

[Report 1922] / Medical Officer of Health, Cumberland County Council.

Contributors

Cumberland (England). County Council.

Publication/Creation

1922

Persistent URL

<https://wellcomecollection.org/works/dcf835sw>

License and attribution

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

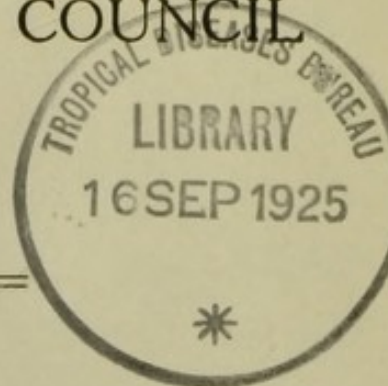
This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

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



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

CUMBERLAND COUNTY COUNCIL



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

F. H. MORISON, M.D., D.P.H.,

FOR THE YEAR 1922.

CARLISLE :

JAMES BEATY & SONS, PRINTERS, LONSDALE STREET.

1923.

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

1

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX AND TILDEN FOUNDATIONS

CUMBERLAND COUNTY COUNCIL.

TO THE CUMBERLAND COUNTY COUNCIL.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have pleasure in presenting to you my Fifteenth Annual Report, viz., that for the year 1922.

As this is again an "ordinary report," only matters with which the County Council has directly to deal are reported on.

No summary of the Reports of District Medical Officers of Health is included.

Area.

The Area of the Administrative County as given in the preliminary Census Returns for 1921, is 968,598 acres.—
Municipal Boroughs and Urban Districts 62,133 acres ;
Rural Districts, 906,465 acres.

Population.

The population as given by the Registrar General for the year 1921 :—

Urban Districts	...	...	...	...	121,830
Rural Districts	...	...	...	...	96,669
Administrative County	...	...	...	...	218,499

Births.

The births registered in the County during the year 1922 numbered 4,863 (2,526 males, and 2,337 females), giving a birth-rate of 22.3 per thousand of population, compared with 5,325 (2,729 males, and 2,596 females), and a rate of 24.5 in the previous year.

In the Urban Districts there were 2,848 births (1,497 males, and 1,351 females), giving a birth-rate of 23.3, and in the Rural Districts 2,015 (1,029 males, and 986 females), giving a rate of 20.8 per thousand of population. The corresponding figures for the previous year were:—Urban Districts 3,159, and a rate of 26.1 ; Rural Districts 2,166, and a rate of 22.5.

The birth-rate in England and Wales for the year was 20.6.

Arranged in the order of their birth-rates the Urban and Rural Districts stand thus:—

<i>Urban.</i>	<i>Rural.</i>
Whitehaven ... 28.2 (29.6)	Alston 23.8 (18.05)
Arlecdon and ... 26.6 (31.1)	Cockermouth ... 20.5 (26.4)
Frizington	
Maryport ... 26.6 (28.2)	Longtown ... 23.0 (24.4)
Egremont ... 26.3 (25.3)	Wigton ... 22.4 (23.9)
Harrington ... 25.4 (30.03)	Whitehaven ... 21.4 (24.6)
Workington ... 23.3 (26.06)	Brampton ... 18.8 (19.6)
Cleator Moor ... 20.4 (28.01)	Penrith ... 18.7 (17.9)
Wigton ... 20.0 (23.0)	Bootle ... 18.4 (17.9)
Cockermouth ... 19.8 (22.3)	Carlisle ... 17.7 (20.1)
Millom ... 19.8 (26.8)	
Penrith ... 19.7 (21.4)	
Holme Cultram 18.7 (20.9)	
Keswick ... 17.8 (16.1)	
Aspatria ... 17.6 (22.2)	

NOTE.—In all these tables the figures in brackets are those for the previous year.

Illegitimate Births.

The number of illegitimate Births was 256, so that 52 per thousand of the total births were illegitimate, compared with 316 and 59 per thousand in the previous year.

The ratio of illegitimate births per thousand of the total births in the various Sanitary Districts is as follows :—

<i>Urban.</i>			<i>Rural.</i>		
Arlecdon and Frizington	64		Alston ...	...	106
Aspatria ...	93		Bootle ...	...	72
Cleator Moor ...	17		Brampton ...	...	85
Cockermouth ...	103		Carlisle ...	...	61
Egremont ...	27		Cockermouth ...	...	50
Harrington ...	69		Longtown ...	...	75
Holme Cultram ...	78		Penrith ...	...	53
Keswick ...	53		Whitehaven ...	...	31
Maryport ...	56		Wigton ...	...	74
Millom ...	28				
Penrith ...	81				
Whitehaven ...	49				
Wigton ...	40				
Workington ...	30				

In the Urban Districts 48, and in the Rural Districts 78 per thousand births were illegitimate.

Deaths.

The number of deaths registered was 3,218 (1,649 males and 1,569 females), this gives a death-rate of 14.7 per thousand.

The death-rate in England and Wales was 12.9.

In the Urban Districts there were 1,892 deaths (989 males, and 903 females), giving a rate of 15.6, ; in the Rural Districts 1,326 (660 males and 666 females), giving a rate of 13.7.

Arranged in the order of their death-rates the Urban and Rural Districts stand thus :—

<i>Urban.</i>		<i>Rural.</i>	
Whitehaven ...	21.6 (13.6)	Alston ...	20.8 (16.2)
Wigton ...	17.0 (15.8)	Brampton ...	17.1 (13.4)
Penrith ...	16.6 (14.2)	Wigton ...	15.2 (12.1)
Arlecdon and ...	16.3 (13.9)	Longtown ...	15.0 (11.02)
Frizington			

Urban—continued.

Keswick	... 15.9 (13.7)
Cockermouth	... 14.7 (12.6)
Holme Cultram	14.7 (9.3)
Cleator Moor	14.5 (13.1)
Maryport	... 14.5 (12.5)
Workington	... 14.3 (12.3)
Millom	... 13.4 (14.3)
Aspatria	... 11.9 (8.1)
Egremont	... 11.4 (13.1)
Harrington	... 11.4 (13.2)

Rural—continued.

Cockermouth	... 13.5 (11.5)
Penrith	... 13.0 (12.4)
Carlisle	... 12.2 (12.09)
Whitehaven	... 11.9 (10.7)
Bootle	... 11.5 (10.06)

The main causes of the increase in deaths are Measles, Whooping Cough, Influenza and their after effects Bronchitis and Pneumonia. There is also a considerable increase in deaths from Heart Disease.

Infant Mortality.

4,863 births were registered, and 485 infants died before they reached the age of one year, the Infant Mortality, therefore, was at the rate of 99 per 1,000 births, 17 per 1,000 higher than last year.

In the Urban Districts there were 2,848 births, and 331 deaths of infants. The Infant Mortality was, therefore, 116 per thousand births, 27 per thousand higher than the previous year.

In the Rural Districts there were 2,015 births, and 154 infant deaths, giving an Infant Mortality rate of 76 per thousand births, 4 per thousand higher than the previous year.

The Infant Mortality rate of legitimate infants was 105, that of illegitimate infants 117.

Of the total Infant deaths, 27.2% died before they were one week old, 30% over one week, but under three months old, or in other words 57.2% of the Infant deaths occurred under three months of age, 16.4% between three and six months, 15.5% between six and nine months, and 10% between nine and twelve months.

The districts mainly responsible for this high rate were those in which most distress existed through unemployment, viz., Cleator Moor (166) ; Whitehaven (160) ; Workington (127). Egremont (121) ; and I have no doubt that insufficient feeding was responsible for it, possibly not so much insufficiency in quantity as in quality, but possibly both have to take their share.

It is disappointing to find such a great increase in the Infant Mortality this year in the Administrative County.

In view of the fact that the rate of Infant Mortality throughout England and Wales is again lower this year even than last, it is evident there must have been some special cause at work in this County to account for the increase.

That special cause, I am afraid, is the distress due to unemployment with, as a consequence, insufficient food.

In normal times the diet of a large section of the community is deficient in what are known as accessory food factors or Vitamines, but in times such as we are passing through this deficiency is more marked because the essential Vitamines are not present in the foods which circumstances compel many parents to feed themselves and their children on.

The want of these accessory food factors is serious for any one, but it is most serious for growing children, and particularly serious for infants.

All farmers know that they cannot expect and will not get strong abundant crops unless they provide the soil with suitable nourishment. In just the same way animals (including human beings) cannot produce strong healthy young unless the mother during the period of gestation is supplied with suitable nourishment.

Hence the great importance of Ante-natal work.

If seed is sown in soil which does not contain the proper nourishing ingredients in sufficient and suitable quantity, the result is that the seed either comes to nothing or the crop is stunted, small in quantity and quality, is in fact premature.

Exactly the same thing is occurring in our midst to-day. Expectant mothers have not during the past year been provided with food containing a sufficiency of the essential factors, with the result that we have to deplore a high infant mortality.

The main causes of the infant mortality bear out this statement. An analysis shows that 42.1% of the total Infant deaths were attributable to Premature Birth, Congenital Debility, Atrophy and Marasmus and Diarrhœa

all of which with the possible exception of the last may well be called deficiency diseases, due to lack in the mother's diet of a sufficiency of Vitamines.

But it may well be asked why if the lack of Vitamines causes so many premature births, etc., does it not cause still more when so many mothers are exposed to exactly the same conditions as regards diet.

Because it is a well recognised fact that females of all species have the faculty of sacrificing themselves for the good of their offspring, but this can only go on for a certain time, and sooner or later the mother suffers.

Another noteworthy fact is that 33.2% of the total Infant deaths occurred from Measles and Whooping Cough and their sequelae Bronchitis and Pneumonia.

So that from those two groups alone 75.3% of the Infant Mortality arose.

Arranged in order of their Infant Mortality rates the Urban and Rural Districts stand thus :—

<i>Urban.</i>		<i>Rural.</i>	
Cleator Moor	166 (88)	Whitehaven ...	99 (79)
Whitehaven ...	160 (95)	Cockermouth	90 (97)
Workington ...	127 (102)	Wigton ...	90 (77)
Egremont ...	121 (111)	Penrith ...	80 (46)
Aspatria ...	109 (63)	Longtown ...	75 (71)
Wigton ...	94 (119)	Carlisle ...	47 (29)
Keswick ...	92 (116)	Bootle ...	45 (37)
Millom ...	92 (131)	Brampton ...	39 (57)
Maryport ...	87 (70)	Alston ...	30 (12)
Arlecdon and ...	86 (79)		
Frizington			
Penrith ...	86 (34)		
Harrington ...	78 (82)		
Holme Cultram	56 (60)		
Cockermouth ...	51 (9)		

The Infant Mortality in England and Wales was 77 per thousand births.

Cancer.

282 deaths were registered as due to Cancer, a rate of 1.2 per thousand, as compared with 247 deaths, and a rate of 1.1 in 1921.

Arranged in order of their death rates from Cancer the Urban and Rural Districts stand thus :—

<i>Urban.</i>		<i>Rural.</i>	
Penrith	... 2.0 (1.8)	Alston	... 2.1 (1.08)
Wigton	... 1.6 (1.3)	Longtown	... 2.0 (0.9)
Keswick	... 1.4 (1.4)	Bootle	... 1.9 (1.3)
Whitehaven	... 1.3 (1.0)	Brampton	... 1.9 (1.3)
Millom	... 1.2 (1.5)	Penrith	... 1.9 (1.4)
Workington	... 1.2 (0.8)	Carlisle	... 1.5 (1.5)
Arlecdon and Frizington	... 1.1 (1.1)	Whitehaven	... 1.1 (0.9)
Harrington	... 1.1 (0.4)	Wigton	... 1.1 (1.5)
Holme Cultram	1.0 (0.4)	Cockermouth	1.0 (1.0)
Cockermouth	... 0.8 (2.06)		
Egremont	... 0.7 (0.4)		
Aspatria	... 0.5 (0.8)		
Cleator Moor	0.5 (0.4)		
Maryport	... 0.5 (1.4)		

Zymotic Diseases.

The diseases usually included in this category are :— Enteric Fever, Measles, Smallpox, Scarlet Fever, Whooping Cough, Diphtheria, Diarrhœa.

216 deaths were registered from these diseases, compared with 148 the previous year. This gives a rate of 0.9, compared with 0.6 in 1921. Of the 216 deaths, Diphtheria was responsible for 15, Whooping Cough for 136, Diarrhœa, 41, Scarlet Fever, 2, Enteric Fever, 2, and Measles, 20.

Arranged in the order of their death-rates from Zymotic Diseases the Urban and Rural Districts stand thus :—

<i>Urban.</i>		<i>Rural.</i>	
Whitehaven	... 3.8 (0.8)	Alston	... 1.0 (1.4)
Arlecdon and Frizington	3.2 (1.1)	Whitehaven	... 0.5 (0.6)
Workington	... 1.5 (1.5)	Cockermouth	0.4 (0.8)
Cleator Moor	1.2 (0.1)	Longtown	... 0.4 (0.4)
Egremont	... 1.1 (1.6)	Brampton	... 0.3 (0.3)

Urban—continued.

Harrington	... 0.8 (1.3)
Maryport	... 0.5 (0.6)
Keswick	... 0.4 (0.4)
Millom	... 0.4 (1.1)
Penrith	... 0.4 (0.2)
Aspatria	... 0.2 (0.2)
Holme Cultram	0.2 (0.2)
Wigton	... 0.2 (0.2)
Cockermouth	... Nil. (0.4)

Rural—continued.

Carlisle	... 0.2 (Nil.)
Wigton	... 0.2 (0.2)
Penrith	... 0.1 (0.1)
Bootle	... Nil. (0.5)

Smallpox.

Although no case of Smallpox was notified in the County we were yet in grave danger as cases still continue to be notified in various parts of the Country, and once a case occurs it will be exceedingly difficult to prevent an epidemic owing to the neglect of vaccination during past years.

During the course of Medical Inspection of School Children it has been the custom to take note of the condition of the children as regards vaccination, and the facts revealed disclose a condition of affairs which to say the least is disquieting.

In the No. IV. Medical Area an attempt has been made to show the rate of increase of exemption, as well as the distribution of the unvaccinated.

For this purpose the condition as to vaccination at the following ages was noted :—3, 4, 5, 6, 7, 8, 9,—11, over 12.

Children were divided into three groups :—

- (i.) Unvaccinated.
- (ii.) 1—2 marks.—In the majority in this group, probably at least two-thirds, the success of vaccination is very doubtful, on account of the smallness of the area covered, and the superficiality of the scars.
- (iii.) 3—4 marks. Successful vaccination.

<i>Age.</i>	<i>Group I.</i>		<i>II.</i>		<i>III.</i>	
3—4	...	44.4	...	28.3	...	27.2
5	...	43.5	...	28.6	...	27.9
6—7	...	39.8	...	32.8	...	27.4
8	...	34.6	...	34.8	...	30.5
9—11	...	29.4	...	35.5	...	35.0
Over 12	...	20.5	...	28.9	...	50.5

From this table, therefore, we learn that whilst 10 years ago 20.5% of the children were unvaccinated, and 50.5% were successfully vaccinated, at the present time 44.4% are unvaccinated, and only 27.2% successfully vaccinated.

In the No. V. Medical Area similar figures show that of the total number examined 40% were vaccinated, and 59% were unvaccinated.

Of the Entrants, *i.e.*, children under 7 years of age, 31.5% were vaccinated, and 68.5% not vaccinated.

In the No. II. Area 51% of the total were vaccinated, 42% of Entrants, and 61% of children over 12.

It is, therefore, quite safe to say that at the present time at least 50% of the child population is entirely unprotected against Smallpox by vaccination.

This view is confirmed by information which the Vaccination Officers were good enough to supply me with in 1920.

Extracts from the reports of Vaccination Officers are given below :—

“ Only one child has been vaccinated since 1914.”

“ The percentage of vaccination recently average about 50% of births.”

“ The percentage of children vaccinated during the years ended December, 1919, was 23.3%.”

“ The percentage in my district is roughly 50% for the past seven years.”

“ The percentage is about 47 of the number born.”

“ I have taken the seven years 1913 to 1919 as to children vaccinated, and the percentage is a trifle over 32.”

“ I can safely say exemptions to vaccination are greatly on the increase because exemption is so easily obtained.”

On the other hand some districts are well vaccinated, for instance :—

“ The percentage of children who have been vaccinated in my area within recent years may be put down at 85%.”

Scarlet Fever.

391 cases were notified, and 2 deaths, compared with 346 cases, and 2 deaths in 1921.

Diphtheria.

226 cases were notified, and 15 deaths, compared with 300 cases, and 38 deaths in 1921 ; a case mortality of 6.6% as compared with 12.6% the previous year.

In the Urban and Rural Districts deaths occurred as follows :—

<i>Urban.</i>				<i>Rural.</i>			
Workington	...	...	5	Alston	...	...	2
Egremont	...	...	1	Carlisle	...	...	2
Maryport	...	...	1	Brampton	...	...	1
Whitehaven	...	...	1	Cockermouth	...	...	1
				Whitehaven	...	...	1

Enteric Fever.

18 cases were notified as against 7 in 1921 ; 2 deaths occurred.

Puerperal Fever.

4 cases were notified, as against 8 the previous year. There were 5 deaths, compared with 5 the previous year.

Measles.

20 deaths were registered as due to Measles, against 1 in the previous year.

Whooping Cough.

136 deaths were registered as due to Whooping Cough. against 23 the previous year.

Diarrhoea.

41 deaths under two years of age occurred against 79 the previous year ; 33 of the 41 deaths were under one year of age.

Erysipelas.

53 cases notified against 94 the previous year.

Influenza.

178 deaths occurred, against 56 the previous year.

Respiratory Diseases.

From these diseases there were 501 deaths, compared with 368 the previous year.

In the Urban Districts the death-rate from these diseases was 2.6, against 1.9 the previous year; and in the Rural Districts 1.7, against 1.3 the previous year.

The death-rate for the Administrative County from these diseases was 2.2, against 1.6 the previous year.

Arranged in the order of their death-rates from Respiratory Diseases the Urban and Rural Districts stand thus :—

<i>Urban.</i>	<i>Rural.</i>
Whitehaven ... 3.8 (2.7)	Cockermouth 2.7 (1.7)
Keswick ... 3.2 (3.3)	Alston ... 2.1 (Nil.)
Cockermouth ... 3.0 (1.4)	Whitehaven ... 1.9 (1.4)
Maryport ... 3.0 (1.8)	Wigton ... 1.9 (1.05)
Wigton ... 2.9 (2.7)	Brampton ... 1.6 (1.8)
Millom ... 2.5 (2.3)	Longtown ... 1.6 (1.2)
Workington ... 2.5 (1.4)	Bootle ... 1.4 (1.0)
Harrington ... 2.4 (2.6)	Carlisle ... 0.9 (1.1)
Penrith ... 2.1 (0.7)	
Arlecdon and Frizington ... 2.0 (2.1)	
Aspatria ... 1.9 (0.2)	
Cleator Moor 1.9 (2.1)	
Egremont ... 1.8 (2.3)	
Holme Cultram 1.4 (1.05)	

Water Supply.

The new gravitation supply to the Harrington Urban and parts of the Whitehaven Rural districts is now complete, and appears to be quite satisfactory.

It is to be regretted that some of the parishes in the Cockermouth Rural district could not, on account of the expense, take a supply from this source.

Nearly half the parishes in the Wigton Rural area are still supplied only from wells which are polluted or liable to be polluted, and some of which in a dry season run dry.

Some parts of the Holme Cultram Urban district are also supplied from wells which are most unsatisfactory.

The Carlisle Rural district has under consideration a scheme for the supply of their area by gravitation.

Rivers and Streams.

No complaints have been received of pollution of any of the rivers.

No doubt there is still a considerable amount of pollution going on from minor sources, but the serious pollutions that used to go on are now nearly stopped.

Drainage and Sewage.

One section of the new sewage scheme, at Cleator Moor, is now completed, and the rest of the work is well in hand.

The Wigton and Cockermouth Urban Authorities have both agreed that new sewage disposal works are necessary, and the work at the time of writing this report is proceeding very satisfactorily.

Sale of Food and Drugs Act.

The following is a copy of the Annual Report of the County Analyst :—

THE COUNTY ANALYST'S LABORATORY,
40 LOWTHER STREET,

WHITEHAVEN,

2nd January, 1923.

The County Council of Cumberland.

GENTLEMEN,

SALE OF FOOD AND DRUGS ACTS.

The number of samples analysed under these Acts during the year, 1922 was 319. All these were received from Police Officers who had been appointed Food Inspectors. No samples were submitted by private individuals.

Of these 319 samples 17 were reported against as not being genuine. This gives the total adulteration in Cumberland during 1922 as 5.3 per cent., and is 1.4 per cent. lower than in 1921, when the total adulteration was 6.7 per cent.

The only article which I had to report as adulterated was milk. Without counting 16 samples taken as "appeals to the cow," 193 formally taken samples were submitted for analysis, and of these 17 were found to be either skimmed or watered. This shows the total adulteration in milk for the year to be 8.8 per cent., and compares very favourably not only with 1921 when the adulteration was excessive—11.6 per cent., but also with the more normal year, 1920, with an adulteration of 9.8 per cent. It is interesting to compare the Cumberland results with those of the whole of England. In the whole of England the proportion of milk samples found adulterated was 9.3 per cent. in 1920, of those submitted for analysis, and 11.1 per cent. in 1919.

Amongst the 176 samples reported as genuine milk are 5 samples in which the milk-fat or non-fatty solids fell below the minimum fixed by the Sale of Milk Regulations. These had to be considered as genuine because in each case the "appeal to the cow" sample showed similar deficiencies, proving that the inferior quality of the milk was due to natural causes.

The average composition of all the samples of milk (209) analysed during the year 1922 is as follows:—

Milk-fat	..	..	..	..	..	..	3.50
Non-fatty Solids	..	..	..	..	..	..	8.93
Water ..	..	..	..	..	..	..	87.57
							100.00

The following are the Quarterly averages:—

	<i>Jan. to Mar.</i>	<i>April to June.</i>	<i>July to Sept.</i>	<i>Oct. to Dec.</i>
	<i>53 samples.</i>	<i>55 samples.</i>	<i>53 samples.</i>	<i>48 samples.</i>
Milk-fat ..	3.62	3.29	3.27	3.89
Non-fatty Solids ..	8.92	8.97	8.88	8.95
Water ..	87.46	87.74	87.85	87.16
	100.00	100.00	100.00	100.00

BUTTER AND MARGARINE ACT, 1907.

Eight samples of Butter were submitted for analysis under this Act, and were all found to be genuine. They are included in the returns under the Sale of Food and Drugs Acts.

I append a list of all the articles analysed during the year 1922 under the Sale of Food and Drugs Acts.

I am, Gentlemen,

Your obedient Servant,

ROBERT HELLON, Ph.D., F.I.C.,

County Analyst.

ARTICLES

examined under the Sale of Food and Drugs Acts during the year 1922.

Milk	..	..	..	..	..	..	193 samples
Butter	..	..	..	..	..	..	16 "
Coffee	..	..	..	..	..	..	12 "
Baking Powder	..	..	..	..	..	..	11 "
Pepper	..	..	..	..	..	..	10 "
Oatmeal	..	..	..	..	..	..	9 "
Sugar..	..	..	..	..	..	..	9 "
Rice ..	..	..	..	..	..	..	8 "
Cocoa	..	..	..	..	..	..	6 "
Lard	..	..	..	..	..	..	6 "
Tapioca	..	..	..	..	..	..	5 "
Tea ..	..	..	..	..	..	..	5 "
Confectionery and Jam	..	..	..	..	..	..	5 "
Cream of Tartar	..	..	..	..	..	..	4 "
Cornflour	..	..	..	..	..	..	4 "
Flour	..	..	..	..	..	..	3 "
Cheese	..	..	..	..	..	..	3 "
Barley	..	..	..	..	..	..	2 "
Cinnamon	..	..	..	..	..	..	2 "
Ground Ginger	..	..	..	..	..	..	2 "
Ground Almonds	..	..	..	..	..	..	1 sample
Ground Cloves	..	..	..	..	..	..	1 "
Bread	..	..	..	..	..	..	1 "
Cayenne Pepper	..	..	..	..	..	..	1 "

319

Tuberculosis.

Up to the end of 1922, weekly sessions were held at the dispensaries, but owing to a reduction of the medical staff from the 1st January, 1923, fortnightly sessions will be the rule.

The following are the Dispensaries now open, showing the Medical Officer in charge, and the day and time of session :

<i>Dispensary.</i>	<i>Medical Officer.</i>	<i>Session.</i>
Penrith ...	...Dr. McMurtrie	...Monday, 1st and 3rd in each month, 2 to 4 p.m.
Maryport	...Dr. Gibson	...Friday, 2nd and 4th, 1-30 to 3-30.
Wigton	...Dr. Gibson	...Monday, 2nd and 4th, 1 to 3 p.m.
Cleator Moor	...Dr. Towers	...Monday, 1st and 3rd, 2 to 4 p.m.
Millom ...	...Dr. Towers	...Tuesday, 1st and 3rd, 1-30 to 3-30 p.m.

<i>Dispensary.</i>	<i>Medical Officer.</i>	<i>Session.</i>
Cockermouth	...Dr. Mason	...Monday, 2nd and 4th, 2 to 4-30 p.m.
Whitehaven	...Dr. Manson	...Monday (Weekly), 2 to 4 p.m.
Workington	...Dr. Macpherson	...Monday (Weekly), 2 p.m.; Friday (Weekly), 3-30 p.m.

During the year 194 notifications of Pulmonary Tuberculosis were received, 134 from Urban and 60 from Rural Districts as against 207 (130 in Urban and 77 in Rural Districts) the previous year ; whilst 65 non-pulmonary cases were notified, 45 from Urban and 20 from Rural Districts, compared with 48 the previous year.

159 deaths occurred from Pulmonary Tuberculosis, 97 in Urban and 62 in Rural Districts, compared with 168 (99 in Urban and 69 in Rural Districts) the previous year.

There were 48 deaths from other forms of Tuberculosis, the same number as last year.

146 new cases applied for treatment during the year, 273 cases were still in receipt of treatment at the end of the year.

Of the applications for Sanatorium Benefit, 12 were not suitable cases for treatment.

273 cases were still in receipt of treatment at the end of the year.

Of the applications for Sanatorium Benefit, 12 were not suitable cases for treatment, four persons withdrew their applications for benefit, and seven died before examination by the Tuberculosis Officer. Three died before admitted to Sanatorium, and one left the district before admitted to Sanatorium.

Of the cases treated, 133 were either sent to the Sanatorium or the Colony, 43 were treated at home (*i.e.*, received Domiciliary Treatment), and the remainder were referred to Dispensaries. Two were recommended for Hospital Treatment.

Seventeen open-air shelters were in use during the year.

Nine Dispensaries were open during the year. Keswick Dispensary closed in October.

At the beginning of the year there were 282 names on the registers of the Dispensaries, and 190 new names were entered on the registers during the year.

There were 2,068 attendances at the Dispensaries, and 1,608 examinations were made.

The number of casual consultations (excluding contacts) were 415.

42 patients ceased to attend from one cause or another.

Visits were paid to 747 patients' homes by the Tuberculosis Officers and Nurses.

Arranged in their order of death-rates from Pulmonary Tuberculosis, the Urban and Rural Districts stand thus :—

<i>Urban.</i>		<i>Rural.</i>	
Whitehaven	... 1.3 (1.4)	Longtown	... 0.8 (0.9)
Arlecdon & Frizington	... 1.1 (0.5)	Carlisle	... 0.7 (1.1)
Cockermouth	... 1.0 (0.8)	Cockermouth	... 0.7 (0.3)
Wigton	... 1.0 (0.8)	Whitehaven	... 0.7 (0.7)
Cleator Moor	... 0.9 (0.9)	Brampton	... 0.6 (0.4)
Keswick	... 0.9 (0.7)	Penrith	... 0.6 (0.4)
Millom	... 0.9 (0.6)	Wigton	... 0.5 (0.7)
Penrith	... 0.8 (0.9)	Alston	... 0.3 (1.8)
Maryport	... 0.7 (0.5)	Bootle	... Nil. (1.0)
Harrington	... 0.6 (0.4)		
Aspatria	... 0.5 (0.2)		
Egremont	... 0.4 (0.4)		
Holme Cultram	... 0.4 (0.2)		
Workington	... 0.3 (0.8)		

Arranged in the order of their death-rates from all forms of Tuberculosis, the Urban and Rural districts stand thus :—

<i>Urban.</i>		<i>Rural.</i>	
Arlecdon and Frizington	... 1.7 (0.7)	Alston	... 1.0 (1.8)
Whitehaven	... 1.6 (1.6)	Longtown	... 1.0 (1.1)
Wigton	... 1.3 (1.3)	Whitehaven	... 1.0 (1.07)
Cleator Moor	... 1.1 (1.5)	Carlisle	... 0.9 (1.2)
Cockermouth	... 1.0 (1.03)	Cockermouth	... 0.9 (0.6)
		Brampton	... 0.8 (0.4)

Urban—continued.

Penrith ...	1.0 (1.09)
Keswick ...	0.9 (0.9)
Maryport ...	0.9 (0.7)
Millom ...	0.9 (0.9)
Aspatia ...	0.8 (0.5)
Harrington ...	0.6 (0.8)
Holme Cultram ...	0.6 (0.2)
Workington ...	0.6 (1.1)
Egremont ...	0.5 (0.5)

Rural—continued.

Penrith ...	0.7 (0.5)
Wigton ...	0.7 (0.7)
Bootle ...	0.1 (1.3)

The following table shows the results of institutional treatment, as well as the numbers and classification of patients :—

INSTITUTIONAL TREATMENT.

Class of Applicant.	No.	Improved.	Stationary.	Not improved.	Dead.	Still in San.
Insured .. <i>M.</i> ...	118	60	8	10	4	36
Persons .. <i>F.</i> ...	27	17	1	2	1	6
Dependants .. <i>M.</i> ...	—	—	—	—	—	—
over 16 .. <i>F.</i> ...	24	11	7	1	—	5
Dependants .. <i>M.</i> ...	17	13	—	—	—	4
under 16 .. <i>F.</i> ...	14	9	—	—	—	5
Non-Insured .. <i>M.</i> ...	2	2	—	—	—	—
<i>Totals</i> ..	202	112	16	13	5	56

As will be seen from the above table, over 55% of the cases of Tuberculosis treated in institutions are, on leaving, classified as "improved."

This, in spite of the fact that many cases were well advanced before treatment was undertaken, must be considered a satisfactory immediate result, but one cannot speak of the ultimate result with so much satisfaction.

If, however, treatment and strict supervision can be maintained over a long period, and provided also that work suitable to the physical condition of the individual can be found for him, then the ultimate result is equally satisfactory,

but such conditions can only be provided for the average man in an institution such as an industrial colony, with the expectation of permanent residence in a specially provided village settlement.

With housing conditions and home surroundings such as obtain in the average industrial district, it is inevitable that many of the cases of Tuberculosis dealt with revert sooner or later to their former condition, and so a further period of treatment in an institution is required.

Were it possible for sanatorium conditions to be carried out in the home, and were it possible to earn a living and obtain the necessary amount and quality of food without having to attempt to do work entirely unsuitable to their physical condition, then the majority, instead of the minority, would have their disease permanently arrested, or at any rate have their lives prolonged very considerably.

It is the fact that men have to undertake work beyond their physical capacity, and, moreover, have to attempt to do work before they are in the condition to do so, and this, in spite of the fact that although the food obtained may be sufficient in quantity, it is sadly lacking in quality, owing largely to ignorance of food values.

I believe that one of the most valuable Public Health campaigns that could be undertaken at the present time would be the general education of all classes of the community by means of lectures, by articles in the public press, and so on, in the real food values of all articles of diet. To repeat and keep on repeating what is said and written in much the same way as quack medicines and proprietary articles are advertised until everyone is convinced that what is repeated so often must be correct.

Women affected with Tuberculosis are in exactly the same plight as men; household duties must be undertaken, the children must be attended to long before mothers are in a physical condition to do so, and the ultimate result is the same, a further breakdown.

It is true, and statistics in this County, like the rest of the Country, confirm it, that Tuberculosis is on the decline, that our present methods are bearing some fruit. But, I think, much more might be done without adding any further financial burden.

In order that this may be brought about, however, every sufferer from Tuberculosis must undertake his share. At the present time I do not consider that the individual, for whom the costly schemes of treatment have been evolved, shoulders his fair share of responsibility, and does not do what he ought to do, and may reasonably be expected to do, to help the Local Authority in their endeavours not only to help him as an individual, but to help the community as a whole.

For instance, the advanced case, which is the most infectious, does not take precautions to prevent infecting others, he coughs in all directions without holding a handkerchief in front of his mouth, he spits on the floor wherever he may be, either in a public room, in a train, bus or tram car, instead of using a sputum flask.

In the early stages, when there is a good prospect of his recovery, he fails also.

He will not take the advice of the Tuberculosis Officer, nor will he follow the advice of his own medical adviser, that treatment is necessary, he puts off with any and every excuse until it is too late to hope for anything like a cure. Even when in a Sanatorium, he is unwilling to carry out instructions, and shirks his obligations on every possible occasion, instead of doing all he can to facilitate his own cure.

On the other hand, there are some patients who will do anything possible for their own cure, such cases should be helped in every possible way.

I have already drawn attention to the fact that patients on leaving the Sanatorium are as a general rule much improved in general health, that their disease is in many cases quiescent, that in a word their resistance is raised to such a point that given good conditions in which to live and good food, their working capacity would be restored to a large extent.

What in practice do we find ?

That the ex-sanatorium patient goes back to work as soon as he possibly can, that sooner or later he begins to lose ground again, and will, unless something is done for him at this stage, go steadily and more or less rapidly downhill.

What can be done for such a case ?

I am strongly of opinion that a number of beds—at Englethwaite for men, at Blencathra for women—should be definitely set aside for what, to borrow a phrase, may conveniently be described as “ refresher courses ” of treatment.

I mean that it should become a definite part of our Tuberculosis policy that every Sanatorium case should return yearly for a period of, say, four weeks.

This not to be so much *treatment* in the sense of dealing with a patient who is losing ground, but rather *prevention* in the sense of maintaining the patient's condition and preventing a relapse.

Latterly a number of patients have expressed a desire to be re-admitted for short periods. As our beds, however, are fully occupied with new cases, I feel that this matter, which involves a definite new departure, should be considered by the Committee.

Of the value of the suggestion I have no doubt. The cost to the County Council will remain as it is, but the difficulty in the general adoption of such a policy will lie in persuading patients to leave their homes and re-enter an institution *before* the need for further treatment is apparent.

Experience has taught, as I have said, that the Tuberculous subject in most cases will put off treatment until it is too late, in the hope, no doubt, that recovery will take place at home, or with the desire of concealing his or her misfortune.

There may be minor difficulties in persuading employers to release their employees for these return courses, but I think such difficulties will be capable of negotiation.

Hitherto anti-tuberculosis schemes have mainly concerned themselves with the treatment of existing cases, and although a fair measure of success has been obtained, I do not consider that sufficient has been, or is being done, in the way of prevention.

It seems to me that two methods of prevention are open to us :—

1. To remove advanced cases to hospital in order to remove the principal sources from which new cases arise.

2. To assist those who are most susceptible to infection, in order to raise their resisting powers to such a pitch that they can overcome the infection if and when received.

Both methods are essential to the perfect scheme, but whereas (2) is easy to put into practice, dealing chiefly, as it does, with delicate children, (1), on the other hand, is not.

In (2) the problem is financial only, merely the question of the provision of a convalescent home, or of sufficient beds in a suitable institution.

In (1), on the other hand, the difficulty lies in persuading the advanced case to enter an institution, in plain language, to die, sacrificing a deeply-rooted instinct for the sake of removing infection from the family circle, with perhaps the abstract ideal in the background of assisting the community at large in the campaign against a national scourge.

The segregation of advanced cases is too, inevitably, costly, intensive medical and nursing care being required.

Nevertheless it is the keynote of the matter, as it is now generally realised that this type of case provides the "massive" infection before which the healthy person goes down.

The *immediate* result is, of course, economically poor, there is no hope or intention of a return to working capacity, but the *ultimate* result—in the prevention of new cases—is perfection in economics.

In the latter method I see great hope.

Tuberculosis is unlike any other infectious disease, in that in the vast majority of cases infection is acquired in the early years of childhood, and may lie latent for many years, ready to break out as active disease at any time, provided conditions are made favourable for it.

Any debilitation condition, such as one of the ordinary infectious diseases or malnutrition from any cause, is one favourable for a latent tuberculosis to become active, and, therefore, to treat as far as possible all debilitating conditions in childhood would, I am convinced, go a long way to prevent tuberculosis in later life.

Children in this condition, and exposed to "massive" infection, *i.e.*, to large and repeated doses of the bacillus of tuberculosis, have a very poor chance whilst living and trying to regain physical fitness under conditions such as many of them have to endure at the present time. Many of their parents, however willing they may be, are unable to do all that is necessary for them.

What then is to be done? Is it worth while doing anything?

Let us look for a moment at both sides of the picture. On one side we have these debilitated children—at the present moment there are thousands of them in the County—after the severe epidemic of Measles, the end of which is now in sight. They are all in a favourable condition to receive infection, exposed as all of them are to almost daily risk.

We have then their powers of resistance playing a game of see-saw with the bacillus of Tuberculosis. What can be the only result? The bacillus gets its end of the plank up, and, unless something is done to help, the child will remain down, and remain throughout childhood a weakling.

In early adult life having been at work for a few years it will break down with an acute attack of tuberculosis, and ultimately go to swell the army of tuberculous subjects who require treatment in a Sanatorium, in a Colony, at a Dispensary, or at home.

On the other side we have a child who, something having been done to raise its resisting powers, gets the upper hand of the bacillus, is able to overcome the infection, and instead of being a weakly, ailing child, is robust and healthy, in early adult life is able to go to and remain at work with the ultimate prospect of becoming a useful member of the community.

Is it worth while? I maintain if twice the money spent on treatment at the present time were spent on prevention, it would still be an economic proposition. But it would not be necessary to spend twice the money. I doubt if it would be necessary to spend even what is spent at present, and results, I am convinced, would be infinitely better.

There is at the present time an institution in the County of which no use is being made, the Industrial School, at Cockermouth, which would serve admirably for treating such cases.

In such an institution these children would be well fed, under constant skilled supervision, living an open-air life, with regular hours for meals, rest, sleep, recreation, and an open-air education.

One, two or three months' residence is all that would be required for the majority, and so a large number of beds would not be necessary.

I hope what has been said will receive careful consideration.

A Report on Englethwaite Industrial Colony, by the Medical Superintendent (Dr. Mark Fraser), will be found as an Appendix to this Report.

Maternity and Child Welfare.

105 Midwives were on the roll during the year, 364 visits of regular inspection were made, and 60 special visits were paid by the Inspector of Midwives, who is also Superintendent of the Cumberland Nursing Association.

The Midwives attended 1,855 cases, and acted as Monthly Nurse in 689 cases.

The following is a summary of the work done by Nurses and Health Visitors during the year :—

	<i>By District Nurses.</i>	<i>By Health Visitors.</i>
Visits to Infants (New Cases) ..	1947	1171
" " (Old Cases) ..	20751	4036
Ante-natal Visits	3698	40
Visits to Children, 1—5 years ..	3245	277

The supply of milk to expectant and nursing mothers and young children has again had to be continued on a fairly large scale, owing to the unemployment in the West of the County.

In another part of this Report attention is drawn to the fact that the rate of Infant Mortality has increased from 82 per 1,000 births in 1921, to 99 in 1922.

A few years ago such an Infant Mortality as 99 would have been considered quite a satisfactory one, but experience within recent years has shown that we cannot rest satisfied with nearly 10% of infants dying before they reach the age of one year.

In 1914, as the Notification of Births Act, 1907, had only been adopted by three Authorities in the County, the County Council, with the sanction of the Local Government Board, adopted the Act for the remainder of the County. I then expressed the opinion that if all babies born were visited by someone having experience in the rearing and management of infants to instruct young mothers how to feed and manage their babies, the infant death-rate would soon show a considerable decrease.

A scheme, with this object in view, was adopted by the County Council, whereby 10 whole-time Health Visitors were appointed, and the Nurses of the various Nursing Associations were to be so organised as to act in their own districts as health visitors.

This scheme has been in operation since then, but the number of Health Visitors has been reduced to seven.

As will be seen from the above summary, a considerable amount of useful work has been carried out.

In face of the fact that the Infant Mortality in the Administrative County has increased from 82 in 1921, to 99 in 1922, am I justified in making the claim that the work of the Health Visitors and District Nurses is bearing fruit?

In my opinion, often previously expressed and now confirmed by experience of nearly ten years working of the scheme, the work of District Nurses as Health Visitors is of very great value.

Of course, a great deal depends on the personality of the Nurse, but given the right kind, the one who is received into the homes of the people as a friend, and a guide in health matters, I am convinced that no better, and certainly no more economical, scheme could be evolved for working such a County as Cumberland.

But the record of Infant Mortality is not so bad even in 1922 as at first sight it appears to be.

If we eliminate from our records the three areas which are carrying out the Notification of Births Act for themselves, and have Schemes of Maternity and Child Welfare of their own, and consider only that part of the County for which the County Council is responsible, we find that instead of the Infant Mortality being 99, it is 85.

At the present time there are no Maternity and Child Welfare Centres in the County with the exception of the one at Wigton, which is worked by the Wigton District Nursing Association.

This centre is doing excellent work, is greatly appreciated by the mothers, and has undoubtedly had a marked influence for good on the infant life in Wigton.

I have the honour to be,

Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

F. H. MORISON, M.D., D.P.H.,

County Medical Officer of Health.

June, 1923.

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

Causes of Death at Different Periods of Life in the Administrative County of Cumberland, 1924.

CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS.										AGGREGATE OF RURAL DISTRICTS.									
		All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M	871	131	29	26	24	48	89	212	177	135	629	65	17	13	14	30	43	141	166	140
	F	778	81	26	28	26	37	86	175	161	158	597	50	18	14	8	17	54	134	125	177
1 Enteric Fever	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	1	—	—	—	—	—	1	—	—	—	1	—	—	1	—	—	—	—	—	—
2 Smallpox	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3 Measles	M	6	1	1	3	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
	F	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 Scarlet Fever	M	—	—	—	—	—	—	—	—	—	—	2	—	1	1	—	—	—	—	—	—
	F	3	—	—	2	—	—	—	1	—	—	1	—	—	—	—	1	—	—	—	—
5 Whooping Cough	M	14	12	1	1	—	—	—	—	—	—	5	2	3	—	—	—	—	—	—	—
	F	15	8	4	3	—	—	—	—	—	—	12	2	7	3	—	—	—	—	—	—
6 Diphtheria	M	4	—	—	—	1	3	—	—	—	—	4	—	—	—	1	3	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—
7 Influenza	M	30	1	2	—	—	1	6	10	4	6	28	1	4	1	1	3	2	8	7	1
	F	37	1	—	1	—	2	6	12	6	9	25	3	1	—	—	—	4	8	4	5
8 Encephalitis lethargica	M	2	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
	F	3	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—
9 Meningococcal meningitis	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	3	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 Tuberculosis of Respiratory System	M	52	—	—	1	—	14	22	14	1	—	25	—	—	—	—	11	6	5	3	—
	F	45	—	—	—	8	13	18	4	1	1	31	—	—	—	—	6	19	6	—	—
11 Other Tuberculous Diseases	M	14	—	—	3	3	6	1	1	—	—	8	2	—	1	2	1	—	1	1	—
	F	14	1	5	2	2	2	2	—	—	—	7	1	—	2	—	3	—	—	—	—
12 Cancer, Malignant Disease	M	81	—	—	—	—	1	4	36	26	14	58	—	—	—	—	—	4	23	19	12
	F	74	—	—	—	—	—	4	42	20	8	60	—	—	—	—	3	27	21	9	—
13 Rheumatic Fever	M	3	—	—	—	—	1	1	1	—	—	1	—	—	—	—	1	—	—	—	—
	F	3	—	—	—	1	1	—	—	—	—	3	—	—	—	1	—	1	—	—	—
14 Diabetes	M	8	—	—	—	1	—	1	3	2	1	7	—	—	—	—	—	—	3	1	3
	F	17	—	—	—	—	2	1	6	7	1	4	—	—	—	—	—	—	2	—	—
15 Cerebral Hæmorrhage, &c.	M	58	—	—	—	—	1	1	15	26	15	36	—	—	—	—	—	7	18	11	—
	F	73	—	—	—	—	—	1	21	32	19	53	—	—	—	—	1	15	20	17	—
16 Heart Disease	M	106	—	—	—	1	1	14	34	38	18	100	—	—	—	—	1	4	30	43	22
	F	89	—	1	—	2	1	11	25	31	18	94	—	—	—	1	1	2	26	28	36
17 Arterio-sclerosis	M	30	—	—	—	—	—	—	7	8	15	33	—	—	—	—	—	—	7	8	18
	F	7	—	—	—	—	—	—	1	2	4	15	—	—	—	—	—	—	7	—	8
18 Bronchitis	M	65	16	4	3	—	1	2	10	18	11	35	9	—	1	—	—	1	2	12	10
	F	47	4	—	—	—	—	3	3	14	22	41	6	2	—	—	—	9	7	17	—
19 Pneumonia (all forms)	M	78	20	10	6	4	5	9	15	4	5	43	8	4	2	1	2	10	8	5	3
	F	49	10	5	6	1	2	5	14	5	1	30	6	5	1	—	—	5	4	5	4
20 Other Respiratory Diseases	M	16	1	—	2	—	1	1	7	3	1	14	—	1	1	—	—	1	4	5	2
	F	10	—	—	—	—	—	3	1	2	4	6	—	—	—	—	—	1	2	1	2
21 Ulcer of Stomach or Duodenum	M	6	—	—	—	—	1	2	3	—	—	5	—	—	—	—	—	1	2	2	—
	F	5	—	—	—	1	—	1	2	—	1	2	—	—	—	—	—	1	—	—	1
22 Diarrhœa, &c.	M	15	10	1	3	—	—	—	1	—	—	6	2	1	1	—	—	—	—	1	1
	F	16	5	3	2	—	—	1	1	1	1	4	—	—	—	—	—	2	1	—	—
23 Appendicitis and Typhlitis	M	7	—	—	1	3	1	1	1	—	—	5	—	—	1	3	—	—	1	—	—
	F	3	—	—	—	1	—	—	2	—	—	2	—	—	—	1	—	—	—	—	—
24 Cirrhosis of Liver	M	5	—	—	—	—	—	—	4	1	—	3	—	—	—	—	—	1	—	2	—
	F	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
25 Acute and Chronic Nephritis	M	21	—	—	—	1	1	1	8	8	2	13	—	—	—	—	—	—	6	4	3
	F	18	—	—	1	—	1	2	8	5	1	12	—	—	—	1	—	1	4	5	1
26 Puerperal Sepsis	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	4	—	—	—	—	—	4	—	—	—	4	—	—	—	2	—	2	—	—	—
27 Other Accidents and Diseases of Pregnancy and Parturition	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	12	—	—	—	—	2	9	1	—	—	6	—	—	—	—	1	5	—	—	—
28 Congenital Debility & Malformation, Premature Birth	M	47	46	—	—	1	—	—	—	—	—	27	27	—	—	—	—	—	—	—	—
	F	36	36	—	—	—	—	—	—	—	—	20	19	1	—	—	—	—	—	—	—
29 Suicide	M	6	—	—	—	—	1	2	1	2	—	5	—	—	—	—	—	2	2	1	—
	F	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—
30 Other Deaths from Violence	M	45	—	—	1	4	8	14	14	4	—	25	1	2	2	1	4	6	6	2	1
	F	26	3	1	3	3	4	2	4	1	5	10	1	1	3	1	—	—	—	1	3
31 Other Defined Diseases	M	146	23	10	1	3	4	6	22	31	46	135	13	1	1	3	5	5	23	31	53
	F	164	13	4	5	4	6	11	25	33	63	139	11	1	4	2	3	4	19	23	72
32 Causes Ill-defined or Unknown	M	6	1	—	—	—	—	1	3	1	—	6	—	—	—	—	2	—	3	1	—
	F	3	—	1	—	—	—	—	1	1	—	9	1	—	—	—	—	2	6	—	—

17th Nov 1914. K. 23127-28

18th Nov 1914. K. 23129-30

19th Nov 1914. K. 23131-32

20th Nov 1914. K. 23133-34

21st Nov 1914. K. 23135-36

22nd Nov 1914. K. 23137-38

23rd Nov 1914. K. 23139-40

24th Nov 1914. K. 23141-42

25th Nov 1914. K. 23143-44

26th Nov 1914. K. 23145-46

27th Nov 1914. K. 23147-48

28th Nov 1914. K. 23149-50

29th Nov 1914. K. 23151-52

30th Nov 1914. K. 23153-54

1st Dec 1914. K. 23155-56

2nd Dec 1914. K. 23157-58

Causes of Death in the Administrative Areas in the County of Cumberland, 1922.

CAUSES OF DEATH.	Allerton and Fringington U.D.		Aspatria U.D.		Clastic Moor U.D.		Cockermouth U.D.		Egremont U.D.		Harrington U.D.		Holme Cultram U.D.		Kirkcubbin U.D.		Maryport U.D.		Milton U.D.		Penrith U.D.		Whitehaven M.B.		Wigton U.D.		Workington M.B.		Alston with Garsgill R.D.		Boothby R.D.		Emmott R.D.		Culter R.D.		Cockermouth R.D.		Longtown R.D.		Froth R.D.		Whitehaven R.D.		Wigton R.D.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
	CIVILIANS ONLY ALL CAUSES	37	49	28	15	71	53	29	43	45	34	23	29	32	38	28	40	88	76	58	60	74	63	240	186	29	34	207	183	25	32	39	31	69	70	80	66	132	169	56	44	74	84	107	74	78	96	
1 Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2 Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3 Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4 Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5 Whooping Cough	..	8	9	1	..	4	5	..	..	1	4	2	1	1	1	1	1	1	2	..	..	1	2	43	26	..	..	5	6	..	4	2	..	..	..	1	1	..	2	3	..	..	1	3	1	..	2	..
6 Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7 Influenza	..	1	1	2	1	..	2	..	4	..	..	..	1	1	4	..	3	4	4	1	3	4	13	10	3	4	15	14	3	1	2	..	6	6	7	6	2	11	1	2	4	5	7	6	10			
8 Encephalitis lethargica	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
9 Meningococcal meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
10 Tuberculosis respiratory system	4	2	1	1	4	4	1	4	2	1	..	3	..	2	1	3	5	3	3	5	3	4	10	17	2	2	4	6	..	1	1	..	5	7	2	8	8	2	4	3	5	8	3	4	2	..		
11 Other Tuberculous Diseases	1	2	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
12 Cancer, Malignant Disease	2	4	1	1	4	1	3	1	3	2	1	4	1	4	4	2	3	3	4	7	8	9	14	13	4	2	16	18	1	5	6	6	8	8	10	8	11	12	7	6	10	14	8	10	10	3		
13 Rheumatic Fever	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14 Diabetes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15 Cerebral haemorrhage	..	3	1	4	5	4	5	4	5	4	2	1	7	4	..	3	6	6	4	6	8	2	8	6	1	1	21	9	..	2	5	2	8	7	8	3	8	11	5	3	4	7	6	5	2	13		
16 Heart Disease	3	4	6	..	8	6	4	9	..	3	4	..	5	5	3	10	17	8	9	9	13	7	15	15	3	4	12	24	2	2	2	8	9	9	9	14	18	33	8	6	12	14	5	9	12	15		
17 Arterio-sclerosis	..	1	..	..	2	1	2	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
18 Bronchitis	..	1	2	3	1	5	2	1	3	3	5	1	3	..	2	5	8	7	6	3	3	16	21	5	1	17	11	..	4	2	1	5	3	3	8	15	1	3	2	2	11	6	9	2	..			
19 Pneumonia (all forms)	3	5	2	..	10	2	4	4	4	2	1	2	3	..	5	6	11	9	3	3	4	5	20	23	..	4	22	14	..	1	1	2	2	1	1	15	12	2	2	2	2	7	3	4	4	..		
20 Other Respiratory Diseases	1	..	..	..	1	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
21 Ulcer of stomach or duodenum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
22 Diarrhoea, &c. (under 2 years)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
23 Appendicitis and Typhlitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
24 Cirrhosis of Liver	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
25 Acute and chronic nephritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
26 Puerperal sepsis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
27 Other accidents and diseases of pregnancy and parturition	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
28 Congenital debility and malformation premature birth.	1	2	2	1	7	6	2	..	2	2	3	..	2	1	5	..	4	7	6	4	8	2	15	15	1	..	22	13	1	..	2	1	..	1	5	1	7	9	3	3	7	5	7	5	5	2	..	
29 Suicide	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30 Other deaths from violence	4	..	2	..	3	..	..	..	..	1	1	1	..	..	..	4	2	8	..	..	..	..	35	1	..	..	1	9	2	..	1	..	1	3	..	10	3	2	1	2	1	15	1	5	3	..		
31 Other defined diseases	6	14	5	6	14	14	3	10	11	6	5	4	7	12	2	7	13	15	10	7	19	13	28	28	5	8	34	34	8	9	10	8	20	19	17	14	21	31	11	7	18	21	14	12	17	25	..	
32 Causes ill-defined or unknown	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Special Causes (included above)—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Polioccephalitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deaths of Infants (Total under 1 year of Age)	5	7	5	2	16	13	3	2	11	11	7																																					

1871

REPORT OF THE

REPORT

REPORT OF THE

REPORT OF THE

REPORT OF THE

REPORT OF THE