

INFLUENZA STUDIES

I. On Certain General Statistical Aspects of the 1918 Epidemic In American Cities.¹

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I. Introduction

The pandemic of influenza which swept over the world in 1918 was the most severe outbreak of this disease which has ever been known, and it takes an unpleasantly high rank in the roster of epidemics generally. It is certainly impossible now, and perhaps always will be, to make any precise statement of the number of people who lost their lives because of this epidemic. But it is certain that the total is an appalling one. Undoubtedly a great many more people died from this cause than from all causes directly connected with the military operations of the Great War. In the United States alone conservative estimates place the deaths from the influenza epidemic at not less than 550,000, which is approximately five times the number (111,179) of American soldiers officially stated² to have lost their lives from all causes in the war. And the end of the epidemic is by no means yet reached. In England and Wales the curve of mortality from influenza was even in 1907, seventeen years after the epidemic of 1890, higher than it was in any of the 40 years preceding 1890. The decline in the mortality rate after the 1848 epidemic in Great Britain was similarly slow.³ There is no evident reason to suppose that conditions following the first explosion of this present epidemic will be essentially different from those which obtained in the earlier cases.

For two reasons the hygienist and epidemiologist should be interested in the intensive study, from every possible angle, of the present pandemic. In the first place, owing to the advances which have been made in every branch of medical science since the epidemic of 1890, there is now available a much more adequate investigational armament with which to attack the problems raised by such an epidemic than was the case earlier. Furthermore, the whole machinery for getting accurate records of the incidence and results of the outbreak are much better now than they were 30 years ago. This is particularly true in the United States. The records of mortality connected with the present epidemic are unquestionably more complete and accurate than any that have ever before been available in this country for any epidemic of anything like so great extent or force.

In the second place, the very magnitude of this epidemic is in itself a challenge to the whole medical profession. The hygienists of the world are the standing army, which is, in theory at least, maintained by society to organize and hold the defenses against such dread invaders as these. Such a blow as the present one may well inspire a slogan like that which saved Verdun, "*Ils ne passeront pas.*" If every epidemiologist does not take advantage of the present opportunity to investigate with all possible thoroughness epidemic influenza, to the end of making a better defense next time, he will have been derelict in his plain duty.

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¹ Papers from the Department of Biometry and Vital Statistics, School of Hygiene and Public Health, Johns Hopkins University, No. 5. This investigation was carried on in consultation with the United States Public Health Service, Office of Field Investigations on Influenza, Dr. W. H. Frost, surgeon in charge.

² As of date Apr. 30, 1919.

³ Cf. Article on "Influenza" in Encyclopedia Britannica, 11th Edition, for a conveniently accessible verification of these statements.

