

St. Marylebone : report by the Medical Officer of Health on the recent epidemic of typhoid or enteric fever.

Contributors

Whitmore, John.
Royal College of Surgeons of England

Publication/Creation

[London] : [publisher not identified], [1873]

Persistent URL

<https://wellcomecollection.org/works/z8qpg4p7>

Provider

Royal College of Surgeons

License and attribution

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



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

ST. MARYLEBONE.

10



REPORT

BY THE

MEDICAL OFFICER OF HEALTH

ON THE RECENT

EPIDEMIC OF TYPHOID OR ENTERIC FEVER.

TO THE VESTRY OF ST. MARYLEBONE.

GENTLEMEN,

The Sanitary Committee having at their meeting on the 20th ultimo requested that I would lay before the Vestry a report on the late outbreak of Typhoid Fever in this parish, I have much pleasure in complying with their request; the more so as I know that everything which concerns the health and welfare of the inhabitants of the parish are to you matters of deep and sincere interest.

The subject having been already fully discussed in the Daily and Medical Journals, it will be unnecessary for me to do more than to state, very briefly, (1), the steps that were taken to trace out, and which ultimately led to a discovery of, the cause of the outbreak; (2), the extent to which the epidemic had spread in this and neighbouring parishes as far as could be ascertained by the enquiries made; and, (3), the sanitary precautions which under the emergency I thought necessary to carry out.

On the morning of the 4th of August Dr. Murchison called upon me to inform me that four of his children were then suffering from Enteric Fever, and that the disease had also broken out in several families in the immediate neighbourhood, the names of which he mentioned. The cause of it he suspected to be milk supplied by the Dairy Reform Company from their dairy in Orchard street, and from the circumstances which he detailed relative to the attacks in his own family, together with the fact that all the other families in which the disease existed were, with but one exception,

over 6

supplied with milk from the same dairy, I could but feel that his suspicions were entitled to the most serious consideration. My first obvious duty, therefore, was to call at the dairy in Orchard street and make a sanitary inspection of the premises; this I did in the afternoon of the same day. The result of my inspection and of a lengthened conversation with Mr. Maconochie, the manager of the dairy, satisfied me that there was nothing in the condition of the premises to account for the outbreak, nor did it appear possible that the milk could be contaminated either by the milk carriers or any other persons employed by the company at the dairy. Thus far my enquiries proved that the company were in no way responsible for the supposed contamination of their milk, and that the causes must be looked for at the farms from whence it was supplied; in the meantime, feeling I should not have been justified in ignoring altogether the possibility of the fever being due to other causes, I extended my enquiries into the state of the sewers and drains of those parts of the parish in which the disease was prevalent, and into the quality of the water supplied. By the kind assistance of Mr. Hallett, the assistant surveyor of the parish, I ascertained that the sewers were in a satisfactory condition, having been all well flushed and cleansed a short time before, and as regards the drains, I could have no doubt of their being in a good structural condition, especially in those houses where cases of fever existed, inasmuch as the occupants of them were medical men of eminence, and other persons who were fully alive to the importance of living under the best and most perfect sanitary conditions that it was possible to obtain. The water supply I found equally free from suspicion, my weekly analyses during the whole year had shown that it was of more than average purity and freedom from organic contamination. On returning home from my visit to the dairy I received intelligence of fresh outbreaks of the fever, all occurring in families who drank the suspected milk. I therefore resolved, without further delay, to write to the manager of the company suggesting the necessity of his suspending the sale of milk from the then sources of supply until the true cause of the fever could be ascertained; my letter to that effect was delivered at the dairy either that same evening or early in the following morning. On the morning of the 5th of August I had an interview with the directors of the company when I laid before them the facts which had come to my knowledge respecting the outbreak, together with the additional and most important fact that Dr. Murchison, an eminent authority on fever, was fully impressed with the belief that to their milk alone the epidemic then prevailing in this and neighbouring parishes was due.

I received from the directors a very courteous reception, and the fullest explanation of the mode in which they conducted business and provided for the purity of their milk; all of which I must admit was very satisfactory as far as it went, but it altogether failed to prove that the milk had not been contaminated before it came into their possession, and that they were not unconsciously supplying poisonous milk to the public.

On the same day I addressed a letter to the three principal medical journals, asking of their readers information of any cases of fever in this and the neighbouring parishes which came under their care or cognizance. I also, with the same object, drew up a circular which was afterwards sent to every medical practitioner in the parish.

From this time until the morning of the 7th of August information of fresh cases of fever was continually brought to my notice by Dr. Murchison and other medical gentlemen, and as on that day the Vestry met, I resolved to inform them of the outbreak. I might have hesitated taking this step from the fear of causing a panic in the district; the responsibility of my position, however, left me no alternative but to do what the law required. I also felt myself called upon to communicate personally with the Medical Officer of the Privy Council, Mr. Simon, in order that in the prosecution of further enquiries I might have the assistance of some gentleman from his department. This I did not seek because I felt personally incompetent to the task, but because it was apparent that the origin of the outbreak was to be sought for in places far away from the Parish of St. Marylebone, beyond which I could exercise no power or authority. Had there been good and sufficient reasons for believing that the cause was to be found in the Parish, I should not have applied for any such aid. Mr. Simon, I must state, hesitated at first to afford me the assistance I asked for, believing, as he kindly said, I was fully competent to the duty without help, but ultimately he yielded to my wish, and appointed Mr. Netten Radcliffe to assist in the investigation.

On the afternoon of this day (August 7th) I wrote to the Directors of the Company (my letter of the 4th, addressed to their Manager, having failed in its object), calling upon them, in terms as strong as I felt justified in using, to suspend for a time the further sale of their milk, and warning them that, by neglecting to do so, they would be alone responsible for the ill consequences that might thereby ensue. To that letter I received the extraordinary reply which has already been made public, which proposed to the Vestry that the Company would suspend the sale of their milk on condition that the Board would undertake to compensate them for "the loss and injury they may sustain in loss of profit and reputation."

On Friday, the 8th of August, Mr. Netten Radcliffe entered upon the scene, and, after calling upon myself and Dr. Murchison, and obtaining from us a general outline of the facts as they then existed, I accompanied him to a meeting of the Directors of the Company. At that meeting we met Dr. Corfield and Mr. Chalmers Morton, who, we were informed, had been appointed by the Directors to assist us in the investigation. It was then arranged that all the farms which supplied milk to the Orchard-street Dairy—eight in number—should be visited, and we were assured that the occupiers of those farms had received instructions to afford us every assistance and information in their power. It was also arranged that we should meet at Oxford, on Monday, the 11th of August, whence we were to start on our enquiries.

It will not be necessary that I should enter into any lengthened detail of the circumstances connected with our inspection of these farms; suffice it to say, that our enquiries were generally directed to the following points:—

1. The system of drainage carried out at the different farms and nature of the soil.
2. The quality and quantity of the water supply.

3. The general condition of the cows and nature of their food.
4. The health of the occupants and labourers on the farms and of the surrounding parishes. This involved enquiries from the District Registrars of certain parishes respecting deaths which were reported to us as having occurred from typhoid fever.
5. The mode by which the washing and cooling of the milk cans was carried out at each farm, the quality of the water used for the purpose, and arrangements generally adopted for preserving the milk free from pollution of any kind.

Subsidiary to these enquiries were others having reference to the extent of the farms, the proportion of arable to pasture land, the number of cows kept, with some others which did not very materially concern the objects we had in view.

In seven of these farms our investigations were unsuccessful in discovering the cause of the outbreak. It is true that in some of them the water supply was deficient in quality, and, in my opinion, unfit for drinking purposes, and the well in dangerous proximity to the privy; it is also true that the drainage was unsatisfactory, but beyond this there was nothing to show that the milk from any of these farms was infected with typhoid poison. At the eighth farm, however, the condition of things which then existed, coupled with some antecedent facts which had come to our knowledge on the evening before we made our inspection, demonstrated beyond the possibility of any reasonable doubt that the fountain and origin of the epidemic had been at last discovered. This farm, known as Chilton Grove Farm, is situated some few miles from Thame, in Oxfordshire. It had been in the occupation of a Mr. Jessop, who died on the 8th of last June, since which time it has been carried on by his widow. This lady has three children, of ages varying from 10 to 20 years, who reside with her at the farm. From information furnished to us by Mr. Humphreys, surgeon, of Thame, the medical attendant of Mrs. Jessop and her family, we learnt that Mr. Jessop some short time before his death was attacked with typhoid fever, and although the return made to the District Registrar described the cause of death to "heart disease," yet, from the circumstance of Dr. Giles, of Oxford, whom he consulted in the early stage of his illness, having pronounced it to be typhoid, as well as from the additional fact that some two or three days before he died copious discharges of blood from his bowels,—characteristic of the disease,—had taken place, it is very clear that this gentleman had suffered from the fever in an aggravated form, and that a certificate ascribing his death to "enteric, or typhoid fever" would have been the more correct.

The farm-house and buildings are placed on a slope; at the highest point the privy, which is a mere open pit, is situated, and at the lowest the well, this latter is bricked but not cemented, and receives its water supply from a brook in a field some 300 or 400 yards distant. The distance between the privy and the well is about 18 and a-half yards, and between these, but nearer to the former, is the dairy, where there is a pump which draws its water from the well through a pipe which we were informed was laid in a sort of trench dug to receive it. The altitude of the privy above the well is

about 8 feet, it is therefore obvious that any soakage from it must flow in the direction of the well, and it is also clear that as soon as such soakage reaches the trench its further progress to the well meets with but comparatively little obstruction. At the time of our visit the water in this well was extremely bad, and we were informed by Mrs. Jessop that it had not been used for drinking for nearly two years, but simply for cooking, washing, and for washing out and cooling the milk cans. It was obvious, both to myself and the other gentlemen present, that the water was impregnated with the leakage of the privy, and also from the pig-styes and manure heap which were even in much closer proximity to it and also upon a higher level.

The theory therefore by which I explain the infection of the milk is as follows:—at some time, probably for many days during the illness of Mr. Jessop, he used the privy, his excreta, intensely impregnated with Typhoid poison and mixed with other liquid and decomposing animal matter, was conveyed into the well by percolation; the water of this well, thus poisoned and rendered still more dangerous by drainage from the pig-styes and manure heap, was daily used for washing out the cans, and it is very probable that, after such washing, some small quantities were left accidentally at the bottom of them. On pouring milk into these cans the whole of it became at once infective.

Before closing this part of my subject, I must not omit to state that at the time of our visit to the farm a son of Mr. Jessop, a lad about 14 years old, was ill in bed, suffering, as we were informed by his medical attendant, with a mild attack of Enteric Fever, from which, however, I understand he has quite recovered.

It is hardly necessary I should repeat what has already been made public, viz., that on the instant the Dairy Company was informed of the discovery made at Chilton Grove Farm, their supply of milk from this Farm was stopped.

I now proceed to show the extent to which the epidemic has spread in this and neighbouring parishes, and although in this part of my enquiry I have had the valuable assistance of Dr. Murchison and other medical gentlemen, and have also availed myself of every other possible source of information, I nevertheless feel that my knowledge on this subject is at present very imperfect, and that I can only arrive at an approximate estimate of the number of persons who have been attacked by the disease. I come to this conclusion from the circumstance that up to the present time I have been continually hearing of fresh cases, all of which, with scarcely a single exception, had drunk the milk from the Dairy Reform Company. I can have no doubt that other cases will yet be brought to my knowledge, and that very many besides have occurred which I shall never hear of.

To the letter which I addressed to my professional brethren through the medium of the medical journals, and to the circular which I also sent to every medical man in the parish, I have received upwards of 200 answers; of these 57 gave information of the disease existing in families resident in St. Marylebone and the neighbouring parishes of St. George's, Hanover Square, and Paddington; to this must be added very many other cases

communicated to me by Dr. Murchison, which bring the estimated number of families in which the disease has occurred to about 90, and the number of persons attacked to about 320. These figures exclude all doubtful cases, and are, I am satisfied, considerably less than the actual number.

The largest number of these cases occurred in this parish and the smallest in the parish of Paddington.

The incidents which have been detailed to me as connected with many of these cases are of the most interesting kind and tend to prove incontestibly that they owed their origin to the infected milk. The per centage of deaths that has resulted, I have not been able to arrive at, from the circumstance that many of the patients suffering from the disease were removed to hospitals out of the parish, and others had gone into the country in the interval between drinking the milk and the first symptoms of the attack; of most of these latter cases there is great difficulty in ascertaining the termination; at present, however, I know of about 20 deaths and of this number not more than five or six have occurred in this parish. One I have ascertained occurred in Wales, a second in France, a third in Kent, and others in various parts of the country. The first serious outbreak of the disease appears to have taken place on or about the third week in July, and continued, as can, I think, be satisfactorily shewn, until the 9th of August, or within four days of the suspension of the sale of the infected milk.

It must be understood that this report takes cognizance only of those cases of fever which are supposed to have been produced by the milk supplied by the Dairy Reform Company; others of course have occurred which had their origin in other causes, but these it does not concern me at the present time to notice.

The sanitary precautions which I thought it desirable to carry out, with a view to check the spread of the epidemic, and provide for the health and safety of the inhabitants generally, were as follows:—

1. A frequent flushing and disinfection of the sewers in all those parts of the parish where cases of fever were known to exist. The disinfectants used for this purpose were sulphate of iron and carbolic acid. The former had the effect of oxidizing, or, in other words, burning up the sewage, the latter, being a powerful antiseptic, arrested the progress of animal and vegetable decomposition.
2. The daily watering of the streets with a weak solution of carbolic acid. This was carried out in those streets where the fever prevailed, as well as in all the crowded and densely populated streets and courts in the parish.
3. The daily sprinkling of the gullies and air shafts in the parish with the carbolic powder.
4. The distribution of small packets of carbolic powder to poor families, the sanitary state of whose houses required the use of a powerful antiseptic.

5. The circulation throughout the parish of a large number of posters and hand bills, containing plain directions of the measures necessary to preserve health and guard against an attack of the epidemic.

In concluding my report, I have much pleasure in stating that this epidemic of fever, which was productive of so much anxiety in the early part of last month, and which through the medium of foul drains, impure water receptacles, and other well known disseminators of the infection of typhoid, threatened to assume alarming proportions, has now almost entirely subsided, and if I can be considered as having even in the smallest degree contributed towards effecting this satisfactory result, I shall have reaped a rich reward for my trouble and anxiety.

I remain, Gentlemen,

Your obedient servant,

J. WHITMORE, M.D.,

Medical Officer of Health, &c.

Court House, 23rd September, 1873.

ST. MARYLEBONE.

At the Vestry,	}	Present—
25th September, 1873.		MR. CHURCHWARDEN SEDGWICK, in the Chair.

Ordered,—

That the foregoing Report of the Medical Officer of Health be printed, and taken into consideration at the next meeting of the Vestry.

W. E. GREENWELL,

Vestry Clerk.

3. The observation throughout the paper of a large number of patients and last but not least, considering the duration of the treatment, may be taken as evidence of the efficacy of the treatment.

In concluding my report I have much pleasure in stating that this treatment of leucorrhoea was particularly so much easier in the early part of the month and still further so in the latter part of the month. The treatment was very successful and the patients were very much improved. The treatment was very successful and the patients were very much improved. The treatment was very successful and the patients were very much improved.

I remain, Sir, your obedient servant,

Yours obedient servant,

J. WHITMORE, M.D.

Medical Officer of Health, &c.

10th March 1872

BY MARYBONE

Printed

At the Press

2nd Edition, 1872. Mr. GUTHRIE'S REPORT on the State of the City.

Original

That the foregoing Report of the Medical Officer of Health be printed and taken into consideration at the next meeting of the Council.

W. R. GREENWICH

1872