

To combat the disease the carriers have to be detected, and it is the custom at Trentham and Featherston, as far as possible, to swab all new recruits on arrival and all reinforcements before embarking for England. These swabs are examined microscopically and bacteriologically, and all carriers are isolated and treated in inhalation-chambers twice a day with sprays of sulphate of zinc or chloramine T. until their throats are clear. This involves a great deal of labour, but it has been cheerfully and capably carried out, first by the Wellington Bacteriological Laboratory under Major Hurley, and in addition latterly at laboratories established at Trentham and Featherston under Major Leahy, N.Z.M.C., and Lieutenant Ross.

Since this system has been established we have had no cases of cerebro-spinal fever on our transports, and the value of the spraying-chambers which have been fixed on all our transports, similar to those in our camps, has again and again been testified to by Medical Officers proceeding with troops, owing to their efficiency in controlling influenza, sore throat, mumps, and measles.

*Pneumonia*.—91 cases, with 39 deaths. At Trentham there were 64 cases, with 21 deaths. The P.M.O. states that of 48 cases which followed upon measles 16 were probably complicated by cerebro-spinal meningitis. At Featherston there were 19 cases, with 17 deaths: these were all cases of measles which developed pneumonia. At Narrow Neck Camp there were 8 cases, with 1 death. At Awapuni there was none.

There are two classes of pneumonia—one of simple lobar pneumonia, to which the cases at Narrow Neck Camp and the bulk of the cases which recovered at Trentham belonged; and the other broncho-pneumonia following on measles, which is a very fatal type of disease, being of a septic character. Some of these cases may have been complicated by the cerebro-spinal meningitis as the P.M.O., Trentham, believes, but I do not think it has been proved that all were so complicated. The A.D.M.S. (S.) has attached a full report on the subject. The indications for prevention by swabbing the throats of all within a ward—doctors, nurses, orderlies, as well as patients—where any of the patients are suffering from measles, influenza, or throat affections, and careful isolation of all suspects, are carefully carried out.

*Scarlet Fever*.—15 cases: Trentham, 4; Featherston, 4; Narrow Neck, 7; Awapuni, none. No deaths. It is satisfactory to note that in the case of notifiable diseases the camp Medical Officers were able to take prompt action and stop any spreading. All the cases at Trentham and Featherston were imported and promptly dealt with. At Narrow Neck the disease was imported and spread to some contacts, who were all isolated, and no more cases occurred. The same remarks apply to *diphtheria* (6 cases): Trentham, 3 cases and 1 death; Featherston, 3 cases, which all recovered.

*Alcoholism*.—91 admissions: Trentham, 39; Featherston, 52.

*Nervous System*.—129 cases, of which 41 were cases of epilepsy, with 1 death. One death also occurred from convulsions.

*Mental Cases*.—19 in various forms, of which the largest number were cases of delusional insanity. There was only 1 case of alcoholic insanity. Some of these cases had previously been in asylums, but had eluded the recruiting Medical Officers.

*Diseases of the Circulatory System*.—There were 65 admissions for diseases of the heart and circulatory system, with 5 deaths—one from valvular disease, which occurred at Auckland whilst on leave; 1 of angina pectoris; 1 of heart-failure after an anæsthetic; and 2 from disordered action of the heart and syncope.

*Digestive System*.—There were 966 admissions: Featherston, 654; Trentham, 193; Narrow Neck, 19; Awapuni, 17. The large number of admissions at Featherston was due largely to gastro-enteritis, which occurred chiefly in February and March and accounted for 334 cases. These cases occurred chiefly immediately after the camp was occupied, and have been ascribed to the presence of large numbers of flies, and the dirty condition of parts on the outskirts of the camp occupied by the civilian workmen engaged in building the camp. The water-supply was carefully analysed and found free from contamination. Thanks to the skill and devoted labours of Professor Kirk the fly problem was speedily and effectively dealt with; careful sanitary supervision and cleaning-up was carried out by Major Gunn, the P.M.O., and his officers, and the epidemic, which was mild in character, cleared up.

There were 69 admissions for appendicitis, with 2 deaths, one of which died after operation in Christchurch, and the other after a sudden attack at sea.

*General Injuries*.—Effects of heat: 4 to burns and scalds; 10 to effects of sun in January and March whilst training—none serious. Other cases, 9, including 7 deaths out of hospital, 1 from shock, 2 from drowning, 1 from falling down a well, and 3 from falling and being run over by trains.

*Local Injuries*, 610. Sprains and contusions accounted for most. 118 occurred at Trentham and 310 at Featherston, the large number at Featherston being partly accounted for by the rougher ground and the number of mounted troops and Artillery being stationed there.

*Poisons*.—Formalin: 1 admission and 1 death (accidental). Ptomaine poisoning: 5 admissions; no deaths. Gas, 1—carbon monoxide in power-house (accidental; died).

*Suicides*.—At Trentham, 1, by hanging; at Featherston, 2, by cutting their throats. All were temporarily insane: no reason could be assigned otherwise for their acts.

*Health of the Various Reinforcements*.—The Reinforcements which had the largest amount of sickness were the 17ths, with a percentage of 182 admissions and a constantly-sick rate of 4.9 per cent.; the 21st, with an admission-rate of 176 and a constantly-sick rate of 3.8; the 19ths, an admission-rate of 167 and a constantly-sick rate of 1.7; and the 18ths, admission-rate of 160, constantly-sick rate 2.3. The healthiest were the Engineers—admission-rate 12, constantly-sick rate 3; the Artillery, 44 and 1; the 23rds, 41 and 1.

The months which showed the largest and the least numbers of admissions were as follows:—

At Trentham: Largest—July, 876; November, 530; June, 527; October, 523: in all of which influenza was the main factor in causing the admissions. The least numbers were in—December, 130; April, 222; March, 227.