PUBLIC HEALTH

Possible 1932 Flu Epidemic Indicated by Ten-Year Survey

Three Minor Outbreaks in Decade Also Shown in Statistics on Industrial Workers

A SLIGHT increase in influenza this year over last year, with no big outbreak until 1932, is the probable forecast for this disease, based on a survey of the past ten years made by the Metropolitan Life Insurance Co.

The statisticians of the company point out that because ten years is not a very long time in the history of the disease, and because the great pandemic of 1918 does not exactly fit into the picture of a three-cycle, no definite prediction can be made.

"From such a short period it would be hazardous to draw any sweeping conclusions," they stated. However, their records show that every three years since 1920 has seen a big increase in the number of cases of influenza. The big years, 1920, 1923, 1926, 1929, were followed by two years of comparatively few cases.

The seasonal peaks in all the years correspond closely in the company's records. In the second year after an outbreak, the seasonal peak is a little higher than in the first. Such a seasonal increase during the next few months would indicate that the disease is following its usual cycle. So far, no increase in cases of influenza has been reported to the U. S. Public Health Service at Washington.

While the 1918 pandemic does not fit into the three-year cycle, it had many unusual features, which indicate that it may stand alone as an exception to the rule. For instance, it did not follow the usual seasonal course, but broke out suddenly in September and continued high for about eight months. The three-year outbreaks, on the contrary, start in about the first of the year and reach their peak in February or March.

"If the general character of the triplets of annual waves observed in the past ten years should continue to show itself in the future, then the year 1930 with its low death rate from influenza would be typical in its position immediately following the high crest of 1929," the company's report stated. "It would be followed in 1931 by a wave of somewhat higher but still moderate crest; and the year 1932 would then follow with another maximum death rate, not to be equalled again for two years thereafter."

Officials of the U. S. Public Health Service do not think the occurrence of influenza epidemics can be described by the term cycle, and they likewise state that no prediction as to the time of the next epidemic can be safely made.

Their records show epidemics in the years 1920, 1922, 1923, 1926, 1928, and 1929. These records are compiled from reports of state health officers and include the general population of the country. The insurance company's records, based on illness among their policy holders, are limited to the industrial population. This probably explains the difference in naming epidemic years.

Epidemic In England Now

England is now experiencing an epidemic which America has escaped so far. An increase in the disease has occurred in this country within the last few weeks, but this is no cause for alarm, the U. S. Public Health Service has stated. An increase in cases of influenza is to be expected at this season.

State health officers reported 2,687 cases for the week ending January 14. For the previous week there were 1,572. However, these figures are no higher than the figures for this time last year, health officials pointed out.

Whenever the spectre of influenza rears its head, even in far-off countries, health officials feel a natural concern. The speed with which influenza outbreaks travel, and the utter lack of knowledge of how to control them, are among the reasons for such uneasiness.

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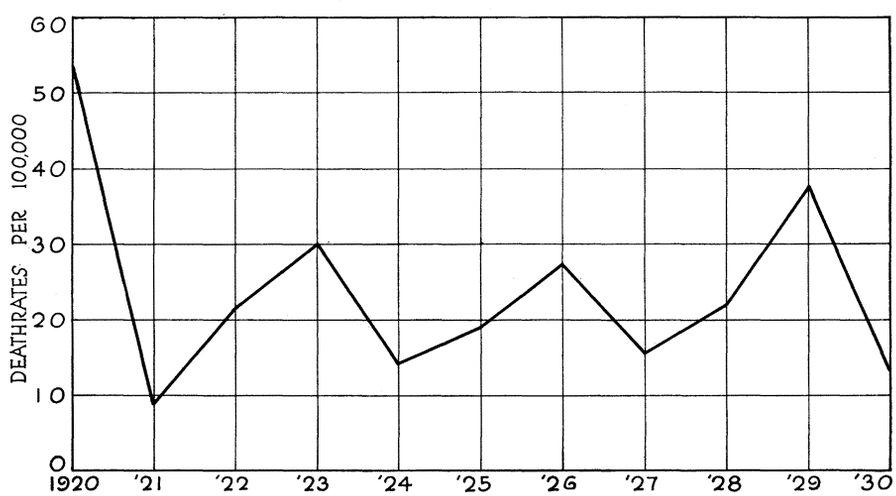

HOW INFLUENZA COMES AND GOES

A curve showing three epidemics of the past decade following the great pandemic of 1918. These statistics were carefully compiled from industrial insurance policy holders.

BOTANY

Tropical Fungus Spores Resist Cold As Well As Heat

A TROPICAL fungus whose reproductive bodies, or spores, are resistant to degrees of cold never encountered even by Arctic plants has been studied by Anna F. Faull of Harvard University. The material she used in her tests was found on a burnt stump in Cuba after a severe brush fire, and belongs to a species frequently found on burnt-over lands.

To test its resistance to heat, Miss Faull subjected its spores to temperatures slightly higher than 50 degrees Centigrade, which is halfway to the boiling point. This had little effect, except that it delayed their sprouting a little.

Then she tried the effects of low temperatures, down to the deadly cold of liquid air. But this also failed to discourage this heat-resistant fungus.

Science News Letter, January 24, 1931