

is connected with the number of births. As records of notification of cases prior to 1932 do not show European and Maori cases separately, the numbers of births and cases given below are for the two races combined. The two periods shown, 1917–25 and 1927–37, commence immediately after an epidemic and end after the succeeding epidemic.

The rates given are not strictly comparable, as both paralytic and aparalytic cases are included, and the percentage of aparalytic cases in the total notifications varies in different epidemics and in different districts in New Zealand. In the centres of population a larger percentage of the cases notified are of the aparalytic type than in country districts. In inter-epidemic periods only paralytic cases are recognized and notified except in the vicinity of small localized outbreaks, whereas in times of epidemic prevalence, with more attention focused on the disease, medical advice is more frequently sought in cases of minor illness, and aparalytic cases constitute a considerable percentage of the total notified.

Figures for complete epidemic periods differentiating between the two types are not available except for the recent epidemic. In 1916, of 339 cases notified in the Wellington Health District during the period January–April, only 7 per cent. were described as “abortive” (Sydney Smith, “Infantile Paralysis in New Zealand,” Public Health Report, 1916). In 1924–25, in the same area, for the period December–February, 42 per cent. of the 339 cases notified were aparalytic. In 1936–37, for the same area, 22 per cent. of the 204 cases notified were aparalytic, compared with 27 per cent. for the whole Dominion:—

Period.	Number of Births.	Number of Notified Cases of Poliomyelitis.	Notification, Rate per 1,000 Births.
1917–1925	261,303	1,761	6·7
1926–1937	343,131	1,310	3·8
1917–1937	604,434	3,071	5·1

It will be seen that from the beginning of 1917, the year following the first major epidemic in New Zealand, there has been one recognized case of poliomyelitis for every 200 births. The rate was much higher during the first period than during the second.

No unusual prevalence of the disease was noticed after 1895 until 1912, when there was an outbreak in North Auckland, about 40 cases occurring. In 1914 the second minor epidemic occurred. It is now impossible to obtain accurate information regarding this epidemic. In the published returns of the Department the cases are shown along with those for cerebro-spinal meningitis. A careful search of the records of the Otago Health District shows that of the 134 cases of the two diseases reported, 101 were of acute poliomyelitis, of which 9 occurred in January, 21 in February, 31 in March, 15 in April, 10 in May, and 7 in June.

This epidemic chiefly affected the South Island, but the North Island did not escape, as Dr. Sydney Smith, in his report on the 1916 epidemic, refers to the 1914 one and gives a table showing the distribution of 58 cases which occurred in the Wellington District during the period February–May. This table shows that 11 cases occurred in February, 23 in March, 15 in April, and 7 in May.

EPIDEMIC OF 1916.

This, the first major epidemic experienced by New Zealand, commenced in Auckland in December, 1915, although it was not until the beginning of January, 1916, that cases were reported to the Department. In a memorandum of date 10th January Dr. T. J. Hughes, Medical Officer of Health, Auckland, reported that between 4th January and 8th January 7 cases had been notified in the city and suburbs. Of these, 1 had first taken ill two months previously, 2 some three weeks, and 2 a fortnight previously. Another case had occurred in mid-December. These had only lately been visited and notified by medical practitioners. The majority of these cases were slight, although 1 was severe, but all were recovering.

By 24th January the number of cases had risen to 29, with 2 deaths, and by the 28th 48 cases had been notified in the city and suburbs and 7 in country towns. On 25th February the *New Zealand Herald* reported that the total cases notified to 24th February, 1916, numbered 149 in Auckland and adjacent areas and 118 in the country districts. During the period January–April the numbers notified totalled 519 (187 in city and suburbs, 332 in country), with 53 deaths.

The first cases in the Wellington Health District were notified in the last week in January, 3 cases being reported. In February 65 cases were notified, in March 178, and in April 93.

Christchurch first reported a case towards the end of February, and Dunedin 2 cases in the first week in March.

The course of the epidemic is shown in the following table:—

	North Island.		South Island.		Total.
	Auckland.	Wellington.	Canterbury.	Otago.	
January, 1916	74	3	..	..	77
February, 1916	242	53	2	..	297
March, 1916	149	151	17	5	322
April, 1916	64	89	27	10	190
May, 1916	15	33	6	4	58
June, 1916	..	11	2	3	16

It will be noticed that the South Island escaped lightly, probably as a result of immunity gained in the 1914 outbreak.