

the disease. If phthysical sputum could be completely destroyed and the spread of the disease by this means prevented, and if by proper precautions the spread of the disease from bovines to man could be prevented, it would be possible in time to almost completely eradicate tuberculosis. It will consequently be seen that the chief means for the prevention of tuberculosis are (1) the disinfection and destruction of the sputum, and (2) the thorough inspection of the meat and milk supplies. Secondary to these come the careful attention to the health, and to hygienic and sanitary conditions.

In order to carry out preventive measures in an intelligent manner, the following points must be borne in mind. All tuberculous affections are due to the introduction of the tubercle bacilli or their spores into the body. The bacilli are not generated *de novo*, but are always derived from a previous case. The bacilli may be found in the sputum, fæces, urine, or other discharges, and may be blown into the air in the act of coughing. The bacilli in the dust form may retain their vitality for some time. This varies but is held by different observers to run from months to years, under conditions favorable to the germs. Persons have contracted phthisis by living in houses previously occupied by consumptives. These houses may remain infective for a long time. It is generally believed that milk containing the bacilli is very dangerous to children. Many children die of tabes mesenterica, probably contracted in this way. The fact that during the past 50 years, the mortality due to tabes mesenterica has not diminished in the same proportion as that of other tuberculous affections is probably explained in this way.

The bacilli enter the body with the inspired air, with food or drink, or by means of inoculation.

From what has been said, it may be concluded that phthisis is an infectious and communicable disease, dangerous to the public health, and that all forms of tuberculosis are preventable. Whether or not a person who has been exposed to an infection will contract a contagious disease depends upon (1) the intensity of the poison, and (2) the resisting power or susceptibility of the individual.

The intensity of the poison depends upon the dose, the source of infection, the channel through which the poison is introduced into the system, and the virulence of the poison, for the virulence of germ poison varies from time to time.

The resisting power of the individual depends upon his constitutional peculiarities, since some persons are more susceptible to infection than others; his condition of health at the time of exposure; and the condition of the tissues with which the germs are first brought into contact.