

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

America's Forgotten Pandemic

The Influenza of 1918

Second Edition

Between August 1918 and March 1919 the Spanish influenza spread worldwide, claiming at least 30 million lives, more people than perished in the fighting of the First World War. It proved fatal to at least a half-million Americans. Yet, the Spanish flu pandemic is largely forgotten today. In this vivid narrative, Alfred W. Crosby recounts the course of the pandemic during the panic-stricken months of 1918 and 1919, measures its impact on American society, and probes the curious loss of national memory of this cataclysmic event.

In this new edition, with a new preface discussing the recent outbreaks of diseases, including the Asian flu and SARS, *America's Forgotten Pandemic* remains both prescient and relevant.

Alfred W. Crosby is a Professor Emeritus in American Studies, History, and Geography at the University of Texas at Austin, where he taught for more than 20 years. His previous books include *Throwing Fire: Projectile Technology Through History* (Cambridge, 2002), *The Measure of Reality: Quantification and Western Society, 1250–1600* (Cambridge, 1997), and *Ecological Imperialism: The Biological Expansion of Europe, 900 to 1900* (Cambridge, 1986). *Ecological Imperialism* was the winner of the 1986 Phi Beta Kappa book prize. It has been published in Portuguese, Spanish, Italian, Greek, German, and Japanese. *The Measure of Reality* was chosen by the *Los Angeles Times* as one of the 100 most important books of 1997.

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

America's Forgotten Pandemic

The Influenza of 1918

Second Edition

ALFRED W. CROSBY

University of Texas, Austin



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition
Alfred W. Crosby
Frontmatter
[More information](#)

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa
<http://www.cambridge.org>

© Alfred W. Crosby 2003
© Cambridge University Press 1989

This book is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without
the written permission of Cambridge University Press.

First published in 1976 as *Epidemic and Peace: 1918* by Greenwood Press, Westport, Conn.
First published by Cambridge University Press 1989
Reprinted 1990, 1997
Second edition first published 2003

Typefaces Caledonia 10/13 pt. and Optima *System* L^AT_EX 2_ε [TB]

A catalog record for this book is available from the British Library.

Library of Congress Cataloging in Publication data available

ISBN 0 521 83394 9 hardback
ISBN 0 521 54175 1 paperback

Transferred to digital printing 2004

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

To Katherine Anne Porter, who survived

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

CONTENTS

List of Graphs and Tables	<i>page</i> ix
Preface to the New Edition	xi
 PART I. An Abrupt Introduction to Spanish Influenza	
1. <i>The Great Shadow</i>	3
 PART II. Spanish Influenza: The First Wave—Spring and Summer, 1918	
2. <i>The Advance of the Influenza Virus</i>	17
3. <i>Three Explosions—Africa, Europe, and America</i>	37
 PART III. The Second and Third Waves	
4. <i>The United States Begins to Take Note</i>	45
5. <i>Spanish Influenza Sweeps the Country</i>	56
6. <i>Flu in Philadelphia</i>	70
7. <i>Flu in San Francisco</i>	91
8. <i>Flu at Sea on the Voyage to France</i>	121
9. <i>Flu and the American Expeditionary Force</i>	145
10. <i>Flu and the Paris Peace Conference</i>	171
 PART IV. Measurements, Research, Conclusions, and Confusions	
11. <i>Statistics, Definitions, and Speculation</i>	202
12. <i>Samoa and Alaska</i>	227
13. <i>Research, Frustration, and the Isolation of the Virus</i>	264
14. <i>Where Did the Flu of 1918 Go?</i>	295

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

viii / CONTENTS

PART V. Afterword

15. <i>An Inquiry into the Peculiarities of Human Memory</i>	311
Index	329

GRAPHS AND TABLES

Influenza Deaths, U.S., 1917	<i>page</i> 22
Pneumonia Deaths, U.S., 1917	23
Influenza and Pneumonia Deaths, Louisville, Kentucky, April, 1918	24
United States Naval Forces Ashore in the U.S., Deaths due to Influenza and Pneumonia, Autumn, 1918	58
United States Army in the U.S., Deaths due to Influenza and Pneumonia, Autumn, 1918	59
Deaths due to Influenza and Pneumonia in Cities in the U.S., Fall, 1918 and Winter, 1919	60
Chronological Map of the Influenza Epidemic of 1918 in the U.S.	65
Deaths due to Influenza and Pneumonia in Philadelphia	86
Cases of Influenza and Deaths due to Influenza and Pneumonia in San Francisco	114
Influenza and Pneumonia Admissions and Deaths in Allied Armies in France	159
Deaths in Paris due to Influenza, Pneumonia, and All Causes, August, 1918–May, 1919	181
Mortality Figures, Influenza and Pneumonia in U.S., 1918–19	209

PREFACE TO THE NEW EDITION

In 1976 when this book was first published, it seemed to be a piece of medical antiquarianism, informative and interesting, I hoped, but with little immediate relevancy to our then-current situation. In the advanced nations the chief killers were no longer infections, not even renowned villains like tuberculosis, much less influenza. Public health measures and penicillin and the other new antibiotics had demoted all the major pathogens to minor threats. They had been superseded by the degenerative diseases of middle and old age such as cancer and arteriosclerosis. We weren't looking forward to these, but we were confident that we would be around long enough to get old and die of them.

In 1969 the Surgeon General of the United States, William H. Stewart, assured us that we had left infectious disease behind in our dust. Three years later, in the final edition of the classic *Natural History of Infectious Disease*, author and Nobel laureate Macfarlane Burnet concluded that "the most likely forecast about the future of infectious disease is that it will be very dull."¹

There was the swine flu scare of 1976 that for a few months contradicted such optimism. The flu experts told us that we might be on the brink of another experience like that of 1918, when life expectation in the United States plunged by twenty years. But the strain of virus that triggered the swine flu scare did not trigger a pandemic, and the millions of dollars spent on the production and distribution of a new flu vaccine were wasted. To many outsiders the whole affair seemed farcical, and the influenza experts and gloom purveyors emerged from the experience with bedraggled reputations.

A less significant effect was that my study of the 1918 pandemic lost the patina of contemporary relevancy it had possessed for a while. I didn't mourn the loss: rooting for a medical disaster because it might help book sales would certainly have qualified me for residency somewhere in the lower circles of Dante's hell.

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

xii / PREFACE TO THE NEW EDITION

The first Cambridge University Press edition of my book came out in 1989, by which time events had resuscitated the study of infection. AIDS had struck like a thunderbolt, infected legions, and killed thousands—and there was no cure or promise of one. For some of us, the malady recalled to memory what the Surgeon General of the United States Army, Victor Vaughan, had written about the peak of the 1918 pandemic: “At that moment I decided never again to prate about the great achievements of science. . . .”²

But AIDS was a sexually transmitted disease and presented little danger to anyone with a strong sense of self-preservation. To most it seemed an exception that served to highlight the comfortable ordinary. The experts with white coats and stethoscopes still had things under control, and we would last until the degenerative maladies got us. For certain, the 1918 flu was ancient history and no more pertinent to our lives than the Sweating Sickness of Tudor England.

In 2003 that confidence is shaking in its boots. AIDS afflicts millions and the white coats still cannot cure it, although they can prolong its victims' lives for years. Tuberculosis, under control a generation ago, has made a comeback with the surfacing of antibiotic-resistant strains. Thugs we never heard of before, Lyme Disease and West Nile Fever, for example, stalk us in our backyards and parks where we picnic, and jungle monsters like Ebola threaten us from TV screens.

The latest fright is SARS (Severe Acute Respiratory Syndrome), at first suspected of being a new strain of influenza.³ It isn't, but the disease is transmitted by droplets in the breath like flu, that is to say, stealthily and swiftly. As I write this, SARS has spread from southern China, allegedly its point of origin, to other locations in eastern Asia and to North America and Europe. It is well on its way to circling the globe in a matter of weeks.

SARS has flu-like symptoms: runny nose, sore throat, aches, and fever. There doesn't seem to be any cure more effective than bed rest, as was so with the 1918 flu. A careful and conservative estimate of those who died of influenza in the World War I pandemic puts the number at a minimum of thirty million, three times the number of combat casualties of that conflict.⁴

Today we have antibiotics to cure the deadly secondary infections that so often followed on the heels of the 1918 flu, which should reduce the death rate of any similar pandemic. We know vastly more about that flu virus than we did that year or when I first wrote about it. Dr. Jeffrey Taubenberger, Ann Reid, and their associates have examined tissue samples preserved since 1918–19 by the U.S. Armed Forces Museum of Pathology in

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

PREFACE TO THE NEW EDITION / xiii

Maryland and by the permafrost in Alaska and have reconstructed much of the genome of the pandemic virus.⁵ We have vigilant worldwide surveillance systems like Japan's National Institute of Infectious Diseases, the United States Centers for Disease Control, and the World Health Organization to watch for new flu epidemics and new strains of viruses. We have institutions to produce vaccines to counter any new strains. We are even making some progress in at least ameliorating the effects of viral diseases like influenza.

But we don't know yet what made the 1918 virus so dangerous, and so we don't know yet what to do to stall the return of that or any similarly dangerous flu virus. Furthermore, we live in a world that has become in some ways a better place for nasty viruses and a worse place for us than it was in 1918. The flu virus seems a poor choice for bioterrorism, but our "globalized" transportation systems increase the probability of natural pandemics of influenza. In 1918 the fastest way to cross oceans was by steamship. In 2003, thousands of us daily and tens of millions of us annually make such trips in aircraft at speeds not far short of that of sound, carrying with us in our lungs and bowels, on our hands and in our hair, micro-organisms of all kinds, including pathogens. We are all, so to speak, sitting in the waiting room of an enormous clinic, elbow to elbow with the sick of the world.

The world's human population is more than three times greater than it was in the last year of World War I, which increases the likelihood of the spread of strains of any and all pathogens. The populations of the animals with which we exchange flu viruses, the source of epidemic strains, are vastly larger than they were in 1918. China, which tops the world in its numbers of humans, aquatic birds, and pigs, has been the source of many new flu strains since 1918 and will be again.

The health problems of our giant cities are especially daunting. Consider Mexico City, with a population of 19 million officially and several million more than that in reality, that is to say, a population considerably greater than those of Norway, Sweden, and Denmark added together. Such megalopoli are sprouting rankly across the world, most spectacularly in the regions where the facilities and income are insufficient to take the most effective measures to control disease.

There is a bitter little pill of a joke currently circulating among infectious disease experts. It is short: The nineteenth century was followed by the twentieth century, which was followed by the . . . nineteenth century.

Cambridge University Press

0521833949 - America's Forgotten Pandemic: The Influenza of 1918, Second Edition

Alfred W. Crosby

Frontmatter

[More information](#)

xiv / PREFACE TO THE NEW EDITION

The medical optimism circa 1976 is receding. *America's Forgotten Pandemic* has at last attained contemporary relevancy.

Notes

1. Burnet, Macfarlane, and White, D. O., *Natural History of Infectious Disease*, 4th edition (Cambridge University Press, 1972); Porter, Roy, *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present* (London: Harper Collins, 1997), p. 491; Grob, Gerald N., *The Deadly Truth: A History of Disease in America* (Cambridge: Harvard University Press, 2002), p. 272.
2. Robert Kenner Films, script of *The American Experience: 1918, the Year of Dying and Forgetting*.
3. Cyranoski, David, "Health Labs Focus on Mystery Pneumonia," *Nature*, vol. 422 (20 March 2003), p. 247.
4. Patterson, K. David, and Pyle, Gerald F., "The Geography and Mortality of the 1918 Influenza Pandemic," *Bulletin of the History of Medicine*, vol. 65 (1991), pp. 4–21.
5. Kolata, Gina, *Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It* (New York: Farrar, Straus and Giroux, 1999), pp. 187–280.