

The above table is compiled from influenzal infection occurring in Featherston Camp. Owing to the heavy incidence in the camp and the depletion of the staff by the disease it was not possible to keep accurate records of all cases, but reports indicated that the average age at least of the serious cases was 29 years. The Principal Medical Officer, Featherston, remarks that the age incidence was chiefly between 25 and 40, and those over 50 were comparatively immune. This seems to be the general experience.

The younger soldier suffered in common with the others, but the incidence of broncho-pneumonia and the mortality among these was less. The table seems to show a heavy incidence among men aged 20 years, but this is probably due to the age distribution in camp. At this period a number of men just attaining military age were in training; the men of 20 and upward had already gone.

During the epidemic in the camps of pneumonia following measles and influenza, 1915-16, the incidence fell chiefly on the younger men between 19 and 23. That epidemic was probably meningococcal in origin. The incidence among men of more mature years suggests that the meningococcus did not play a great part in the epidemic of 1918.

Incubation Period.

All the evidence from the camps points to a very short incubation period, possibly under twenty-four hours in susceptible cases, probably not longer than forty-eight hours.

Period of Infectivity.

No very reliable data on this point have been acquired. With so universal a distribution of infection as occurred in November the detailed histories of cases cannot be traced accurately. It is certain that the cases are very infective in their earlier stages, and probably this rapidly diminishes as convalescence approaches. I have not known any case of infection attacking the attendants in the civil convalescent hospitals, which would suggest that after the temperature has been normal for two or three days the infective period is over. In one case observed the sputum was clear of pneumonic or influenzal bacilli on the fifth day, despite a relapse on that date.

Bacteriological Considerations.

The influenza bacillus seems to have been constantly present in both waves, but in the second, among the earlier cases, it was less prominent, and in its place a diplococcus having some of the features of a pneumococcus was more prevalent. Later the influenza bacillus appears to have become again more noticeable. The diplococcus was also observed in the cases from the troopship "Tahiti." Major Ritchie, N.Z.M.C., reports that on investigation this proved to be a streptococcus.

It is significant that this streptococcus was first observed in 1917 in a severe outbreak in one of the American camps. They were also present among pneumonic cases arising as a sequel to a measles epidemic in Sling Camp among the 32nd Reinforcements. At present we do not know what part this diplococcus played in the epidemic. It seems possible that, though at first an associate of measles infection, this organism later found an opportunity for spreading in company with the more widely distributed influenzal bacillus, and took an ever-increasing part in the severity of the infection. Symbiosis of two organisms of this sort is a well-recognized factor in epidemiology. A similar relationship is now known to exist between the meningococcus and various catarrh-producing organisms, such as the influenza bacillus and the infective agent in measles, and in the New Zealand camps in 1915 and 1916 this produced epidemics of great severity. Any massing of catarrhal infections is followed by the appearance of complicating organisms, and the virulence of these rises as the opportunity for their spread increases, on the principle well known to bacteriologists that the rapid transference of an organism from victim to victim enhances its infectivity. In this connection attention may be drawn to the following table, which indicates the increase in infected throats arriving at the camps during the months when the first wave of influenza was prevalent:—

Month.	On Mobilization.		On Embarkation.	
	Diphtheria.	Cerebro-spinal Meningitis.	Diphtheria.	Cerebro-spinal Meningitis.
January .. .. .	..	8	..	5
February .. .. .	..	8	..	5
March	1	3	..	..
April .. .. .	..	13	..	..
May	1	19	..	..
June	4	21	..	9
July	2	11	..	..
August	1	21	..	..
September .. .. .	..	21	..	4
October	1	26	..	..
November .. .. .	..	13	..	..
December .. .. .	..	..	..	..
Totals	10	164	..	23