Guest Editorial

THE 1918–1919 INFLUENZA PANDEMIC IN THE UNITED STATES: LESSONS LEARNED AND CHALLENGES EXPOSED

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Few have described the influenza pandemic of 1918–1919 better than Dr. Victor Clarence Vaughan, the portly dean of the University of Michigan Medical School and advisor to the U.S. Surgeon General during World War I. In early September 1918, upon surveying the destruction wrought not from bullets but rather from microbes at a military camp outside of Boston, Vaughan bemoaned that influenza had ". . . encircled the world, visited the remotest corners, taking toll of the most robust, sparing neither soldier nor civilian, and flaunting its red flag in the face of science." Striding between the crowded, makeshift hospital wards and the

DIGITAL ARCHIVE

The University of Michigan Center for the History of Medicine and the U.S. Centers for Disease Control and Prevention are working together to produce an extensive digital archive and encyclopedia containing the world's largest database and set of records on the 1918-1919 influenza pandemic in the United States. The American Influenza Epidemic of 1918: A Digital Encyclopedia (www.influenzaarchive.org) is being created in partnership with the University of Michigan Scholarly Publishing Office and launches officially in 2012. It will include interpretative essays, timelines, archival documents, and images, and be fully searchable. Once operational, the archive will exist as a free access resource to the general public, policy makers, historians, and the public health community.

overflowing morgue, Vaughan anxiously recorded that bodies were being stacked about "like cordwood."

Vaughan's macabre image of the alarming and accelerating loss of thousands of young soldiers in the prime of their lives foreshadowed the overwhelming sickness and death that would engulf the globe in the fall of 1918, as the deadliest wave of this contagious calamity took its harrowing toll. After the pandemic subsided in the winter of 1920, at least 50 million people had died worldwide, including approximately 550,000 in the United States. It reached its height during the final months of "the war to end all wars," which mobilized tens of millions of young men to the European theater of battle. Moreover, it appeared at a time when public health had made tremendous advances thanks to a combination of sanitarian campaigns and bacteriological science, but several decades before the viral etiology of influenza had been determined.

When influenza appeared in the United States in 1918, Americans responded to the incursion of disease with measures used since Antiquity, such as quarantines and social distancing. During the pandemic's zenith, many cities shut down essential services. Public health professionals on the home front, including many volunteer nurses, deployed their limited medical armamentarium as they tirelessly tended to the ill and attempted to contain the spread of disease. Across the nation, hundreds of thousands of personal tragedies unfolded and irrevocably changed the lives of those who survived. Children were orphaned, a disproportionate number of young adults died, and for a brief period fear, suspicion, and panic prevailed. Yet even in this trying context, the historical record reveals that many Americans responded courageously during the crisis.

Historians and journalists have long been interested in this dramatic chapter in American life and have produced an impressive body of books, articles, and multimedia on this topic. The memory of the 1918 pandemic has also left a lasting mark on public health policy, planning, and practice. Indeed, for each influenza pandemic that followed in its wake—in 1957, 1968, and most recently in 2009, as well as during the swine flu scare of 1976—the events of 1918 have served both as a reference point and as a severe if not "worst-case" scenario.

Even with a growing literature on the historical, epidemiological, and public health aspects of the 1918 influenza pandemic in the United States, significant

ing of this cataclysmic event. Although influenza was in the air and heralded on the front pages of newspapers across the nation during the fall of 1918, communities great and small experienced the pandemic in markedly different ways. Indeed, the 1918 influenza pandemic can be best characterized as many tales of multiple places and people. Consequently, narratives that capture the human dimension of pandemic response often can best be told from the local and personal perspective. At the same time, overgeneralizations can discredit or distort the stories of the participants, misrepresent the varying nature of community responses, and diminish the lessons that we can glean from studying the past.

Pandemics typically unfold across a wide spectrum of communities that are diverse in race, ethnicity, age, gender, and socioeconomic means. There is a delicate and interwoven balance among the virus, the host, and the social milieu that influences the timing, transmission patterns, spread, and severity of the pandemic. It is not uncommon for pandemics to disproportionately impact some sectors of society. Young adults may be severely impacted by infections, complications, and death in contrast to epidemics of seasonal influenza, which tend to hit hardest at the extremes of age. Morbidity, suffering, and even mortality rates may also be exaggerated by preexisting differences and disparities in underlying conditions both medical and cultural, such as war, poverty, crowding, and slavery.

Several underlying themes in this special supplement merit highlighting because they resonate with our contemporary experience with the 2009 H1N1 pandemic, despite the marked difference in the severity of the circulating virus between 1918 and today. These events are not simply medical or public health events in isolation, but vast and complex in their social impact. As a consequence, influenza pandemics demand a multidisciplinary response, and call on all of society to engage and participate. There are clear roles for both private citizens and uniformed personnel; for households, communities, work forces, volunteer organizations, and professional organizations; and for traditional governance structures at the local, state, and federal levels.

By examining the most devastating influenza pandemic in the modern era, this supplement seeks to extract lessons for public health professionals working in the 21st century. Most of the 13 original essays in this supplement were first presented in a workshop held at the University of Michigan in May 2009, a productive and stimulating event during which each author received substantive feedback on her or his

paper and participated in discussions and debates about the historical implications of the 1918-1919 influenza pandemic on public health and American society. Just as the maker of a mosaic creates a particular tile to fit into a larger pattern, the contributors have thoughtfully reconstructed important dimensions of the 1918-1919 pandemic. Assembled into a whole, this collection allows us to step back and appreciate a more complete picture of these intricate events. Together, these articles paint a nuanced and multifaceted portrait of the health crisis that gripped America in 1918. In addition, we believe they are especially pertinent for public health practitioners actively engaged in combating and containing the 2009 H1N1 influenza pandemic, not to mention emerging infectious threats that have yet to declare themselves.

This supplement opens with a photographic essay of the people and places that influenza affected. Following it are three essays that frame the 1918 influenza pandemic in terms of the biological history of the virus, the response of scientists who unsuccessfully sought to produce an effective vaccine, and the guiding parameters of urban public health during the early 20th century. Moving from this broad focus, the next section of essays examines crucial aspects of public health response and social behavior, exploring crowd control and personal hygiene, the response of one major city (New York City), and the experiences of three major cities that deviated from the norm by keeping open, rather than closing, their public schools during the crisis. Highlighting key social institutions, the next section depicts the activities of the U.S. military, the efforts of the American Red Cross, and the formidable role nurses played during the pandemic. The final section focuses on individual communities including African Americans (who confronted the pandemic against the backdrop of Jim Crow racism) and ethnic immigrants (such as Southern Italians and Eastern European Jews)—and analyzes the suffering of patients during the pandemic.

In toto, these essays shed much new light on the 1918–1919 influenza pandemic, all the while emphasizing the immediate context of war and the general contours of an era when Progressivism had greatly expanded health infrastructure and programs. This supplement attaches human faces and emotions to this devastating event, and underscores continuities and discontinuities between public health and pandemic responses then and now.

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