It was noted at an early stage that few suspect cases and no positives had been reported from the North Shore. This seemed strange, because, although this portion of Auckland is separated from the remainder by the Waitemata Harbour, a considerable proportion of its population of 30,000-odd are employed on the city side; continual daily contact is maintained through the ferry service, and the North Shore beaches attract innumerable car-loads of children from south of the harbour every week-end. It was decided to regard the North Shore, so long as its freedom from cases continued, as a control area for the study of conditions on the city side. Even if the epidemic eventually spread there, it was hoped that its late commencement would enable us to find out what sort of conditions immediately precede an outbreak.

As it turned out, the date of onset of the first case on the North Shore was 24th December, nearly two months after the earliest recognized case fell ill. By this time over 50 cases had already occurred on the city side. By the end of March the North Shore had furnished only 4 cases, as against 91 in the rest of the metropolitan area (ratio 1:23), the population ratios being about 1:8.

The method adopted was simple. The investigation was divided into two parts:--

(1) The homes of cases occurring in the metropolitan area were visited as soon as possible after notification, and careful inquiry was made into (a) the recent health of the patient, and the symptoms of onset of the attack; (b) the health of all other members of the household. Leading questions were avoided, an attempt being made to interest the family in the problem and, by unhurried and sympathetic questioning, to obtain a complete history. Full allowance was made for the difficulty of recalling the details of family illnesses; few people find it easy to remember much about the health of their families more than a week or so previously, and the present writer found that he himself was quite unable to describe the health of his own household during the preceding month. The symptoms and duration of all illnesses possibly related to poliomyelitis were recorded and the date of onset was fixed as closely as possible in every case. Special note was made of any of the following:—

Fever. Vomiting. Diarrhœa. Headache. Pain or stiffness of the neck. Abdominal pain. Drowsiness.

Delirium.

Sore throat.

(2) The first 16 confirmed cases in the metropolitan area were selected as nuclei for the study of the background to the epidemic. House-to-house visits were carried out in the area surrounding each of these cases, the houses visited being grouped, as far as possible, symmetrically about the house in which the case had occurred. A note was made of any address where admittance had not been obtained, and about twenty houses were entered in each area. As soon as possible after completing an area, the same investigator crossed to the North Shore, selected a district which appeared to be of similar social and economic type, and visited twenty homes. These served as controls.