

Scarlet fever has been widely prevalent throughout the district during the last year, isolated cases occurring in most of the centres of population throughout the year in the district.

*Monthly Distribution (Table 2).*

The monthly totals show that the cases gradually diminished to a minimum in September, increased in October, and doubled themselves in November. During December and January the number of cases remained stationary, and it seemed possible that this district would escape more lightly than other districts. At the beginning of February, however, the cases began to quickly increase in numbers; this increase might reasonably be put down to the reassembling of the schools, being perhaps assisted by the hot dry weather. The cases increased again in March to a maximum, and have decreased considerably in April. It has been observed in England that the number of cases is at a minimum in March and April, corresponding to September and October here, and rise to a maximum in October, corresponding to April here. As to the meteorological conditions that are most favourable to the spread of scarlet fever, there is a wide divergency of opinion among authorities. Whitelegge states that "upon the whole it seems probable that the tendency to spread is increased by atmospheric humidity in absence of wind and rain." In this epidemic dry and hot weather seemed to increase the tendency to spread, and wet weather to diminish it. The state of atmospheric humidity without wind and rain is a meteorological condition that never continues for any length of time in Christchurch, so that it is possible that the tendency to spread might have been still greater under such conditions.

The population of the Canterbury Health District is 159,059, of which about 57,000 are resident in Christchurch and suburbs. It might be expected therefore that the Christchurch returns would influence the gross returns, so as to make the gross monthly totals resemble the monthly totals for Christchurch and suburbs. This is not so, however, as the monthly totals for Christchurch and suburbs, and for the part of the district outside Christchurch, and the gross totals have all practically the same relative monthly distribution—that is, a gradual decrease to a minimum in December, and a rise to a maximum in March.

The figures for Timaru show a rise to a maximum of twenty-one in April, 1902 (there having been seven cases reported in the previous March), then a decrease during the winter, occasional cases being still reported, and another outbreak in the summer and autumn, 1903, with a maximum of thirty cases in April.

Waimate forms a marked exception to the other towns, as there the epidemic was at a maximum in November, and there was no increase in the number of cases reported in the autumn.

Oamaru is the only large town in the district in which scarlet fever has not been prevalent in epidemic form at any time of the year.

*Age.*

As the age of the patient is not entered on the notification form, and it is impossible to send an Inspector to every case to obtain the age, no reliable information has been obtained on this point. In Christchurch, however, more information has been obtained about the ages; and it would appear that a larger number of persons over the age of ten have been attacked in proportion to those under the age of ten than would have been expected judging from the statistics of other countries.

*Sex.*

Here, again, the information obtained from the notifications is incomplete, as in many cases the surname only is given, or a surname with an initial of the Christian name. Of the 846 numbers recorded where the sex is known, there have been 361 males and 485 females. This is in accordance with the statistics of other epidemics, where it has been found that more females are attacked than males.

*Mortality.*

In Christchurch and district there have been 339 cases notified and 16 deaths recorded during the year. This gives a case-mortality of 4·7 per cent. Of these deaths 1 occurred in Sydenham in January, 1 in Christchurch in January; in March—2 in Linwood, 2 in Papanui, 2 in Woolston, 3 in Christchurch. The notifications received in these districts in January, February, and March number 174, so that, putting the case-mortality in the most unfavourable light, it is only as high as 6·3 per cent. Even this percentage of deaths is a low one. In some epidemics in England it has been as high as 30 per cent.

Though the type of the epidemic has been mild throughout the district, it would be a great error to assume, as has been done by many people who have only come into contact with mild cases, that there have been no severe ones. Several of the cases that I have seen at the Hospital have been of a very severe type, and would have afforded a useful object-lesson to those people who think it unnecessary to take any precaution to prevent its spread.

*Hospital Accommodation.*

The epidemic found the local authorities totally unprepared to cope with the epidemic by providing sufficient hospital accommodation.

*Christchurch.*—Attached to the Christchurch Hospital is a separate building accommodating sixteen patients suffering from infectious disease, which has been made to accommodate eighteen patients, owing to the continued pressure for accommodation arising from the epidemic. There are no facilities for administering it apart from the General Hospital, and in the past cases of scarlet fever have occurred in the general wards, the occurrence of which has been put down to the two buildings having to be administered by the same staff in many ways.

In October a meeting of the representatives of local bodies in the district of the North Canterbury Hospital Board was held at the Christchurch City Council Offices, at which the local authorities agreed to delegate their responsibilities and powers under sections 37 to 41 of "The Public Health