

A study was made of the age and sex of individuals who feel ill from 1 to 10 days after a previous case in the household, and those in whose case the interval was 12 days or more. There were 48 of the former and 28 of the latter, and the following table shows the percentage in each age/sex group.

		Males.				Females.			
		0-	5-	10-	15-	0-	5-	10-	15-
Short-interval infections:	Percentage in each group	20.8	20.8	8.3	6.3	12.5	10.4	6.3	14.6
Long-interval infections:	Percentage in each group	10.7	17.8	7.2	7.2	17.8	10.7	3.6	25

From this it would appear that male pre-school children and girls aged 10 to 15 years have an excess of short-interval and female adults an excess of long-interval infections. The notion that the long interval denotes faecal infection might fit in with this observation, because it is on the mother that the duty of attending to the young or the sick child mainly falls, with a more than average risk of contamination with faecal organisms.

Forty cases may seem a small number upon which to base conclusions, however tentative. These cases, however, represented 74 per cent. of the total notified in the metropolitan area in that period. It is probable, therefore, that, while it would be foolish to assume that the results have any wider application, they do represent with considerable accuracy what happened in the homes of positive cases falling ill in Auckland while the epidemic was at its height.

VII. THE BACKGROUND: PEAK AND DECLINE

(a) INCIDENCE IN AGE AND SEX GROUPS

The Auckland urban area, with which this study has been concerned, has a population of just over a quarter of a million. During the five months November to March these produced a total of 94 confirmed cases of poliomyelitis, the peak in the first week of December (16 cases) being followed by an irregular and rather tardy decline.

It would be unwise to discuss the progress of an epidemic of poliomyelitis without having regard to the age and sex composition of the population concerned. I have tried to spare the reader by relegating the actual figures to the Appendix (Table VII), but in Figs. X (I) and X (II) on page 81 he will find a picture of the course of the epidemic showing the number of cases per 15,000 in each age/sex group occurring each month. Males are shown in Fig. X (I), females in Fig. X (II). These charts also show, in parallel with the positive cases, the incidence of suspect illnesses in all families with children in the test and control areas. Suspect illnesses are shown per 100 in each age/sex group of the population concerned, the scale for positive cases having been exaggerated 150-fold for comparison.

It will be seen that the curves of incidence for all three are very similar. Control areas produced less illness than test areas, and it subsided more rapidly. It is tempting to attribute this, and the dearth of positive cases on the North Shore, to the measures imposed from the end of November onwards, but we cannot hope to prove it.