

- (4) A circular memorandum was despatched to all doctors in the Canterbury and West Coast Health District. The Head Office of the Department and Medical Officers of Health of all other South Island districts were similarly notified.
- (5) Arrangements were made with the milk-vendor to have all his milk pasteurized. This was possible by arrangement with the local butter-factory. The plant available was designed only for pasteurizing cream by a continuous-flow process and was not ideally suited to the pasteurization of milk. It was considered, however, that the treatment could be sufficiently well controlled to guarantee that the treated milk would be safe. Milk was brought from the dairy in cans and bulked at the factory. The cans were then steam sterilized at the factory and returned to the dairy. The cans for the round were kept separate. Milk when pasteurized was filled into them, and on the completion of the round they were returned to the factory for sterilizing. They were not permitted to go back again to the dairy. Arrangements were made for frequent sampling of the milk-supply particularly with a view to determining whether the pasteurization procedure was being carried out effectively.
- (6) A request was made to the North Canterbury Hospital Board to establish a bacteriological laboratory at the Kaikoura Hospital in order to facilitate the bacteriological investigation of cases and of possible carriers, thereby obviating the inconvenience and delay which would be inevitable if all specimens had to be sent to Christchurch. This was done on 29th October.
- (7) Arrangement were made for the regular and frequent sampling of the water-supply. Some of these were taken by the Sanitary Inspector, others by the Engineer to the Kaikoura County Council, who very willingly agreed to co-operate in this matter. It was necessary to transmit all these samples on ice to Christchurch for examination by the Government Analyst.

COURSE OF THE OUTBREAK

After an isolated case on 26th September, 6 further cases occurred during the following two weeks. The outbreak reached its maximum incidence in the week ending 20th October, by which time more than half the total cases had already occurred. Even if the measures taken proved entirely successful, the epidemic could be expected to continue thereafter for a further 10–15 days relatively unabated. Further isolated cases might still occur after that due either to longer than average incubation periods or to secondary infection from cases occurring earlier in the outbreak. The first delivery of pasteurized milk was made on the morning of October 24th, and subsequent to 8th November—that is, 15 days after pasteurization was instituted—only 6 cases occurred. Subsequent to 14th November—*i.e.*, 21 days after the community had been served with pasteurized milk (not an extreme incubation period)—only 2 cases were noted. Experience, therefore, was closely in accord with expectations. It is of interest to note that by the time that the nature of the outbreak was firmly established—*i.e.*, 22nd October—45 out of the total of 78 cases had already commenced to be ill.

ACCOMMODATION

In order to accommodate the rapidly increasing number of cases, arrangements were made to evacuate all patients from the medical and surgical wing of the hospital. The maximum number that could be catered for by these means, allowing for the expected preponderance of children, was 40. It was anticipated at first that this might suffice.