

Some of the most popular beaches in the Auckland district are situated along the coast-line shown near the top right-hand corners of these diagrams. Auckland's main sewer discharges at a point about a quarter of the way along from the right-hand border of the diagram, and beaches crowded with bathers in the summer months stretch for a couple of miles to the east, beginning not far from the outfall. The sea-water at these beaches has been heavily polluted for years. It is interesting to note that although the contiguous areas are quite densely populated, and the local inhabitants probably use these beaches more than any one else, the distribution of poliomyelitis cases in this neighbourhood is very sparse indeed. An unbiased observer might even say of these diagrams that it looked as if this area had been specially favoured in its avoidance by the virus. This is interesting in view of the fact that in the earlier stages of the epidemic certain interested parties made efforts to throw the entire blame for the outbreak on the state of the harbour, arguing (incorrectly) that poliomyelitis cases had been commonest near the beaches.

VIII. SEVERITY OF DIFFERENT AGES

In the previous inquiry an estimate was obtained of the ratio of minor illnesses related to poliomyelitis ("suspect" illnesses) to positive cases. Separate estimates were made for different age/sex groups, as follows:—

Ratio of Suspect Illnesses to Positive Cases

Sex.	Age.	Calculated Ratio.	Round Figures.
Males	0—	112 : 1	100 : 1
	5—	99 : 1	100 : 1
	10—	319 : 1	300 : 1
	15 and over	546 : 1	500 : 1
Females	0—	203 : 1	200 : 1
	5—	230 : 1	200 : 1
	10—	168 : 1	200 : 1
	15 and over	972 : 1	1000 : 1
Total	301 : 1	300 : 1

These results were based upon the incidence of "suspect" illnesses recorded amongst families in various parts of the city from November, 1947, to February, 1948, inclusive (applied by calculation to the urban area as a whole), and the incidence of poliomyelitis over the same period. The latter included all positive cases admitted to hospital. The proportion of cases with paralysis or paresis was not taken into account and at that time was not known. As can be seen from Fig. V, the relationship of cases with paresis to total notifications is, in any case, extremely irregular.

As no further investigations have been made into the occurrence of minor illnesses in the general population, the accuracy of these estimates cannot be checked directly. An indirect test of limited value is available, however.