striking when we examine the weekly return for the deaths from the ninety-six large towns in England as shown in the table below :—

Week ending	Ninety-six Large Towns, including London.	London County.	London Outer Ring.
19th October	1,895	371	390
26th October	4,482	1,256	969
2nd November	7,412	2,458	1,705
9th November	7,560	2,433	1,535
16th November	5,916	1,665	907
23rd November	5,106	1,178	606
Totals	32,371	9,361	6,112

Here we find that the crest was reached on the weeks ending 2nd and 9th November, differing little from our own. It is evident, then, that the second epidemic wave did not travel as such to New Zealand from England.

A study of the general epidemiology of the recent outbreak shows that this division into a primary mild and a secondary severe and explosive wave is, so far as our information goes, universal.

In Glasgow there was a distinct second-wave explosive outburst on the 21st September, chiefly among children at first, and Spain also seems to have developed a secondary wave of great intensity about this time. The next marked explosion (a term which seems best to describe this type of epidemic) of which we have definite information was that on the transport "Tahiti" at Sierra Leone on the 26th September. The infection in this case was, we know, brought from Europe on a naval vessel forming one of the convoys; and it may be well to point out here that the infection seems so far to have centred round maritime trade centres, such as Glasgow and Portsmouth, suggesting the influence of shipping and the movement of troops from overseas.

The Cape Town epidemic was the first of the conspicuous outbreaks in a general population, and this took place about the first week in October; and in this connection I may mention that a New Zealand transport called at Cape Town on the 25th September, left on the 27th September, and on this boat there was already an epidemic of influenza picked up at Durban. Though the troops went ashore at Cape Town, and had an opportunity of picking up infection, only cases of a mild type arose during the voyage to Sierra Leone. There were some 150 of these, so that there was every encouragement for the exaltation of infective virulence. Yet a week after the departure of the troopship Cape Town was in the throes of a severe epidemic. It is scarcely possible that the infection was not already in Cape Town. We must suppose that it had at that time not developed its virulent character. A brief period of preliminary circulation among the Native cantonments will possibly be found to have been the factor which led to the heightened virulence.

In America the second wave seems to have first developed in Boston about the end of September, and thence it spread westward; but it was not until the week ending 16th October that it became general throughout the States, and even then had not attained a very high degree of virulence. In San Francisco influenza took on a severe form on the 21st October, and an explosion of great violence occurred, the peak of intensity being on the 27th October. Regarding Vancouver we have little information, but know that severe cases were *not notified* in the week ending 11th October.

In London it began on the 21st October; in France, among the troops, on the 8th October. We see, then, that this second epidemic wave throughout the world took on an explosive character and manifested itself in various places in outbursts of violent character but short duration, in which pneumonic complications were very prominent. The wave became pandemic in the later part of October and the beginning of November, just when the outburst came to New Zealand.

Probable Factors influencing the Epidemic.

It is difficult to explain the almost simultaneous world-wide outbursts which have characterized the second wave of infection. This wave has surprised and puzzled epidemiological students all over the world. Sir Arthur Newsholme, in an address published in the *Lancet* of the 23rd November, reviews the history of past epidemics, and points out that this secondary wave of October-November was one never before experienced. The interval between the first and second waves was shorter than any previous epidemic, being sixteen weeks instead of from thirty-five to seventy weeks. Moreover, the first wave in Britain was in midsummer, a hitherto unknown experience; and then came the early autumnal second wave, of very brief duration but great severity, whereas generally the waves appear in winter or spring.

Movement of Troops.—Sir Arthur Newsholme accounts for this unusual outbreak by the abnormal state of the world's population resulting from the war—the huge masses of troops being hurried from one country to another in conditions of unavoidable crowding, the massing together of men from far and near under unaccustomed conditions and before they had an opportunity to acquire gradually some degree of immunity, the rapid transference of infection among the susceptible men, and so on. Successive waves of infection of increasing virulence are thus brought into a country and so add to the infectivity of existing disease.