

This occurrence has, it is believed, a definite significance in relation to the influence epidemic. In the United States in the spring of 1918, a number of definite local outbreaks of influenza were observed; thus in Fort Oglethorpe, near Chatanooga, Tenn., in March; in Chicago during March; in San Quentin prison, California, in April, October and November. At Camp Funston recurrent outbreaks of pneumonia were observed in March, April and May of 1918 and were definitely associated with co-incident epidemics of a mild type of influenza.

The rise in mortality from pneumonia, this very similar type of disease, in the spring of 1918 is so sudden, so marked and so general throughout the United States as to point very clearly to a definite relation. Everything indicates that the increased mortality from pneumonia in March and April of 1918 was the consequence of a beginning and largely unnoticed epidemic of influenza, the beginning in this country of the pandemic which developed in the autumn of that year.

In British cities the epidemic manifested three distinct waves—the first and slightest in point of mortality occurring in June and July, the second and most severe in November, the third in February and March. Data which need not be cited here in detail indicate that the course of the epidemic in western Europe generally was similar. In cities of India the sequence was similar but the mortality far greater. In the United States the epidemic developed more largely in a single wave during September, October and November. If, however, the epidemic already mentioned as occurring in the spring be considered the first phase and the explosive outbreak of the autumn the second, a third phase of recrudescence is quite evident in many areas. In general, this winter recrudescence was less marked in those cities which suffered most severely in the autumn epidemic.

The prevalence of a serious epidemic of influenza was first recognized in and around Boston in September of 1918. Within about two weeks it was general in the Atlantic seaboard, developing a little later among cities further west. Rural districts were usually attacked somewhat later than large cities in the same sections.

In the cities east of the line of the Appalachians the excess mortality from pneumonia and influenza during the weeks ended September 14, 1918, to March 1, 1919, was approximately 5.6 per 1,000; in cities between the Rocky Mountains and the Appalachians 4.35; and in those of Pacific Coast 5.55 per 1,000.

Notwithstanding this general geographic relation, there are notably wide differences in the mortality rates of individual cities in the same section, even between cities close together, differences which are not as yet