...	23	...
Oleo-Margarine .....	...	...	4	...	4	...
Margarine .....	...	...	1	...	1	...
Dripping.....	...	...	7	...	7	...
Baking Powder.....	...	...	9	...	9	...
Lard .....	...	...	10	...	10	...
Cream of Tartar .....	...	...	8	...	8	...
TOTAL	175	8	90	5	265	13

Results of Examination of Samples.

LIST OF FORMAL ADULTERATED SAMPLES.

Nature of Sample.	Nature and Extent of Adulteration.	How dealt with.
New Milk	... 11% deficient in fat	... Costs, £2 8s. 6d.
Do.	... 16% deficient in fat, and 19% added water.	Fine £20, and £2 8s. 6d. costs.
Do.	... 5% deficient in fat, and 8% added water.	Fine £5.
Oil of Almonds	...Apricot kernel oil	... Warranty defence; whole-saler paid £10 10s. 0d. costs.
Butter	... 22.5% water	... Dismissed on warranty.
New Milk	... 1.2% added water	... <i>Sub judice</i> .
Do.	... 3.5% do.	... <i>do.</i>
Do.	... 8% do.	... <i>do.</i>

INFORMAL SAMPLES.

Almond Oil	Apricot Kernel Oil.
New Milk	12% Deficient in fat.
Cream	0.37% Boric Acid not declared.
Preserved Cream	0.49% Boric Acid, 0.4% declared.
New Milk	Adulterated with added water.

**Report on the Administration of the Public Health (Milk and Cream)
Regulations, 1912 and 1917.**

1. MILK ; AND CREAM NOT SOLD AS PRESERVED CREAM.

	No. of Samples examined for the presence of a preservative		No. in which a pre- servative was re- ported to be present.
Milk.....	161	.....	Nil.
Cream	4	.....	1

The sample was informal, the amount of preservative present being equal to 0.37% of Boric Acid. In this case only samples of Preserved Cream could be subsequently obtained from the tradesman.

2. A. CREAM SOLD AS PRESERVED CREAM.

Correct statement made	7
Incorrect statements made	1
TOTAL	8

The incorrect sample contained 0.49% Boron Preservative, the label stating the amount as not exceeding 0.40%. This was an informal sample, a subsequent formal sample was within the stated limit.

B. DETERMINATION OF MILK FAT IN CREAM SOLD AS PRESERVED CREAM.

(1) Above 35%	8
(2) Below 35%	0
TOTAL	8

Apart from the samples mentioned above, there were no instances where the requirements as to labelling or declaration of Preserved Cream in Article V. (1) and the proviso in Article V. (2) of the Regulations had not been observed.

3. (1) There was no evidence of thickening substances being added to Cream or Preserved Cream.

II. NUISANCE INSPECTION.

Administration.—For administration purposes the town is divided into four districts, each having its inspector who is responsible for his district to the Chief Sanitary Inspector.

The following is a summary of the work done by the Sanitary Inspectors :—

	<i>No.</i>
Visits to Factories	165
„ Workshops and Workplaces	508
„ Bakeries.....	590
„ Outworkers' Premises	2
„ Chip, Fish and Tripe Shops.....	258
„ Ice-cream Shops	122
„ Milk and Grocers' Shops	130
„ Fruiterers' and Fishmongers' Premises	69
„ Butchers, Bloodboilers and Food Preparers ...	138
„ Milliners and Dressmakers	70
„ Other Dress Trades	11
„ Hairdressers and Barbers	20
„ Marine Stores and Offensive Trades	185
„ Stables and Manure Pits.....	5232
„ Premises where Animals are kept	277
„ Lodging-Houses, Registered	394
„ Lodging-Houses, Unregistered	19
„ Vans, Tents, &c.	52
„ Canal Boats	109
„ Single Dwellings	119
„ Back-to-Back Dwellings	1913
„ Furnished Rooms.....	434
„ Other Dwellings	13198
„ Reported Overcrowded	3
„ Reported Dirty	112
„ New Property <i>re</i> Closets, &c.....	—
„ Old Property <i>re</i> Alterations	164
„ Premises where Nuisances exist	13647
Drains Tested	308
Legal Notices Served	1033
No. of Preliminary Notices sent out to abate Nuisances	4017
No. of Defects reported to Borough Surveyor.....	164
No. of Defects reported to other Departments	1328
Smoke Observations taken.....	685
Visits to Boiler Houses	19
Interviews with Owners, Agents, &c., <i>re</i> Property	3519
Visits to School Premises	434

Inspection of Ashpits and Stable Middens.—There are 9,853 ashbins in use in Burnley; this number has gradually increased from 2,969 in 1908, 6,642 in 1912, 7,402 in 1913, 8,499 in 1914, 8,896 in 1915, 9,140 in 1916, 9,279 in 1917, 9,392 in 1918 and 9,628 in 1919.

Section 85 of the Local Act of 1908 provides that where an ashpit is not of suitable size and construction and in proper order and condition, the Local Authority may by notice require an owner or occupier to provide an ashbin.

Under this Section 225 notices have been served. In some cases the ashpit has been repaired, but in the majority of cases an ashbin has been provided.

Stable Middens.—There are 300 stable middens in Burnley, and nearly the whole of these are emptied at least once a week.

5,234 visits were paid to manure pits by the Inspectors, 84 preliminary notices were sent, and 54 verbal notices were given, and 2 legal notices served, referring to 140 defects, principally accumulations of manure, dirty yards and drains. In most cases the nuisance was at once abated.

Abatement of Black Smoke.—The following resolution of the Health Committee obtains in the method of our dealing with the Black Smoke Nuisance:—

“That the Town Clerk be requested to inform all persons causing the emission of smoke from chimneys in the Borough, (other than chimneys of private dwelling-houses), that proceedings will be taken when black smoke is emitted from such chimneys for more than five minutes during a half-hour's observation.”

The following is a summary of the results of the observations taken:—

No. of Chimneys observed.	No. of observations taken.	Average No. of observations taken per chimney.
144	685 half-hourly.	4.75

Result of Observation:—

	Dense.	Medium.	Light or None.
Total amount of Smoke in Minutes	190.5	1007	19,352.5
Average amount of Smoke in Minutes	0.28	1.47	28.25

The following is a statement of the action taken under Sections 91—94 of the Public Health Act, 1875 (Paragraph 9), relating to the emission of black smoke:—

Letter Notices sent	23
Legal Notices served	9
Legal Proceedings	1

THEATRES, MUSIC HALLS, AND PICTURE PALACES.

A circular-letter was issued to Local Authorities in August by the Ministry of Health, calling attention to the insanitary conditions existing in many theatres, etc., and requesting that instructions be given for the Sanitary Inspector to make periodic inspections of the Dressing Rooms, Sanitary Accommodation, etc.

In accordance with this request, the places of public entertainment in the Borough are visited at intervals ; the accommodation provided has been found to be ample, and the cleanliness and ventilation of the dressing rooms satisfactory.

The condition of the Sanitary Accommodation for the use of the audience was, in most cases, quite satisfactory. The few defects found were remedied without delay on being brought to the notice of the Management.

OFFENSIVE TRADES.—The Offensive Trades as laid down in Section 112 of the Public Health Act of 1875, are :—

Blood Boiler.	Fellmonger.	Tallow Melter.
Bone Boiler.	Soap Boiler.	Tripe Boiler.

In addition to these trades, which require the permission of the Local Authority before they can be practised, the Burnley Act of 1871 requires that Marine Store Dealers shall possess a license from the Local Authority to carry on their business.

In 1911, the following Offensive Trades (in accordance with Section 51 of the Public Health Act Amendment Act, 1907), were added to the above list :—

Gut Scraper.	Tanner.	Fish Fryer.
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and Manufacturers of Manure from Fish Offal, Blood or other putrescible animal matter.

The following is a list of the Offensive Trades practiced in Burnley.

Marine Stores	7
Tripe Boilers	4
Blood Boilers	6
Fat Melters	3
Gut Scrapers	2
Bone Boiler	1
Fellmonger.....	1
Tanner	1
Knacker	1
Fish Fryers	109
TOTAL	135

The premises where these trades are carried on are under constant supervision, in some cases, quite necessary ; 13 legal notices have been served, and 33 letters sent, and constant verbal reminders have had to be given in one or two cases. The result is that these trades are carried on with, as a rule, very little nuisance to the neighbourhood in which they are situated.

Nuisances in trades of this kind can usually be prevented by suitable premises properly cleansed and ventilated ; noxious fumes should be carried into a chimney of suitable height.

The Offensive Trades have been well supervised by this Department, 443 visits having been paid by various members of the Sanitary Staff.

Rag Flock Act.—No action has had to be taken under this Act.

INSPECTION OF FACTORIES AND WORKSHOPS.

Under the Factories and Workshops Acts, 1901, and 1907, it is the duty of the Local Sanitary Authority to enforce the sanitary provisions relating to these places.

Number of factories and workshops on register at end of year :—

Factories	362
Bakehouses	266
Milliners and Dressmakers	278
Woodworkers.....	39
Tailors, Shoemakers and Cloggers	156
Metal Workers	48
Sundries	58
TOTAL	1207

This list is of necessity an approximate one, as the figures relating to workshops and bakehouses are constantly changing, especially the class of workshops which includes dressmakers. The number of bakehouses is also constantly changing, for a bakehouse must be registered if it is a place "in which are baked bread, biscuits, or confectionery from the baking or selling of which a profit is derived." This definition includes in Burnley a great number of small grocers and confectioners' shops.

Factory Inspection—

Number of Inspections	165
Defects found	58
Legal Notices served	—
Letter Notices sent	20
Verbal Notices	25

List of Defects—

Water Closets defects.....	15
Defective Drains	19
Troughs and Spouts.....	19
Ashpits and Bins	3
Others	2
TOTAL	58

Inspection of Bakeries—

Number on Register	282
Number of Visits paid	590
Verbal Notices	69
Letter Notices	34
Legal Notices.....	7

Details of Defects found—

Required Limewashing	37
Defective Water Closets	21
,, Drains	19
,, Ashpits and Bins.....	21
,, Spouts and Eaves	7
Other Defects	13
TOTAL	<u>118</u>

Other Workshops—

Inspections	776
Legal Notices served	22
Letter Notices sent.....	63
Verbal Notices given	65

Defects Found—

Defective Water Closets	38
Dirty Workshops	23
Defective Drains	37
Defective Eaves and Spouts	26
Defective Ashpits	19
Insufficient W.C.	2
Other Defects	25
TOTAL	<u>170</u>

The following is a copy of a table called for annually by the Home Office.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1920,

for the County Borough of Burnley, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecution
Factories (Including Factory Laundries).	165	20	...
Workshops (Including Workshop Laundries.)	1366	126	...
Workplaces (Other than Outworkers' premises included in Part 3 of this Report.)	...	...	...
TOTAL	1531	146	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			No. of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector	
Nuisances under the Public Health Acts :—*				
Want of Cleanliness	33	32	...	...
Want of Ventilation .....	...	...	...	...
Overcrowding .....	...	...	...	...
Want of Drainage of Floors .....	...	...	...	...
Other Nuisances	167	161	...	...
Sanitary Accommodation {insufficient	2	1	...	...
{unsuitable or defective ...	59	53	...	...
{not separate for sexes .....	...	...	...	...
Offences under the Factory and Workshops Act :				
Illegal occupation of underground bakehouses (s. 101) .....	...	...	...	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	37	37	...	...
Other Offences .....	...	...	...	...
(Excluding offences relating to outwork which are included in Part 3 of this Report)				
TOTAL	298	284	...	...

*Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

NATURE OF WORK*	OUTWORKERS' LISTS					
	Lists received from Employers.					
	Sending twice in the year.			Sending once in the year.		
	Lists †	Outworkers †		Lists.	Outworkers.	
Contractors.		Workmen.	Contractors		Workmen	
Wearing Apparel—						
(1) making, &c.	4	...	4	5	...	66
(2) cleaning and washing						
Household linen						
Lace, lace curtains and net ...						
Curtains and furniture hangings						
Furniture and upholstery						
Electro-plate						
File-making						
Brass and brass articles						
Fur pulling						
Cables and chains						
Anchors and grapnels						
Cart gear						
Locks, latches and keys						
Umbrellas, &c.						
Artificial flowers						
Nets, other than wire nets						
Tents.....						
Sacks.....						
Racquet and tennis balls						
Paper bags and boxes						
Brush making						
Pea picking						
Feather sorting						
Carding, &c., of buttons, &c. ...						
Stuffed toys						
Basket making						
Chocolates and Sweetmeats.....						
Cosaques, Christmas Crackers, Christmas Stockings, &c. ...						
Textile Weaving.						
TOTAL	4	...	4	5	...	66

*If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his (or 5 as the case may be) against the principal class ONLY, but the outworkers should be assigned in columns 3, 4, 5 and 6.

†The figures required in column 2, 3 and 4 are the TOTAL number of lists received from those employers. The entries in column 2 must necessarily be EVEN numbers, as there will be two lists for each employer—in some cases, a number of individual outworkers whose names are given, since in the February and August lists of the same employer.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number
Workshops upon Register	8455
Bakehouses Overground	263
" Underground	3
Milliners and Dressmakers	278
Woodworkers	39
Tailors, Shoemakers and Cloggers	156
Metal Workers	48
Sundries	58
Total number of workshops on Register	8455

NOTE.—The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his Annual Report to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office). The Office the portions which do not relate to factories, workshops, laundries, workplaces or homework. The duty was performed on the 15th of December, 1904. A further Memorandum, on the Home Work Provisions of the Factory Act, was issued on the 15th of December, 1904.

Section 107.			OUTWORK IN UNWHOLESOME PREMISES, Section 108.			OUTWORK IN INFECTED PREMISES, Section 109, 10		
Notices served on employers as to keeping or sending lists.	Prosecutions.		Instances	Notices served	Prosecutions	Instances	Orders made (S 110)	Prosecutions (Sections 109, 110)
	Failing to keep or permit inspection of lists	Failing to send lists						
...
...

away as to show the number of workers in each class of work, the lists should be included among those in column 2 (7) into their respective classes. A footnote should be added to show that this has been done. strictly with the statutory duty of sending two lists each year and of the entries of names of outworkers in those lists odd numbers have been inserted. The figures in column 3 and 4 will usually be (approximately) double of the the outworker's name will often be repeated.

5.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories —	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	2
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	24
Other	21
Underground Bakehouses (s. 101) :—	
Certificates granted during the year .....	...
In use at the end of the year	3

(Signature) T. HOLT, M.D., Medical Officer of Health.

District Council to report specifically on the administration of that Act in workshops and workplaces, and to Annual Report is presented otherwise than in print, it is unnecessary to include in the copy sent to the Home Authorities and the Medical Officer of Health under the Act of 1901 are detailed in the Home Office Memorandum Councils and Medical Officers of Health in October, 1906.

CANAL BOATS ACTS, 1877 and 1884.

REPORT OF THE BURNLEY URBAN SANITARY (REGISTRATION) AUTHORITY AS TO
THE ADMINISTRATION OF THE CANAL BOATS ACTS DURING
THE YEAR 1920.

The Inspector under the Acts is the Sanitary Inspector, Mr. Richard Jump, 27, St. James's Street, Burnley, whose salary is inclusive and unapportioned.

During the year 109 inspections were made, as against 105 the previous year ; these included 6 and 8 steamers respectively. The condition of the boats, as regards cleanliness of cabins, was in all cases satisfactory.

There were eight infringements on six boats, as follows :—

Four were found to have water leaking into the cabin ; three have been put in order, and the fourth has gone out of use. One boat had been re-registered on change of ownership, but the necessary alterations in markings had not been made.

One required painting, and has been put in order.

One boat was found to have its Registration Marks obliterated, and not to have been painted since 1914. The attention of the owners was drawn to this, and they contended that the boat, being a steamer and used as a tug and not "as a cargo carrying vessel," it did not come within the Acts and Regulations. If this contention of the owners is correct, it will be impossible to use the provisions of the Acts to secure reasonable living conditions in this type of boat.

There have been no cases of Infectious Disease on Canal Boats during the year, and no boats have been detained for cleansing or disinfecting.

Two boats were re-registered on change of ownership.

There are no motor boats on the Register, and none have been inspected during the year.

The Inspector desires to acknowledge the courtesy and assistance he has received from the masters and others on the boats.

The statistical statement is appended.

RATS AND MICE (DESTRUCTION) ACT, 1919.

This Act came into operation on January 1st, 1920, and the Health Committee, in April, appointed the Inspector of Nuisances as the Officer to administer the Act within the Borough.

Under the Act, the occupier of any premises is under an obligation to "take such steps as may be necessary and reasonably practicable for the destruction of rats and mice on his premises; and for preventing the premises becoming infested with rats or mice." Failure to do this renders him liable to a penalty not exceeding £5, or, where he has been served with a notice under the Act, not exceeding £20.

Various premises have been visited, and enquiries made with a view to ascertaining if the provisions of the Act were being complied with. Advice and assistance has been given in many cases, with respect to ridding premises of rats and mice. Poisons suited to different circumstances have been prepared and sold at practically cost price.

At the request of the Board of Agriculture and Fisheries, the Health Committee decided to observe November 1st to 6th as "Rat Week" in the hope that a simultaneous attack on the rat and mouse population might have the effect of considerably reducing the numbers.

REPORT DEALING WITH THE WORK DONE IN CONNECTION WITH "RAT WEEK"—
1ST NOVEMBER TO 6TH NOVEMBER, 1920.

As a preliminary to the actual work, advertisements were inserted in the local papers, and conspicuous posters were exhibited throughout the town, inviting applications for advice and assistance, and, in addition, 459 circulars were sent to various persons, firms and companies whose premises it was thought might be infested with rats or mice.

Preparations were made to supply such poisons as might be required. These were prepared in accordance with the recipes supplied by the Board of Agriculture.

Only 258 applications were received for supplies of poison; all the requests were complied with, and the quantity and kind appropriate to the circumstances were supplied, together with the necessary instructions for use, and a stamped addressed post-card on which to report results.

The 258 applications were for 293 premises, made up as follows :—

Dwelling Houses, 88 ; Shops, 51 ; Allotments, 41 ; Cotton Mills, 24 ; Stables, 19 ; Workshops, 12 ; Piggeries, 7 ; Bakeries, 7 ; Waste Dealers, 5 ; Farms, 5 ; Public Houses, 3 ; Triperies, 3 ; Schools, 4 ; Fruiterers' Warehouses, 4 ; Lodging Houses, 2 ; Fellmongers and Tanners, 2 ; Miscellaneous, 16.

The amount of poison supplied, if used according to directions, would be sufficient to provide about 42,000 baits ; from the reports of its use to hand, it would appear that much larger baits have been put down than necessary, the users having acted on the principle of making the dose big enough. It is to be regretted that so few reports have been received : 267 stamped postcards were given out, but only 81 have been returned. The reports summarised state that :—

Number of baits laid	...	...	2,012
Number of baits taken	...	...	1,409
Dead rats or mice seen	...	...	74

In 31 cases there is stated to be a diminution of the number of rats or mice on the premises. The number of dead rats or mice seen will not be a measure of the effectiveness of the work, as the poisons take some time to act, and the animals get back into their holes and will die there. In view of the size of bait used, it may be presumed that each bait taken would be responsible for one death, and as the reports received represent less than one-third of those supplied, if the reported results are multiplied by three we should get an approximation of the amount of success achieved, this would give the number of deaths at 4,200.

The " Rat Catcher " employed by the Department visited various Corporation properties during the week. Enquiries were made previous to the week as to where his services would be most useful, and visits were paid as follows :—

Health Department	...	Bank Hall, Disinfecting Station, and Parker Street Infant Welfare Centre.
Cleansing Department	...	Abel Street, Maden Fold, Habergham and Boggart Brig Tips.
Electricity Department	...	Destructor and Electricity Works.
Parks Department, etc.	...	Towneley and Scott Parks, Small Holdings, Shorey Holme, Heasandford and Barden Allotments.
Education Department	...	Open-Air School.
Markets Department	...	Slaughterhouses.
Housing	... ..	Rosehill Housing Site.

The various premises were found to be remarkably free from rats. Ferrets and dogs were used in most cases, the number of rats killed by this means being 43.

Some difficulties were experienced: On the Housing Site, extensive timber stacks were infested with rats, and, as these provide ample cover, it was impossible to drive them out with ferrets. Poison baits were resorted to. On Tuesday 46 baits were laid down, 42 of which had been taken by Wednesday morning. 60 additional baits were then laid, and of these 58 disappeared. The men on the site state that the rats are not now seen, where they were formerly very numerous.

A somewhat similar case was found at Abel Street Tip: a heap of stone in this case gave the cover; here 40 baits were laid down, which were all taken, 40 additional baits being then laid. Here, again, there is a marked lessening of the numbers. At Parker Street Welfare Centre mice were the trouble: 21 baits were laid, of which 6 were taken.

The results of the "Week" are disappointing; the very small number who took the matter up, and the want of interest shown are regrettable features. It is only by concentrated and simultaneous attacks at intervals, throughout the country, together with constant endeavour on the part of individuals on their own premises, that we can hope to considerably reduce and finally exterminate the expensive, destructive and dangerous pests.

III. HOUSING OF THE WORKING CLASSES.

General Housing Conditions.

Last year it was estimated that there was a shortage of 700 houses, and the Local Authority obtained the approval of the Ministry of Health to erect 378 houses on the Rose Hill Site—an elevated position, about 750 feet above sea level, on the south side of the town, and a little over a mile from the Centre. Building operations commenced in May, but up to the end of the year no houses were completed.

Another site near Palace House on the west side of the town, has received the approval of the Ministry. It is intended to erect 324 houses on this site.

There have been no important changes as regards the population, nor does there appear to be any likelihood of unusual changes in the immediate future.

Overcrowding.

As a result of the inspections of 1920, allowing for 300 cubic feet in bedrooms, there is only one overcrowded house ; on the basis of 400 cubic feet there are 26, and on the basis of more than two persons per room, there are 24 overcrowded houses. There have only been three complaints of overcrowding during the year, but these have, on investigation, been proved to be groundless.

The general standard of houses is good ; the majority of the houses are 4-roomed, self-contained, have their own back yards and sanitary conveniences.

The general character of the defects found : Defective plastering of walls and ceilings, floors out of repair, leaky roofs, window sashes and cords out of repair. Most of these are due to the neglect of the owner.

As a result of inspection of unfit houses, 68 notices were served under the Public Health Acts. In addition to these notices, letters have been written to owners, pointing out the various defects. Notices have also been served under Section 15 (3) of the Housing and Town Planning, etc. Act., 1909, and Section 28 (1) of the Housing and Town Planning, etc. Act, 1919.

Water Supply.

The water supply is good and constant. With the exception of about 7 farms and a few houses on the outskirts, all houses are provided with town's water.

There are 9,965 clean water closets, 18,444 waste water closets, 517 latrines, and 275 privies, these mostly in outlying cottages and farm houses. Approximately 23,563 houses have their own sanitary conveniences, and 2,269 join with others. Ashpits, estimated number, 15,074, and ash bins, 9,853.

The Rent Restriction Act came into force in July. By this Act the landlords were empowered to increase the rents by 30 per cent. This they could do, provided they kept their houses in a reasonable state of repair. If the tenant had reason to consider that the house was not in a reasonable state of repair, he could apply for a certificate to the Local Sanitary Authority to that effect, and could appeal, with this Certificate to support him, against the raising of his rent.

As a result of this, only one person applied for a certificate, and this was not granted; but 82 complained of the state of repair without actually appealing against the raising of the rent. All the complaints were investigated and action taken in all cases where necessary.

Legal Notices served during the year.—Public Health Act, 1875 : Sections 91-94 : There were 591 served relating to :—

Defective Water Closets, Tippers, &c.....	157
„ Drains, &c.	74
„ Dish-grates, Slop-pipes, &c.	23
„ Yard Flags, Walls, &c.....	51
„ Troughs, Spouts, &c.....	101
„ Cellar Areas, &c.	1
* Damp House Walls, Defective Roofs, &c.....	68
Dust Bins	121
Dirty House	1
Refuse	2
Others.....	7

The number of defects for which notices have been served was 606 but in some cases more than one defect was put on one notice.

Burnley Corporation Act, 1908, Section 85.

Notices served relating to Ashbins, 225.

Towns Improvement Clauses Act, 1874, Section 74 ; Public Health Act, 1875, Section 160, relating to :—

Defective eaves troughs, rain pipes, etc.—Notices served, 177.

Public Health Act, 1875, Sections 91 to 94.

Notices relating to Black Smoke, 9.

Burnley Borough Improvement Act, 1883. Section 42.

Relating to Ashpit Accommodation, 13.

„ „ Closet „ 6.

Public Health Act, 1875, Section 36.

Relating to insufficient closet accommodation. Notices served 10.

General Inspection of Working Class Dwellings.—The more unsatisfactory of these dwellings have been frequently visited. 2,032 visits have been paid to back-to-back and single houses, 434 to furnished rooms, and 13,198 to other dwellings. 3 were suspected of being overcrowded, but none were found to be actually in that state when visited.

Dirty Houses.—85 were suspected of being dirty, but only 32 were found to be so on inspection. In one case it was found necessary to serve a legal notice to get the nuisance remedied.

HOUSES LET IN LODGINGS.—There are 43 houses in Burnley registered as Houses Let in Lodgings, compared with 47 last year.

Bye-laws have been made, and provide :—

- (1) For fixing and from time to time varying the number of persons who may occupy a house or part of a house which is let in lodgings or occupied by members of more than one family, and for the separation of the sexes in a house so let or occupied.
- (2) For the registration of houses so let or occupied.
- (3) For the inspection of such houses.
- (4) For enforcing drainage and for the provision of privy accommodation for such houses, and for promoting cleanliness and ventilation in such houses.
- (5) For cleansing and limewashing at stated times of the premises, and for the paving of the courts and courtyards thereof.
- (6) For the giving of notices and the taking of precautions in case of any infectious disease.

The 43 houses mentioned are divided into 133 separate tenements which are for the most part let furnished. These tenements vary from one to three rooms :—

One roomed	117
Two roomed	13
Three roomed	3
	133

The number of tenements to each house varies from one to forty-three.

Eight of the above are really one-roomed houses, and only come under the definition of Houses let in Lodgings because they are let furnished and let from week to week.

The house with 43 tenements is the old Militia Barracks in Clifton Square.

The tenements vary in price according to the number and size of the rooms; the rent varying from 4/6 to 10/- a week, which includes the loan of furniture, generally of a very inferior kind; the bed and bedding; curtains and blinds to the windows. These articles, which are on loan from the landlord, are presumed to be kept clean by him, as are also common passages, sanitary conveniences, approaches, etc. The rooms, of course, must be kept clean by the tenant.

In the summary of work done by the Sanitary Inspectors it will be seen that 434 visits have been paid to the furnished rooms during the year, and the report from the Inspectors is that they are fairly satisfactory. The common complaint is that the tenants if not watched, allow the rooms to get dirty. 15 verbal, 20 written and 3 legal notices were given.

Total visits to 133 Houses Let in Lodgings.....	434
Total defects found	62
Total defects remedied.....	57

The 62 defects found were as follows :—

Dirty Floors, Walls, etc.....	2
Defective Drains	2
Limewashing overdue	43
Defective W.C.s	3
Defective Bins	3
Rain Pipes and Eaves.....	4
Defective Roofs.....	1
Sundry Defects	4
TOTAL	62

Occupants.—On making an informal census at the end of the year it was estimated that 250 persons occupied the furnished rooms :—

Adults :—Male	107
Females	105
Infants under 1.....	5
Children 1 to 12	33
TOTAL	250

In the above list every person over 12 is counted as an adult in accordance with the byelaw 7, which says that—

“ No lodger shall suffer any person above the age of 12 to occupy as a sleeping apartment any room let to such lodger, if the room is occupied by more than one person above that age and of the opposite sex.”

COMMON LODGING HOUSES.—The registration and supervision of the Common Lodging Houses are under the direction of the Health Committee. Bye-laws affecting these places received the sanction of the Local Government Board in 1907.

These are :—

- (1) For fixing and from time to time varying the number of lodgers who may be received into a common lodging house, and for the separation of the sexes therein; and
- (2) For the giving of notices and the taking of precautions in case of any infectious disease; and
- (3) Generally for the well-ordering of such houses.

There are six common lodging houses in Burnley. Two admit both male and female lodgers. The size of the bedrooms allows of 400 cubic feet of air space to each inmate. Some of the older houses are not very satisfactory in their structural arrangements, but no serious complaint has had to be made regarding the general management or the cleanliness and ventilation.

The following is a list of the Common Lodging Houses with the number of lodgers for which each is at present registered :—

Lodging House.	No. of Lodgers for which registered.	Males.	Females.
Water Street	38	38	..
*Bank Parade	59	50	9
*Bridge Street.....	55	44	11
Calder Street	137	137	..
Kay Street.....	280	280	..
Barracks Road	146	146	..

* Admit Women Lodgers.

The Lodging Houses have been periodically visited, several night visits having been made.

Number of visits.....	394
Defects found	76

These defects were :—

Water Closets	15
Drains	19
Dirty condition of rooms, &c.....	16
Want of Limewashing.....	4
Rain Water Pipes and Eaves	3
Ashpits	5
Overcrowding	2
No Registered Deputy at Night.....	2
Intermixing of Sexes	2
Kitchen used for sleeping	1
Other Defects	7

In addition to the registered Common Lodging Houses there are a number of unregistered ones, to which 19 visits have been paid. Generally speaking these houses are not satisfactory on account of the class of people who live in them, the want of supervision, and the construction of the buildings. Six of these places have been Public Houses, the majority being at the time they were licensed of the lowest class.

These houses are as a rule unsatisfactory and in many cases illegal, but difficulty is experienced in demonstrating that the law is being broken.

7. Maternity and Child Welfare.

BANK HALL.—MATERNITY AND CHILDREN'S HOSPITAL AND CHILD WELFARE CENTRE.

The object of the Maternity side of the Institution is to provide for the care of maternity cases of a special nature, and which come under the following definitions :—

1. Maternity cases reported by those in charge of the Schools for Mothers as being likely to develop complications.
2. Maternity cases which, on the representation of a medical practitioner, require immediate institutional treatment.
3. Maternity cases which, because of the unsatisfactory condition of the home, ought to be removed.

The Children's Ward is for those young children who, though not really hospital cases, still require, on account of home conditions, some medical or skilled care which they cannot get in their homes. The centre is intended to be used for the instruction of expectant mothers, midwives, home helps, etc.

SUMMARY OF WORK.

CHILDREN'S HOSPITAL.

Admissions	154
Average Stay in Hospital	13.7 weeks.

MATERNITY HOSPITAL.

Admitted	78
Births	78

WELFARE CENTRE.

Number of Attendances of :—

Mothers	436
Infants	361
Children	39
Expectant Mothers	293
Total	<u>1,129</u>

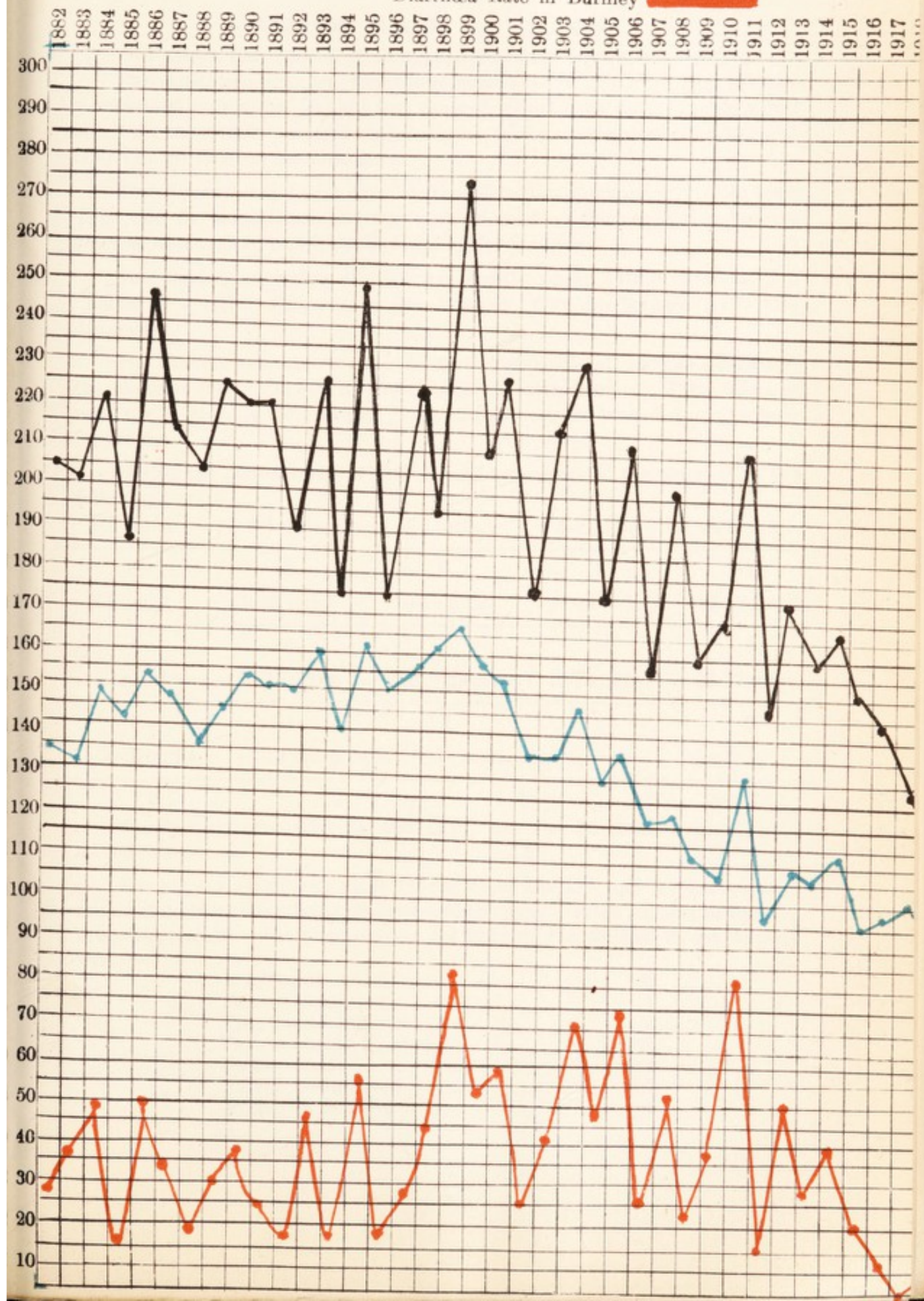
Clinics, conducted by the Medical Officer for Maternity and Child Welfare were held twice weekly, on Monday and Wednesday afternoons.

In August, a separate clinic was commenced for expectant mothers, held on Monday mornings, to meet increasing numbers attending.

Further details of the work at Bank Hall Hospital will be found in the Appendix.

INFANTILE DEATH RATES per 1000 Births in Burnley, and in England & Wales and Infantile Diarrhoea Rates in Burnley for 39 years.

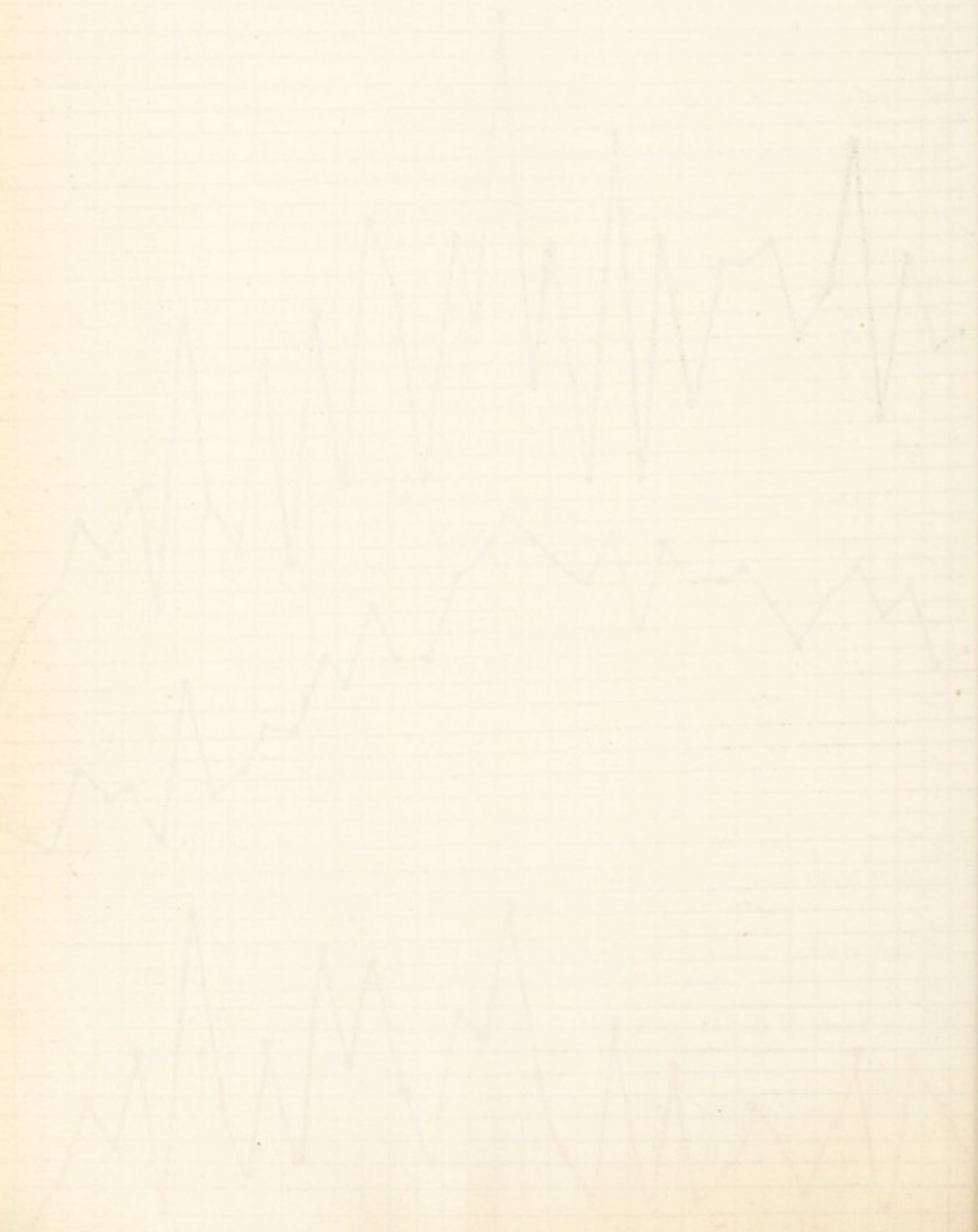
Infantile Rate in Burnley █
 Infantile Rate in England and Wales █
 Diarrhoea Rate in Burnley █



THE DEATH RATES per 1000 births in Berlin, and in England & infantile Mortality Rates in Berlin for 20 years

From the Berlin Mortality Statistics
for the years 1870-1889 and 1890-1900
and the English Mortality Statistics for 1870-1899

1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900



TARLETON HOUSE DAY NURSERY.

REPORT FOR THE 12 MONTHS ENDING 30TH NOVEMBER, 1920.

This institution was opened for the admission of children in October, 1917, by a voluntary association, and the fees charged were 1/- per day. The days and hours the institution was open was 6.30 a.m. to 6.p.m. Monday to Friday, and 6.30 a.m. to 12 noon on Saturdays.

The Nursery was taken over by the Maternity Committee on 1st April, 1919, and the same hours and fees were adopted. Commencing 1st January the fees were revised to 1/6 per day and 1/- for Saturday.

The children attending the Nursery mostly reside within a radius of a quarter of a mile. There are a few, however, that are brought fairly long distances.

The Nursery is situate in an industrial neighbourhood, and the mothers of the children are practically all engaged in the cotton trade. Their hours of work are from 7 a.m. to 5.15 p.m., with half an hour for breakfast and an hour for dinner.

During the period under review, 52 children attended the Nursery, of the following ages :—

1-2 mths.	3-4 mths.	4-5 mths.	5-6 mths.	6-7 mths.
3	8	6	1	4
8-9 mths.	9-10 mths.	10-11 mths.	11-12 mths.	12-13 mths.
4	10	1	2	1
14-15 mths.	15-16 mths.	16-17 mths.	17-18 mths.	22-23 mths.
1	1	2	1	2
36-37 mths.	3 yrs. 6 mths.	3 yrs. 9 mths.	TOTAL.	
2	2	1	52	

The Nursery was open on 297 days, and the 52 children made 4,651 attendances.

The highest attendance made by one child was 279, and the lowest, one; the average attendance being 89 days, and the daily average number of children attending was 16. The reasons given for bringing the children to the Nursery were :—

Insufficient income	...	...	...	31
Parents separated	...	...	...	1
Illegitimate children	...	...	...	4
Father unable to work	...	...	...	10
Father dead	...	...	...	1
Father unemployed	...	...	...	2
Mother in hospital	...	...	..	3

The occupations of the parents were :—

FATHER.				MOTHER.			
Miner	...	...	12	Cotton operative	...	...	38
Cotton operative			11	Charwoman	...	...	2
Soldier	...	...	2	Various	...	...	12
Various	...	...	27				
			<hr/> 52				<hr/> 52
			<hr/>				<hr/>

The children have been regularly inspected by a Medical Officer of the Department, but no infectious cases have been discovered, and none of the children have had to be sent home on account of illness.

The only occasion on which this Nursery was used as a residential one was in a case where the Mother, having to undergo an operation at the Hospital, sent in her child, which was kept at the Nursery for 6 days.

The reason this institution was not regularly used as a residential nursery was owing to the fact that a requisite staff for that purpose was difficult to obtain; also that certain structural alterations were thought by the Committee to be required before the work of a residential nursery could be efficiently carried out.

SCHEME FOR THE WORKING OF INFANT WELFARE CENTRES.
(**Infant Consultation Centres or Schools for Mothers.**)

ADOPTED BY THE SUB-COMMITTEE OF THE MATERNITY AND CHILD WELFARE
COMMITTEE.

OBJECT—The preservation of Infant life.

For this purpose there are provided :—

1. Instruction and advice to the expectant mother.
2. Instruction and advice to mothers regarding the feeding, clothing, and general management of the infant.
3. Advice regarding the treatment or prevention of minor ailments of infants.
4. Means of treatment for infants and expectant mothers.

The machinery for this is as follows :—

1. Four centres open once a week, at which the necessary instruction and advice can be given.
2. A medical officer at each centre once a fortnight.
3. A trained nurse at each centre.
4. A Child Welfare and Maternity Centre at Bank Hall, to which cases may be referred from the four centres, and where treatment or attention can be given which it is impossible to give at the centres, and where such cases as are not under suitable conditions for their proper treatment may be detained.

Though the essential part of the work is medical, all mothers, *with their children* (under 5) are encouraged to come to one or other of the four centres. As a matter of routine, all the children should be weighed and the weight recorded ; this is to ensure an inspection of the child by the nurse. If it is necessary, the mother is referred to the medical officer.

The nurse is one of the health visitors—generally of the district in which the centre is situated—and in this way the work is linked up with that of the Health Department, and the following up of cases can easily be carried out.

An Infant Welfare Centre resolves itself into a medical institution, and has therefore been placed under the Medical Officer of Health. It is suggested that the Superintendent Health Visitor be responsible to him for the general management of these institutions, and to see that, as far as possible, the centre fulfils its purpose regarding :—

1. Expectant mothers. Midwives engaged to attend these expectant mothers are invited to attend with them at the centre when they come the first time for advice.
2. Mothers with children (under 5) only.
3. All children to be weighed, and to be undressed for weighing—weekly up to 3 months old ; fortnightly up to one year old, and 3-monthly after one year.
4. All new cases are to be seen by the Medical Officer on joining, and, as a routine, once a month afterwards, if not otherwise necessary.

Advice regarding the feeding of infants will only be given by the Medical Officer and all foods of a medical nature distributed at the Centres will be through that Officer.

Instruction and advice on general management of infants will be given by the Medical Officer or Nurse.

Voluntary Assistance.

To enable the Centres to attract Mothers of the children of the kind it is hoped to benefit, the assistance of voluntary workers is needed.

So far, the League of Social Service have provided instruction in cooking, dressmaking, and other domestic matters ; this, it is hoped, they will be able to continue. Tea for the mothers has also been provided by this Association.

If the League is still able to continue this work, the scope and arrangements for it will be made by the League in consultation with the Medical Officer of Health.

An important part of the scheme is also the individual volunteer, who can assist the nurse in the weighing of the children, in helping to entertain the children when the mothers are receiving some instruction in cooking, dress-cutting, etc. There is a certain amount of clerical work in which the voluntary worker can help, and perhaps the most important is the help the volunteer can give in following up an absentee mother. It is necessary that the individual volunteer attends at the centre regularly or provides an efficient substitute in her absence. She should report to the Superintendent Health Visitor at the centre where she is willing to give her services, and arrange with the Superintendent what duties she has to perform.

August, 1920.

INFANT WELFARE CENTRES.

In addition to Bank Hall, already mentioned, there are Welfare Centres at Ebenezer School, Lane Bridge School, Mount Olivet School, and at Parker Street.

Parker Street is owned by the Corporation, and was opened in June. The purchase money for the building was provided from the Jewel Fund of the National Baby Week Council.

Ebenezer, Lane Bridge and Accrington Road are worked by the League of Social Service, as Schools for Mothers, a Medical Officer and Nurse being provided by the Maternity Committee to attend at Ebenezer and Lane Bridge—the Nurse weekly and the Medical Officer fortnightly. Mount Olivet and Parker Street are run entirely by the Local Authority as Infant Consultation Centres.

All these centres open once a week, at 2.30 in the afternoon. At all the centres, with the exception of Accrington Road, a Medical Officer attends either weekly or fortnightly.

Private Welfare Centre.

Messrs. Dugdale have a private welfare centre attached to their works at Lowerhouse. To this centre a nurse is attached, and the Medical Officer employed by the Local Authority for Maternity and Child Welfare work attends weekly.

YEAR'S WORK.

Accrington Road School open	37 times.
Bethesda School open	24 times.
Ebenezer School open	46 times.
Lane Bridge School open.....	46 times.
Mount Olivet School open	8 times.
Parker Street School open	57 times.
TOTAL	218

LECTURES AND DEMONSTRATIONS :—

Medical Subjects	59
Domestic and Social Subjects.....	49
TOTAL	108

These children were fed as follows :—

Breast Fed	239
Artificial	301
Mixed	66

REASONS FOR SEEKING ADVICE REGARDING CHILDREN OVER 1 YEAR.

Rickets	7	Coughs	3
Bow-legged	4	Constipation	4
Skin Disease	4	Abdominal Tuberculosis	1
Otorrhoea	2	Enlarged Tonsils	1
Laryngitis	1	Phimosis	5
Threadworms	1	Hernia.....	5
Adenoids	1	Diarrhoea	5
Vomiting and Headache	2	Marasmus	2
Anæmia	1	Injury to Wrist.....	1
Nettlerash	5	Feeding.....	12
Eczema	1	Debility	1
Conjunctivitis	2	Bronchitis	7
Abscess of Leg	1	General	29

AVERAGE WEIGHT OF INFANTS AT FIRST VISIT :—

	Under 1 Month.		1 to 2 Months.		2 to 3 Months.		3 to 6 Months.		6 to 12 Months.	
	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
Breast Fed	9	9	10	8	12	11½	14	7½	17	8
Breast and Artificial...	8	3½	9	14½	9	11½	12	5½	...	...
Artificial	8	3½	9	8	12	10	11	11	14	0

Health Visiting.—There are 8 Health Visitors whose work is supervised by the Superintendent Health Visitor, who also acts as Inspector of Midwives. They all fulfil the conditions of the Maternity and Child Welfare Act, and the recommendation of the Ministry of Health as regards qualifications for these duties. The Superintendent and the 8 Visitors are all fully trained nurses. The Superintendent holds the C.M.B. certificate, and the Sanitary Inspectors certificate of the Royal Sanitary Institute. Five of the Health Visitors also hold the C.M.B. certificate. Being all fully trained allows interchanging of duties, but, as a general rule, each Visitor is kept to one particular kind of work, and as far as possible to one district. Two act as Tuberculosis Nurses and Visitors, two as School Nurses and Visitors, and four devote themselves to Maternity and Child Welfare Work.

The duties of the Visitors engaged on Maternity and Child Welfare work are, in the first place, to visit houses where there are newly-born children ; to advise the mother, if necessary, as to the care of her child. The Visitors have each a district. The routine of visiting infants consists of a visit as soon after birth as possible, except in those cases where a medical man has been in attendance, when a visit is usually paid at the end of 10 days. Re-visits are paid where necessary, and a second routine visit is paid at the end of six months.

In addition to these routine visits, special visits are paid when illness is known or thought to exist, and is not being attended by a doctor.

Milk (Mothers and Children) Order, 1918.

Para. 1 of the above order reads as follows :—

“ Any local authority within the meaning of the Notification of Births Act, 1907, may, and, when required by the Local Government Board, shall arrange for the supply of food and milk for expectant mothers and nursing mothers and of milk for children under 5 years of age, subject to such conditions as may from time to time be prescribed by the Food Controller.”

During the year 119 children under 1 year, and 34 children between the ages of 1 and 2 years were supplied with milk at reduced prices, from the Corporation Milk Depot.

Milk at reduced price was also supplied to 9 expectant and 7 nursing mothers.

Nursing.—An arrangement has been made with the Burnley and District Nursing Association for the supply of a Nurse where necessary. The fact that this association exists has necessarily prevented calls for such service on this Authority.

Home Helps.—Arrangements were made towards the end of the year for the supply of Home Helps. Up to the end of the year eleven mothers were assisted by this means.

Midwives' Act, 1912.—The Local Sanitary Authority is the Supervising Authority under this Act, and has appointed the Health Committee to carry out these duties. Briefly these are to exercise general supervision over all midwives practising under this Act in the district; to investigate any charge of negligence or misconduct on the part of any midwife, and to report if necessary to the Central Midwives' Board; to suspend from practice any midwife where necessary to prevent the spread of infection.

In the particulars here given of the number of midwives practicing in Burnley the word "bona-fide" refers to midwives who were in practice at the time of the passing of the Act and who probably have no other qualification for the work beyond that of having attended several cases.

The certified ones are those who have obtained a certificate from some authority which is accepted by the Central Midwives' Board as showing their fitness for the occupation.

The names of the midwives are entered on a roll, a copy of which is published annually by the Board.

29 midwives notified their intention to practice :—

Certificated.....	14
Bona-fide	14
Added during the year	1

The average number of cases attended by each midwife in practice works out at 49.5.

Supervision by the Inspector :—

Visits to Midwives' homes : Routine, 81 ; Special, 11...	92
--	----

The following warnings were also given :—

For not sending for medical aid	7
For not notifying still-birth	3
For using letters C.M.B. on card	2
For not carrying an efficient antiseptic	1

Notifications received from midwives during the year :—

Intention to practice	28
Sending for Medical aid	112
Still-births	47

187

The following cases are given as a reason for sending for medical aid :—

FOR MOTHER : 79.		FOR CHILD : 33.	
Abortion.....	3	Feebleness	5
Adherent Placenta	6	Spina Bifida.....	2
Ruptured Perinaem	21	Vomiting	3
Headache	1	Convulsions	2
Rigor	1	Prematurity	2
Delayed Labour	16	Discharging Eyes	15
Haemorrhage.....	7	Deformity	3
Convulsions	1	Death before Doctor's	
Syncope	1	Arrival	1
Rise of Temperature	7		
Varicose Veins	1		
Mal-presentation	13		
Ulcerated Leg	1		

There were 3 cases of Puerperal Fever (1 case proved fatal).

Notification of Births' Act, 1907.

This Act, which makes it compulsory on certain persons to notify a birth to the Medical Officer of Health within 36 hours of its occurrence, was adopted in Burnley in 1908.

During the year 1920 there were 2,600 births notified in accordance with it. During the corresponding period 2,456 births were registered by the Registrar of Births and Deaths.

The births were notified by the following persons :—

Midwife	1405
Father.....	109
Doctor	976
Other persons	110
TOTAL	2600

Of this number there were :—

Full-time Stillborn	76
Premature Stillborn	65
TOTAL	141

Very little difficulty has been experienced in the working of this Act, as is seen by the smallness of the following numbers of persons who had to be communicated with regarding non-notification :—

Fathers	70
Medical Men	6
Midwives	7
Unregistered Midwives.....	0
TOTAL	83

Births notified by medical men are not visited until ten days at least have elapsed. The majority of the others are visited as soon as possible after notification. There have been 1,624 births notified by parents, midwives, and other persons, and of this number the majority were visited within seven days of birth.

STILL-BIRTHS IN BURNLEY IN THE YEAR 1920.

The following particulars have been obtained by MISS BURGESS, the Superintendent Health Visitor, as a result of enquiries at the homes :—

2,456 live births were notified in 1920, and during the same period 315 deaths, giving, roughly speaking, an infant death-rate of 128. During the same period 141 still-births were notified, therefore we ought to call the death rate 185. This takes no account of miscarriages, and the number of these will very probably equal or even exceed the still-births.

It has not been possible to get particulars of all these cases, some having been born in institutions and a few in houses where it was inadvisable to visit.

Duration.

71 were full term, 60 were premature, and 10 were not stated.

Attendant.

Of the 71 full term, 36 were delivered by doctors, and 35 by midwives.

Of the premature, 28 were delivered by doctors and 32 by midwives.

Fifty of the 141 were first pregnancies.

Sex.

69 were males, 62 were females, and 10 were not stated.

Of the 69 males, 45 were full term, and 24 were premature. Of the 62 females, 27 were full term and 35 were premature.

Illegitimacy.

Ten of the mothers were unmarried ; one had twins.

Occupation.

Fifty-nine of the mothers were housewives : 35 of them had full term, and 24 of them premature confinements. Of those engaged in work outside their houses, 36 went to full term and 35 had premature confinements. The occupation of the workers was given as follows :—Domestic Service, 4 ; Laundresses, 2 ; Shop Assistant, 1 ; and Factory Workers, 64.

1	ceased work	6 months	before the event.
2	do.	4 do.	do.
3	do.	3 do.	do.
10	do.	1-3 do.	do.
3	do.	1-3 weeks	do.
4	do.	1-5 days	do.

Nine mothers complained of a fall during pregnancy.

Ages.

It is sometimes difficult to ascertain the age of the mother, but 5 stated they were over 40 years, 15 were over 30 years, 29 were between 20 and 30 years, and 2 were 19 years of age.

Previous Still-births.

In	12	of the cases	it was the	2nd	still-birth.
„	4	do.	do.	do.	3rd do.
„	3	do.	do.	do.	4th do.
„	1	do.	do.	do.	5th do.

Twins.

There were 3 sets of twins—in each case 1 male and 1 female. One set was born at full term, and 2 sets at 7 months. Two sets were delivered by midwives, and one by a doctor. Two mothers were married and 1 unmarried.

Delivery.

- 14 were instrumental deliveries—13 full term and 1 premature.
- 5 were breech presentations—all full term.
- 5 were foot presentation—all full term.
- 2 were transverse presentations—both full term.
- 1 a placenta praevia—full term.

Three mothers had contracted pelvis and went to full term, and 2 had histories of albuminuria.

The larger number of still-births occurred in March, when there were 18, and the smallest number in February and December, when there were 7 ; otherwise, they were fairly evenly distributed over the different months.

Laboratory Report.

Twelve specimens of placentae were sent in by midwives, to the Pathologist, who gives the following report :—

- 7 showed a negative Wasserman reaction.
- 1 showed a positive Wasserman reaction.
- 2 showed active gonococcal-infection.
- 2 showed gross infection of bacillus coli.

Of the 2,456 births notified, 954 of the women were primipara, leaving 1,502 women who had had previous confinements ; 322 gave histories of stillbirths or miscarriages, divided as follows :—

130 gave a history of 1 stillbirth.

19 do. do. 2 stillbirths.

7 do. do. 3 do.

3 do. do. 4 do.

49 gave a history of 1 miscarriage.

10 do. do. 2 do.

3 do. do. 3 do.

1 do. do. 4 do.

MILK DEPOT.

DETAILS OF THE WORK CARRIED OUT.

	1920
Number of Infants on Books, Jan. 1st	69
Admitted during the year	149
Discharged during the year.....	151
Number on Books, Dec. 31st	67

DETAILS OF YEAR'S WORK.

Gallons of Milk obtained	11141
Pints of Cream obtained	1700½

HUMANISED MILK.

	Cruets.	Bottles.
Number of bottles modified	25273	191862
Sold at Shops	12540	92720
Sold at Depot	13231	98752
Supplied free	—	—

STERILISED MILK.

Bottles sterilised	40563
Sold at Shops	21305
Sold at Depot	17189
Supplied to Crown Point Hospital	780
Supplied free	548
Supplied at half-price	718

STERILISED CREAM.

Bottles sterilised	2170
Sold at Shops	658
Sold at Depot	1364
Supplied to Bank Hall.....	124

SUMMARY OF YEAR'S WORK.

MATERNITY AND CHILD WELFARE.

HEALTH VISITING.

Number of newly born children visited	2400
„ children born in 1919, revisited	3915
„ children born in 1920, revisited	2197
„ visits to houses where children have died	277
„ visits to still-births	132
„ visits paid within three days of birth	429
„ visits paid within 3 to 10 days of birth.....	663
„ visits paid from 10 days to 1 month	1308
„ visits paid to cases of Ophthalmia Neonatorum	97
„ visits to cases of Puerperal Fever.....	3
„ visits paid to Midwives : Routine, 81 ; Special, 11	92
„ enquiries made re admission to Bank Hall Hospital ...	94
„ enquiries made re admission to Tarleton House Nursery	39
„ enquiries made re supply of milk to necessitous cases ...	220
„ enquiries re applications for help	59

INFANT WELFARE CENTRES.

Number of times Centres were open	218
„ Attendances made by Visitors	445

TUBERCULOSIS DISPENSARY.

Number of times Dispensary was open	308
„ visits paid to Tubercular cases	2238

SCHOOL CLINIC AND SCHOOL MEDICAL INSPECTION.

Number of times School Clinic was open	270
„ visits paid to School children from Clinic	3641
„ visits paid to School children after School Medical inspection	928
„ enquiries made re milk for School children	220

APPENDICES.

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1. Tables—Vital Statistics.
 2. Housing Statistics and Details of Inspection.
 3. Bank Hall Children's and Maternity Hospital—Details of number admitted.
 4. Meteorology.
 5. Extracts from report of Medical Officer of Infectious Diseases Hospital.
 6. Summary of notification of Tuberculosis.
 7. Report of Medical Officer of Health on visit to Papworth Sanatorium and Tuberculosis Colony.
 8. List of Police Court Proceedings.

Appendix 1.

Table 1.—Showing Causes of Death for the Year 1920.

	TOTAL	MALES	FEMALES	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and over	Workhouse	Hospital	Sanatorium	Bank Hall.
Males.....	742	742	..	182	39	24	25	79	197	196	111	40	15	27
Females	745	..	745	135	29	26	29	102	205	219	76	30	11	33
Smallpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	3	2	1	..	1	2	..	..	..	..	..	..	1	..
Diphtheria and Membranous Croup..	9	5	4	..	4	5	..	..	..	..	..	..	4	..
Enteric Fever	2	1	1	..	..	..	1	1	..	..	..	..	..	..
Measles	7	3	4	3	4	..	..	..	..	..	..	..	..	..
Erysipelas	3	..	3	..	..	..	..	..	2	1	..	..	..	..
Puerperal Fever	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Encephalitis Lethargica	2	1	1	..	..	..	1	..	1	..	1	..	..	..
Influenza	11	6	5	..	..	1	..	3	4	3	..	..	..	..
Rheumatism	16	7	9	..	..	1	2	4	5	4	1	..	..	..
Diarrhoea and Enteritis.....	47	27	20	34	5	1	1	1	4	1	2	1	..	1
Syphilis.....	10	5	5	8	..	..	1	..	1	..	5	..	..	..
Tubercular Diseases :—														
Phthisis	76	44	32	1	2	4	13	28	23	5	15	1	13	1
General	5	1	4	1	1	2	..	1	..	..	..	..	1	1
Tabes Mesenterica.....	2	2	..	1	1	..	..	..	..	..	..	..	..	..
Meningitis	5	3	2	1	3	1	..	..	..	..	..	1	..	2
Peritonitis	14	10	4	4	7	..	3	..	..	..	..	2	1	6
Knee	2	1	1	..	..	..	..	..	2	..	1	..	..	..
Spine	2	1	1	1	..	..	1	..	..	..	..	1	..	..
Larynx	2	2	..	..	..	..	..	1	1	..	1	..	..	..
Abscess of Lung.....	1	..	1	..	..	..	..	1	..	..	1	..	..	..
Cervical Glands	2	1	1	1	..	1	..	..	..	..	1	1	..	..
Cervical Adenitis	1	1	..	1	..	..	..	..	..	..	..	1	..	..
Hip	1	1	..	..	..	..	1	..	..	..	1	..	..	..
Respiratory Diseases :—														
Pneumonia	73	39	34	4	9	3	5	17	25	10	9	2	2	..
Bron-Pneumonia	50	25	25	22	10	1	1	1	10	5	4	..	1	8
Bronchitis	163	91	72	36	7	2	1	5	37	75	19	1	..	1
Pleurisy	6	4	2	..	..	1	1	1	2	1	..	1	..	..
Laryngitis	6	2	4	1	3	1	..	..	1	..	..	..	..	..
Congestion of Lungs	3	1	2	..	..	..	..	1	..	..	..	1	..	..
Abscess of Lungs	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Asthma	3	2	1	..	..	..	..	1	2	2	..	..	..	..
Heart Disease	170	74	96	..	..	8	8	28	66	60	21	4	..	..
Aneurysm	2	2	..	..	..	..	..	..	2	..	..	..	..	..
Apoplexy	77	32	45	..	..	..	..	2	33	42	11	..	..	..
Anaemia	17	9	8	1	..	..	..	3	5	8	1	..	..	..
Other Diseases of the Circulatory System :—														
Arterio Sclerosis.....	25	13	12	..	..	..	..	2	7	16	12	..	..	..
Cerebral Thrombosis.....	6	3	3	..	..	..	..	1	1	4	2	..	..	..
Angina Pectoris.....	1	1	..	..	..	..	..	..	1	..	..	..	..	..
Embolism of Lung.....	1	1	..	..	..	1	..	..	..	..	..	1	..	..
Internal Hæmorrhage	1	..	1	..	..	..	1	..	..	..	..	..	..	..
Stomach :—														
Gastritis.....	11	6	5	9	..	1	..	..	1	..	..	..	..	1
Gastric Ulcer	7	3	4	1	..	..	..	2	3	1	..	1	..	..
Gastric Catarrh	4	2	2	2	..	..	..	1	1	..	..	..	..	..
Hæmatemesis.....	1	..	1	..	..	..	..	..	..	1	..	..	..	1
Gastrostaxis	1	..	1	..	..	..	1	..	..	..	..	1	..	..
Indigestion	1	1	..	..	..	..	..	..	1	..	..	..	..	..
Intestinal Diseases :—														
Appendicitis.....	10	5	5	..	..	5	2	..	3	..	..	9	..	..
Obstruction	7	..	7	2	..	..	..	1	3	1	..	1	..	1

CAUSES OF DEATH FOR 1920—CONTINUED

	TOTAL	MALES	FEMALES	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and over	Workhouse	Hospital	Sanatorium	Bank Hall
Intestinal Diseases (<i>cont</i>) :—														
Peritonitis	2	2	..	..	..	..	..	..	1	1	..	..	..	..
Ischio Rectal Abscess	1	1	..	..	..	..	..	..	1	..	1	..	..	..
Liver :—														
Jaundice.....	1	..	1	1	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver	2	1	1	..	..	..	..	1	1	..	..	..	..	..
Acute Yellow Atrophy.....	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Gall Stones	4	1	3	..	..	..	..	1	1	2	1	1	..	..
Inflammation of Liver.....	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Cholecystitis	1	..	1	..	..	..	..	1	..	..	..	1	..	..
Urinary System :—														
Nephritis	40	20	20	..	..	1	2	12	18	7	5	2	..	..
Cystitis	6	5	1	..	..	..	..	..	3	3	1	..	..	..
Enlarged Prostate	3	3	..	..	..	..	..	..	1	2	1	1	..	..
Vesical Calculi	1	1	..	..	..	..	..	..	..	1	1	..	..	..
Pyo-Nephrosis	1	..	1	..	..	..	..	..	1	..	..	1	..	..
Renal Calculi.....	1	1	..	..	..	..	..	..	..	1	1	..	..	..
Suppression of Urine	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Urethral Stricture.....	1	1	..	..	..	..	..	..	..	1	1	..	..	..
Diseases of the Reproductive System :—														
Neoplasm Uterus	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Ovarian Cyst	2	..	2	..	..	..	..	..	1	1	..	..	..	..
Salpingitis	1	..	1	..	..	..	..	1	..	..	..	1	..	..
Uterine Fibroid.....	1	..	1	..	..	..	..	1	..	..	..	1	..	..
Endometritis	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Nervous System :—														
Meningitis	11	4	7	5	1	4	..	1	..	..	..	..	1	1
Cerebral Softening.....	3	3	..	..	..	..	..	..	1	2	2	..	..	..
General Paralysis of the Insane	3	2	1	..	..	..	..	..	3	..	2	..	..	..
Convulsions	28	11	17	26	2	..	..	..	..	..	1	..	..	1
Epilepsy	6	1	5	..	..	..	..	4	2	..	1	..	..	..
Ascending Paralysis.....	1	..	1	..	..	..	..	..	1	..	1	..	..	..
Disseminated Sclerosis	2	..	2	..	..	..	..	..	..	2	2	..	..	..
Encephalitis	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Hemiplegia	4	2	2	..	..	..	..	1	1	2	1	..	..	..
Chorea.....	1	..	1	..	..	1	..	..	..	..	..	..	..	..
Bulbar Paralysis.....	1	1	..	..	..	..	..	..	1	..	..	..	..	..
Locomotor Ataxia.....	3	3	..	..	..	..	..	..	2	1	..	..	..	..
Spastic Paraplegia.....	1	1	..	..	..	..	..	..	1	..	..	..	..	..
Myelitis.....	1	1	..	..	..	..	..	1	..	..	1	..	..	..
Insular Sclerosis	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Neuritis	1	..	1	..	..	..	..	..	1	..	2	..	..	..
Other Brain Disease :—														
Cerebral Tumour.....	3	2	1	..	..	..	..	2	1	..	..	..	..	..
Cerebral Abscess	1	..	1	..	..	1	..	..	..	..	..	1	..	..
Premature Birth.....	57	29	28	57	..	..	..	..	..	..	1	..	..	6
Congenital Defects :—														
Spina Bifida	6	3	3	6	..	..	..	..	..	..	..	..	..	..
Atelectasis	12	8	4	12	..	..	..	..	..	..	1	1	..	3
Congenital Heart	7	4	3	7	..	..	..	..	..	..	..	..	..	2
Asphyxia.....	1	1	..	1	..	..	..	..	..	..	..	..	..	1
Malformation	1	..	1	1	..	..	..	..	..	..	..	..	..	..
Cong. Hydrocephalus	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Debility, Marasmus	50	29	21	48	1	..	..	..	1	..	2	1	..	19
Accidents at Birth.....	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Teething	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Old Age	72	30	42	..	..	..	..	..	..	72	14	..	..	..

CAUSES OF DEATH FOR 1920—CONTINUED.

	TOTAL	MALES	FEMALES	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and over	Workhouse	Hospital	Sanatorium	Bank Hall.
Parturition and Pregnancy :—														
Placenta Praevia	1	..	1	..	..	..	..	1	..	..	..	1	..	..
Pregnancy	1	..	1	..	..	..	..	1	..	..	..	1	..	..
Parturition	2	..	2	..	..	..	1	1	..	..	..	..	1	..
Ante-partum Haemorrhage..	2	..	2	..	..	..	1	1	..	..	..	..	..	2
Puerperal Eclampsia.....	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Child Birth	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Hernia.....	8	5	3	..	..	..	..	..	3	5	..	3	..	..
Malignant Diseases :—														
Cancer—Reproductive	22	..	22	..	..	..	..	6	11	5	6	1	..	..
Alimentary	71	35	36	..	..	..	1	3	35	32	10	8	..	..
Urinary	5	4	1	..	..	..	..	..	..	5	..	..	..	..
Tongue	3	3	..	..	..	..	..	..	2	1	..	..	..	..
Bone	2	1	1	..	..	..	..	1	..	1	1	..	..	..
Jaw	4	2	2	..	..	..	..	..	2	2	2	..	..	..
Head	2	1	1	..	..	..	..	..	2	..	..	..	..	..
Mucous Membrane	1	1	..	..	..	..	..	1	..	..	..	..	..	..
Lung	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Breast	13	..	13	..	..	..	..	1	10	2	1	..	..	..
Lymphatic Glands.....	1	1	..	..	..	..	..	..	1	..	1	..	..	..
Larynx	2	2	..	..	..	..	..	..	1	1	1	..	..	..
Scrotum	1	1	..	..	..	..	..	..	1	..	1	..	..	..
Diabetes	18	11	7	..	..	..	1	1	13	3	1	1	..	..
Gangrene	1	1	..	..	..	..	..	..	..	1	1	..	..	..
Alcoholism	2	2	..	..	..	..	..	1	1	..	1	..	..	..
Diseases of the Ear :—														
Otitis Media	3	2	1	1	2	..	..	..	..	..	1	..	..	1
Mastoid Abscess	1	1	..	1	..	..	..	..	..	..	..	1	..	..
Inquests :—														
Accidental Deaths.....	28	18	10	1	5	2	4	6	4	6	2	9	..	..
Suicides	13	9	4	..	..	..	..	3	10	..	..	..	..	..
Natural Causes	9	4	5	1	..	..	..	1	3	4	1	..	..	..
Other Causes :—														
Carbuncle	1	1	..	..	..	..	..	..	..	1	1	..	..	..
Pemphigus	2	2	..	2	..	..	..	1	..	..	..	1	..	..
Toxemia	1	1	..	..	..	..	..	..	..	..	..	1	..	..
Abscesses	4	1	3	2	..	..	..	..	1	1	1	..	..	1
Exophthalmic Goitre	3	..	3	..	..	..	..	2	1	..	..	..	..	..
Icterus Neonatorum	3	2	1	3	..	..	..	..	..	..	..	..	..	..
Syncope	6	4	2	..	..	..	..	2	1	3	..	1	..	..
Cellulitis	5	2	3	..	..	..	..	..	3	2	2	..	1	..
Graves Disease	1	..	1	..	..	..	..	..	1	..	..	1	..	..
Abdominal Tumour	1	1	..	..	..	..	..	1	..	..	..	..	..	..
Pancreatitis	2	2	..	..	..	..	..	1	1	..	..	..	..	..
Encysted Hydrocele Cord ..	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Ulcers	3	2	1	..	..	..	..	..	1	2	..	..	..	..
Stomatitis	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Myxœdema	2	..	2	..	..	..	..	1	1	..	..	..	..	..
Acidosis	1	..	1	..	..	..	..	1	..	..	..	..	..	..
Glomerulitis	1	1	..	..	..	..	..	1	..	..	..	..	..	..
Conjunctivitis	1	..	1	1	..	..	..	..	..	..	1	..	..	..
Necrosis of Tibia	1	..	1	..	..	..	..	..	1	..	1	..	..	..
Drowned	2	2	..	..	..	..	..	..	2	..	..	..	..	..
Murdered	1	..	1	1	..	..	..	..	..	..	..	..	..	..
TOTAL	1487	742	745	317	68	50	54	181	402	415	187	70	26	60

TABLE II.—SHOWING POPULATION, BIRTH RATE, DEATH RATE AND INFANTILE MORTALITY IN VARIOUS LARGE TOWNS AS SHOWN BY THE ANNUAL RETURNS OF THE REGISTRAR GENERAL.

<i>Name of Town.</i>	<i>Population in 1920.</i>	<i>Birth Rate.</i>	<i>Death Rate.</i>	<i>Infantile Mortality.</i>
Liverpool	803,452	31.2	15.7	111
Middlesborough	132,208	33.4	15.1	137
Salford	235,239	26.8	12.7	97
Preston	121,950	24.6	13.4	101
Oldham	143,154	23.3	14.7	106
Sunderland.....	155,211	35.0	15.8	103
Bootle.....	80,029	28.4	13.5	96
Merthyr Tydfil	74,493	29.7	13.6	83
Wigan.....	90,866	30.1	15.7	128
Gateshead	128,309	32.1	14.2	112
St. Helens	104,822	30.9	13.1	114
BURNLEY	105,030	23.3	13.7	126
Stockport	130,635	22.0	12.4	97
Halifax	105,847	18.9	13.2	97
Rochdale	93,639	20.4	13.0	94
Hull.....	290,808	29.2	13.2	98
Bradford.....	293,979	20.7	13.1	92
Barrow-in-Furness	76,561	25.6	11.3	76
Warrington	77,939	28.8	11.6	88
Birkenhead	153,951	27.8	12.5	101
Sheffield	492,570	26.6	13.2	104
Blackburn	131,012	21.5	13.4	110
Leeds	449,212	25.6	14.3	105
Newcastle-upon-Tyne ...	286,061	29.4	13.8	96
Birmingham	895,915	28.0	12.6	83
Cardiff	212,582	24.7	10.7	82
Bury	56,410	19.7	13.9	93
Huddersfield	116,776	18.0	12.6	80
York	77,501	27.7	12.3	62
Rhondda	184,999	27.3	11.7	104
Bolton.....	184,533	22.7.	13.6	98
Leicester	245,465	24.0	11.5	87
Nottingham	267,836	25.9	12.9	95
Swansea.....	167,218	24.7	11.8	89
Derby	128,868	25.8	10.5	72

TABLE III.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1920 AND PREVIOUS YEARS.
 (Being Table I. of the Local Government Board).

Year.	Population estimated to Middle of each year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.		Number.	Rate.	Non-residents registered in the District.	Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Numb'r	Rate per 1,000 Nett Births.	Numb'r	Rate.
1913	109,021	2497	2488	22·8	1953	17·9	164	48	434	174	1837	16·8
1914	110,040	2600	2590	23·5	1900	17·3	148	50	409	158	1803	16·4
1915	103,098	2017	2010	19·5	1826	17·7	140	59	334	166	1745	16·9
1916	100,183	1807	1806	16·5	1787	16·7	142	88	273	151	1503	15·0
1917	93,779	1518	1510	14·4	1558	16·6	138	89	218	143	1420	15·1
1918	90,770	1449	1447	14·3	1764	18·9	137	108	185	126	1615	17·7
1919	102,391	1608	1600	15·6	1608	15·6	146	91	189	118	1553	15·16
1920	105,030	2452	2456	23·3	1550	14·7	130	67	317	129	1487	14·16

The following special cases arise as to Transferable Deaths :—

(1) Persons dying in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) must be regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission, the death is not transferable. If the patient has been directly transferred from one such institution to another, the death is transferable to the district of residence at the time of admission to the first Institution.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement should be referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence are to be referred (a) to the district of residence, under the general rule ; (b) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known ; (c) failing this, to the district where death occurred, if known ; and (d) failing this, to the district where the body was found.

At Census of 1911—

Total population at all ages	106,337
Number of inhabited houses	24,058
Average number of persons per house	4·42

Area of District in acres (land and inland water) 4,629

TABLE IV.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1920.

(Being Table II. of the Local Government Board).

Name of District—County Borough of Burnley.

Notifiable Disease.	Cases Notified in Whole District.								Not Stated.	Total cases removed to Hospital.
	At all Ages.	At Ages—Years.								
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.		
Small Pox.....	...	...	...	...	...	...	...	...	...	...
Measles	290	27	137	123	3	...	...	...	...	1
Cholera .....	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup)	96	...	24	45	14	12	1	...	...	52
Erysipelas.....	77	...	1	4	5	26	32	9	...	5
Scarlet Fever	176	1	24	131	17	3	...	...	...	89
Enteric Fever	9	...	...	1	5	2	1	...	...	6
Typhus Fever .....	...	...	...	...	...	...	...	...	...	...
Relapsing Fever .....	...	...	...	...	...	...	...	...	...	...
Continued Fever .....	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	3	...	...	...	2	1	...	...	...	...
C'bro-spinal Men'gitis	...	...	...	...	...	...	...	...	...	...
Ophthal Neonatorum	18	18	...	...	...	...	...	...	...	...
Poliomyelitis	1	...	1	...	...	...	...	...	...	...
Primary Pneumonia	91	5	7	17	16	28	12	6	...	...
Influenzal Pneumonia	8	...	...	...	3	1	4	...	...	7
Malaria	42	...	...	...	15	27	...	...	...	...
Dysentery.....	2	...	...	...	1	1	...	...	...	...
Enceph Lethargica...	4	...	...	...	2	1	1	...	...	...
*T. B. Lungs	110	1	3	11	21	45	21	8	...	...
†Other Forms of T. B.	56	5	8	18	14	10	...	1	...	...
TOTAL	983	57	205	350	118	157	72	24	...	160

* Total Notifications received, 118.

† Total Notifications received, 65.

Isolation Hospital—Burnley District Sanatorium. Total available beds, 112. Number of Diseases that can be concurrently treated, 6.

TABLE V.—CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1920.

(Being Table III. of the Local Government Board).

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of 'Residents' or 'Non-Residents' in Institutions in the District.
	All Ages.	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	
ALL CAUSES :										
Certified.....	1486	317	33	35	50	54	180	402	415	472
Uncertified	1	..	..	..	..	..	1	..	..	..
Enteric Fever	2	..	..	..	..	1	1	..	..	..
Small Pox .....	..	..	..	..	..	..	..	..	..	..
Measles	7	3	3	1	..	..	..	..	..	..
Scarlet Fever	3	..	..	1	2	..	..	..	..	1
Whooping Cough .....	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	1	3	5	..	..	..	..	4
Influenza	11	..	..	..	1	3	..	4	3	..
Erysipelas	3	..	..	..	..	..	..	2	1	..
Phthisis (Pulmonary Tuberculosis)	76	1	..	2	4	13	28	23	5	45
Tubercular Meningitis	5	1	..	3	1	..	..	..	..	4
Other Tubercular Diseases	32	9	6	3	3	5	3	3	..	23
Cancer, malignant disease	128	..	..	..	..	1	13	65	49	45
Rheumatic Fever	16	..	..	..	1	2	4	5	4	6
Meningitis	11	5	..	1	4	..	1	..	..	2
Organic Heart Disease.....	170	..	..	..	8	8	28	66	60	27
Bronchitis	163	36	5	2	2	1	5	37	75	38
Pneumonia (all forms)	123	26	11	8	4	6	18	35	15	30
Other diseases of Respiratory organs	19	1	..	3	2	1	4	5	3	2
Diarrhoea and Enteritis	47	34	2	3	1	1	1	4	1	4
Appendicitis and Typhlitis	10	..	..	..	5	2	..	3	..	13
Cirrhosis of Liver	2	..	..	..	..	..	1	1	..	..
Alcoholism	2	..	..	..	..	..	1	1	..	1
Nephritis and Bright's Disease ..	40	..	..	..	1	2	12	18	7	9
Puerperal Fever	1	..	..	..	..	..	1	..	..	..
Other accidents and diseases of Pregnancy and Parturition	8	..	..	..	..	2	6	..	..	6
Congenital Debility and Malformation, including Premature Birth	133	133	..	..	..	..	..	..	..	38
Violent Deaths, excluding Suicides	28	1	1	4	2	4	6	4	6	13
Suicides	13	..	..	..	..	..	3	10	..	..
Other Defined Diseases	419	67	4	1	4	2	43	115	183	160
Diseases Ill-defined or unknown..	6	..	..	..	..	..	2	1	3	1
	1487	317	33	35	50	54	181	402	415	472

TABLE VI.— INFANT MORTALITY DURING THE YEAR 1920.

NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR,

(Being Table IV. of the Local Government Board).

CAUSES OF DEATH.	Under 1 week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 weeks.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths Under 1 year.
ALL CAUSES :										
Certified.....	71	17	22	11	121	67	60	42	27	317
Uncertified .....	..	..	..	..	..	..	..	..	..	..
Small Pox .....	..	..	..	..	..	..	..	..	..	..
Chicken Pox .....	..	..	..	..	..	..	..	..	..	..
Measles .....	..	..	..	..	..	..	1	1	1	3
Scarlet Fever.....	..	..	..	..	..	..	..	..	..	..
Whooping Cough .....	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup .....	..	..	..	..	..	..	..	..	..	..
Erysipelas .....	..	..	..	..	..	..	..	..	..	..
Tubercular Meningitis .....	..	..	..	1	1	..	..	..	..	11
Abdominal Tuberculosis .....	..	..	..	..	..	1	2	2	..	55
Other Tubercular Diseases .....	..	..	..	..	..	..	..	4	..	44
Meningitis (not Tubercular) .....	..	..	..	..	..	2	2	1	..	55
Convulsions	6	2	1	..	9	7	7	..	3	268
Laryngitis .....	..	..	..	..	..	..	1	..	..	11
Bronchitis	1	1	3	..	5	10	8	5	8	368
Pneumonia (all forms).....	..	1	..	..	1	1	9	13	2	268
Diarrhoea .....	..	..	..	..	..	3	4	1	2	10
Enteritis	1	2	..	1	4	5	6	3	6	244
Gastritis.....	1	1	..	..	2	1	3	3	..	99
Syphilis.....	1	1	1	2	5	2	..	..	1	88
Rickets .....	..	..	..	..	..	..	..	..	..	..
Suffocation (overlaying) .....	..	..	..	..	..	..	1	..	..	11
Injury at Birth	1	..	..	..	1	..	..	..	..	11
Atelectasis	9	2	..	1	12	1	..	..	..	133
Congenital Malformations	4	..	1	..	5	6	2	2	..	155
Premature Birth	36	5	5	3	49	7	..	1	..	577
Atrophy, Debility and Marasmus	10	2	4	2	18	16	8	5	1	488
Other Causes.....	1	..	7	1	9	5	6	1	3	244
TOTALS.....	71	17	22	11	121	67	60	42	27	317

Nett Births in the year—2456

Legitimate..... 2295
 Illegitimate

Nett Deaths in the year—317

Legitimate Infants 270
 Illegitimate Infants 39

TABLE VII.—PARTICULARS OF THE TWELVE WARDS.

WARDS.	Estimated Population	Acreage.	Birth Rate.	Death Rate.	Notifiable Infectious Diseases.	Infectious Diseases Morbidity Rate	Infectious Diseases Mortality Rate	Infantile Diarrhoea Death Rate.	Infantile Mortality
St. Andrew's ...	16087	823	17.2	11.7	175	10.7	1.4	...	61
Daneshouse ...	8502	140	23.2	13.5	71	8.4	1.5	...	96
Stoneyholme ...	5898	540	20.2	13.2	31	5.3	1.9	0.34	134
St. Peter's	5608	114	32.3	23.5	49	8.7	4.8	1.07	199
St. Paul's	6363	152	33.6	22.9	80	12.1	3.1	0.79	182
Fulledge	11292	735	24.2	15.0	130	11.5	2.0	0.44	176
Burnley Wood	9091	366	23.8	12.8	122	13.4	2.3	0.44	121
Healey	8130	468	21.9	11.7	68	3.4	1.5	0.12	79
Trinity	7554	93	27.1	14.2	49	6.5	1.4	0.66	146
Whittlefield ...	5472	175	23.4	11.5	43	7.8	1.3	...	133
Gannow	10084	496	25.0	14.4	62	6.1	1.2	0.30	115
Lowerhouse ...	10126	527	21.2	13.1	120	11.8	2.4	0.30	125
Workhouse ... (Census)	823	...	...	...	...	...	...	...	...
Totals for the town as a whole	105030	4629	23.3	14.16	1000	9.5	1.9	0.32	129

TABLE VIII.—POPULATION, BIRTH RATE, DEATH RATE, INFANTILE DIARRHOEA DEATH RATE PER 1000 BIRTHS, AND INFANTILE MORTALITY IN BURNLEY FOR THE LAST 39 YEARS.

Year.	Population.	Birth Rate.	Death Rate.	Infantile Diarrhoea, Death Rate per 1000 Births.	Infant Mortality.
1882	61,695	41.8	23.5	27.9	204
1883	64,509	40.1	23.7	36.7	201
1884	67,322	39.3	23.8	47.7	221
1885	70,135	37.8	21.2	15.0	186
1886	72,949	35.4	23.6	47.0	246
1887	75,761	36.0	20.7	33.0	214
1888	78,574	36.4	21.3	17.9	204
1889	81,388	37.2	23.2	29.8	225
1890	84,201	34.1	22.5	35.9	220
1891	*87,016	36.0	23.1	22.7	221
1892	88,019	35.9	20.9	15.8	189
1893	89,022	35.4	22.8	46.1	227
1894	90,024	34.5	19.9	16.7	174
1895	91,027	35.0	25.6	54.9	249
1896	92,030	34.6	20.2	16.2	173
1897	93,033	33.8	22.1	26.9	223
1898	94,036	31.9	19.0	44.6	194
1899	95,039	29.9	23.6	82.8	273
1900	96,041	30.5	19.7	51.1	208
1901	*97,043	27.5	18.9	58.6	227
1902	98,158	29.6	19.3	23.4	175
1903	99,061	27.3	18.7	42.4	216
1904	99,971	26.8	19.4	70.8	232
1905	100,889	26.3	16.6	46.1	174
1906	101,816	28.0	19.9	73.3	212
1907	102,751	29.0	17.7	24.1	156
1908	103,696	28.6	18.2	52.2	201
1909	104,648	25.4	16.3	21.5	157
1910	105,610	25.4	16.5	37.0	168
1911	*106,569	23.2	18.1	81.3	210
1912	108,012	23.0	15.0	14.5	145
1913	109,021	22.8	16.8	49.8	174
1914	110,040	23.5	16.4	27.0	158
1915	103,098	19.5	16.9	38.8	166
1916	100,183	16.5	17.7	19.4	151
1917	93,779	14.4	16.6	12.6	143
1918	90,770	14.3	18.9	5.5	126
1919	102,391	15.6	15.2	8.7	118
1920	105,030	23.3	14.1	13.8	129

*The population for the census years 1891, 1901, and 1911 are taken from the Census Returns; the other populations for the other years are estimated from these figures.

C. *Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909 :*

(1) Number of representations made with a view to the making of Closing Orders	None.
(2) Number of dwelling-houses in respect of which Closing Orders were made	None.
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	None.
(4) Number of dwelling-houses in respect of which Demolition Orders were made	None.
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	None.

3. UNHEALTHY AREAS.

Areas represented to the Local Authority with a view to Improvement Schemes under (a) Part I. or (b) Part II. of the Act of 1890 :

No action taken.

4. Number of Houses not complying with the Building Bye-laws erected with consent of Local Authority under Section 25 of the Housing, Town Planning etc., Act, 1919	None.
--	-------

5. Staff engaged on Housing work with, briefly, the duties of each Officer :

The Staff consists of a Housing Inspector who carries out the inspections under the Housing Acts, and devotes his whole time to Housing work ; and also a Chief Sanitary Inspector and five assistants, who deal with defects coming under the Public Health Acts and the Local Acts as far as they regard dwellings.

PARTICULARS OF INSPECTIONS UNDER THE HOUSING ACTS.

KIND OF HOUSES INSPECTED :—

Through.	Back to Back.	Single.	Single Room Dwellings.	Basements	Total.
708	56	15	2	...	781

SURROUNDING VENTILATION:—

702	open on to front streets.
40	„ „ cul-de-sac streets.
4	„ „ courts.
26	„ „ landings.
7	„ „ passages.
2	„ „ a back yard.

Through Houses 708

Number of Rooms—

2	Rooms	...	...	...	...	...	8
2	„ and attic	...	...	...	...	...	8
3	„	...	...	...	...	...	9
3	„ and scullery-kitchen	...	...	...	...	...	54
4	„	...	...	...	...	...	549
4	„ and scullery-kitchen	...	...	...	...	...	2
4	„ and attic	...	...	...	...	...	3
5	„	...	...	...	...	...	71
5	„ and scullery-kitchen	...	...	...	...	...	2
6	„	...	...	...	...	...	1
7	„	...	...	...	...	...	1
							708

Size of Rooms—

LIVING ROOMS (with kitchen ranges) 1102

Height: 22 between 7 and 8 feet.

191 „ 8 „ 9 „

887 „ 9 „ 10 „

2 above 10 feet.

Floor Space: 391 under 125 square feet.

223 between 125 and 150 square feet.

425 „ 150 „ 200 „

61 „ 200 „ 250 „

2 over 250 square feet.

Cubic Space: 270 under 1,000 cubic feet.

594 between 1,000 and 1,000 cubic feet.

233 „ 1,500 „ 2,000 „

5 above 2,000 cubic feet.

LIVING ROOMS (without kitchen ranges) 60.

Height: 3 between 7 and 8 feet.

13 „ 8 „ 9 „

43 „ 9 „ 10 „

1 over 10 feet.

Floor Space: 60 under 125 square feet.

Cubic Space: 60 under 1,000 cubic feet.

PARLOURS 227

Height : 50 between 7 and 8 feet.
 175 " 8 " 9 "
 2 " 9 " 10 "

Floor Space : 156 under 125 square feet.
 44 between 125 and 150 square feet.
 23 " 150 " 200 "
 4 " 200 " 250 "

Cubic Space : 89 between 500 and 1,000 cubic feet.
 123 " 1,000 " 1,500 "
 15 " 1,500 " 2,000 "

BEDROOMS 1,486

Height : 15 between 7 and 8 feet.
 346 " 8 " 9 "
 1,118 " 9 " 10 "
 7 above 10 feet.

Floor Space : 547 under 125 square feet.
 325 between 125 and 150 square feet.
 578 " 150 " 200 "
 33 " 200 " 250 "
 3 above 250 square feet.

Cubic Space : 362 under 1,000 cubic feet.
 796 between 1,000 and 1,500 cubic feet.
 321 " 1,500 " 2,000 "
 7 above 2,000 cubic feet.

RENTS ranging from 3/6 to 8/- per week with both rates ...	{	42 at 3s. 8d.
		21 at 5s. 2d.
		4 at s. 4d.
" " " 3/- to 7/2 " " poor rate ...	{	9 at 4s. 1d.
		12 at 5s. 4d.
		9 at 6s. 8d.
" " " 3/6 to 9/- " clear ...	{	32 at 4s. 10d.
		14 at 5s. 3d.
		9 at 6s. 9½d.

BACK TO BACK HOUSES 56

2 rooms 37
 2 " and attic 10
 3 " 9

56

LIVING ROOMS 56

Height : 1 between 7 and 8 feet.
 22 " 8 " 9 "
 10 " 9 " 10 "
 23 above 10 feet.

Floor Space: 3 under 125 square feet.
 29 between 125 and 150 square feet.
 19 " 150 " 200 "
 4 " 200 " 250 "
 1 above 250 square feet.

Cubic feet: 1 under 1,000 cubic feet.
 41 between 1,000 and 1,500 cubic feet.
 13 " 1,500 " 2,000 "
 1 above 2,000 cubic feet.

BEDROOMS 65

Height: 22 between 7 and 8 feet.
 13 " 8 " 9 "
 6 " 9 " 10 "
 24 above 10 feet.

Floor Space: 34 under 125 square feet.
 4 between 125 and 150 square feet.
 11 " 150 " 200 "
 15 " 200 " 250 "
 1 above 250 square feet.

Cubic feet: 8 under 1,000 cubic feet.
 39 between 1,000 and 1,500 cubic feet.
 15 " 1,500 " 2,000 "
 3 above 2,000 cubic feet.

RENTS ranging from 2/10 to 5/5 a week with poor rate, and from
 3/1½d. to 5/6 a week, clear.

Single Houses 15

2 rooms	...	...	...	...	...	7
2 " and attic	...	...	...	...	...	3
3 "	...	...	...	...	...	2
3 " and scullery-kitchen	...	...	...	...	...	2
4 "	...	...	...	...	...	1
						<hr/> 15 <hr/>

LIVING ROOMS 16

Height: 1 between 7 and 8 feet.
 10 " 8 " 9 "
 5 " 9 " 10 "

Floor Space: 1 under 125 square feet.
 4 between 125 and 150 square feet.
 6 " 150 " 200 "
 5 " 200 " 250 "

Cubic space: 1 under 1,000 cubic feet.
 7 between 1,000 and 1,500 cubic feet.
 7 " 1,500 " 2,000 "
 1 above 2,000 cubic feet.

BEDROOMS 20

Height : 6 between 7 and 8 feet.
 11 " 8 " 9 "
 3 " 9 " 10 "

Floor space : 4 under 125 square feet.
 3 between 125 and 150 square feet.
 7 " 150 " 200 "
 5 " 200 " 250 "
 1 above 250 square feet.

Cubic space : 4 under 1,000 cubic feet.
 5 between 1,000 and 1,500 cubic feet.
 8 " 1,500 " 2,000 "
 3 above 2,000 cubic feet.

RENTS from 3/1 to 5/-, with poor rate, and 5/3 and 5/5, clear.

Single Room Dwellings 2

Height : 1 between 8 and 9 feet.
 1 " 9 " 10 "

Floor space : 2 between 125 and 150 square feet.

Cubic space : 2 between 1,000 and 1,500 cubic feet.

RENTS—2/9½d., with poor rate, and 3/6, clear.

4 living rooms used as sleeping rooms in addition to bedrooms
 2 " " " " instead of bedrooms.
 6 parlours " " " " in addition to bedrooms.

OVERCROWDING :

1 allowing 300 cubic feet per adult in bedrooms.
 26 " 400 " " " "
 34 on the basis adopted by the Registrar-General, viz., more than 2 persons
 in a room.

STORAGE OF FOOD :

748 had cupboards.
 26 " " and pantries.
 4 " " and shelves.
 2 stored food in pantries.
 1 " " on shelf in living room.

STORAGE OF COAL :

278 had places under stairs.
 141 " cellars.
 299 stored coal in yard.
 31 " " " (uncovered).
 5 " " at top of cellar steps.
 4 " " under slopstone.
 23 " " in scullery.

WATER SUPPLY :

All houses were supplied with Town water.
 553 had taps in living rooms.
 60 " " in scullery-kitchens.
 157 " " in sculleries.
 2 " " under stairs.
 6 " " at bottom of stairs.
 3 " " top of cellar steps.

DRAINS :

All houses were provided with drains.
 8 had drains underneath (cellar drains).
 307 ventilated by downspouts.
 273 sloptraps.
 13 gullies in cellars.
 229 yard gullies.
 480 dishbrick inlets to waste water closets.

DOWNSPOUTS :

128 near doors.
 193 " windows.
 80 on corners of buildings.
 307 connected to drains.
 26 discharge on sloptraps.
 20 " " dishbricks.
 29 " " yard flags.
 18 " " footpath.
 1 " " in fore-court.

SLOPSTONES :

553 in living rooms.
 60 " scullery-kitchens.
 157 " sculleries.
 2 under stairs.
 6 at bottom of stairs.
 3 " top of cellar steps.

SLOP-PIPES :

754 inside.
 27 outside.

YARDS :

696 houses had back yards for own use.
 159 under 100 square feet.
 348 between 100 and 125 square feet.
 181 " 125 " 200 "
 8 above 200 square feet.

SANITARY CONVENIENCES :

730 had separate conveniences.
 16 joined at 8.
 3 " " 1.
 32 joined at closets used in common with houses previously reported.

CLEAN-WATER CLOSETS :

134 with separate cisterns.

WASTE-WATER CLOSETS : 604.

PAIL CLOSET : 1.

ASHPITS :

Large covered 1

Used by 5 tenants.

Small covered 513

484 used by 484 tenants=1 to each.

31 ,, 62 ,, =2 to each.

Ash Bins 152

139 used by 139 tenants=1 to each.

13 ,, ,, 26 ,, =2 to each.

Ash Tubs 29

Used by 29 tenants.

36 joined at ashpits with other houses previously reported.

DEFECTS :

DAMPNESS—

Living Rooms 69

Caused by want of pointing 44

,, ,, rising up walls 18

,, ,, defective spouting 5

,, ,, earth adjoining 2

Scullery-Kitchens 4

Caused by want of pointing 2

,, ,, defective window frame... .. 1

,, ,, defective spouting 1

Parlours 20

Caused by want of pointing 14

,, ,, rising up walls 4

,, ,, earth adjoining. 1

,, ,, defective verandah roof. 1

Bedrooms 184

Defective roofs 70

,, spouting 19

Want of wall pointing 57

Defective window frames. 13

,, pointing along bottom of window

frames 25

Attic 1

Caused by defective roof.

WANT OF CLEANLINESS—

21 living rooms and 36 bedrooms dirty.

VENTILATION—

22 bedrooms poorly ventilated.

LIGHT—

10 living rooms and 2 bedrooms poorly lighted.

WINDOWS—

338 defects were found in connection with living room windows.

7	..	..	..	..	..	scullery kitchen windows.
584	..	..	..	..	..	bedroom windows.
5	..	..	..	..	..	attic windows.

STATE OF REPAIR :

LIVING ROOMS—

105 with defective walls.

68 floors.

24 ceilings.

551 defects were found in connection with fireplaces, ovens and boilers.

3 lobbies had defective plastering.

3 floors.

2 stairs out of repair.

7 required rails, and 28 staircases had defective plastering.

SCULLERIES—

50 windows were not openable, and 10 had defective window frames.

25 had walls and ceilings out of repair, and 12 roofs were defective.

14 were without downspouts and eave spouts, and 5 had defective eaves.

BEDROOMS—

106 walls out of repair.

27 floors ..

67 ceilings ..

10 fireplaces ..

177 without fireplaces.

8 fireplaces built up and 21 made up.

UNDERDRAWING—

5 bedrooms and 3 attics not underdrawn.

COAL STORES—

In fair condition.

DRAINS—

17 blocked.

52 dishbricks broken or required cementing at back.

17 dishbricks without grates.

2 defective syphons.

DOWN-SPOUTS—

39 broken or blocked.

SLOPSTONES—

49 worn, allowing water to lodge or flow over on to floor.

19 had defective woodwork or cementing at back.

SLOP-PIPES—

11 closed and 16 defective.

CLOSETS—

26 defects were found in connection with clean-water closets, and

105 in connection with waste-water closets.

ASHPITS—

46 ashpits and 10 ashbins defective.

YARDS—

45 with broken or sunken flags.

14 with defective walls.

2 had doors off.

7 had doors out of repair.

65 of the houses had fore-courts ; 97 were lobbied, 33 had vestibules only, and 2 were provided with baths.

15 were occupied by the owners, and 14 were houses and shops.

14 houses were occupied by 2 families, and 1 by 3 families.

Notices served under Section 15 (3) numbered 53. Several defects were put on one notice.
The following is a list of those found :—

DEFECTS.	SCULLERIES.		KITCHENS.		PARLOURS.		BEDROOMS.	
	Number.	Remedied.	Number.	Remedied.	Number.	Remedied.	Number.	Remedied.
Broken Flaps	1	1	12	11	..	..	..	..
Floors out of repair .....	..	..	..	..	..	..	4	4
Defects in connection with fireplaces	..	..	11	10	1	1	2	1
Defects in connection with ovens .....	..	..	34	28	..	..	..	..
Defects in connection with boilers.....	..	..	20	14	..	..	..	..
Defective skirting boards	1	1	3	3	..	..	..	..
Walls out of repair	5	3	24	22	1	1	14	11
Ceilings out of repair .....	..	..	1	1	..	..	8	6
Window frames out of repair	2	2	7	7	..	..	14	11
Window sashes out of repair .....	..	..	2	2	..	..	3	3
Window sashes fast .....	..	..	1	..	1	..	20	17
Window cords broken .....	..	..	15	11	7	6	37	33
No handrails .....	..	..	2	..	..	..	..	..
Staircase walls out of repair .....	..	..	7	6	..	..	..	..
Doors out of repair	1	1	2	2	..	..	..	..
Cupboards out of repair .....	..	..	1	1	..	..	..	..

OTHER DEFECTS:—

8 defective roofs	...	...	...	...	...	...	8 remedied.
3 „ eaves spouts	...	...	...	...	...	...	3 „
10 „ pointing of external walls	...	...	...	...	...	...	8 „
8 „ slopstones	...	...	...	...	...	...	7 „
2 „ slop-pipes	...	...	...	...	...	...	1 „
1 dishbrick requiring cementing round	...	...	...	...	...	...	1 „
4 yards with broken flags	...	...	...	...	...	...	3 „
2 yards with walls defective	...	...	...	...	...	...	2 „
4 defective closet roofs or walls	...	...	...	...	...	...	4 „
9 closet doors requiring re-hanging	...	...	...	...	...	...	9 „
1 defective cellar floor	...	...	...	...	...	...	1 „
3 defective set boilers	...	...	...	...	...	...	2 „

In addition to the above, 651 defects were remedied after letters had been sent to the owners.

Appendix 3.

BANK HALL CHILDREN'S HOSPITAL.

TABLE I.—SHEWING DISEASES AND RESULT OF TREATMENT OF CHILDREN ADMITTED.

SUMMARY: PERIOD 12/12/'19 TO 31/12/'20.

Cause of Admission.	DISCHARGED			Remaining in Hospital.	Died.	Total.
	In Good Health.	Improved.	No Im- provement			
Marasmus	19	8	2 (a)	5	19	53
Respiratory Diseases	10	1 (b)	1 (c)	3	9	24
Debility following Illness... ..	4	—	—	—	—	4
Convulsions	2	—	—	—	2	4
Abscesses	2	—	—	1	—	3
Rhachitis	—	11	—	2	—	13
Gastritis	—	—	—	1	1	2
Mongoloid Idiocy	—	—	1	—	—	1
Hydrocephalus	—	—	1	—	—	1
Enteritis	5	2 (a)	1 (a)	1	3	12
Seborrhoeic Eczema	1	—	—	1	—	2
Prematurity	1	—	—	—	3	4
Abdominal Tuberculosis	—	1	—	3	5	9
Persistent Vomiting	4	—	—	2	—	6
Tubercular Meningitis	—	—	—	—	3	3
Congenital Specific	—	—	—	2	3	5
Dietetic Errors	—	—	—	1	—	1
Pulmonary Tuberculosis	—	—	—	—	1	1
Atelectasis	—	2	—	—	—	2
Septic Meningitis	—	—	—	—	1	1
Intestinal Ulceration	—	—	—	—	1	1
Perniones	1	—	—	—	—	1
Arrested Mental Development and Aphasia	—	—	—	1	—	1
TOTAL	49	25	6	23	51	154

(a) Removed by parents against advice. (b) Removed to Infectious Diseases Hospital.

(c) Sent home; Pertussis in the house.

TABLE II.—AVERAGE DURATION OF STAY, AND AVERAGE WEEKLY INCREASE OF WEIGHT OF CHILDREN DISCHARGED, NOT INCLUDING THOSE REMOVED BY RELATIVES AGAINST ADVICE.

Reason for Admission.	Average duration of Stay in weeks.	Average Weekly Gain in Ozs.
Marasmus	15	3.3
Respiratory Diseases	22	3.3
Rhachitis	19.5	2.25
Enteritis	4.5	1.0
Other Conditions	7.5	4.5

TABLE III.—SOURCE OF ADMISSION OF CHILDREN.

General Practitioners.	Health Visitors.	Outpatient Clinic.	Total.
109	5	40	154

ADMISSION WEIGHT-FOR-AGE RECORD.

Consideration of the Chart (over) will show that where the condition of the child was such as to admit of weight being recorded on admission, out of 114 admissions, 110 were under average weight for their age, while 4 were at or above average weight. The youngest infant admitted was a case of atelectasis, aged 5 hours.

45 of the admissions were under 7½-lbs., and of these, 25 were from 2 to 5 months of age.

TABLE IV.—SHEWING THE AGES AND CAUSES OF DEATH OF CHILDREN AT BANK HALL HOSPITAL.

PERIOD: 12/12/'19 TO 31/12/'20.

Cause of Death.	Total	SEX.		AGE PERIOD.										
		M.	F.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	1-2 years.	2-3 years.	3-4 years.
Marasmus (Nutritional)...	16	9	7	—	—	—	—	7	3	5	—	1	—	—
Marasmus (Luetic) ...	4	—	4	—	—	—	—	3	—	1	—	—	—	—
Broncho-Pneumonia ...	9	6	3	—	—	—	—	—	4	2	—	2	—	1
Bronchitis ...	1	1	—	—	—	—	—	—	1	—	—	—	—	—
Abdominal Tuberculosis	7	4	3	—	—	—	—	—	1	1	—	2	3	—
Tubercular Meningitis ...	2	—	2	—	—	—	—	1	1	—	—	—	—	—
Pulmonary Tuberculosis	1	—	1	—	—	—	—	—	—	1	—	—	—	—
Miliary Tuberculosis ...	1	1	—	—	—	—	—	—	—	1	—	—	—	—
Prematurity ...	4	—	4	—	—	—	—	2	1	1	—	—	—	—
Gastric Ulcer ...	1	—	1	—	—	—	—	—	1	—	—	—	—	—
Intestinal Ulceration ...	1	—	1	—	—	—	—	—	1	—	—	—	—	—
Intussusception ...	1	—	1	—	—	—	—	—	1	—	—	—	—	—
Septic Meningitis ...	1	—	1	—	—	—	—	—	1	—	—	—	—	—
Congenital Heart Disease	1	1	—	—	—	—	—	—	—	1	—	—	—	—
Multiple Abscesses ...	1	—	1	—	—	1	—	—	—	—	—	—	—	—
.....														
TOTAL ...	51	22	29	—	—	1	—	13	15	13	—	5	3	1

BANK HALL MATERNITY HOSPITAL—1920.

Total number of Cases admitted or re-admitted during the period 12/1/20 to 31/12/20	...	...	...	...	110
Cases still in Hospital on 31/12/20	...	...	...	...	5
Extern Cases	...	...	...	...	2
Total Intern Maternity Cases	...	...	...	...	78

TABLE V.—SHEWING MATERNITY CASES ADMITTED, AND REASONS FOR ADMISSION.

No. of Cases.	NATURE OF CASE.	No. of Deliveries	DEATHS.						Abortions	
			Maternal		Infantile.		Stillbirths.			
			Male.	Female.	Male.	Female.	Male.	Female.		
12	Contracted or irregular Pelvis, requiring Caesarean Operation	13	—	—	1	—	—	—	—	—
2	Eclampsia, requiring Caesarean Operation	2	—	—	1	—	—	—	—	—
6	Contracted Pelvis, requiring Instrumental Delivery	6	—	—	1	—	—	—	—	—
1	Other Conditions,	(a) 1	—	—	—	—	—	—	—	—
1	Malpresentations,	1	—	—	—	—	—	—	—	—
2	Uterine Inertia,	2	—	—	—	—	—	—	—	—
3	Malpresentations, non-instrumental	3	—	—	—	—	—	—	—	—
18	Slightly contracted or irregular Pelvis	18	—	—	—	—	—	—	—	—
9	Toxaemias of Pregnancy	9	—	—	—	—	—	—	—	—
9	Intercurrent Ailments	9	—	—	—	—	—	—	—	(b) 1
	Antepartum Haemorrhage—									
2	(1) Accidental	1	(c) 1	—	—	—	—	—	—	—
1	(2) Placenta Praevia	1	(d) 1	—	—	—	—	—	—	1
9	Accommodation	9	—	—	—	—	—	—	—	—
1	Precipitated by train journey	1	—	—	—	—	—	—	—	—
2	Emergency	2	—	—	—	—	—	—	—	2
78		78	2	4	2	4	2	4	2	3

(a) History of 5 births over 10-lbs. (b) Pelvic Abscess. (c) Admitted moribund: not delivered.
 (d) Death due to Chronic Myocardial Degeneration.

(10)	Number of infants not entirely breast-fed while in the Institution, with the reasons why they were not breast-fed—			
	Mother's milk inadequate...	... ..	6	} 12
	Mastitis ... ..	... ..	3	
	No desire to suckle ... ..	... ..	3	
(11)	Number of maternal deaths, with causes—			
	Admitted Moribund—not delivered	... ..	1	} 2
	Chronic Myocardial Degeneration	... ..	1	
(12)	Number of fetal deaths (stillborn, or within 10 days of birth), and their causes, and the results of the post-mortem examination, if obtainable—			
	(a)	Stillborn	6	
		Sex. Cause of death.		
		Male ... Contracted pelvis and malpresentation.		
		Female ... Rhachitic pelvis (caesarean operation).		
		Male ... No reason found (forceps).		
		Male ... Contracted pelvis (caesarean operation).		
		Female ... Central placenta praevia and antepartum haemorrhage (caesarean operation).		
		Male ... Eclampsia (caesarean operation).		
	(b)	Within 10 days of birth	4	
		Sex. Lived Cause of Death.		
		Male ... 9 hours ... Eclampsia (caesarean).		
		Female ... 6 days ... Contracted pelvis malpresentation.		
		Male ... 6 hours ... Contracted pelvis (caesarean operation).		
		Male ... 2 hours ... Antepartum haemorrhage.		
		No post mortems were held on these.		

Appendix 4.

METEOROLOGY.

THE METEOROLOGICAL OBSERVATORY is at Queen's Park. It is attached to the Meteorological Office and is called an Auxiliary Climatological Station. The results of the observations are sent to that office, and monthly returns are published from all the places that supply readings. A weekly return of temperature and rainfall is also sent by us for the use of the Registrar General, and is published in a weekly return sent out from his office.

The Instruments consist of a Kew pattern barometer—in the potting shed—the reservoir of which is 458 feet above sea level. In the enclosure are the following :—

In the Stephenson Screen	Wet Bulb Thermometer. Dry Bulb Thermometer. Maximum Thermometer. Minimum Thermometer.
	Solar Radiation Maximum Thermometer. Grass Minimum Thermometer. Earth Thermometer —1 foot. —4 feet. Sunshine Recorder. (Campbell Stokes). Rain Gauge. (8 inches in diameter).

The floor of the Stephenson screen is 461 feet above sea level.

The Readings are taken daily at 9 o'clock a.m., Greenwich time, and the results are posted each day in front of the Town Hall, and published on the Wednesday in each of the two local papers.

SUMMARY OF READINGS FOR THE YEAR.

BAROMETER.—The mean reading was 1015.1 millibars ; highest reading 1040.1 millibars on 5th February ; lowest reading 972.1 millibars on 22nd December.

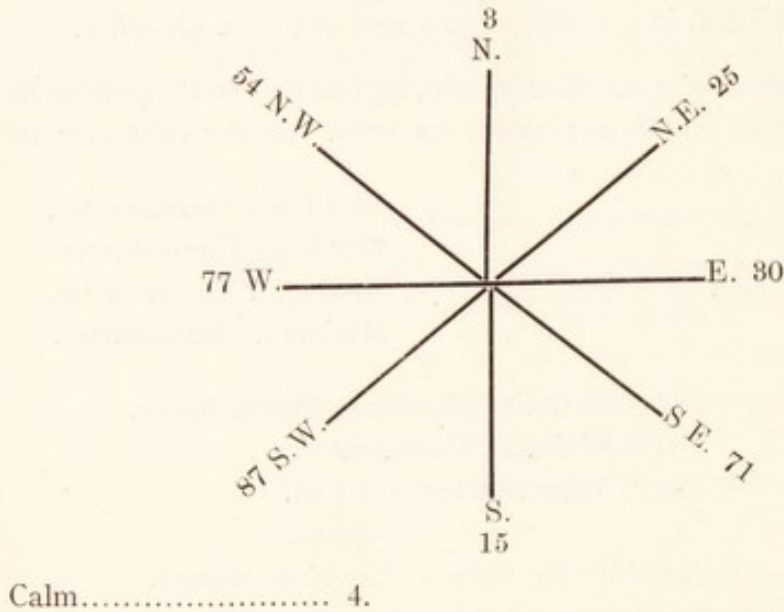
TEMPERATURE.—The highest temperature in the shade recorded was 76 on 17th and 18th June ; the lowest temperature being 13 on 13th December ; the mean temperature for the year was 47.5 ; the mean daily range being 12. The lowest reading of the Grass Thermometer was 18 on 6th January ; the number of days of ground frost being 63.

RAINFALL.—The total amount of rain for the year was 1087.2 millimetres, the highest amount in one day being 35.2 millimetres on 9th February, the number of rainy days has been 241. The mean relative humidity at 9-0 a.m. was 84.6 per cent.

SUNSHINE.—The total amount of bright sunshine registered was 1,017 hours, 54 minutes highest amount in one day 14 hours, 42 minutes—on 24th May and 9th June.

EARTH THERMOMETER.—The mean reading of the 1-foot thermometer was 47.7, mean reading of 4-feet thermometer 48.0.

Diagram shewing the number of days on which the wind was in the same direction. Observation taken at 9 a.m. Greenwich time.



Appendix 5.

**Extracts from the Report of the Medical Officer of the Burnley and District
Joint Hospital Board.**

TABLE SHEWING THE NOTIFICATIONS OF THE FIVE PRINCIPAL INFECTIOUS DISEASES IN
THE AREAS OF THE CONSTITUENT AUTHORITIES AND THE NUMBERS ISOLATED
TOGETHER WITH THE PERCENTAGES ISOLATED, DURING 1920.

	Measles	Scarlet Fever.	Enteric Fever.	Ery- sipelas.	Diph- theria.	Total.
BURNLEY COUNTY BOROUGH (including the Workhouse) :						
Total Notified	290	176	9	77	96	648
Total Isolated	4	91	5	8	57	165
Percentage Isolated	1.3	51.7	55.5	10.4	59.3	26.2
BURNLEY RURAL DISTRICT :						
Total Notified .....	..	12	1	1	17	31
Total Isolated .....	..	..	1	..	..	1
Percentage Isolated	0.0	0.0	100.0	0.0	0.0	3.1
BRIERFIELD URBAN DISTRICT :						
Total Notified	16	12	..	5	8	41
Total Isolated .....	..	5	..	..	1	6
Percentage Isolated	0.0	41.6	..	0.0	12.5	4.3
PADIHAM URBAN DISTRICT :						
Total Notified	1	13	1	11	7	33
Total Isolated	1	10	..	2	4	17
Percentage Isolated	100.0	76.9	0.0	18.2	57.1	31.5

TABLE SHEWING TOTAL NUMBER OF CASES FROM BURNLEY ADMITTED IN THE YEAR, 1920.

Month.	Scarlet Fever.	Enteric Fever.	Ery-sipelas.	Diphtheria.	Measles.	Influenza.	Tuberculosis.	Other Diseases.	Total.
January	8	..	1	3	..	..	9	1	22
February	9	..	1	1	..	..	8	..	19
March	6	1	1	2	..	..	6	1	17
April	6	..	1	5	..	..	11	..	23
May	5	..	1	2	..	..	3	1	12
June	9	1	..	4	4	..	7	..	25
July	2	1	1	2	..	..	4	1	11
August	8	1	..	6	..	..	6	1	22
September	8	..	1	9	..	..	5	2	25
October	15	..	1	5	..	..	6	5	32
November	7	..	..	7	..	..	5	1	20
December	8	1	..	11	..	..	10	..	30
Totals	91	5	8	57	4	..	80	13	258

TABLE SHEWING THE TOTAL NUMBER OF PATIENTS RECEIVED DURING THE YEAR FROM EACH DISTRICT, AND THE DISEASES FROM WHICH THEY WERE SUFFERING.

	Scarlet Fever.	Enteric Fever.	Ery-sipelas.	Diphtheria.	Measles.	Influenza.	Tuberculosis.	Other Diseases.	Total.
BURNLEY BOROUGH : Cases	91	5	8	57	4	..	80	13	258
RURAL DISTRICT : Cases .....	..	1	..	1	..	..	..	1	3
BRIERFIELD URBAN DISTRICT : Cases	5	..	..	..	..	..	..	..	5
PADIHAM URBAN DISTRICT : Cases	10	..	2	4	1	..	..	2	19
OUTSIDE HOSPITAL DISTRICT : Cases .....	..	..	..	..	..	..	45	..	45
TOTALS : Cases	106	6	10	62	5	..	125	16	330

Appendix 6.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

SUMMARY OF NOTIFICATIONS RECEIVED DURING THE PERIOD JAN. 1st, 1920 to DEC. 31st, 1920.

Ages Periods.	Notifications on Form A.										Total Notifications, (i.e., including cases previously notified by other doctors).	Number of Notifications on Form B.				Notifications on Form C.			
	Primary Notifications.											Total Notifications, (i.e., including cases previously notified by other doctors).	Primary Notifications.		Total Notifications, (i.e., including cases previously notified by other doctors).	Poor Law Institutions.	Sanatoria.		
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65			65 to 75	Over 75				Under 5	5 to 10	10 to 15	Total
Pulmonary Males	..	2	3	1	2	9	11	6	5	8	..	49	55	..	..	..	..	62	..
Females	1	1	3	4	6	11	11	7	3	..	..	61	63	..	..	..	..	35	..
Non Pulmonary Males.....	4	7	5	5	3	2	3	..	..	..	..	29	31	..	..	..	..	7	..
Non Pulmonary Females.....	1	1	5	3	8	1	6	1	..	1	..	27	34	..	..	..	..	4	..

Appendix 7.

REPORT OF THE MEDICAL OFFICER OF HEALTH ON VISIT TO PAPWORTH SANATORIUM AND TUBERCULOSIS COLONY.

To the Chairman and Members of the Tuberculosis Sub-Committee.

GENTLEMEN,

In accordance with Minute No. 4346 (*d*), I visited Papworth Sanatorium and Tuberculosis Colony, and I have the honour to present a brief report of this visit, with a few general observations on the methods of, and suggestions for, dealing with this disease.

The Colony method of dealing with Tuberculosis—the word “dealing” is used here rather than the word “treating”—is one that is occupying the attention of all persons and authorities who are interested in this vital and complex problem. Papworth Sanatorium and Colony is the property of an association formed for the purpose of carrying out this work.

The Papworth estate is situated about 14 miles from Cambridge, in country well suited to the purpose, and consists of a large Hall used as a Hospital, and a number of shelters for the patients, a village, the cottages of which are occupied by ex-Tuberculosis patients and their families; another Hall used as a Hostel for those who have been discharged from the Sanatorium and are working on the estate; extensive grounds, part of which is used for hen-farming, part for gardening. In addition to this, workshops have been erected for the training of patients in certain handicrafts and also for the occupation of such patients when they have been trained. None but ex-patients are employed, and the training of patients and management of these workshops is also by ex-patients. All men working are paid for their work. They are paid at modified rates whilst learning, and, when trained, they receive the union rate of wages for that occupation, if it is an occupation to which that term applies.

This Institution, as will thus be seen, provides for more than the treatment of the disease: it also provides for the after-care of the patient.

The principles that have guided the founders of the Institution are:—

- (*a*) That Tuberculosis is an infectious disease.
- (*b*) Being an infectious disease, the greatest necessity for its prevention is the isolation of those suffering from it.
- (*c*) That the chief source of danger is the “middle case,” i.e., the case which is neither an early case, where there is little or no incapacity for work, nor an advanced one, when the person must be regarded as a hospital case and unable to work.
- (*d*) That provision of work for these middle cases will both help to cure and will help to secure the isolation which is so essential; and
- (*e*) To provide this work, various forms of employment must be available to suit the varying types of case. For a married man it is recognised that he cannot be separated long from his wife and family, and that if he has to live with his family it is better that he lives under the suitable conditions which can be secured at a Colony such as this.

To enlarge a little upon these various points.

That this disease is infectious is not recognised sufficiently, and when the public do recognise that fact and all it means, some real step will be taken to isolate those who are a source of danger to others. Until we do isolate such cases, no other steps we are able to take can have any real effect in lessening the incidence of the disease. It is this fact that has been fully grasped by the Papworth Association.

The "middle case," by its ability for some amount of work and therefore able to mix with others, more especially in family life, is the one that undoubtedly spreads the disease. It is also very difficult to isolate this kind of case. The present method of sending the patient to a sanatorium, where, after a stay of a few months, he so far improves as to return to what in most cases is an insanitary home, or to work which is quite unsuited to his condition, is of little use. The result of this is that after a longer or shorter period the patient reverts to his former condition and continues to be a source of danger to his family. It is certainly the middle case that gives us all the trouble. The majority of very early cases, with ordinary sanatorium treatment, recover. It is also doubtful if infection from these is a serious danger. The advanced case also does not, as a rule, spread the infection to the same extent as the middle case, for it is confined to bed, or is well known as an infectious case, and therefore guarded against.

The middle case has the disease so far advanced that, generally speaking, there is little hope of *cure*. I would like to quote here an extract from an article written by Dr. Varrier Jones, the Medical Officer of the Papworth Association, and Professor G. Sims Woodhead, the Professor of Pathology at Cambridge :—

"The use of the word 'cured' not being justified in connection with any form of treatment yet brought to bear on tuberculosis, the term 'arrest of the disease,' has been substituted, though even this elastic expression has usually been superseded by still more guarded and tentative expressions."

I do not fully subscribe to this statement, as I am quite convinced, from an experience extending over many years that cases of tuberculosis do yield to treatment, and that the word "cured" is often fully justified. That the word "cured" is seldom applicable to Sanatorium cases I quite agree, for the reason that suitable cases for that form of treatment do not often reach the sanatorium, but arrive there when the disease can no longer be classified as "early."

That most cases are so far advanced when they first come to the notice of the medical practitioner as cases of tuberculosis, is unfortunately far too common. The patient, if he is a man with a family, goes on working as long as he is able, and at the same time infecting members of his family. He only goes to the doctor when unable to work, and has already ceased to be an early case. He may be sent to a sanatorium, and, after a few months he mends or he gets very tired of what is often a very monotonous existence; he leaves the sanatorium, returns to the anxieties of home life—which will probably be great, for, in addition to the anxieties caused by his illness, there is the added difficulty of lessened wage-earning capacity.

The chief interest of this colony method of dealing with tuberculosis is in dealing with the middle case. At Papworth only males are taken. A man, on admission, is put in

the observation ward ; as soon as possible his classification is decided upon. If an advanced case and not likely to be able to work he goes into the hospital part of the Hall, and there remains, quite apart from any other class of case. If he becomes a sanatorium case he goes to those wards set apart for those cases. When it is decided that he is able to work, he has the choice of several occupations, either one that he knows or one that he wishes to learn.

The Papworth industries are carpentry and joinery, cabinet making, poultry-farming, boot repairing and making, tailoring, portmanteau and attache case making, horticulture, printing. Other occupations are practised: one man makes hand-made jewellery, another is making shop window cards. A patient previously occupied as a grocer looks after the colony store.

Men occupying the sanatorium side of the Institution go to work according to their capacity, but are not allowed to work more than 4½ hours daily. If the disease is arrested and sanatorium treatment is no longer required, the man passes to the hostel, and there to all intents and purposes, lives in lodgings, for which he pays out of his earnings, his working hours being six hours a day. He is, of course, under medical supervision. If a married man, he may have a cottage in which a room is set apart for him. Here, again, all the patients and their families are under medical supervision. Whether it is wise or not to allow uninfected children to live in a tuberculosis colony, time alone will show.

In the case of a single man it is thus seen how free from anxiety he can be as to his future—a condition so necessary to securing an improvement in his physical condition—for if he is ill he goes into the sanatorium, and, as soon as he is fit again, there is work for him at which he can earn a living.

No claim is made that this colony system can be made self-supporting, but it can at least reduce the great cost that tuberculosis is to the community.

As to the possibilities of extending the colony system. It appears to be essential that a colony shall be large enough to give opportunities for various kinds of employment. It also must be large enough to attract and to keep a patient for an extended period, if not for the rest of his life.

There are numbers of cases that do not require the colony system ; the very early cases, and the advanced. It must always be an endeavour to get a case early, and it is surely possible to discover a method whereby cases *suspected* of tuberculosis can be dealt with better than they are at present.

A ready means of taking suspected cases of tuberculosis into a sanatorium for observation, and the fact that many of these—probably the great majority—would, after a short stay, be discharged cured, should do away with the unwillingness of a patient to consider that the term "consumption" could possibly apply to himself, and do away also with the dislike of the medical man to suggest to his patient the possibility of such a dread disease, and hence a failure to notify it until there is no doubt as to its existence ; by that time it is generally beyond "cure" : many times even beyond "arrest." It must be made possible, when tuberculosis is *suspected*, to remove the patient to a local sanatorium for observation ; if that observation lasts for months and there is capacity for work, it may even in some cases be possible to allow that patient to carry on his ordinary avocation in

modified form. It is found that recurrences of the disease are probable, owing to the condition and surroundings of the patient; then is the time to consider the question of colony treatment. Of course, for the advanced case, there is only one method, and that is isolation, and we must be in a position to provide this as it becomes necessary.

An adaptation of the colony system might be adopted here. Casual occupations such as that mentioned, of shop window card making, would lend themselves to this; in fact, any occupation where the patient could work on his own, then, just as long as the patient was considered to be a possible source of danger would he be isolated. This plan would do away with the removal of the patient to some distant part of the country for perhaps a long period, this, in the case of a father of a family, being a very important consideration. In some cases the patient might help to maintain his family by this means, whilst working under conditions much more favourable to his condition than those he could have in his own home.

It has already been said that the infectiveness of tuberculosis is of much more importance than is frequently recognised. We do not act as if it were infectious; but the time is coming when some form of isolation will be compulsory, and whether the colony method will be the one or not, it is perhaps too much on its trial at present to hazard an opinion. The infectiveness is so varying, the cases themselves are so different, each from the other, and the duration of the infectious period is often so long that the ordinary methods of isolation as applied to the acutely infectious diseases, are useless with tuberculosis, and it seems as if the colony system, or some modification of it such as suggested, may offer a solution of the difficulty. The great mass of dangerous cases being the "middle" cases, it is necessary to devise some means of isolating these, and as they are capable of work, work will have to be found for them modified according to their requirements. Also the work found will have to be useful work or the patient will cease to take interest in it.

Isolation implies restrictions, and these restrictions will have to be as little irksome as possible.

I have not said anything of the economic side of the scheme beyond the fact that no claim is made that the system is self-supporting. The Papworth Industries appear to be run on a well carried out plan from that point of view. Advertising the goods made, agents for their distribution, and, in fact, the usual methods of a business concern are practised. There is no cheap labour: the ordinary rates are paid to each fully trained workman, who, as long as he is working full time, will be a very small charge on the association. Of course, with workmen of that type, absences from work must be frequent and often prolonged, this fact making it quite impossible to hope for anything except a reduction in the cost of maintaining people suffering from this disease.

To summarise on the Colony Scheme of dealing with tuberculosis. It claims:—

- (1) The effective isolation of cases carrying infection.
- (2) Reducing the cost of their maintenance by the community.
- (3) That the method works favourably on the patient in a curative sense.

The great point as regards treatment is that if the patient is able to work it is best for him to work, but that he must work with a purpose. It helps to cure his disease, if that is possible, both by its mental and physical effects. I would add that, in all probability, the mental are more important than the physical effects.

This method of isolation is on trial, with what success it is much too early to say. At present it is voluntary. When public opinion demands isolation, this may be the method in which it will be applied. So far, Papworth has not dealt with women, and also, one may be permitted to doubt whether very many really early cases arrive there. Having some knowledge of the mentality of patients of this kind, I might add here that it is perhaps as well if they do not, for I am sure that contact of a very early case with a number of well-marked ones is *not* to his advantage.

In concluding this report, I would like to express my indebtedness to Dr. Philip, Assistant Medical Officer, and to Miss Borne, the Matron, who showed me over the estate and explained the scheme. This association owes much to the enthusiasm of its officers, who are trying to solve the difficulty of the isolation of this world-wide and most deadly of all our infectious diseases. When that is solved, we shall have made a tremendous stride along the road to its final extermination.

I have the honour to be, Gentlemen,

Your obedient servant,

THOMAS HOLT, M.D.

September, 1920.

Medical Officer of Health.

Appendix 8.

LIST OF POLICE COURT PROCEEDINGS DURING 1920.

Date of Decision.	Act or Bye-law under which Proceedings taken.	Offence.	Result.
January 19th (Adjourned case.)	Sale of Food and Drugs Act, 1875, Section 6.	Selling camphorated oil deficient in camphor.	Dismissed on payment of costs—£3 8s. 0d.
March 3rd ...	Burnley Corporation Act, 1908, Sec. 85.	Failure to provide dust bins (5 cases)	Adjourned.
April 7th ...	Food and Drugs Act ...	Selling milk deficient in fat 11 per cent.	Dismissed on payment of costs—£2 8s. 6d.
April 14th ...	do. ...	Selling milk deficient in fat 16 per cent., and 19 per cent. added water.	£20 fine, and £2 8s. 6d. costs.
April 21st ...	Burnley Corporation Act, 1908, Sec. 85.	Failure to provide dust bins (5 cases)	Withdrawn on payment of costs, 17s. 6d.; bins provided.
May 12th ...	Food and Drugs Act ...	Selling milk 5 per cent. deficient in fat, and 8 per cent. added water.	Fine, £5.
May 19th ...	Burnley Corporation Act, 1908, Sec. 85.	Failure to provide dust bin ...	Fine, 10/-, and costs, £2 2s. 0d.
July 28th ...	Food and Drugs Act ...	Selling oil of almonds not of nature demanded.	Dismissed on warranty; wholesale dealer paid £10 10s. 0d. costs.
August 25th ...	Public Health Act, 1874, Sec. 94 ...	Nuisance—Blocked drain, etc. ...	Adjourned 3 weeks.
Do. ...	do. ...	Nuisance—Defective flushing apparatus.	do.
Do. ...	Burnley Corporation Act, 1908, Sec. 85.	Failure to provide dust bin ...	do.
Do. ...	do. ...	do. ...	do.
Do. ...	do. ...	Action for continuing penalty ...	Fine, 5/-.
September 15th ...	Public Health Act, 1875, Section 94	Nuisance—Blocked drain, etc. ...	Withdrawn on payment of costs and nuisance abated.
Do. ...	do. ...	Nuisance—Defective flushing apparatus.	do.
(Adjourned cases.)	do. ...	Smoke nuisance ...	Adjourned for observations.
September 22nd ...	do. ...	Excess of 6.5 per cent. of moisture in butter.	Dismissed on warranty defence.
September 29th ...	Food and Drugs Act ...	Failure to provide dust bin ...	Adjourned.
October 6th ...	Burnley Corporation Act, 1908, Sec. 85.	do. ...	do.
November 17th ...	do. ...	do. ...	do.
Do. ...	do. ...	do. ...	Withdrawn on payment of costs; bin provided.
Do. ...	Public Health Act, 1875, Section 94	Nuisance—Blocked drain ...	Adjourned.
November 24th ...	do. ...	do. ...	Fine £1, costs £1 1s. 0d., and order to abate within 7 days.
(Adjourned case.)	Burnley Corporation Act, 1908, Sec. 85.	Failure to provide dust bin ...	Fine, 10/-.
December 8th ...	do. ...	do. ...	do.
Do. ...	do. ...	do. ...	do.
December 15th ...	Public Health Act, 1875, Section 94	Smoke nuisance ...	Adjourned.
(Adjourned case.)	do. ...	do. ...	do. <i>sine die</i> .

