[Report 1909] / Medical Officer of Health, Whitehaven R.D.C.

Contributors

Whitehaven (England). Rural District Council.

Publication/Creation

1909

Persistent URL

https://wellcomecollection.org/works/db3kzakg

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.



WHITEHAVEN RURAL DISTRICT COUNCIL.



ANNUAL REPORT

OF

J. B. FISHER, M.D., D.P.H.,

MEDICAL OFFICER OF HEALTH.

WITH

TABULAR RETURNS OF MORTALITY, &C.,
FOR THE YEAR 1909.



WHITEHAVEN:

Printed by W. H. Moss & Sons Limited, 13, Lowther Street.

Digitized by the Internet Archive in 2018 with funding from Wellcome Library

To the Whitehaven Rural District Council.

77, LOWTHER STREET,
WHITEHAVEN,
25th January, 1910.

GENTLEMEN,

The time has again arrived for my submitting to you my Annual Report as Medical Officer of Health for the Whitehaven Rural District. This Report, giving an account of the public health of the District during the year 1909, the incidence of infectious disease in different parts of the District, the measures taken to prevent the spread of disease and to improve the sanitary conditions of the District, with the usual tables shewing the comparison of the birth-rate and the death- rates at different ages and from different causes, during the year, with those of previous years, is the Twenty-sixth Annual Report I have made as Medical Officer of Health of the Rural District, and the Sixteenth since the formation of the Rural District Council. For calculating the birth and death-rates I have estimated the population of the District at thirteen thousand, which is practically the population as shewn by the Census of 1901, and the same as has been estimated for each year since that time. I have explained in previous reports that a comparisonof the Census of 1901 with that of 1891 shewed that the population of the District had remained practically the same during the decennium, the natural increase by excess of births over deaths having been almost exactly counter-balanced by emigration—which had similarly affected so many rural districts all over the country-so many young people having betaken themselves to the towns. It seems most likely that the same thing has been going on since then, and that no increase of population can be counted upon. It will be observed that in Table VIII. the estimated population for the years 1899, 1900, and 1901 is somewhat higher, this being due to alterations in the boundaries of the District during those years.

The number of births registered in the District during the year 1909 was three hundred and eighty-seven, which is equivalent to a birth-rate of 29.77 per thousand of population per annum. This is 0.1 below the average of 29.87 for the ten preceding years, though higher than in 1907 and 1908, when it was 27.69 and 28.77 respectively. Two hundred boys were born during the year, and one hundred and eighty-seven girls. Twenty-eight of the births were illegitimate, seventeen boys and eleven girls.

One hundred and seventy-nine deaths were registered in the District during the year, giving a death-rate of 13.77 per thousand per annum, or 0.71 below the average of 14.48 for the ten preceding years. There were, however, during the year, twelve deaths of persons belonging to the Rural District which occurred in Public Institutions beyond the District, namely—four in the Whitehaven Union Workhouse, four in the Whitehaven and West Cumberland Infirmary, three in Garlands Asylum, Carlisle, and one in the Royal Albert Asylum, Lancaster. The addition of these brings the total number of "deaths of residents, whether occurring in or beyond the District," as shewn in Table IX., up to one hundred and ninety-one, which is equivalent to a death-rate of 14.69 per thousand per annum, or 0.11 above the average of 14.58 for the ten previous years.

Of infants under one year of age there were registered forty-two deaths, giving an infantile death-rate of 3.23 per thousand of population per annum, which is 0.18 below the average of 3.41 for the ten preceding years. The number of births registered during the year being, as already stated, three-hundred and eighty-seven, the infant death-rate per thousand births registered was 108.53, which is 5.84 below the average of 114.37 for the ten preceding years.

The "Notification of Births Act, 1907," has not been adopted in the District.

Twenty-eight deaths occurred during the year of children between one and five years of age, making with the forty-two infant deaths above-mentioned, a total of seventy deaths of children under five years of age, equivalent to a death-rate of 5.38, which is 0.55 above the average of 4.83 for the previous ten years.

There were sixty-eight deaths of persons over sixty-five years of age, giving a senile death-rate of 5.23 per thousand per annum, or 0.78 above the average of 4.45 for the ten preceding years.

From the eight principal zymotic diseases enumerated in Table VI., twenty-one deaths were registered during the year—one from Whooping Cough, two from Diphtheria, two from Scarlet Fever, and sixteen from Measles—equivalent to a zymotic death-rate of 1.62 per thousand of population per annum, which is 0.6 above the average of 1.02 for the ten previous years.

It will be observed, therefore, that the vital statistics for the year 1909 do not deviate in any marked degree from the average of previous years. The birth-rate is below, and the nett death-rate above the average, but to so slight an extent in each case, only 0.1 per thousand per annum, as to be of no practical importance. A greater proportionate variation occurs in the death-rate of children under five years of age, and in the zymotic death-rate, which are above the average, the increase in both cases being due to the large number of deaths of children from Measles. This disease occurred in epidemic form during the year, and will be referred to later on. It is satisfactory to note that the infant death-rate, whether reckoned per thousand of population per annum, or per thousand births registered, is below the average, whilst the senile death-rate is above the average of the ten preceding years.

Under the" Infectious Disease (Notification) Act," there were notified during the past year one hundred and twenty-one cases, the average number per year for the nineteen previous years during which the Act has been in force being eighty -two. Ninety-one of the cases notified were Scarlet Fever, thirteen

Diphtheria, one Enteric Fever, and sixteen Erysipelas. The number of cases of Scarlet Fever notified during the year 1909 was considerably above the average, being, as above-stated, ninety-one; the average for the nineteen years during which the Act has been in force being sixty-seven. In five instances two cases were notified simultaneously in the same house, in eleven instances subsequent cases occurred in the same house. Table XII. shows the parishes in which cases of infectious disease were notified, the number of cases in each of these parishes during the year 1909 and the number of cases removed to Hospital. From this Table it will be seen that of the total of ninety-one cases of Scarlet Fever notified in the entire District, forty-nine occurred in the Parish of Moresby and twenty in that of Distington, the remaining twenty-two cases being distributed amongst various parishes as sporadic cases.

At Moresby Parks, cases have occurred all through the year, and from time to time in other parts of the Parish of Moresby. Twenty-two patients were removed to Galemire Hospital immediately they were notified. The remainder were treated at their own homes where adequate accommodation existed for the necessary isolation of the patient.

At Distington, the first case of Scarlet Fever that was notified during the year was imported from Liverpool in April. The patient was at once removed to hospital, and no further case occurred until the end of June. This case was also promptly removed to hospital, but fresh cases have occurred during the subsequent months until they reached the total of twenty, of which nineteen were removed to hospital.

The cases which occurred in other parishes could, for the most part, be sufficiently isolated at their own homes, and only three of the patients were removed to hospital, one each from the parishes of Lamplugh, St. Bees, and St. John.

Table XIV. shows the number of notifications received during each month of the year.

In all cases of Scarlet Fever, the Sanitary Inspector or myself visit the place to ascertain whether the patient can be safely treated at home with due regard to the public health, or whether removal to hospital is desirable, as well as to make enquiries as to any mild cases that may have been overlooked, for it is such "missed" cases that are frequently responsible for the continuance of the disease in certain localities. A child has a slight indisposition, a rash may or may not be observed by the mother. In either case it is considered of no importance, no medical advice is sought, and it is only when desquamation occurs or other members of the family fall ill that the Doctor is called in and the true nature of the disease discovered. One such case was reported by me in October, in which a girl aged nine years had a slight rash and sickness of a transient character, and in a day or two returned to school, but in due course was observed to be peeling. She was sent home, the Doctor was called in and at once notified the case as one of Scarlet Fever. I visited the house along with the Sanitary Inspector, and from that time all proper precautions were taken, but it was very fortunate that serious results did not follow the oversight, so far as we could ascertain. The case occurred in a farm house from which milk was supplied to the people living in the adjacent hamlet, and the patient had been mixing freely with the other inmates of the house whilst in an infectious state. Immediately the case was notified she was isolated, and arrangements were made to prevent the possibility of milk contamination, and, on my advice, the Rural District Council recommended the exclusion of all children living in the hamlet from attending the school in a neighbouring village which was at the time, and had long been, free from Scarlet Fever, until a sufficient time had elapsed to make sure that none of them had contracted the disease. No more cases occurred at the hamlet, and so far as we could ascertain, no cases were traceable to this one. But the child had been going to school in a neighbouring District where many cases occurred, and it is impossible to say to what extent she may have contributed to the spread of the disease there. In four other cases in

different parts of the District no Doctor was called in until peeling of the skin was observed. In one of these cases the Doctor was not called in to see the boy first affected, as his illness was considered trivial. When the sister became more seriously ill the Doctor was sent for and found the child suffering from Scarlet Fever. Examination proved that the boy had already had the disease and was peeling freely. Bearing such cases in mind, the Inspector and myself make careful inquiry as to other cases of similar illness in the neighbourhood when we visit the houses where patients are suffering from infectious disease, and especially Scarlet Fever. And for this purpose we have paid many visits during the year to those places where cases have occurred. When it is necessary to remove the patient to hospital, the Inspector sees to the disinfection of the rooms the patient has occupied, and all bedding, clothing, and other articles that might retain infection. When the patient is treated at home, printed instructions are supplied in each case to supplement the verbal instructions given as to isolation and disinfection, and visits are paid from time to time to see that these instructions are understood and carried out. Disinfectants are also supplied gratuitously where necessary, and at the termination of the case disinfection of the premises is carried out by the Inspector in the same way as after removal of the patient to hospital. I would like here to acknowledge the assistance given to us by the medical men in the District in dealing with infectious disease. The majority of them when sending their notifications add a note as to the possibility of isolation at home or the necessity for removal of the patient to hospital, the number of susceptible persons in the infected house, the willingness of the patient or his friends to consent to removal, and any information they may have obtained as to the probable source of infection. In this way much valuable time is often saved in dealing with the earliest cases, especially when they occur in the more remote parts of the District. When removal is recommended, we seldom experience the difficulty that was at one time frequently met with in obtaining the consent of the patient or his friends.

Of the thirteen cases of Diphtheria notified during the year one was an imported case. The patient contracted the disease in a neighbouring district in which he had been living for a considerable time. His illness was diagnosed and notified in that district, and he came to his parents' home in the Rural District as there was better accommodation for treatment and isolation there than in the lodgings he had been occupying. In two instances two patients were notified in the same house. In all the cases a careful examination was made of the premises to ascertain if any insanitary condition existed likely to have contributed to the occurrence of the disease. In one case the drainage arrangements of the farm house, where the patient lived, and the adjacent farm buildings were of an antiquated character, and had fallen into disrepair. Notice was served by the Sanitary Inspector on the owner of the premises, and the work necessary to remedy the defects was commenced, but is not yet completed, having been delayed by the weather. The material, pipes, gullies, &c., is on the ground, and the work will be proceeded with as soon as possible. In none of the other cases was any sanitary defect discovered. One case of Diphtheria was removed to Galemire Hospital as he could not be suitably isolated at home, disinfection being carried out by the Sanitary Inspector after the removal of the patient. In the remaining cases precautions similar to those adopted in cases of Scarlet Fever were observed, and on the termination of each case, the rooms the patient had occupied, and all infected articles, were disinfected by the Inspector.

The only case of Enteric Fever notified during the year occurred at Middletown, in the Parish of Lowside Quarter. In my Report to the Rural District Council at the time, I said "Along with your Sanitary Inspector I visited the place and "made a careful examination of the surroundings. There can be no doubt that the drainage of this part of the District is by no means satisfactory. Ill constructed drains have been separately put in at different times, which fail to properly drain the places they were intended to drain. Some of them

"appear to be entirely choked and useless, and surface drain-"age has to find its way as best it can into the soil. Hitherto "the want of a sufficient supply of water has rendered im-"practicable any great improvement in the drainage, the "quantity being insufficient for domestic purposes, and none "being available for flushing sewers, had such been provided. "When the works now in progress are completed there will " be an adequate supply of water for all purposes, and it will "then be necessary to consider the provision of a general "system of sewerage." The same might be said with equal truth of other villages in the parishes south of Egremont. The methods of drainage in several of them are primitive and inefficient, and a source of danger to the public health. In the absence of a proper water supply, which I have so often called attention to in my Annual and other Reports, and which has been generally admitted for many years, any attempt to deal in a satisfactory manner with the question of drainage would have been worse than useless. Now, however, that the scheme sanctioned by the Local Government Board in 1907, for supplying these parishes with water from springs at Scale Beck, Pea Ghyll, and Bengarth Ghyll, in the neighbourhood of Gosforth, may be expected to be completed at an early date, the Council will have to give attention to the improvement of the drainage arrangements in these places and adopt the system most suitable in each case.

Sixteen cases of Erysipelas were notified during the past year in different parts of the District. These, as well as all other cases of disease notified, were made the occasion of visits of inspection to ascertain the sanitary condition of the premises where they occurred, but none of them was found to be associated with any local insanitary conditions.

Pulmonary Tuberculosis is not notifiable in the District, but two cases were reported under the "Public Health (Tuberculosis) Regulations, 1908." In each case I visited the patient and gave advice as to the precautions necessary. I also left with each a printed copy of the Instructions drawn up

by the Society for the Prevention of Tuberculosis, after explaining the importance of attention to them.

During the year 1909, Measles has been the most important of the infectious diseases which do not come under the provisions of the "Infectious Disease (Notification) Act." I have already pointed out that to this disease is due the fact that the death-rate from zymotic disease and that of children under five years of age are above the average of the ten preceding years. Sixteen deaths were registered during the year from Measles, fifteen of these being in children under five years of age, and no less than fourteen in the Village of Parton, where the disease appeared in epidemic form in October. I first received information of the outbreak on Tuesday, the 19th October, and at once visited the schools there. I found that a boy who had come from a district in which the disease was prevalent had attended the Parton Infant School for one day, a fortnight previously, and had then developed Measles. No more cases were known of amongst children attending this school until Monday, the 18th October, and when I was there on the 19th, there were fifty-two children absent on account of Measles, out of one hundred and three on the register. Under these circumstances I advised the closure of the school until Monday, the 15th November. From the boys' and girls' schools there were some absentees, chiefly the house-mates of younger children suffering from the disease, and I ascertained that the majority of the children who were present in these schools at the time of my visit were known to have had Measles, so that I did not consider it necessary to advise their compulsory closing. They were, however, subsequently closed voluntarily by the Education Authority. All the three schools were disinfected by the Sanitary Inspector. The disease spread throughout the village, attacking all susceptible children and causing the heavy mortality I have mentioned. Measles did not become prevalent in any other part of the Rural District, though it was epidemic in adjacent districts.

Epidemics such as this, involving the illness of such large numbers of young children and so many deaths, raise the ever recurring question of the inclusion of Measles amongst the diseases compulsorily notifiable. The expense, heavy though it might be, ought not to be allowed to stand in the way if any considerable amelioration were to be expected from compulsory notification. I have endeavoured to obtain information as to the experience of Sanitary Authorities who have tried Notification of Measles, but with no very satisfactory results. No general review of the subject seems to be available of later date than the Report by Dr. Theodore Thomson, published in the Annual Report of the Medical Officer of the Local Government Board for 1894-95. It is to be remembered that many cases of Measles are very slight and no medical attendant is called in, so that notification by the medical profession would be necessarily very incomplete, while the householder seldom notifies under any circumstances.

Measles, again, is highly infectious in its very early stages before the real nature of the illness can be recognised, so that infection is often spread before notification would be possible.

The most weighty objection, however, to the adoption of Compulsory Notification of Measles is the inability of the Sanitary Authority to take the measures that would be necessary to make any adequate use of the information so obtained. Isolation of patients in their own homes is frequently impossible, and epidemics of Measles, when they occur, are of such magnitude that existing hospital accommodation would fall far short of what was required. The provision of sufficient hospital accommodation for all cases that could not be isolated at home would entail enormous expense, and even if hospital accommodation were available, it is doubtful, bearing in mind the early infectiveness of Measles, whether it could be so used as to produce results in any degree commensurate with the cost, or even do much more than attenuate and prolong an epidemic.

Many Authorities have tried compulsory Notification of Measles and have discarded it for these reasons, and, much as I should like to see all possible means taken to control this devastating scourge of childhood, I do not think that, at present at any rate, compulsory notification is warranted by ascertained results.

The popular belief that Measles is a trivial disease, and the equally mischievous fallacy that all children are bound to have the disease sooner or later contribute in no slight degree to its spread by inducing neglect of such precautions as are possible. The leaflets setting forth the facts relating to the disease and its true character and seriousness, which we have recently had printed, will, I hope, correct these misapprehensions to some extent, and if they only induce parents to make a reasonable effort that their children may have the disease later rather than sooner, some good will have been achieved. The extraordinary fatality of Measles in children under five years of age, and the comparative infrequency of deaths above that age, shows the importance of postponing, if we cannot prevent, its occurrence. The Code of Regulations for Public Elementary Schools for the year 1909, issued by the Board of Education, introduces a new system of Annual Grants on an age basis instead of on the basis of classes as formerly. Under this system grants will be paid at the rate of 13/4 for scholars under five years of age, and 21/4 for scholars over five years of age. Under the old system, the grant was 17/- for "infants," and 22/- for older scholars. In many schools this will lead to no children being admitted under five years of age, and this may indirectly tend to postpone the age at which they contract Measles, for it is quite certain that Infant Schools have in the past been very frequently the medium of infection. On this ground some sanitarians have long advocated the refusal of admission of all children under five. How far this prediction will be fulfilled experience only can determine, for, of course, older children contracting the disease at school or elsewhere may bring the disease home to their younger brothers and sisters.

Whooping Cough prevailed amongst children attending Haile and Wilton Voluntary School in May and June. I visited the place and advised the exclusion of affected children, but there did not appear to be any necessity for closing the school.

In November, it was reported to me that some of the children attending St. Bees Board School were suffering from a rash, the nature of which had not been determined. I visited the school and found several children suffering from Scabies. Other children who were absent from school I visited at their homes, and some of these were suffering from the same disease. I advised the exclusion from school of all suffering from the disease until they brought a Medical Certificate that they were free from infection.

At the end of the year there were in the Galemire Hospital for Infectious Diseases five cases of Scarlet Fever belonging to the Rural District, four of these having been admitted from Distington and one from Moresby Parks, and one case of Diphtheria, whilst five cases of Scarlet Fever were still under treatment at their own homes where they were suitably isolated, and all proper precautions were being taken to prevent the spread of the disease. Four of these were at Moresby Parks and one in the Parish of St. John, Beckermet. Measles seemed to have burned itself out at Parton, and had not become prevalent in any other part of the District.

With reference to hospital accommodation, I would like to remind the Council that we have no separate provision for the isolation of Smallpox such as is nowadays considered necessary. Hitherto any cases that have occurred have been isolated at Galemire Hospital, but the segregation of Smallpox patients in a hospital into which other infectious diseases are received is not a measure to be commended, or one which can be adopted with safety to other patients. On one occasion, when an outbreak of Smallpox occurred, the Galemire Hospital Committee very properly resolved to admit no cases other than Smallpox so long as that disease was prevalent. The

districts served by the hospital were consequently for the time being quite unprovided with any accommodation for the isolation of other infectious diseases, and in the Rural District several cases of Scarlet Fever, that would otherwise have been removed to hospital, had to be isolated at home as best they could. In view of recent modifications in regard to Public Vaccination, this matter becomes of the greatest importance. Not only can anyone now pose as a conscientious objector, but every facility, not to say inducement, is given to parents to neglect the vaccination of their children. The inevitable result will be the growing up, in many places, of a population to a large extent unprotected against Smallpox; and whenever that disease, the serious nature of which is not now appreciated, is introduced amongst such an unprotected population an epidemic may be confidently expected of a much more alarming character than has of late years been experienced. The danger is a real and imminent one, and I consider that every Sanitary Authority should be prepared to meet it by having at their disposal accommodation for the isolation of Smallpox apart from that provided for other infectious diseases.

The medical inspection of children in public elementary schools in the Urban and Rural Sanitary Districts of Cumberland is carried out by whole time assistant school medical officers, under the direction of the County Medical Officer of Health, who is School Medical Officer for these Districts. The Boroughs have their own Education Committees and School Medical Officers. In December, a Conference of Medical Officers of Health of the Urban and Rural Sanitary Authorities with the Health Committee and County Medical Officer was held in Carlisle to consider the Joint Memorandum issued in September by the Local Government Board, and the Board of Education, with reference to closure of schools and exclusion of scholars to prevent the spread of infectious disease, and to arrange for the co-operation of the Medical Officers of Health and the School Medical Officer. It was agreed "that

"for the purposes of voluntary closing of schools and for the "exclusion of particular scholars, the District Medical Officers of Health be authorised to act immediately, and that the "School Medical Officer will subsequently approve their "immediate action." In this way it is hoped that the School Medical Officer will receive the earliest information of infectious disease in the schools, that delay will be avoided, and that compulsory closing by the Sanitary Authority on the advice of the Medical Officer of Health of the District, will seldom be required.

The Sanitary Inspector and myself have visited the various places where cattle are kept for dairy purposes to see that the requirements of the Dairies, Cowsheds and Milkshops Order were complied with. One dairy farm at Moresby has been added to the Register during the year, after extensive repairs and alterations, including re-paving and the provision of adequate lighting and ventilation to the byre and dairy, had been carried out to meet the requirements of the Order. At Distington, two byres on small farms where dairy cattle are kept have been drained, paved, lighted and ventilated, and at Hensingham one large byre has been re-paved and provided with improved means of lighting and ventilation in compliance with notice served by the Sanitary Inspector after our visits. There is no arrangement for the examination by Veterinary Surgeons of dairy cattle in the District.

There are seven Registered Slaughter-houses, situated in different parts of the Rural District, far removed from each other. These are visited from time to time by the Sanitary Inspector and myself to see that they are kept in a clean and sanitary condition, but visits are not paid at times of slaughtering as a matter of routine. There is no Inspector with a special certificate in meat inspection. No carcases were found to be Tuberculous during the past year.

There are no Registered Common Lodging Houses in the District.

Systematic inspections of all parts of the District have been made during the year by the Sanitary Inspector and myself, together and separately, in addition to the special inspections necessitated by particular circumstances, such as the occurrence of cases of infectious disease in particular localities, or unwholesome conditions brought to our notice by complaint or otherwise. Many insanitary conditions were discovered during these inspections, and all were remedied, so that at the end of the year the sanitary condition of the District was satisfactory. In the majority of cases no formal notice was required, our verbal instructions to the persons responsible being promptly attended to. Thirty-nine formal notices were served for the abatement of nuisances and all were complied with. In one case only was it necessary to advise the Rural District Council to authorise legal proceedings to be taken under the Public Health Act. This was a case of overcrowding, discovered during our inspections, in which no notice whatever had been taken of the warnings of the Sanitary Inspector and myself. Proceedings were ordered to be taken but immediately this fact became known the family were removed to a larger house and the over-crowding was abated.

Contracts have been made during the year for the regular removal of ashes and house refuse from Winder, Winder Ghyll, and Low Keekle.

A Local Government Board Enquiry was held at St. Bees, on 27th September, 1909, by A. W. Brightmore, Esq., D.Sc., M. Inst. C.E., concerning the application of the Rural District Council for power to borrow £1,300 for works of water-supply for the special drainage district of St. Bees. These works consisted in the laying of a four inch main on part of the route where hitherto only one main existed. If this work is sanctioned and carried out there will be a four inch and a three inch main for the whole of the distance from the point at which the water is taken from the main of the Cleator Moor Urban District Council.

On the 21st December, 1909, an Enquiry ordered by the Local Government Board, was held at Wasdale by R. D. Hetherington, Esq., Assoc. M. Inst. C.E., concerning the Council's application to borrow £270 for works of sewerage and sewer disposal at Netherwasdale.

One new workshop has been registered during the year under the "Factory and Workshops Act, 1901," making the number on the Register thirty-eight. Table XV. shows the number of workshops in which different trades are carried on and the number of male and female employés engaged in each trade during the year. There are no "outworkers" in the District of the classes requiring that the owner or occupier of the factory or workshop should send a list of their names and addresses to the District Council. No notice has been received during the year from the Factory Inspector for the District of any sanitary defect observed by him in any factory or workshop. No infectious disease has occurred in connection with any workshop, and no complaint has been made of any unwholesome condition existing in any of them. The Abstract of the Act required to be affixed in workshops in which females are employed was in all cases found duly exhibited. There has been no neglect of this provision since the first year of the Act's being in force, when the three workshops in which females were employed were reported to the Factory Inspector for neglect in this respect. The omission was then due to ignorance of the requirement on the part of the owner, not to wilful disregard of the Act. Since that time we have always found the Abstract duly affixed, and even in those workshops in which men only are employed, and in which it is not compulsory to have the notice affixed, the modified Abstract prepared for such places is usually conspicuously displayed. The different workshops have been visited during the year by the Sanitary Inspector and myself, special attention being given to those in which articles of food are prepared. Our visits have always been "surprise visits," of which no notice had been given, and we have always found the premises in a clean and satisfactory condition, properly ventilated, and affording the full amount of air-space required by the Act according to the number of persons employed. There are no "underground bakehouses" in the District, and the conditions found in the workshops in which bread, confectionery and flour are prepared, were quite satisfactory.

I am, Gentlemen,

Yours obediently,

J. B. FISHER,

Medical Officer of Health.

TABLE I.—BIRTHS.

	Nui	mber of	Births			В	irth-rat	e per 10	000 per	annun	n.
		387	7					29	77		
in a	COM	PARI	SON	WIT	н тв	EN PI	REVIO	ous	YEAR	RS.	1111
Per	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
1000 per ann		30.88	29.28	30.3	30.23	3 29.92	29.15	88.28	27.69	28.77	29.77
		TAB	LE I	[.—D]	EATI	IS AT	ALI	AG	ES.		
Nu	ımber o	f Death	ns Regi	stered.		De	eath-rat	e per 1	000 per	r annur	n.
		191						14.	69		
	COM	IPAR	ISON	WIT	H TI	EN P	REVI	ous	YEAI	RS.	
Per	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
1000 per ann		19.09	13.74	15.07	13.31	13.92	14.69	13.31	13.92	13.62	14.69
TAB	LE II	11.—1	EAT		F IN		rs ui	NDEF	R ONI	E YE	AR
	Nun	ber of	Deaths	s.		Per 1000	of Down	Death		1000 Bir	rthe
		42				rer 1000	3·23	lation.	R	108.58	d.
	COM	PAR	ISON	WIT	н тв	EN PE	REVI	ous '	YEAF	RS.	
Per	1899.	1900	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
1000 of pop.	3.26	5.19	3.05	3.31	3.31	3.23	8.53	2.93	3.69	2.62	3.23
Per 1000 Births	111.11	168.29	104.44	109.13	100,13	107.96	121'37	87.96	133.33	91	108.53

TABLE IV .- DEATHS UNDER FIVE YEARS OF AGE.

			· LLE	OLIDI				01	AG		
Num	ber of	Deaths			De	ath-rat	e per 1	000 pei	annun	n	
	70				5.38						
COM	PARI	SON	WIT	н тв	N PI	REVI	ous	YEAI	RS.		
1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1900	
4.61	7.59	3.81	4.92	4.15	4.77	5.53	4.38	4.69	3.85	5.38	
LE V	.— D.	EATE					ER 8	SIXT	Y-FIV	Έ	
Num	ber of	Deaths			De	ath-rat	e per 1	000 per	annun	n.	
	68						5.2	13			
COM	PARI	SON	WITI	н те	N PE	REVIO)US	YEAR	RS.		
1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909	
6.74	6.09	3.59	4.38	3.92	4.46	3.38	4.15	3.85	3.92	5.28	
E VI.	—DE						INCII	PAL	ZYMC	OTIC	
Smallp	ox								0		
									10		
carlet	H OTTO	7*							16		
									2		
Vhoop	ing C	ough							2		
Vhoop	ing C s Feve	ough		r	 				2		
Vhoop Typhu Typhoi	oing C s Feve id (Er	ough er iteric)	Feve		 anous				2 1 0		
Vhoop Typhu Typhoi	oing C s Feve id (Er ieria (ough er iteric) includ	Feve						2 1 0 0		
Whoop Typhu Typhoi Diphth Diarrh	s Feve d (Er eria (œa	ough er iteric) includ	Feveling M	lembr		Crou	p)		2 1 0 0 2		
Whoop Typhus Typhoi Diphth Diarrh	oing Cos Feve id (Er ieria (œa	ough er iteric) includ	Feveling M	lembr	anous Cotal	Croup er an	p) num		$ \begin{array}{c} 2 \\ 1 \\ 0 \\ 0 \\ 2 \\ 0 \\ \hline 21 \\ 1.62 \end{array} $		
Whoop Typhus Typhoi Diphth Diarrh	oing Cos Feve id (Er ieria (œa	ough er iteric) includ	Feveling M	lembr	anous Cotal 1000 p	Croup er an	p) num		$ \begin{array}{c} 2 \\ 1 \\ 0 \\ 0 \\ 2 \\ 0 \\ \hline 21 \\ 1.62 \end{array} $	1909	
	COM 1899. 4·64 SLE V Num COM 1899. 6·74 E VI.	70 COMPARI 1899. 1900. 4·64 7·59 SLE V.— D. Number of 68 COMPARI 1899. 1900. 6·74 6·09 E VI.—DE Smallpox	70 COMPARISON 1899. 1900. 1901. 4·64 7·59 3·81 SLE V.— DEATH Number of Deaths 68 COMPARISON 1899. 1900. 1901. 6·74 6·09 3·59 E VI.—DEATHS Deaths Smallpox Measles	COMPARISON WIT 1899. 1900. 1901. 1902. 4.64 7.59 3.81 4.92 3.81 4.92 3.81 4.92 3.81 4.92 3.81 4.92 4.64 7.59 3.81 4.92 5.8	COMPARISON WITH TE 1899. 1900. 1901. 1902. 1903. 4.64 7.59 3.81 4.92 4.15 SLE V.— DEATHS OF PEYEARS ON WITH TE YEARS ON WITH TE 1899. 1900. 1901. 1902. 1903. 6.74 6.09 3.59 4.38 3.92 E VI.—DEATHS FROM E DISEASES Smallpox Measles	COMPARISON WITH TEN PR 1899. 1900. 1901. 1902. 1903. 1904. 4 · 64 7 · 59 3 · 81 4 · 92 4 · 15 4 · 77 3 LE V.—DEATHS OF PERSON YEARS OF AG Number of Deaths. Deaths. Deaths. Deaths. 68 COMPARISON WITH TEN PR 1899. 1900. 1901. 1902. 1903. 1904. 6 · 74 6 · 09 3 · 59 4 · 38 3 · 92 4 · 46 E VI.—DEATHS FROM EIGHT DISEASES IN 18 18 Smallpox Smallpox	COMPARISON WITH TEN PREVIOUS 1899. 1900. 1901. 1902. 1903. 1904. 1905. 4.64 7.59 3.81 4.92 4.15 4.77 5.53 SLE V.—DEATHS OF PERSONS OF YEARS OF AGE. Number of Deaths. Death-rate 68 COMPARISON WITH TEN PREVIOUS 1899. 1900. 1901. 1902. 1903. 1904. 1905. 6.74 6.09 3.59 4.38 3.92 4.46 3.38 E VI.—DEATHS FROM EIGHT PREVIOUS 1899. 1909.	COMPARISON WITH TEN PREVIOUS 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 4·64 7·59 3·81 4·92 4·15 4·77 5·53 4·38 3LE V.—DEATHS OF PERSONS OVER SYEARS OF AGE. Number of Deaths. Death-rate per 1 68 5·2 COMPARISON WITH TEN PREVIOUS 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 6·74 6·09 3·59 4·38 3·92 4·46 3·38 4·15 E VI.—DEATHS FROM EIGHT PRINCIPAL DISEASES IN 1909. 1	COMPARISON WITH TEN PREVIOUS YEAR 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 4·64 7·59 3·81 4·92 4·15 4·77 5·53 4·38 4·69 SLE V.—DEATHS OF PERSONS OVER SIXTY YEARS OF AGE. Number of Deaths. Death-rate per 1000 per 68	COMPARISON WITH TEN PREVIOUS YEARS. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908. 4·64 7·59 3·81 4·92 4·15 4·77 5·53 4·38 4·69 3·85 3.85 3.81 4·92 4·15 4·77 5·53 4·38 4·69 3·85 3.85 3.81 4·92 4·15 4·77 5·53 4·38 4·69 3·85 3.85 4·64 7·59 3·81 4·92 4·15 4·77 5·53 4·38 4·69 3·85 3.85 4·64 7·59 3·81 4·92 4·15 4·77 5·53 4·38 4·69 3·85 3.85 4·69 3·81 4·92 4·16 3·10 4·10	

TABLE VII.—SHOWING CHIEF OTHER CAUSES OF DEATH IN 1909.

Croup				2
Influenza				2
Enteritis				1
Gastritis				1
Phthisis				4
Other Tubercular Diseases			-···	6
Cancer, Malignant Disease				8
Bronchitis				14
Pneumonia				15
Alcoholism—Cirrhosis of I	Liver			1
Premature Birth				5
Parturition, Accidents of				3
Heart Disease				23
Accidents				7
Suicide				1
Congenital Defects				2
All other causes				75
				170
Eight Zymot	ic Dise	ases, as above		21
Total	Deaths	in 1909 (Nett)		191

TABLE VIII.—VITAL STATISTICS QF WHOLE DISTRICT DURING 1909 AND PREVIOUS YEARS.

		Bi	rths.	Tot	in the D			Total	Deaths of	Deaths of Resi-	at all	Deaths I Ages
Year.	Popula- tion estimat'd to			-	er 1 Year f age.	Atall	Ages.	Deaths in Public Institu-	Non- resid'nts regis- tered in	donte		istrict.
	Middle of each Year.	No.	Rate.	No.	Rate per 1,000 Births regist'd	No.	Rate.	tions in the District.	Public Institu- tions in the District.	Institu- tions beyond the District.	No.	Rate.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1899. 1900. 1901. 1902.	13,800 13,300 13,100 13,000	410 383 394	29.35 30.83 29.23	45 69 40 43	111'11 168'29 104.44 109'13	253 262 177 187 165	18.33 19.69 13.51 14.38 12.69	49 12 1	44 8 1	 4 9•	209 254 180 196	15.14 19.09 13.74 15.07
1903. 1904. 1905. 1906. 1907.	13,000 13,000 13,000 13,000 13,000	389 379 432 360	30°23 29°92 29°15 33°23 27°69 28°77	43 42 46 38 48 34	107.96 121.37 87.96 133.33 91	174 180	13.38 13.84 12.38 13.31 13.31	3 5 1 1	3 2 1	7 13 12 8 5	173 181 191 173 181 177	13.31 13.92 14.69 13.31 13.62
Averages for years 1899-1908		391-9	29.87	44.8	114:37	190.5	14:48	7.8	5-9	6-9	191.5	14:58
1909.	13,000	387	29.77	42	108.53	179	13.77	Nil.	Nil.	12	191	14.69

^{*} Rates in columns 4, 8, and 13, calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

The only Institution within the District receiving sick and infirm persons from outside the District is Galemire Hospital for Infectious Diseases.

The Institutions outside the District receiving sick and infirm persons from the District are (1)—Whitehaven Union Workhouse; (2)—Whitehaven and West Cumberland Infirmary; (3)—Garlands Asylum, Carlisle; (4)—Royal Albert Asylum, Lancaster.

Area of District in Acres .					74,402	
Total Population, at all ages .			 	 	12,953	us)1.
Number of Inhabited Houses			 4.5	 	2,561	At 190
Average Number of Persons pe	er ho	use	 		12,953 2,561 5.058	20.4

TABLE IX.—CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1909.

	Death	s at the s	ubjoined in c	Ages of or beyond	"Reside	nts," wh	ether oc	curring
Causes of Death.	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	Total Death in Public Instit tions in the Distric
Smallpox								
Measles	16	5	10	I				
Scarlet Fever	2		2					
Whooping Cough	I		I					
Diphtheria and Mem-								
Langua Cuerra	2		1	I		100		
O	2	1 99	2					
(Tambus								
Partonia				24.0				
Other continued			***				100	12000
			***			1	Ι	****
Epidemic Influenza	2		***					***
Cholera		***		***				
Plague				***				1
Diarrhœa	***	***		**	***	***		
Enteritis	I	I		***	***	***	1-1	
Gastritis	I	I				***	10.5	***
Puerperal Fever			***		1.0	**	***	***
Erysipelas	***	***	***		***	***	***	11
Phthisis	4		1.55		I	3	***	
Other Tubercular Diseases	6	2	2		I	I	***	
Cancer, Malignant Disease	8	***				3	5	
Bronchitis	14	4	200			2	8	112
Pneumonia	15	4	. I	I		3	6	
Pleurisy								
Other Diseases of Res-						1000		
piratory Organs								
Alcoholism					1			
Cirrhosis of Liver	I					1	***	
Venereal Diseases						***		
Premature Birth		5						
Diseases and Accidents of	3	3		1			100	1000
, 1,1	2		To the second	1000		2		
TT TOTAL	3	***		1	1	3 7	14	
	23	***	1			5	I	1
				***			Î	
Suicides								
Congenital Defects		18	8		Y	12	22	
All other causes	75	10	0	4	I	12	32	
All causes	191	42	28	8	4	41	68	Nil

TABLE X.—INFANTILE MORTALITY DURING THE YEAR 1909.

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

CAUSE OF DEATH. Season Chicken-pox Measles Scarlet Fever Diphtheria: Croup Whooping Cough Diarrhœa, all forms Enteritis, Muco-enteritis, Gastro-enteritis, Gastro-enteritis, intestinal Catarrh Marasmus Tolumbur at Birth Want of Breast-milk Atrophy, Debility, Marasmus Marasmus Chicken-pox Meakles I Tolumbur at Birth Want of Breast-milk Atrophy, Debility, Marasmus Tuberculous Meningitis Tuberculous Peritonitis: Tabes Mesenterica Other Tuberculous	10-11 Months.	
Chicken-pox Measles Scarlet Fever Diphtheria: Croup Whooping Cough The second of the	. I 3	5
Whooping Cough Diarrhoea, all forms Enteritis, Muco-enteritis, Gastro-enteritis, Gastritis, Gastro- intestinal Catarrh Premature Birth Congenital Defects Injury at Birth Want of Breast-milk Atrophy, Debility, Marasmus (Tuberculous Meningitis		
Diarrhoea, all forms Enteritis, Muco-enteritis, Gastro-enteritis, Gastritis, Gastro- intestinal Catarrh Premature Birth Congenital Defects Injury at Birth Want of Breast-milk Atrophy, Debility, Marasmus (Tuberculous Meningitis		
Premature Birth 3 I 4 I I I I I I I I I I I I		I
Congenital Defects Injury at Birth Want of Breast-milk Atrophy, Debility, Marasmus 4 2 6 I I		I
(Tuberculous Meningitis	I	5 2
Tuberculous Meningitis Tuberculous Peritonitis: Tabes Mesenterica Other Tuberculous		8
Cther Tuberculous		2
(Erysipelas		THE REAL PROPERTY AND ADDRESS OF THE PARTY AND
Syphilis		-
Rickets		I.
Convulsions	2	
	. I	4
Pneumonia	ı	4
Suffocation, overlying		: :
All Causes { Certified 8 3 1 1 13 6 1 1 3 1 1 6 1	-	-

Births in the year:—Legitimate, 359; Illegitimate, 28.
Infant Deaths during the year:—Legitimate, 36; Illegitimate, 6.

Deaths from all Causes at all Ages, 191.
Population estimated to middle of 1909, 13,000.

TABLE XI.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1909.

	(Cases N	OTIFIE	D IN W	HOLE I	DISTRIC	T.		
NOTIFIABLE DISEASE.			At Ages.						
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and up- wards.	removed to Hospital.	
Smallpox									
Cholera									
Diphtheria (including									
Membranous Croup)	. 13		4	6	1	2		1	
Erysipelas	10		1	2	3	9	1		
Scarlet Fever	0.1	8	29	54	4	1		44	
Typhus Fever									
Enteric Fever	1				1				
Relapsing Fever									
Continued Fever									
Puerperal Fever									
Plague									
Totals	. 121	3	34	62	9	12	1	45	

Galemire Hospital for Infectious Diseases is situated within the Whitehaven Rural District and provided by the Whitehaven Rural District Council and the Urban District Councils of Egremont, Harrington, Cleator Moor, and Arlecdon and Frizington jointly.

Total available beds, 84. Number of diseases that can be concurrently treated, 5.

TABLE XII.—SHEWING THE DISTRIBUTION OF CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1909.

Device	Scarlet	Diph- theria	Enteric	Ery-	Total.	Cases Removed to Hospital.			
Parish.	Fever.	ver. including Membran- ous Croup.	Fever.	sipelas.	Total.	Scarlet Fever.	Diph- theria.	Enteric Fever.	
Distington	20			7	27	19			
Gosforth		1			1				
Haile	1				1				
Hensingham	3	8		2	13		1		
Lamplugh	2	1		- 3	6	1			
Lowside Qr.	4		1		5				
Moresby	49			2	51	22			
Parton	3	1		2	6			8	
Preston Qr.		1			1				
St. Bees	1	1,			2	1			
St. John	8				8	1			
Total	91	13	1	16	121	44	1		

TABLE XIII.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING 1909.

Compared with those notified during each year since the Infectious Disease (Notification) Act came into force in December, 1889.

1	Disease	(Notific	eation)	Act cam	e into fe	orce in	Decemb	er, 188	9.
Year.	Small- pox.	Scarlet Fever.	Diph- theria.	Mem- branous Croup.	Enteric Fever.	Continued Fever.	Puer- peral Fever.	Ery- sipelas.	Total.
1890		81	8		4	2	. 2	1	98
1891		85	1		4	1		3	94
1892		25				2		7	34
1893		72			3		1	8	79
1894	1	107						3	111
1895		49			2	1		10	62
1896		154	2	8	1	1		9	170
1897		88	1	2	5		1	7	104
1898		88	4	1	5			10	108
1899		41	9	2	3			16	71
1900		22	3		2			5	32
1901		22	1	1	2			10	36
1902		65	2	1	2			12	82
1903		63	6		2			9	80
1904		94	1		1			11	107
1905		54		1	1			20	76
1906		106	7		3			14	130
1907		32	3	1			1	12	49
1908		18	12	2	1			8	41
1909		91	18		1			16	121
			14						

TABLE XIV.—SHEWING THE NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED DURING EACH MONTH OF THE YEAR 1909.

	Mo	nth.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.
January			 5	1		4
February			 14	1		1
March			 7	8		1
April			 5	1	1	1
May			 3			
Torre			 4			2
July			 6			
August			 11			2
Septembe	r		 13	1		3
October			 8	1	-	
November			 5	4		2
December			 10	1		
	Total		 91	13	1	16

TABLE XV.—SHEWING THE NUMBER OF REGISTERED WORKSHOPS IN THE RURAL DISTRICT OF WHITE-HAVEN DURING THE YEAR 1909, AND THE NUMBER OF PERSONS EMPLOYED THEREIN.

Nature of I	Quainass	No. of Work-	Number	of Persons E	mployed
Nature of 1	ousiness.	shops.	Male.	Female.	Total.
Joiners		 7	20		20
Blacksmiths		 9	22		22
Dressmakers		 5		19	19
Tailors		 3	8		8
Shoemakers		 7	15		15
Bakehouse		 1		2	2
Painters		 2	5		5
Flour Mixing		 3	15		15
Confectioner		 1		4	4
Total		 38	85	25	110