" *Nature of Illness.*—Ask about each member of the household in turn, inquiring about ' flu,' feverish attacks, stomach upsets, headaches, sore throat, pains in limbs, &c. Has he been in bed ill, even for one day, in the last month or so ? Note details of any illness even remotely related (but not other illnesses). Note if a doctor was called, and his diagnosis. Make note of date of onset in all cases."

IV. RELIABILITY OF FINDINGS

Study of the household contacts of positive cases was based on 40 cases in the metropolitan area. The dates of onset ranged from 25th October to 29th December. Consecutive cases were taken, except that those which were rapidly fatal were not included. All homes were visited on three occasions, the first visit following immediately upon notification, the second and third being made after intervals of from six to eight weeks.

There were fifteen test areas to the south of the Waitemata and fifteen control areas on the North Shore ; in one instance an area was based on 2 cases in the same street which occurred on the same day. In 15 of these cases the dates of onset fell between 12th November and 1st December, while one commenced on 18th December. Visits to the test areas were completed between the 1st and 23rd December, the control areas being completed between the 3rd and 23rd. Intervals between visits to test and control areas averaged less than three days and were never longer than five. A second visit was paid about the end of January to all homes in which there were children, and a third at the end of March. These families were therefore under fairly continuous observation throughout the period of the epidemic.

With regard to the well-known fallacy in such investigations, that houses where there happened to be nobody at home were not included, it is not thought that this factor was of much importance in the present instance. Throughout the period in question all schools were closed and the public had been warned to keep children segregated at home and not to allow them to go about the streets or enter shops. These instructions were, on the whole, very carefully observed, and most parents seldom allowed their children to leave their homes or gardens. Houses which included persons under the age of 16 were therefore hardly ever found to be empty. Most of the inhabitants of missed houses must have been adults, and therefore, so far as households consisting of adults only are concerned, our results cannot be accepted without reserve.

In all cases the occupation of the head of the household was noted, and the house was placed in one of four social and economic classes (see Appendix, Table I). Comparable control areas were not found without difficulty, and in two instances surveys of test areas had to be excluded because similar districts could not be found on the North Shore. In the final result, however, the two groups selected were practically identical in social and economic status.

In the Appendix, Tables I and II, details will be found of the types of houses visited and of the composition of the families living in them, in both test and control areas. It will be seen that about 300 families (1,100 persons) were included on each side of the Waitemata, families being subdivided into those without children, those in which there were only pre-school children, and those including school-children. There were minor differences in the density and composition of these families, but not sufficient to invalidate comparison.

The investigators were well received, but it was noticeable that where there were only adults in the household information was not so readily obtained as elsewhere. Mothers of young families were, without exception, most willing to co-operate. There was no reason to suppose that persons living on the North Shore were any less " polio-conscious " than those on the city side.