

is shown by the figures for England and Wales, where alone of all countries in north-west Europe there has been over these years a progressive marked reduction in the incidence of diphtheria.

In New Zealand a considerable number of children have been inoculated, but not sufficient to make us secure against the possibility of a serious epidemic. If anything, inoculation has been more actively carried out in the North Island than in the South Island, and yet, as has been shown, the incidence in the North Island has been sixteen times as high as in the South Island. It is clear that some other factors are at work, as was the case in Norway, Sweden, and the Netherlands before the war. Until at least 70 per cent. of the children under five years of age have been protected against diphtheria there can be no certainty that other factors may not combine to cause an epidemic. With the medical staff at present available to the Department this represents an impossible achievement without considerable help from private practitioners. For this reason the Department is concentrating on children of seven years and under, who are the most susceptible. The ideal to be arrived at is the inoculation of every child at six months of age, with a reinforcing dose on entering school at five.

*Scarlet Fever.*—Notifications numbered 1,465 (Europeans, 1,454; Maoris, 11), compared with 5,081 for 1945. The last peak of scarlet fever incidence was in 1944 with 7,622 notifications.

*Enteric Fever.*—There were 98 cases of enteric fever (Europeans, 49; Maoris, 49), and of these 15 were paratyphoid fever. Of the Maori cases, 18 were concerned in one outbreak at a pa in the Rotorua district. The water-supply was from shallow wells that were probably polluted from pit privies in the close vicinity. Immediate steps were taken to obtain for the pa a piped supply of good water from the neighbouring borough.

During June–July there was an outbreak involving 8 cases and 1 death in Southland. Two families only were concerned, and the source of infection was thought to be a woman who was a contact of both families and who had occasional attacks of diarrhoea. She was admitted to hospital for thorough bacteriological investigation, but it could not be proved that she was a carrier.

*Polio-myelitis.*—There were 113 cases notified, including 1 case in a Maori. This was a considerable increase on the numbers for the two preceding years, and as the majority of cases occurred in the first five months of the year it appeared as if an epidemic of the disease might be impending. After May, however, the incidence declined and only sporadic cases occurred throughout the rest of the year.

*Tetanus.*—A total of 25 cases were notified, and these included 4 cases of *Tetanus neonatorum* traced to the use of dusting-powders that were heavily infected with tetanus spores. The first two cases occurred in separate hospitals and were notified simultaneously to the Medical Officer of Health, Auckland. Inquiries were immediately set on foot, and the only common factor was a proprietary brand of baby powder that had been used in each case. The powder was traced back to the place of manufacture and found to be prepared from imported crude talc, nothing having been done during processing to render it sterile. A week later notification was received of a third case of *Tetanus neonatorum*, and in this case also the same brand of baby-powder had been used. Samples of the powder used—similar powder of the same brand—and samples of the crude talc were all examined for the presence of tetanus spores, and in all cases tetanus infection was found to be present. Steps were immediately taken to caution all midwives and maternity nurses against the use of unsterilized powders, but before the warning was issued a fourth case occurred, this time in Wellington. It is noteworthy that while the infected powder was used for the actual cord dressing in one case, it was only used as a general dusting-powder in the other cases. The infection therefore must have been a very heavy one. All 4 cases proved fatal.