

following her father did the same. From this particular party there developed a fairly widespread epidemic of mumps and measles. This instance of how infectious disease is contracted and spread from personal contact with an infective case is interesting. A few cases of mumps in young adolescents developed serious complications—*e.g.*, suppurating parotitis, pancreatitis; and I have heard of two cases of paralysis of both auditory nerves, causing total deafness.

Measles, both ordinary and German, have been prevalent, especially in certain country districts. I heard from doctors that quite a number of children developed both forms of measles in sequence—*i.e.*, a child had an attack of apparently ordinary measles, and then about a fortnight to three weeks later a second rise of temperature, followed by a second rash. In some instances the second outbreak was more severe than the first; but also the opposite relationship occurred. These cases, with apparently a relapse, I take it, were undoubtedly two separate infections with ordinary and German measles, and not the result of one infection.

*Diphtheria and Scarlet Fever.*—The notification figures for these two diseases for 1927 show in the Wairarapa—East Cape Health District, 213 and 260 cases respectively. The diphtheria figures show a considerable reduction of those for 1926: 294 to 213—over 20 per cent. reduction. Scarletina, however, shows an increase of 107 over last year's figures. This increase occurred mainly in the latter half of the year, and is due to a generally increased incidence all through the health districts, and not to any particular outbreak of the disease.

In the Nelson-Marlborough Health District the figures are scarlet fever 29, and diphtheria 10, which are very low in proportion to those for the Wairarapa-East Cape District. The remarks I made in my report for the year 1926 on the much lower incidence of notifiable infectious disease in the Nelson-Marlborough District are maintained in this year's returns. Scarlet fever and diphtheria in the Wairarapa-East Cape total 479, as against 39 in the Nelson-Marlborough Health District.

*Diphtheria* is still more prevalent in the Poverty Bay district, including Gisborne Borough, than in any other part of the Wairarapa-East Cape District. The preventive inoculation treatment started by me in the latter part of 1926 was continued by Dr. Clark, the School Medical Officer, in February upon the reopening of the schools after the summer holidays. Dr. Clark and his staff mainly carried out this treatment in the country schools in the Cook and Waikohu Counties. The results so far as the obtaining of parents' consent is concerned was pretty much the same in these schools as in the town schools—*viz.*, about 40 per cent. to 50 per cent., which is somewhat higher than I obtained in the Gisborne schools. Taking as an average of 40 per cent. of children attending school, with quite a negligible number of children of pre-school age who received preventive treatment, what lowering of the incidence of diphtheria cases in this the third year of the prevalence of diphtheria might be expected? In my opinion, the inoculation campaign of 1926-27, although it resulted in only 40 per cent. to 50 per cent. of school-children receiving treatment, has fully justified itself. There has been in the Borough of Gisborne alone a lessened incidence over 100 per cent., and about the same in the country children. We know that diphtheria, when it becomes prevalent in a district, generally continues to be prevalent for a period of at least three years. In the Hawke's Bay District during the five years 1915-19 diphtheria was, I believe, more prevalent than in any other part of New Zealand. It then steadily declined, and this year and last year have a very low incidence, although this year is not so good as last year (1926) or the previous year (1925). If we regard this decline as due, as it most probably is, to acquired immunity from attacks, severe and mild, of the disease, it is quite reasonable to assume that the 100 per cent. reduction in incidence in the Poverty Bay District is directly due to active immunization obtained by toxin-anti-toxin inoculation treatment.

*Typhoid Fever.*—This disease is, unfortunately, more prevalent than it should be in the Wairarapa-East Cape District, although there is a big reduction in the actual incidence figures—76, as compared with 115 in 1926 and 64 in 1925. The large increase in 1926 was mainly due to the outbreak in the Hawke's Bay District and a small one in the Poverty Bay District. The great majority of the cases are Maoris and whites living in contact with Maoris. There have been some white cases where no Maori contact could be discovered. The mortality rate has been high—ten deaths out of sixty-four notified cases.

#### PULMONARY TUBERCULOSIS.

The notification figures show 106, as against 99 in 1926 and 125 in 1925. There are still difficulties in carrying out "follow up" work. In the larger centres of population the Sanitary Inspector is able to keep most of the cases which he knows are residing in his district, if not actually under close observation, which is undesirable, at any rate under some supervision. But in the country districts it is difficult to keep track of the movements of chronic cases. The lists of cases notified are checked by each Inspector, as far as possible, every six months. I am afraid the domiciliary treatment of some patients leaves a good deal to be desired. This is because many of the patients have not the means to pay for private medical attendance. If there was a little more encouragement by Hospital Boards to get these patients to attend as out-patients from time to time for medical examination, I am of opinion that some of these chronic cases could receive advice and treatment that would enable them to carry on successfully in their respective occupations.

#### PUERPERAL SEPSIS AND MATERNAL MORTALITY.

The notifications under section 79 of the Health Act, 1928, are twenty-eight in the Wairarapa-East Cape and four in the Nelson-Marlborough Health Districts—a total of thirty-two. The majority of these notifications are mild cases of "sapræmia and doubtful sepsis."