

a man was found working visibly suffering from scarlet fever, the characteristic rash being present on the skin. Milk was also being received by the same company from two farms on which there were cases of scarlet fever. Similar reported serious milk epidemics of scarlet fever have occurred in Buffalo, 1899; London, England, 1901; and in Salem, Mass.

As to diphtheria, the medical literature of recent years contains many reports of milk borne outbreaks. Mention of two or three of these will be sufficient for our present purpose.

In 1893, a small epidemic occurred in Lund, Sweden, when eight persons in different families became sick with diphtheria. These cases were traced to the use of milk from a farm near Lund. At this farm house two of the inmates were found to be infected with diphtheria.

Quite an extended epidemic occurred in 1886, in England. In the course of a few days, 70 cases of diphtheria occurred, distributed in more than thirty families, fifteen cases being fatal. All the sick had received milk from the same dairy. Not one case of diphtheria occurred during this time among consumers using milk from other dairies.

Another report is that from Ashtabula, Ohio, where one hundred persons became affected with diphtheria in December, 1894. The houses in which the disease occurred were widely separated, but milk was taken at all of them from the same dairyman. On the farm of this dairyman a workman had a very sore throat, probably diphtheretic. This person had assisted in the work of the dairy, while suffering acutely from sore throat. Of forty-four households investigated it was found that thirty-two had received milk directly from this sick person; the other twelve had received milk from the same dairy but it had been delivered by another man.

Dr. U. Findt has given a detailed account of a diphtheria epidemic, borne by milk from a co-operative dairy at Holbrook, in which fifty-one patients were infected in July, sixteen cases the following month, and six more in September. This case is remarkable in that the milk appears to have been contaminated for quite a long period. It is certainly very difficult to prove the presence of diphtheria bacilli in market milk, because, even if the milk has been the cause of the epidemic, they are present in it only in very small numbers and usually but for a limited time. To the present time the diphtheria bacillus has only rarely been isolated from market milk samples.

In the case of typhoid fever, Dr. Caroe has reported ninety large and small epidemics which occurred immediately outside Copenhagen during the period 1878-1896, and which were mostly due to infection by milk. In the city itself, in the year 1900, three definite typhoid fever milk epidemics occurred.