

A second positive case occurred in four different houses, one of which commenced on the same day as the original case, another two days afterwards, the others after intervals of ten days. Of the remaining 174 contacts, 77 (43 per cent.) had an illness during the period under review which might possibly have been regarded as poliomyelitis in a mild form. Six were seen during the attack and were definitely diagnosable as abortive cases. The remainder varied enormously in severity, but only cases which displayed some genuinely suspicious feature have been included in this survey.

The onset of the positive case in the household was taken as the focal point for this part of the investigation, suspicious illnesses in the contacts being studied in their time relation to the positive case. Suspect illnesses whose dates of onset fell within six days on either side of that of the positive case were regarded as concurrent with it, as neither was likely to have been responsible for the infection of the other, assuming the generally accepted incubation period of not less than seven days.

As soon as suspect illnesses amongst contacts were divided into those concurrent with or commencing before the positive case and those occurring afterwards, it became obvious that there was probably a mathematical relationship between positive cases and suspect illnesses. This is shown in Fig. V, details being given in the Appendix, Table V.

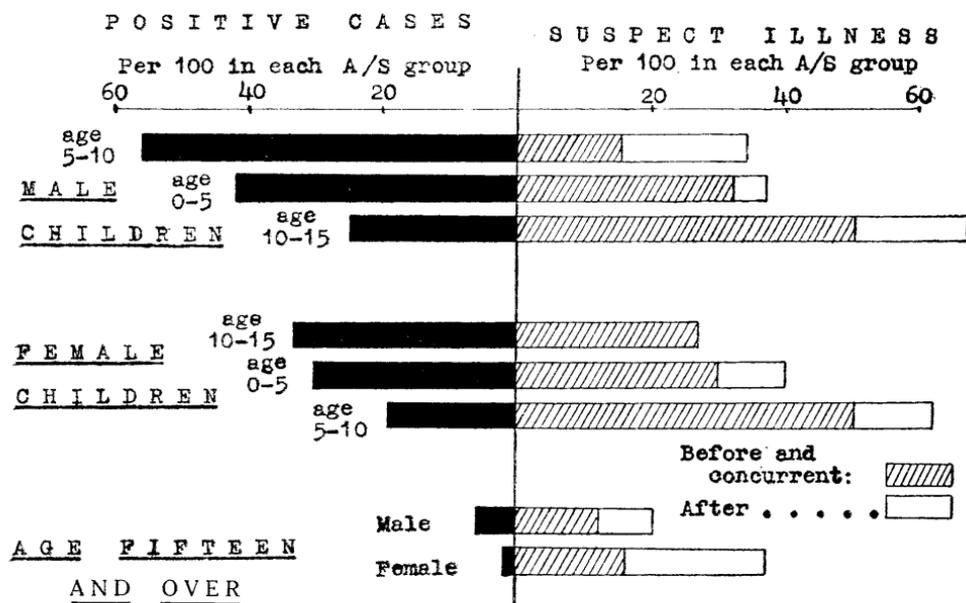


FIG. V.—FORTY AFFECTED HOUSEHOLDS: RELATIONSHIP BETWEEN POSITIVE CASES AND SUSPECT ILLNESSES IN AGE/SEX GROUPS

It will be noted that in each of the groups, male children, female children, and persons aged 15 years or over, the more positive cases there were, the less suspect illness was found.* This is true whether we consider all suspect illnesses or only those occurring before the onset of the positive case or concurrently with it. The coefficient of correlation is very high (from -0.88 to -1 in the latter case; -0.67 to -1 in the former) and confirms this apparent relationship.

* By "suspect illnesses" we really mean *persons* who developed a suspect illness, as only one illness was recorded for any individual.