

VARIOLA.

The source of the Otago outbreak is unknown, the first notification the Department received being that of a case at Gore on the 12th April. On investigation, however, it was discovered that cases had been occurring in Dunedin for some two months before this date. Ninety-five cases in all were notified—sixty from Otago, thirty from Southland, and five from Ashburton. The latter group of cases were attributable to infection from a school-teacher, who had been in contact with a case in Invercargill before its notification, and who had then returned to Ashburton unknown to the Department.

The disease was the type of smallpox known as “alastrim,” and was apparently identical with the disease which was prevalent in New Zealand and Australia in 1913.

The precautions taken included the removal of cases and suspects to isolation hospital; the vaccination of contacts, with daily surveillance for fifteen days thereafter; the removal to isolation hospital of contacts who refused vaccination or who were otherwise deemed better in isolation; the very complete disinfection of all personal belongings of cases and of the contents of infected houses; and, lastly, a very active campaign of vaccination.

The efficiency of vaccination was shown in a most striking manner. Of the cases notified from Otago only eighteen had been vaccinated at any time in their lives, and in not one of these cases, owing to the lapse of time, could it be regarded that any protection was present. Again, only two contacts who were vaccinated developed smallpox, and their history suggests that they were incubating the disease at the time of the procedure. The disease was very mild in type and no fatalities resulted.

ANTHRAX.

One case of this disease, with fatal issue, was reported in 1920, but as no bacteriological examination was made the diagnosis remains in doubt.

Action was taken during the year to prohibit the importation of Japanese shaving-brushes, which, as the experience of other countries has shown, constitute so potent a source of danger.

SECTION 3—NON-NOTIFIABLE DISEASES.

WHOOPIING-COUGH.

Whooping-cough was epidemic during the year in close association with mumps and measles. The formidable nature of whooping-cough, especially in infancy, is shown by the fact that a total of 107 deaths, fifty-seven of which occurred in children under one year, were attributable to this cause in 1920.

CANCER.

The following table, taken from the New Zealand Official Year-book, shows the cancer death-rate in the Dominion for the last ten years :—

Number of Persons who died from Cancer, the Proportion per 10,000 Persons living, and the Percentage of all Deaths, 1911-20.

Year.	Deaths from Cancer.	Total Deaths: All Causes.	Deaths from Cancer per 10,000 of Living Persons.	Deaths from Cancer per 100 of all Deaths.
1911	809	9,534	7.97	8.49
1912	812	9,214	7.82	8.81
1913	856	10,119	8.01	8.46
1914	904	10,148	8.29	8.91
1915	900	9,965	8.19	9.03
1916	909	10,596	8.27	8.50
1917	957	10,528	8.71	9.09
1918	936	16,364	8.49	5.72
1919	1,031	10,808	9.07	9.54
1920	1,029	12,109	8.72	8.50

In a special article published in the Year-book for 1917, the Chief Compiler, Census and Statistics Office, points out that the rising cancer death-rate in the Dominion is very largely accounted for by alterations in the age and sex constitution of the population, and by increased accuracy in diagnosis and in certification of the cause of death.