

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 quantity 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 30 large and small typhoid epidemics which occurred immediately outside Copenhagen during the period 1878-96, and which were mostly due to infection by milk. In the city itself, in the year 1900, three definite typhoid milk epidemics occurred.

During the present year, early in the spring, an epidemic of typhoid took place in Paisley, Scotland, and it has been proven bacteriologically that upwards of 100 cases could be traced to infected milk. Many similar typhoid milk epidemics, both in Europe and America, are now on record.

Last year, at Oshawa, Ont., Dr. McCrea, health officer there, reported several cases of typhoid caused directly by milk contamination.

It is unnecessary to go farther in this discussion of typhoid milk epidemics, for it is a well-known fact that impure drinking water is probably the most common carrier of typhoid contagion to man, and it is self-evident that milk which is favorable to the growth of typhoid bacilli may be infected from the water. Typhoid bacilli may be blown about by the dust, carried on the boots of persons who walk over infected surfaces, and they may also be carried by flies, as was abundantly proven during the Spanish-American and the South African wars. By all of these means the milk may become infected with the typhoid bacilli.

In regard to tuberculosis, the bacilli may enter milk not only from tubercular cows and infected stables, but also without doubt from tuberculous people. The danger, however, is lessened in the case of the tubercular organism by the fact that these bacilli do not increase or multiply in milk. The latter peculiarity, as well as the fact that but few tubercular milk epidemics have been reported, puts tuberculosis rather out of the category of diseases that may be spread in epidemic form by means of the medium milk. But so prevalent is tubercular disease in man and animals, so generally diffused and numerous in the community are its sources, and so closely allied with these sources is the medium milk, which will preserve and convey its causal agent, that we can not advisedly dismiss from further discussion in this paper a disease which is so often milk-borne.

It has long been known that tuberculosis can be acquired by ingestion as well as by inhalation and inoculation, but the part