

**THE CROYDON TYPHOID OUTBREAK.**  
**(A Summary of the Chief Clinical Features)**

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**The Incidence of Cases**

An outbreak of typhoid fever occurred in the southern part of Croydon in 1937. It commenced during the last week in October, and continued throughout November and December. The total number of real or suspected cases which came to my notice and which resided in Croydon was 317. Of these 299 were notified and 18 were not notified. Of the notified cases 15 were secondary, and of the not notified 1 was secondary. Seven of the 299 notified cases were ultimately considered not to have suffered from typhoid.

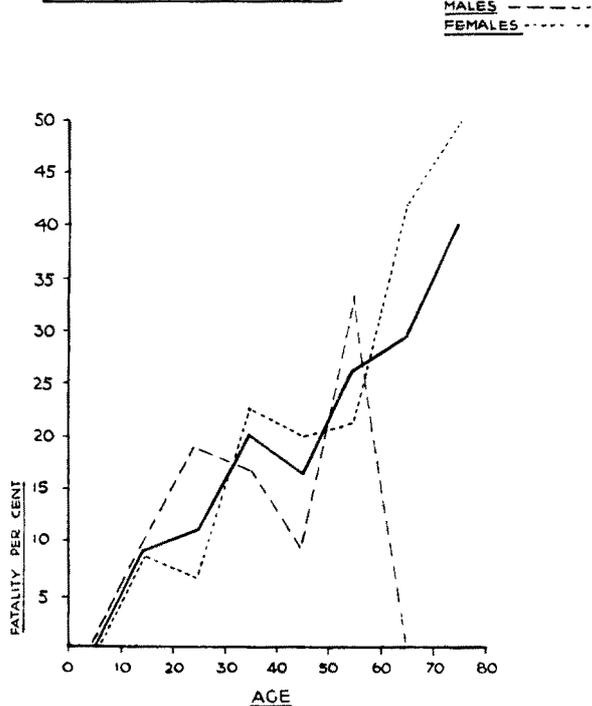
In addition to the above, 28 primary cases and 3 secondary cases were brought to my notice by the medical officers of health concerned; these were not resident in Croydon but were definitely connected with the outbreak, either by working in the town, or having resided therein during the relevant period. Of these 18 were in the neighbouring borough of Purley and Coulsdon, 1 in Wallington, 1 in Caterham, 1 in Merton, 1 in Carshalton, 1 in Horsham, 1 in Brighton, 1 in Camberwell, 1 in Liverpool, 1 in Great Yarmouth and 1 in Newport (Mon.). The 3 secondary cases were nurses who had been nursing in Croydon.

The total cases, therefore, known to me, were 341 including 19 secondary cases.

The graph overleaf shows the age and sex incidence in five-year age groups for both sexes.

CROYDON EPIDEMIC OF TYPHOID. AGE AND SEX

SPECIFIC FATALITY RATES.



In the area there are a number of residential and day schools. The largest of these was a day school of some 750 boys, but it was early ascertained that this school obtained its water supply direct from the Low-Level mains, an entirely separate supply. Nine cases occurred in boys attending this school, of whom 6 lived on the High-Level supply at home, and 1 master, who also lived on the same supply. The largest residential school is situated in the Addington Hills and nearby the High-Level Reservoir. It got the full force of the infection, 16 boys and 1 maid contracted the infection, one of the cases being secondary. The usual number of boys in residence is 150. The incidence rate was therefore 10.6 per cent. None of the teaching staff became ill. The other schools affected were private schools. In one, a boys' school, 5 cases, including a master, contracted typhoid; whilst in a girls' school—average attendance 130—9 cases occurred including a teacher.

Among the public elementary schools in the district 15 cases occurred. The average attendance at these schools is 2,873. The incidence rate was therefore 0.52 per cent. One case occurred in a convalescent home for children, containing an average of 30 children, but no cases occurred in any of the private nursing homes in the area; 1 case occurred in a residential hotel.

It is extremely difficult, in view of the ramifications of the water supply, to give anything other than a very approximate estimate of the population at risk. It was possibly between 40,000 to 45,000. Even with the lower figure the incidence rate is only 0.75 per cent. This is rather a characteristic of water-borne outbreaks and would certainly appear to show that the infecting doses in the water were not heavy. The proximity of the residential school to the source of supply and the fact that the boys had a habit of using a tap for drinking in the changing room and in close proximity to the W.C.s would account for the high incidence at this school as compared with other schools and the rest of the population.

More than 1 case occurred in 8 families, and of these 1 family had 3 cases—all children under ten years of age and nursed at home. There was, however, some evidence to show that the later 2 were secondary in that the dates of notification were (1) 10/11/37; (2) 26/11/37; (3) 29/11/37. The date of onset of the first case was given as 3/11/37, that of the two subsequent cases was indefinite. In the families with two cases, the second case in all was considered to be definitely secondary.

CROYDON TYPHOID.—AGE AND SEX FATALITY PER CENT.

Age Groups.	Males.	Females.	Both Sexes.
0—	0.00	0.00	0.00
10—	8.93	8.82	8.89
20—	18.52	6.52	10.96
30—	16.67	22.22	20.00
40—	9.09	20.00	16.13
50—	33.33	21.43	26.09
60—	0.00	41.67	29.41
70—79	0.00	50.00	40.00

The number of houses on the High-Level supply is difficult to determine but probably a fifth to a sixth of the total houses in Croydon might have received the