

tive estimate of the cases of pulmonary tuberculosis worthy of medical supervision in any locality may be made by multiplying the mortality by ten. Estimated in this way the incidence of tuberculosis would be twenty-one thousand, just twice that already given. The proportion of these will vary according to the density of population, as does the death rate, which is the ratio of one hundred for country and small town, one hundred and seventeen for the group of fifteen towns over five thousand, and one hundred and forty-three for the group of nineteen cities. Even under the present improved percentage mortality, one hundred and seventy-one thousand of those now living in Ontario may expect to die of tuberculosis. If the correction of 72 per cent. increase over the reported mortality mentioned above, is applied to the province, this number should be increased to two hundred and ninety thousand. According to the smaller estimate of present cases, each of the three thousand physicians in Ontario, if cases were fairly divided, should now have four under treatment, and he should acquire a new active case every eighteen months, which will die, besides others which should recover. Phillips' estimate would give eight to each man to start with.

There is cause for satisfaction that there has been an actual reduction of seven hundred fatal cases (23 per cent.) in 1908 compared with ten years earlier, at which time the institutional segregation and education of cases of pulmonary tuberculosis in Ontario was inaugurated.

Contrasting the death rates of various countries and communities, with phthisis excluded, for the early eighties—the time of the discovery of the tubercle bacillus—with the earlier years of the present decade the annual death rate has in all been reduced in varying degrees from 3 to 33 per cent., while the diminution in the death rate of phthisis, except in two countries, has been from 7 to 52 per cent. In general, the reduction in death rate from phthisis is enormously greater than that of the general death rate from all other causes, and the experience of a number of countries is that the conditions improving general health have not had any constant effect on the prevalence of tuberculosis, as these are frequently offset by fresh handicaps developing in modern industrial life. Improvement in general sanitary and social conditions, though exerting a certain influence, has not been the principal cause in diminishing tuberculosis, and influences more powerful and more rapid in operation must have been at work. Newsholme epitomizes an elaborate analysis of the causes which