

infection. In early adult life, infection by means of contaminated dust in homes, factories and public meeting places is the more frequent and the high mortality between the ages of twenty to thirty is doubtless due to this form of infection. The hereditary infection has been the debateable question for decades, and while possible, in frequency, cannot be comparable to the modes just mentioned. It is quite in fashion to assume that various pests, among others, the house fly, may be the carrier of the bacillus, but this is probably rare. While a nuisance is likely to have additional crimes charged to it and flies show little discrimination in objects of their attention, more care in maintaining cleanliness is demanded and there will then be fewer objects towards which a campaign of extermination may be directed. While the actual proof of the mode of infection is usually wanting, there is reasonably certain evidence as to how it is brought about. In dried sputum, especially if exposed to air and particularly to light, the bacillus soon dies. The virulence of sputum is undoubtedly greatest when it is moist. The probability rests somewhat upon the quantity of tubercle bacilli, but largely upon the soil. The rapidity of the infection seems to depend largely upon its association with pathogenic bacteria. When a mixed infection takes place in an organism with diminished resistance, the result is likely to be disastrous. The mortality in dwellers in crowded quarters is six-fold that of those who live in comfortable and capacious homes. In the former, massive infection of associated micro-organisms occurring in individuals improperly fed, herded together in filthy rooms, debilitated by excessive work and addicted to immoderate use of alcohol or other so-called stimulants are the important factors in producing this high mortality.

While the crux of the tuberculosis question is assumed to be the prevention of implantation, for without the bacillus there can be no tuberculosis, yet as a matter of fact favorable conditions must be present or the results of implantation will be insignificant. Prevention of infection is theoretically possible; that it will be an accomplished fact in our time and generation is the dream of an optimist. This means education of the masses to a degree of cleanliness, which even surgeons fail to reach. To teach a tuberculous individual of the lower orders, so that he is not a potential danger to the community is an impossibility. Let us be reasonable. The fertile soil is furnished by ignorance, laziness, love of filth, enjoyment of squalor, herding together individuals in the same race, intemperance of all sorts, vices of all description, mental, moral and physical degeneration, conditions which thrive in urban population and which are so common and wide-spread and lasting that every effort to better them is met by indifference, resentment or active rebellion. A moral, mental and physical uplift is essential and it will require a century to bring these people even to the semblance of human beings. Clean up the average