

“With every accompaniment of ravage and agony”: Pittsburgh and the Influenza Epidemic of 1918–1919

THE INFLUENZA PANDEMIC THAT STRUCK Philadelphia, San Francisco, and other American cities during the autumn of 1918 and the winter of 1919 has received significant scholarly attention, but, surprisingly, the most severe and persistent outbreak, which occurred in Pittsburgh, has remained largely ignored. No one factor explained the high morbidity and mortality rates experienced in Pittsburgh. Four salient factors, however, contributed to the deadliness of the city’s outbreak: the appalling state of Pittsburgh’s environment and the health of its citizens before the influenza’s arrival; the city government’s refusal to enforce and strengthen state quarantine measures; the city’s inability to manage relief efforts effectively; and the city’s attempts to undermine and eventually terminate the state quarantine before Harrisburg ordered it lifted. Though the worst large urban outbreak in the country—one that lasted from September 1918 through April 1919—for a number of reasons, Pittsburgh’s experience has been overshadowed by that of a city three hundred miles to its east that has garnered the lion’s share of historical attention.

Philadelphia captured the imagination of scholars and others because, though Pittsburgh produced higher overall death rates, Philadelphia failed catastrophically in its handling of the crisis. Philadelphia also represents a rather straightforward case study. On September 28, the city held the Fourth Liberty Loan Drive, which was designed to encourage the purchase of bonds to fund the war effort. It was the largest parade in the city’s history and contributed to a swift spreading of the virus. Within a week of the parade, sickness and death overwhelmed city services. In the first ten days after the parade, more than a thousand Philadelphians lay dead, and estimates suggest that over two hundred thousand people had

fallen ill.¹ Unable to cope, the city government turned to private agencies. The city did, however, strengthen a state gathering ban, offer unlimited funds for dealing with the epidemic, and secure volunteers and emergency hospital space. Philadelphia's public health director, a gynecologist, publicly pled for hospital rooms and trained personnel. On October 7, a Disaster Committee composed of charity workers and political and public health representatives, and chaired by future Senator George Wharton Pepper, met to discuss how best to combat the epidemic.²

In response to the growing epidemic throughout the state, on the morning of October 4, the state health department issued a statewide ban on the assembling of crowds.³ The enforcer of the ban order, commissioner of the state Department of Health, Dr. Benjamin Franklin Royer, hung his hopes on disrupting the spread of a disease that contemporary medicine could not treat. Not quite a quarantine, the state's order actually amounted to a series of gathering bans that closed saloons, theaters, motion picture houses, soda fountains, ice cream parlors, and other places of entertainment. Philadelphia acted immediately and closed its places of amusement while it strengthened the ban by also ordering the closure of all churches, synagogues, and schools. Even with the ban, the dead mounted, and the coroner used mass graves to clear out morgues, funeral homes, and apartments that contained the bodies of influenza victims. On October 8, Archbishop Dennis J. Dougherty released three thousand nuns and hundreds of seminary students for relief work.⁴ While the nuns manned emergency hospitals and went door to door to identify the ill and the dead, the seminarians buried nearly 5,000 people in mass graves; they tagged as many people as possible for future exhumation and reburial. The navy estimated that the city lost 15,566 citizens between September 14, 1918, and March 1, 1919, for a death rate of 8.8 per 1,000. According to the navy, only one city in the country, Pittsburgh, ranked higher.⁵ Census data supported the navy's figures and indicated that 7,024 influenza deaths and 9,238 pneumonia deaths occurred between October

¹ "Medical News," *Journal of the American Medical Association* 71 (1918): 1424.

² "Day's Influenza Death Toll 289," *Philadelphia Inquirer*, Oct. 7, 1918.

³ "Theaters, Saloons in Pennsylvania Closed to Halt Influenza," *Philadelphia Inquirer*, Oct. 4, 1918.

⁴ Francis Edward Tourscher, *Work of the Sisters during the Epidemic of Influenza, October 1918* (Philadelphia, 1919), 2.

⁵ Secretary of the Navy, *Annual Report of the Secretary of the Navy, 1919* (Washington, DC, 1919), 2435.

1 and December 31, for a total of 16,262 fatalities.⁶ A St. Louis Federal Reserve Bank study based on the 1910 census, which put Philadelphia's population at 1.5 million, offered a mortality rate of 932 per 100,000, or at least 13,980 deaths.⁷ Such a high number of deaths created the perception that Philadelphia's outbreak was more severe than Pittsburgh's.

In 1918, Pittsburgh was only one-third the size of Philadelphia, but it was every bit as important as Philadelphia to the war effort. By the end of World War I, dozens of munitions plants and scores of mills and factories dotted suburban Allegheny County and Pittsburgh, while the military ran training camps in hospitals, universities, and parks. The University of Pittsburgh's School of Medicine established a field hospital fit for duty the day after the United States entered the war in April 1917, while the army built barracks, a mess hall, an administration building, and a YMCA Hospitality House.⁸ Each of the city's major universities created a Student Army Training Corps, and Liberty Bond drives raised money and fostered a sense of patriotism. Furthermore, as Pittsburgh's war-related industrial contracts increased, so too did the number of laborers entering the city. Pittsburgh's population grew from 564,878 people in 1915 to an estimated 586,000 in 1918, a 4 percent increase that strained the city's infrastructure at every level.⁹

The population increase merely provided more victims for the flu. During the first two decades of the twentieth century, Pittsburgh had some of the nation's worst morbidity and mortality rates. Influenza exacerbated, sometimes fatally, preexisting conditions in people it infected. Pittsburgh's horrendous air quality, the result of coke production and the burning of bituminous coal, was an important environmental factor that contributed to the severity of the illness in Pittsburgh's residents. The business community thwarted attempts to pass or enforce smoke abatement in Pittsburgh because of the added expense such measures entailed and because, philosophically, they resented governmental encroachment on private-property prerogatives.¹⁰ Such conditions produced the highest

⁶ Bureau of the Census, *Mortality Statistics: 1918*, Bulletin 141 (Washington, DC, 1920), 74.

⁷ Thomas A. Garrett, "Pandemic Economics: The 1918 Influenza and Its Modern-Day Implications," *Federal Reserve Bank of St. Louis Review* 90 (2008): 81.

⁸ Robert C. Alberts, *Pitt: The Story of the University of Pittsburgh, 1787–1987* (Pittsburgh, 1986), 70.

⁹ Bureau of the Census, *Financial Statistics of Cities Having a Population of Over 30,000, 1918* (Washington, DC, 1919), 9.

¹⁰ Department of Public Health, City of Pittsburgh, *Annual Report, 1910* (Pittsburgh, 1911), 14; Department of Public Health, City of Pittsburgh, *Annual Report, 1916* (Pittsburgh, 1917), 52.

rates of pneumonia sickness and death in the nation. Between 1900 and 1902, Pittsburgh recorded 253 deaths per 100,000 from pneumonia, behind only New York, while the years 1912 through 1914 saw the death rate for pneumonia rise to 261 per 100,000, the worst rate in the nation.¹¹ A 1923 Mellon Foundation investigation concluded that between 1912 and 1923 most locations in Pittsburgh experienced an increase of soot and ash fall that caused or aggravated respiratory disorders.¹² *The Pittsburgh Survey* noted that toiling in the city's grinding, cutting, and stogie-rolling industries exposed laborers to fine dust and raised pneumonia and, presumably, seasonal influenza mortality rates.¹³ The city's inhabitants routinely suffered high rates of morbidity and mortality during any influenza outbreak.¹⁴

Besides the sooty air, Pittsburgh had the worst living conditions of any major city. Most workers and their families lived in two- or three-story buildings that were subdivided into apartments. With space at a premium, residents used every floor, including the attic and cellar, for housing. Such crowded conditions contributed to the transmission of infectious diseases. The city's boardinghouses provided cheap lodging for single laborers, but unattached men and women also could not rely upon family in the event of illness. Pittsburgh's poorest workers sought shelter on the city's hillsides and in hollows or ravines. Connected to the city by a maze of trails and hillside stairs, the houses in this no-man's land consisted of little more than sheds built of refuse lumber and bits of tin and other debris. No municipal hospital existed to aid Pittsburgh's poor when sickness struck, though about twenty private hospitals, half of them general hospitals and the rest a mixture of specialist, maternity, and psychiatric institutions, reserved roughly a hundred beds for charity cases in a city of nearly six

¹¹ G. E. Harmon, "A Comparison of the Relative Healthfulness of Certain Cities in the United States Based upon the Study of Their Vital Statistics," in *Publications of the American Statistical Association* 15 (1916): 171, table XII. Harmon also noted that every major city reduced its pneumonia death rate during the period 1900–14 except Pittsburgh, where the rate increased.

¹² "Mellon Pneumonia/Air Pollution Studies" (1923), University of Pittsburgh Archive Service Center (hereafter UPASC). In one instance, managers who discovered their coke plant's emissions were harming the shrubs planted around the facility asked Mellon Foundation researchers to recommend remedies, but they apparently showed no concern for human health.

¹³ Paul Underwood Kellogg, ed., *The Pittsburgh Survey: Findings in Six Volumes* (New York, 1909–14); Elizabeth Beardsley Butler, *Women and the Trades: Pittsburgh, 1907–1908* (New York, 1911), 359–60.

¹⁴ J. A. Lichty, "Grip—The Epidemic in Pittsburgh," *New York State Journal of Medicine* 8 (1908): 191.

hundred thousand people.¹⁵ A few hospitals funded limited community nursing programs, often with just one nurse on staff, while the city supported no community nursing programs.¹⁶

Pittsburgh's Board of Health was a hollow municipal organ composed of political appointees. The board failed to publish a single annual report between 1912 and 1919, even though the municipal study group contracted to audit the Board of Health informed the city in 1913 that publicity was "an effective aid to health control."¹⁷ As in Philadelphia, the mayor appointed Pittsburgh's health director, who was liable to removal at the mayor's pleasure. But unlike Philadelphia's health director, who was at least a doctor, Pittsburgh's director, William H. Davis, was a party stalwart with no medical background. Davis served with the Pennsylvania National Guard during the Spanish-American War, acted as Pittsburgh's postmaster in 1906, was an active Freemason, and was a high-ranking member of the chamber of commerce.¹⁸ The mayor who appointed Davis, a millionaire timber-company owner named Edward Vose Babcock, promised a fiscally restrained administration and viewed supporting the war effort as his primary mission.¹⁹ Babcock did not include a proper Board of Health in his list of desired improvements.

War labor migrants began to crowd into Pittsburgh as early as 1915, with job-seeking southern blacks joining white migrants and European immigrants arriving from other cities. To cope with housing needs, buildings condemned by the city only a few years before re-opened, minus any utilities, while boardinghouses ran two shifts for boarders—those who worked by day and slept at night and men and women who worked at night and then climbed into the still-warm, dank bunks vacated by their diurnal housemates.²⁰ According to the city Board of Health, at least fifty

¹⁵ Letter from William Flinn, Nov. 16, 1909, submitted to Pittsburgh Department of Public Health, *Annual Report, 1910*, 41.

¹⁶ Yssabella Waters, *Visiting Nurses in the United States: Containing a Directory of the Organizations Employing Trained Visiting Nurses, with Chapters on the Principles, Organization, and Methods of Administration of Such Work* (New York, 1909), is an excellent overview of all Pennsylvania visiting-nurses programs.

¹⁷ Bureau of Municipal Research, *The City of Pittsburgh, Pennsylvania: Report on a Survey of the Department of Health* (New York, 1913), 46.

¹⁸ Allegheny County was fortunate in having Adolph Koenig, a competent medical man who was knowledgeable in public health, as county health officer. During the epidemic, Koenig concentrated his efforts on the dozens of mill cities in the county.

¹⁹ Allen Humphreys Kerr, *The Mayors and Records of Pittsburgh, 1816–1951: Their Lives and Somewhat Their Time* (Pittsburgh, 1952), 270.

²⁰ Abraham Epstein, *The Negro Migrant in Pittsburgh* (Pittsburgh, 1918), 13.

thousand men and women lived in such rooms by 1918.²¹ Others found shelter in outbuildings and sheds, while the Hill District's Jews, African Americans, and Italians competed for space in subterranean apartments of the sort New York City and Philadelphia banned. Some companies converted railroad boxcars into barracks through the simple expedient of equipping them with bunk beds, waste buckets, and cut-outs for windows.

The result of such dense and dilapidated housing was a public health mess. Open sewers ran with excrement along the sides, and sometimes across, downtown streets. Contemporary researchers from the University of Pittsburgh noted a 200 percent rise in respiratory deaths among Pittsburgh's African American population, from 64 between January and July 1915, to 183 deaths during the same six-month period in 1917. Indeed, the health of the city's black migrants was so poor, and hospital beds were so difficult to find and nearly impossible to purchase, that 50 percent more African Americans died during 1917 than were born.²² More ominous was a rise in Pittsburgh's already-high pneumonia death rate. One study of major cities' pneumonia deaths indicated that between 1916 and the first four months of 1918, Pittsburgh's pneumonia deaths per 100,000 rose from 339 to 757. Detroit had the next highest death rate, at 452 per 100,000—40 percent lower than Pittsburgh—while Philadelphia suffered from a death rate of only 363 per 100,000 during the first four months of 1918.²³ In the decades following the epidemic, historians believed the elevated death rates in American cities indicated that the influenza spread through the human population and mutated to overwhelm its victims' immune systems. An alternative view suggests that Pittsburgh, and other cities populated with war workers, saw a rise in deaths from respiratory ailments because of increased crowding, an influx of rural migrants, inadequate housing, and scant medical care, not because of an especially deadly influenza virus.

Though three hundred miles separated Pittsburgh from the nearest eastern ports, and Boston, where the virus first appeared in its final pandemic form in Boston during the last week of August 1918 was nearly twice as far away, the disease quickly made its way to the Smoky City. Individuals in Pittsburgh, however, did not become infected at

²¹ "Full Force of Epidemic Yet to Come," *Pittsburgh Gazette Times*, Oct. 15, 1918.

²² Epstein, *Negro Migrant in Pittsburgh*, 13, 8.

²³ John Dill Robertson, *A Report on the Epidemic of Influenza in Chicago Occurring during the Fall of 1918* (Chicago, 1919), 48, table IV.

Philadelphia's rate. Though Pittsburgh did not mandate that doctors report influenza until October 4, when the state intervened, morbidity and mortality records reflected the virus's presence in the city by mid-September, when deaths from respiratory ailments spiked. Deaths, though, were scattered, and the numbers reported ill did not cause alarm. Yet, affidavits from the coroner's reports indicated that people in Pittsburgh were dying rapidly of fulminate infections. For instance, a forty-five-year-old Russian man fell ill on September 6 and died on the eleventh from what the coroner declared to be cardiac failure with contributory lobar pneumonia.²⁴ His sister-in-law and landlord both testified, however, that his illness lasted for only a week and that he did not ordinarily feel sick. Affidavits also revealed that a forty-nine-year-old Russian immigrant, who died of a pulmonary hemorrhage, at least according to the coroner, was ill for a week with a "severe cold" and cough, during which time he hemorrhaged from the nose and mouth.²⁵ Epistaxis, or nosebleeds that could produce bloody vomiting if too much blood were swallowed, was a common symptom during the epidemic. Other deaths followed, and some victims died within just a few days of showing symptoms. One forty-year-old machinist awoke in his boardinghouse September 20 without any symptoms and died of pneumonia two days later.²⁶ A thirty-nine-year-old laborer grew feverish and prostrate about the seventeenth and became worse until he died of empyema on the twenty-first.²⁷ One of the first deaths among Pittsburgh's African American community occurred on Wylie Avenue, when, on September 25, a thirty-year-old man was found dead in his apartment after a sickness of forty-eight hours.²⁸

As flu-like deaths mounted, the Board of Health announced on September 14 that the virus would make its appearance on the seventeenth, though it did not explain how it determined that date.²⁹ Pittsburgh's health authorities reassured their city that the type of flu would be the "less" serious Boston type, not Philadelphia's "strain," which had already begun to spread rapidly in that city. In reality, the virus was stable, and different strains did not exist; rather, it appears that this state-

²⁴ Allegheny County Coroner's Case Files, UPASC reference code 191810-431.

²⁵ Allegheny County Coroner's Case Files, UPASC reference code 191810-390.

²⁶ Allegheny County Coroner's Case Files, UPASC reference code 191810-387.

²⁷ Allegheny County Coroner's Case Files, UPASC, Sept. 21, 1918.

²⁸ Allegheny County Coroner's Case Files, UPASC, Sept. 25, 1918.

²⁹ "Spanish Influenza Due in City Tuesday," *Pittsburgh Post*, Sept. 15, 1918.

ment was a public-relations ploy on behalf of the Board of Health to allay public fears. Three days later, on September 17, twenty-one-year-old Stewart Eckstein became sick with what appeared to be a virulent case of influenza.³⁰ In a reversal of its position, the board announced that Pittsburgh was not in the midst of the epidemic because the man actually suffered from pneumonia. Davis added that even if Eckstein were ill with influenza, it was likely because he visited the coast near military barracks and contracted it outside the city. Rather than a spur to action, the case served only to reinforce the notion that the city was safe. One man, Sumner B. Ely, recorded in his journal the progress of the virus among his family. His daughter, Mary, fell ill with a “cold” that developed into a fever of 101 degrees on the twenty-third. With his daughter “not any better” on the twenty-fifth, Ely sent for a physician. Luckily, Mary began to improve forty-eight hours later, even as her brother grew sicker; he, too, recovered.³¹

The outbreak in Pittsburgh built slowly, but it is difficult to ascertain the rate at which it spread because of the city’s inefficient Board of Health. On September 29, Mayor Babcock led a celebration of about forty thousand people in Forbes Field to encourage the purchase of war bonds during the loan drive. But the large gathering did not fuel an explosive increase in the epidemic’s numbers, as did Philadelphia’s parade the day before.³² The military, however, diagnosed increasing numbers of victims in camps within the city. Cases in the camps doubled almost every twenty-four hours until the army commandeered the 150-bed Magee Women’s Hospital on October 4.³³ The city, in contrast, did not move to secure or increase hospital space, nor did it address the public, even though the Red Cross official history of the epidemic insists that throughout September, “harrowing stories that had come from other sections of the country of multitudes of dead” and lack of trained personnel and equipment reached the city.³⁴

³⁰ “Spanish Influenza Expected Today,” *Pittsburgh Post*, Sept. 17, 1918.

³¹ Journal of Sumner B. Ely, Sept. 21, 1918, UPASC.

³² M. Hoke Gottschall, *Constructive Pittsburgh: A Review of the Babcock Administration* (Pittsburgh, 1922), 7.

³³ Oskar Klotz, introduction to *Studies on Epidemic Influenza: Comprising Clinical and Laboratory Investigations* (Pittsburgh, 1919), 6. The *Pittsburgh Dispatch* announced on September 21 that Surgeon General William Gorgas ordered the hospital commandeered, though this apparently did not happen until October 4.

³⁴ Chapter History Committee, *The Pittsburgh Chapter American Red Cross* (Pittsburgh, 1922), 188.

At this juncture, the city government made a crucial mistake that only aggravated the situation—it decided not to bolster the state gathering ban. The state telegraphed the closing order to Pittsburgh on October 2, with restrictions to begin at five o'clock on the morning of the fourth. Along with the ban, the state urged the city to gather supplies and personnel and identify possible sites for emergency hospitals. When, on October 4, reporters asked Babcock what the ban meant for the city, the mayor professed awareness of the order, but he believed “the whole thing seemed wrong” in light of the fact that the city’s Board of Health assured him that the epidemic posed no danger.³⁵ As the mayor publicly cast doubt upon the necessity of the order, the city’s public health leader, Davis, held an all-day meeting to draw up plans to enforce the state’s policy. The Red Cross informed Davis that it stood ready to assist in any way necessary, and Katherine Dempster, local Red Cross director of nursing services, reported that eastern Pennsylvania and Delaware did not have enough hospital space to provide adequate care for all the sick.³⁶ Davis, however, refused all offers of aid with the explanation that “the disease was not affecting Pittsburgh to any great extent.” He declared this as the army’s contingent in Pittsburgh accepted the Red Cross’s assistance in the first week of October and requested tens of thousands of items, from paper napkins and paper spit cups to blankets and pneumonia jackets.³⁷ Within three days of taking over Magee Hospital, the army occupied much of Mercy Hospital and immediately admitted 302 patients.³⁸ The mayor capped the city’s intransigence by issuing an exemption from the gathering ban to loan-drive workers, though state law did not allow for such exemptions.

In addition to its refusal to accept aid, the city initially implemented the state ban with no additional closings. While schools throughout Allegheny County closed, and the city’s parochial school system shut down, Pittsburgh’s public schools remained open. Davis predicated the continued operation of the school system upon his misguided belief that monitoring the rates of sickness and death in schoolchildren allowed him

³⁵ “Edict Unnecessary, City Health Believes,” *Pittsburgh Dispatch*, Oct. 4, 1918; “More Nurses Are Called,” *Pittsburgh Dispatch*, Oct. 5, 1918.

³⁶ “Edict Unnecessary, City Health Believes.”

³⁷ Chapter History Committee, *Pittsburgh Chapter American Red Cross*, 190.

³⁸ *Pillar of Pittsburgh: The History of Mercy Hospital and the City It Serves* (Pittsburgh, n.d.), 88.

to evaluate conditions throughout the city.³⁹ Pittsburgh schools did not close until October 24, when Davis's plan for "medical supervision" of school students fell apart as absentee rates reached between one-third and one-half.⁴⁰ The city also permitted places of worship to offer services. While many Protestant churches stayed open, their Catholic and Jewish counterparts closed by the second week of the outbreak. Meanwhile, the city neither husbanded supplies nor called for volunteers, even though Pittsburgh was home to a medical school, a school of dentistry, and hundreds of retired and private-practice doctors and nurses. Davis summed up officials' reluctance to deal with the epidemic when he answered a reporter's question about whether there was an influenza epidemic in Pittsburgh by stating, "You must draw your own conclusion. What constitutes an epidemic is a matter of opinion."⁴¹ Such a reserved stance by the city's director of health toward the state ban did not bode well for coordinating relief efforts.

Though the city did not handle the initial response to the epidemic well, and there was little it could do about its long-term environmental deficiencies, it might have mustered a creditable management of the epidemic throughout October and November. To be sure, no city in the nation was fully prepared to handle an epidemic in the days following its debut in Boston. When this most contagious of viruses—and pandemic strains are even more contagious than their seasonal cousins—began to circulate in a city, an epidemic could seemingly explode. As such, the scope of the epidemic was entirely unprecedented. The first concerted effort in Pittsburgh to combat the flu was a series of gatherings of city health, charity, and political leaders between October 8 and 12. By this time, more than six hundred citizens *officially* reported ill every twenty-four hours, with hundreds more sickened but unreported. At the meetings, hospital heads complained that they lacked municipal support, whether in the form of money, equipment, coordination, or personnel. Further, they warned, the hospitals were nearing their capacity and emergency hospitals appeared necessary. The subject of an emergency hospital—and the city appeared content to think in terms of creating only one—provoked a "difference of opinion" among the attendees. One group urged the immediate establishment of a hospital while others insisted,

³⁹ "The Old 'Flu' May Stop Scholastic Workouts," *Daily Dispatch*, Oct. 6, 1918.

⁴⁰ "City Schools Are Closed by Grip Fighters," *Pittsburgh Gazette Times*, Oct. 24, 1918.

⁴¹ "Rapid Spread of Influenza in Pittsburgh," *Pittsburgh Gazette Times*, Oct. 10, 1918.

incredibly, that all existing hospital space be utilized before taking any action. The group decided by the tenth to at least “make ready” the hospital, and it set about to locate a suitable building and personnel. The city council also chose the tenth to begin its fight against influenza; it called on Health Director Davis to explain “what was being done or contemplated that would cost the city money.”⁴²

By mid October, Pittsburgh also suffered from a severe lack of nurses. Unlike most major cities, Pittsburgh neglected to establish a visiting or community nursing program in the years before the epidemic. Worse yet, contingents of medical students, doctors, and nurses had already left Pittsburgh when the state asked them to provide aid in Philadelphia and stricken mining communities.⁴³ Pittsburgh’s leaders’ underestimation of their own plight may have led the state to believe that the city had personnel to spare. Whatever the case, city hall did not protest when Harrisburg culled the ranks of Pittsburgh’s healthcare workers and sent them east. By the ninth, the military reported that it could no longer find nurses for its soldiers at Magee Hospital. Davis made a public appeal the next day for all nurses, regardless of training or retirement, to step forward. Only days later, however, the local Red Cross chapter noted that of its 250 nurses, only 51 came forward for duty, while the 2,000 strong Mothers of Democracy yielded only 16 volunteers. One charity leader wrote that good work done in some neighborhoods by settlement house nurses “served only to throw in dark relief the work [to be done] in other sections of the city where people literally died by scores because we could not organize a nursing service to save them.”⁴⁴ The city’s Red Cross director of nursing offered a reason for the shortage of nurses: the city’s women were thoroughly frightened by influenza.⁴⁵ Moreover, Davis’s attempts to raise nurses came only after many women were ill or tending to their families and neighbors.

While officials dickered over spending and the establishment of emergency hospitals, tens of thousands of people staggered to or were dumped on the steps of hospitals, police stations, fire halls, and settlement houses. Influenza frightened University of Pittsburgh doctors at Mercy Hospital

⁴² “Larger Death Toll Is Taken by Pneumonia,” *Pittsburgh Gazette Times*, Oct. 11, 1918.

⁴³ “Appeals to Nurses,” *Daily Dispatch*, Oct. 11, 1918.

⁴⁴ Sherman Conrad to Chairman of Visiting Nurse Association, Mar. 1919, Visiting Nurse Association Collection, UPASC.

⁴⁵ “Red Cross Needs 300 Nurses to Fight Spanish Influenza,” *Pittsburgh Gazette Times*, Oct. 19, 1918.

as the disease's fulminate pneumonia produced a mortality rate that they reported "was excessive, much higher than we have been accustomed to experience in Pittsburgh, where, as a rule, our hospital ward infection is a very severe infection."⁴⁶ While no city possessed the hospital space required to cope with the epidemic's flood of casualties, Pittsburgh's concomitant lack of emergency hospitals during the entire first half of October forced hospitals to release influenza and pneumonia patients who were not yet recovered but judged to be treatable at home. Such patients must have spread the virulent pneumonia they acquired in the hospital and thereby only aggravated the epidemic. Doctors who watched the release of patients from one hospital noted that "some of the patients discharged before November 30 as recovered may have later developed sequelae which might have proved fatal. No follow up system has been pursued." Moreover, the doctors at Mercy Hospital reported that the civilian death rate was two and a half times higher than the military rate, though soldiers throughout the nation usually experienced mortality rates far above nearby civilian populations. The physicians at Mercy Hospital believed the military quickly admitted sick soldiers, while civilians too often languished until brought in with "already developed serious complications."⁴⁷ The doctors never explicitly linked the impact on Pittsburgh's citizens of breathing the city's polluted air for years and decades—as opposed to the short-term exposure to such air in the case of soldiers—as a factor in the disparity of mortality rates between soldiers and civilians.

In this nightmare of sickness and confusion, the emergency committee's search for an emergency hospital finally bore fruit. The city requested that Kingsley House, a settlement house in the Hill District, donate its space and staff for such a purpose. It agreed and opened its doors on October 15, though with only 130 beds it could make little difference; even the addition of a 200-bed hospital forty-eight hours later did not accomplish much.⁴⁸ Though Davis acknowledged that thousands of people needed care, the pace of organizing emergency hospitals remained sluggish. Besides Kingsley House, the Irene Kaufmann Settlement, erected in the Hill District to Americanize European Jews, was designated an emergency hospital. The Kaufmann Settlement operated a modest visiting

⁴⁶ W. W. G. Maclachlan, "The Treatment of Influenza," in *Studies on Epidemic Influenza*, 88.

⁴⁷ J. A. Lichty, "A Clinical Description of Influenza as It Appears in the Epidemic of 1918–19," in *Studies on Epidemic Influenza*, 63.

⁴⁸ "Red Cross Busy in Checking Influenza," *Pittsburgh Gazette Times*, Oct. 15, 1918.

nurse service before the epidemic, but during the outbreak the nurses did most of their work in the settlement's buildings. Sick and dying immigrants overwhelmed the nurses and volunteers while family and friends begged for help for victims who were too sick to leave their homes. The settlement treated 1,047 cases of influenza and pneumonia in forty-two days, an increase of 560 percent above the normal caseload.⁴⁹ The influx of sick and dead at the Kaufmann Settlement was not unique, as settlement houses were often the only place of refuge in immigrant neighborhoods. By the middle of October, with hospitals unable to provide care for most people, settlements overflowed with people so ill that they could not stand. One newspaper noted that thousands of sick "strangers" remained in the mills and rail yards.⁵⁰

An outstanding element of Pittsburgh's relative lack of coordinated, timely action was that the city had information concerning the disease and its potential. Pittsburgh newspapers followed some of Philadelphia's horrors and, though reporters spared the public the worst details, they enumerated Philadelphia's death toll and described the mass graves and the corpses found in private homes. Newspapers also printed small columns about other major American cities, as well as about the plight of small towns and coal patches in Pennsylvania that found themselves bereft of doctors, nurses, or hospitals. Pittsburgh also received official descriptions of the epidemic's ferocity when state health commissioner Royer ordered a state Health Department doctor who treated cases during Boston's epidemic to lecture Pittsburgh's public and private health officials about the spread of the disease and possible countermeasures.⁵¹ Furthermore, since the end of September, both Washington, DC, and Harrisburg sent suggestions, orders, and warnings, though Pittsburgh's authorities did not act on the information.

Pittsburgh, however, was spared from having corpses piled in morgues and funeral homes. Pittsburgh relied on private groups, especially the Red Cross, to organize body removal and burials. Though the death rate in Pittsburgh was greater than Philadelphia, it occurred over the course of months rather than a few weeks. Consequently, the burden placed on morgues, funeral homes, coffin builders, and cemeteries never grew so

⁴⁹ Irene Kaufmann Settlement House to Nan Dorsy, Mar. 30, 1921, Visiting Nurse Association Collection.

⁵⁰ "Doctors Confer," *Pittsburgh Sun*, Oct. 15, 1918.

⁵¹ "Kingsley House Ready," *Pittsburgh Post*, Oct. 14, 1918.

great that bodies lay in homes or stacked in city and hospital morgues. When the odor of decay indicated the presence of a deceased victim, it was not a result of the city's inability to keep up with burials but merely an oversight. Pittsburgh's Red Cross chapter allied itself with one of the biggest city undertakers to study the city's cemeteries. The one-day study requested that the city provide equipment and personnel for burial details. The Red Cross specified that it hoped to avoid using trench graves like those found in a "large neighboring city" where "bodies were piled like cord wood" and "wrapped only in cloth."⁵² Though never specified, "the large neighboring city" was clearly Philadelphia. Pittsburgh quickly complied with all demands concerning burials. For instance, when the city learned that funeral homes required more laborers, the city offered the Red Cross the services of street-cleaning crews for grave digging.⁵³ Businesses throughout the city helped a coffin company provide each body with at least a simple box. Pittsburgh also forbade the export of caskets, and the Red Cross boasted that "not a single incident was reported in this county where the burial of a body was delayed owing to lack of casket, cemetery facilities, or labor," even though hearses queued outside cemetery gates.⁵⁴

As officials surveyed burial requirements, the war effort ground on, and patriotic fervor still influenced the actions of many citizens regardless of the epidemic or the crowd ban. The October 19 deadline for subscriptions to the Fourth Liberty Loan loomed, and Pittsburgh was behind its goal by millions of dollars. Newspapers in both Philadelphia and Pittsburgh ran page-long ads exhorting citizens to pinch every possible penny to buy bonds. In a coordinated effort to meet their goal, volunteers canvassed every neighborhood, ferreting buyers from homes, businesses, and factories. At stake were patriotism and civic pride. On the nineteenth, a crowd of more than fifty thousand gathered downtown for the telegraphed results. When the outcome was wired, Pittsburgh stood far ahead of its goal and the throng screamed and danced with joy. Newspapers explained to readers the next day that the whistles heard throughout the city all night were train whistles tied down by their celebrating conductors, all this as "impromptu parades," led by Boy Scout

⁵² Chapter History Committee, *Pittsburgh Chapter American Red Cross*, 191.

⁵³ "Liquor Men to Urge Saloons' Opening," *Pittsburgh Gazette Times*, Oct. 11, 1918.

⁵⁴ Chapter History Committee, *Pittsburgh Chapter American Red Cross*, 191; Mary Wilson Sage, "Pittsburgh Plague—1918: An Oral History," *Home Healthcare Nurse* 13 (1995): 51.

troops and musicians, snaked through the city.⁵⁵ City officials did not attempt to quell the festivities and likely could not have quieted the crowd. But it bears mention that neither health board nor mayor commented on the outburst.

As euphoria from the Liberty Loan success quieted, the city council called meetings to decide how best to fund, and at what level, the fight against the flu. The council expressed concern that the board of health had “been obliged to contract extraordinary indebtedness and [faced] still more expenses.” When a bill was introduced proposing that the city appropriate one hundred thousand dollars to underwrite the fight against influenza, the majority of the council and Mayor Babcock believed that a reduction of the sum was in order. Anonymous officials told newspapers that the fight against influenza required only twenty-five thousand to fifty thousand dollars. The council voted half the original sum, fifty thousand dollars, and forbade Davis from buying cots for use in firehouses that also doubled as emergency hospitals because the firemen went home at night and victims could use their beds.⁵⁶ As damaging as these developments may have been, the situation worsened when political and business elements in the city campaigned to undermine the quarantine.

The final major problem in Pittsburgh’s response was the effort on the part of entertainment-industry representatives and the mayor to weaken, and finally end, the gathering ban before the state lifted it or the situation warranted its termination. Whether served in elite downtown hotels or swilled at neighborhood speakeasies, alcohol was an important cog in the local economy and political structure. Thousands of saloons catered to all classes and ethnic groups, and watering holes of every description lined the streets of working-class neighborhoods and industrial sections of the city. Immigrants found temporary friends and a few hours of happiness in the company of people who shared their own culture and hardships. Paid companions, gambling, and blood sports might also be found in such establishments. State public health leaders, however, saw the packed crowds as a menace to health. Unfortunately for quarantine efforts, for decades illicit saloons and other centers of vice had paid the Pittsburgh Republican machine for permission to operate. Lincoln Steffens, an admittedly colorful journalist, reported in 1903 that saloonkeepers might

⁵⁵ “Great Crowds Cheer Loan Success,” *Pittsburgh Gazette Times*, Oct. 20, 1918.

⁵⁶ “Medical Men Join in Fight against Grip,” *Pittsburgh Gazette Times*, Oct. 22, 1918.

pay hundreds of dollars a week to ward bagmen.⁵⁷ In return, saloon, theater, and dive operators expected to remain unmolested by police and politicians. The crowd ban denied both small businesses and the city's political establishment access to easy money.

From the first days of the ban, city officials openly expressed ambivalence or hostility. As early as October 10, the Liquor Dealers' Association of Pittsburgh sent two representatives to Harrisburg to convince Commissioner Royer to drop the prohibition of alcohol sales.⁵⁸ Further, the Wholesale Malt and Liquor Dealers Protective Association of Western Pennsylvania sought the allowance of wholesale alcohol sales only tens days after the ban commenced.⁵⁹ The state reaffirmed the ban's guidelines, and the city continued to turn a blind eye to all but the most flagrant violators. City dailies reported hotel and restaurant bars openly selling liquor to crowds of people with no police or health department intervention, and when authorities did get involved, they issued only verbal warnings.⁶⁰ Liquor wholesalers in Pittsburgh shipped train-car loads of liquor to the bituminous district north of the city. Mines reported minimum absentee rates of 50 percent, with some mines missing 80 percent of their workers, much of it, operators complained, from "drunken Sundays and Monday idleness." On October 17, federal officials intercepted a boxcar of booze and returned it to Pittsburgh accompanied by the threat that the Pittsburgh district might be declared a military zone, with all saloons closed indefinitely. The day before, Davis sent letters to ten of the most egregious ban violators and warned them of permanent closure of their establishments while a judge affirmed that he stood ready to revoke the license of anyone Davis recommended. Though Davis took a tough public stance against ban violators, city hall sought an end to the gathering ban.⁶¹

That agitation for an end to the ban was proceeding in private was confirmed on October 26, when Royer published a letter in several Pittsburgh newspapers in which he preempted the mayor's office and wrote: "A few Pennsylvanians have been small enough to attribute the

⁵⁷ Lincoln Steffens, *The Shame of the Cities* (New York, 1904), 160–64. Steffens's articles were first published in 1902 and 1903 in *McClure's*.

⁵⁸ "Liquor Men to Urge Saloons' Opening," *Pittsburgh Gazette Times*, Oct. 11, 1918.

⁵⁹ "No Modification of Closing Order by State Health Department," *Allentown Morning Call*, Oct. 15, 1918.

⁶⁰ "Full Force of Flu," *Pittsburgh Gazette Times*, Oct. 15, 1918.

⁶¹ "Dry State, Threat of Fuel Men," and also Davis's letter, *Pittsburgh Dispatch*, Oct. 17, 1918.

drastic actions taken by this office . . . as having been taken for political effect.” Royer asserted that the state Health Department had “no thought other than that of saving life, health, and man-power in this period of America’s great need.” The commissioner then explicitly linked his office’s efforts with the greater war effort, in effect making the struggle against the epidemic an issue of patriotism. He also addressed voter disapproval of the ban in Pittsburgh by writing that those who threatened to switch their vote in the upcoming elections were “not worthy of the franchise which is the pride of all American citizens.”⁶² As if to underscore the still-dangerous situation in Pittsburgh, Bishop Regis Canevin of Pittsburgh mobilized the Conference of Catholic Charities and the diocese’s nuns and directed parish priests to open as many diocesan buildings as needed. The bishop also informed the city that it had already established and staffed headquarters in all twenty-seven wards, a plan Davis believed would help identify people in the early stages of the illness.⁶³

On the morning of October 29, Mayor Babcock traveled to Harrisburg to speak with Health Commissioner Royer about an immediate end to the ban. Concomitantly, Allegheny County coroner Samuel C. Jamison, whose office missed cases of influenza in September, published a letter in which he claimed to know “officially” that the epidemic was slowing in the city and that the ban was no longer required. Royer, too, released a letter in which he suggested that “the Mayor of Pittsburgh is apparently getting very restless.” The commissioner pled with citizens to persevere, demanded that the heads of major industries fight to uphold the ban, and castigated the entertainment industry for putting lives at risk in its quest for profits during this time of war and epidemic. Royer labeled as “misguided” those members of the clergy, mostly Protestant ministers, who demanded an end to the ban on Sunday worship that the city had initiated during the middle of October.⁶⁴ Royer, of course, was pleading for obedience from citizens who had a vested interest in ignoring the ban. To guarantee compliance, local authorities needed to pursue ban slackers actively.

The mayor’s return to Pittsburgh on October 20 was followed by his announcement on November 2 that he intended to end the ban at five o’clock the next morning. He neutralized the city Board of Health by

⁶² “Flu Gaining in Many Parts of State,” *Pittsburgh Gazette Times*, Oct. 26, 1918.

⁶³ “Catholic Aid in Epidemic Accepted,” *Pittsburgh Gazette Times*, Oct. 27, 1918.

⁶⁴ “Mayor Babcock Favors Lifting Epidemic Ban,” *Pittsburgh Sun*, Oct. 29, 1918.

informing businesses that Davis would not interfere with operations.⁶⁵ Newspapers published a letter Babcock sent to Harrisburg wherein he explained his reasons for lifting the ban, chief among them his belief that his local administration alone was the duly-elected government of the city and was responsible for public health. Therefore, the state had no lawful basis to subordinate the mayor during an epidemic. Babcock described a “pall” cast over the city by the closure of entertainment venues and saloons, while the epidemic continued to rage seemingly unabated by the state’s ban. Many of the city’s ministers backed Babcock and explained that during epidemics churches ought never to close, as people doubly sought refuge in God’s houses. Both churchmen and the entertainment industry announced immediate openings, with the mayor’s pronouncement more important than Harrisburg’s.⁶⁶

Critics responded forcefully to Babcock’s actions and his assertions about the conditions in the city. The Allegheny County Medical Society believed the state’s efforts effective and considered the argument between city and state an “unfortunate controversy.”⁶⁷ The Citizen’s Political Union of Pittsburgh and Allegheny County telegraphed a message to Royer in which it expressed its “great indignation here at the mayor’s order,” which it believed to be tied to the coming elections.⁶⁸ Further, the union asked the state to keep the city’s saloons closed on Monday, November 4, as it expected Babcock’s administration to use the saloons to garner votes, a normal machine tactic.⁶⁹ According to the union, “the mayor speaks of the production of war supplies, [but] everyone knows the closing ban prevented the epidemic reaching the terrible stage that it reached in Philadelphia,” and “the depression in our city caused by deserted assembly places by reason of the ban is not to be compared with the terror in the city caused by the spread of the disease.”⁷⁰ The upcoming gubernatorial election might have influenced Babcock as well.

The gubernatorial race between Republican senator William C. Sproul and Democratic judge Eugene C. Bonniwell was in its final month

⁶⁵ “Text of Mayor’s Proclamation Authorizing ‘Flu’ Ban Lifting,” *Pittsburgh Sun*, Nov. 2, 1918.

⁶⁶ “Mayor Tells City Health Head to Ignore Flu Ban,” *Pittsburgh Post*, Nov. 2, 1918.

⁶⁷ “Royer Prepared to Prevent Grip Ban Lifting Here,” *Pittsburgh Post*, Nov. 3, 1918.

⁶⁸ “Union Urges Royer to Enforce ‘Flu’ Ban,” *Pittsburgh Post*, Nov. 3, 1918.

⁶⁹ In *The Plague of the Spanish Lady: The Influenza Pandemic of 1918–1919* (New York, 1974), Richard Collier maintains that Tom Pendergast’s Kansas City machine stymied all efforts by the Board of Health to close saloons and theaters because of the revenue such establishments generated for the machine and city (p. 144).

⁷⁰ “Union Urges Royer to Enforce ‘Flu’ Ban.”

when the state banned crowds. The Republican-leaning *Gazette Times* told readers that between the epidemic and the crowd ban, the “speaking campaign” was impossible to wage, with “Republican headquarters . . . giving out cards showing how to vote a straight Republican ticket.”⁷¹ Republican editors and speakers informed voters that Senator Sproul never supported the ban, or even agreed with its implementation, but rather that the Democrats and liquor men stoked such rumors to garner votes. Republican organizations also alleged that Democrats, allied with the liquor industry, not only falsely blamed the entire ban on Republicans, but further charged that liquor men told laborers they might avoid the flu by drinking whiskey.⁷² These and other statements were Republican attempts to distance Sproul from not only the ban, but from the Republican governor, Martin Grove Brumbaugh, under whom it was maintained. Governor Brumbaugh entered the fray by assuring voters that his administration, independent of Sproul, enacted the ban and that “a certain candidate for the office of governor” incorrectly connected Sproul with it. Brumbaugh thought the political controversy was unseemly during such a “frightful” epidemic. He also found it curious that only the liquor interests, not churches, waged political attacks against the ban.⁷³ Regardless of the political fighting, saloons and theaters opened on November 3, and Babcock left for a visit to a friend’s farm sixty miles outside the city.

Health Commissioner Royer took speedy action on the fourth when he dispatched agents from the state’s Attorney General’s office to prosecute businesses that violated the ban; penalties ranged from fines to imprisonment. Royer issued a constant stream of pronouncements, some in flowery language, in which he asked women to “demand” that their husbands uphold the ban while he pled that men not pull “political chestnuts out of the alcoholic flame.”⁷⁴ On November 5, the state filed notices in court against seventeen theaters and three saloons.⁷⁵ The breakdown in relations between city and state, and the consequences for the city’s residents, prompted Surgeon General Rupert Blue to write a detailed letter to Pittsburgh newspapers in which he implored everyone to follow the

⁷¹ “Influenza Is Hushing Voice of Candidate,” *Pittsburgh Gazette Times*, Oct. 20, 1918.

⁷² “Liquor Men Using False Penrose Tale,” *Pittsburgh Gazette Times*, Oct. 23, 1918.

⁷³ “Sproul Had No Part in Order to Close Bars,” *Pittsburgh Gazette Times*, Oct. 25, 1918.

⁷⁴ “Royer’s Agents Here to Begin Prosecutions,” *Pittsburgh Sun*, Nov. 4, 1918.

⁷⁵ “State Will File 20 Suits Today to Enforce Ban,” *Pittsburgh Post*, Nov. 5, 1918.

state's orders in defiance of the mayor.⁷⁶ The next day, the city's saloons shuttered their doors as twenty-five more reports were filed in court. Theater owners persisted until November 7, by which time the state cited thirty more theaters while Babcock accused Royer of being "drunk with power." Meanwhile, the flu and pneumonia killed 129 more citizens.⁷⁷ Unfortunately, an erroneous report of an armistice largely nullified the state's efforts when it led to street celebrations with tens of thousands of participants. The dancing, group singing, and emotions were so intense that it led one observer to believe that people were "out Hallow'ening any Hallowe'en Pittsburgh had seen in years."⁷⁸

The state lifted the ban on November 9, though more than two hundred Pittsburghers died during the previous forty-eight hours. On November 11, with the armistice signed, Mayor Babcock led a parade that "threaded its way through walls of humanity in the downtown districts" and drove even "staid citizens" to such "rollicking abandon" that "it seemed as if the celebration would never cease."⁷⁹ For the next twenty-four hours, with the mayor's sanction, revelers packed streets and bars. By the thirteenth, Babcock was on the New Jersey coast for a political meeting with state Republicans. In the mayor's absence, cases of influenza increased quickly, the result of cold weather, the absence of the ban, and, most importantly, the celebrations of November 7 and 11–12. Cries for nurses continued through November, while the State Council of Defense cared for 728 orphans.⁸⁰ For months, Pittsburgh continued to exhibit much higher than normal morbidity and mortality rates. While other major cities experienced distinct waves of illness during the fall and winter of 1918–19, Pittsburgh suffered a severe fall wave followed by a period of stable but high infection rates, with flare-ups in February and March. The Red Cross noted that "calls for nurses continued in great numbers" through February, with a decrease in late March. The epidemic finally ended in May.⁸¹

As with all large cities, accurate estimates of the dead in Pittsburgh are difficult to determine. Beyond the sheer number of fatalities, which led

⁷⁶ "Dr. Royer Gets Support of U.S. Surgeon General," *Pittsburgh Post*, Nov. 5, 1918.

⁷⁷ "New Prosecutions," *Pittsburgh Post*, Nov. 7, 1918.

⁷⁸ "Pittsburgh Celebrates Jubilantly," *Pittsburgh Post*, Nov. 8, 1918.

⁷⁹ Gottschall, *Constructive Pittsburgh*, 9.

⁸⁰ *Report of the Council of National Defense and Committee of Public Safety: Allegheny County Division* (Pittsburgh, 1919), 51.

⁸¹ Chapter History Committee, *Pittsburgh Chapter American Red Cross*, 197.

to recording errors throughout the country, it was nearly impossible to determine whether the flu, or other contributing factors like heart disease and tuberculosis, had resulted in death. Furthermore, because Pittsburgh sustained a prolonged outbreak, officials may not have recorded all influenza deaths as such. Contemporary Red Cross records indicated that at least 17,037 cases and 2,540 deaths occurred in October alone.⁸² The navy estimated the city's death rate at 9.6 per 1,000, or about 5,600 deaths.⁸³ More recent studies have estimated even higher mortality totals. For instance, a 2005 Centers for Disease Control and Prevention estimate placed the deaths at 10.3 per 1,000, or roughly 6,000.⁸⁴ A 2007 study published in the *Journal of the American Medical Association* and based upon the 1920 census calculated that Pittsburgh suffered 806 pneumonia and influenza deaths per 100,000 people, for a total of roughly 4,836 deaths.⁸⁵ Finally, based upon the 1910 census of 534,000 residents, a federal study at the turn of the twenty-first century pegged Pittsburgh's mortality rate at an awesome 12.4 per 1,000, or roughly 6,600 deaths.⁸⁶ With a population of about six hundred thousand in 1918–19, the flu killed fully 1 percent of Pittsburgh's population. Viewed through a slightly different lens, had New York experienced Pittsburgh's death rate, it would have suffered roughly 60,000 deaths, double the actual toll. One person who lived through the epidemic in Pittsburgh felt "it was as if the very deep with every accompaniment of ravage and agony had poured out of its appointed bounds to overwhelm a people already heavily laden with the anxious burdens of war," and "only another DeFoe could do justice to that terrible winter."⁸⁷

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Pittsburgh's total mortality numbers were shaped by four major factors. The first was its refusal to enforce the state's gathering ban quickly. Like Philadelphia, Pittsburgh was infected in early September, though

⁸² Ibid, 194.

⁸³ Secretary of the Navy, *Annual Report . . . 1919*, 2434.

⁸⁴ David K. Shay, "Influenza Pandemics of the 20th Century," [online power point], Apr. 20, 2005, Influenza Branch of the National Center for Infectious Diseases and CDCP, <http://www.hhs.gov/nvpo/meetings/PowerPoints/ShayNVACpanflu4-20-05.ppt>

⁸⁵ Howard Markel et al., "Nonpharmaceutical Interventions Implemented by US Cities during the 1918–1919 Influenza Pandemic," *Journal of the American Medical Association* 298 (2007): 647.

⁸⁶ Garrett, "Pandemic Economics," 81.

⁸⁷ Chapter History Committee, *Pittsburgh Chapter American Red Cross*, 189.

not to the same extent. Unlike Philadelphia, however, Pittsburgh did not host a parade that wound through the city and, therefore, did not experience a sudden spike in cases. Instead, influenza spread slowly, the pace increasing every day. Because Pittsburgh did not see an explosion in cases, the state gathering ban had a better chance of decreasing the severity of its outbreak than it did in Philadelphia. When the ban began, Pittsburgh refused to order churches, synagogues, or schools to close, though such closures carried no financial burden for the cost-conscious city.

Concomitant with the loose ban was the city's inability to manage relief efforts efficiently. Health Director Davis, who was not a public health expert, was not prepared to undertake a task as large and sophisticated as fighting a major epidemic. Positive public pronouncements aside, Pittsburgh possessed no experienced Board of Health upon which to base a credible response. Newspaper accounts indicated that saloons openly flouted the crowd ban. Only in the middle of October did Davis move against such establishments. Even then, the city did not seek to quell the celebrations surrounding the Fourth Liberty Loan returns and the false armistice rumor, events perhaps propelled by a general disregard for the crowd ban. The city experienced only small triumphs, the provision of sufficient numbers of coffins and single graves among them. Calls for volunteers first came only well into October, long after many potential volunteers were already involved with sick family members and neighbors. Indeed, a private, citywide nursing organization was founded in 1919 as a response to the epidemic, which highlighted "the stupendous problem of providing nursing care."⁸⁸ Worse still, the sluggishness with which the city created emergency hospitals resulted in only one hospital being opened by October 15, more than ten days after the ban began. The city followed the opening of the Kaufmann Settlement emergency hospital by utilizing other small buildings for emergency purposes. Davis also had to struggle with a city council preoccupied with trimming the amount of money the Health Department spent to combat the epidemic.

In addition to an ineffective crowd ban and poor management of relief efforts, Pittsburgh officials, principally the mayor, wished to lift the ban before the state believed it advisable. The weeks-long fight that resulted undermined the already-weak epidemic-fighting measures. By tradition, Pittsburgh managed both the city's public health apparatus and its retail

⁸⁸ Lucia M. Sweaton, "A Sketch of the History of the Public Health Nurse Association of Pittsburgh" (undated pamphlet), Visiting Nurse Association Collection.

liquor industry. While control of the city Board of Health was straightforward, the relationship between city hall and saloons, through a system of formal liquor licenses and informal graft, was more complicated. Saloons, by providing a gathering place, also generated revenue for local politicians and served as rally points. The ban complicated machine efforts to “get out the vote,” in the words of an Allegheny County Republican leader, for the November 5 election.⁸⁹ State health leaders, principally Royer, possessed neither political experience nor the willingness to compromise what they viewed as the sound, scientific reasoning behind the ban. It is also reasonable to assume that, in light of Babcock’s insistence upon the legitimacy of his administration, tension existed between Babcock and state officials. Certainly some of the friction was the result of long-standing political feuds between Pittsburgh’s Republican leaders and their Harrisburg counterparts. Moreover, local officials were forced, beginning in 1917, to make unprecedented concessions to state and federal agencies charged with prosecution of the war and management of domestic affairs. City leaders like Babcock saw their power undermined when the state not only imposed the first statewide emergency public health measure in Pennsylvania’s history, but also linked it to the war effort. For Pittsburgh politicians, the state’s orders interfered in patently local affairs and upset a balance the Pittsburgh and state political machines forged decades earlier.

Finally, Pittsburgh’s sooty air and generally poor living conditions made its residents particularly susceptible to influenza. This was especially true in the case of people whose respiratory systems were damaged by years of inhaling the city’s industrial byproducts. Studies of Pennsylvania’s mining communities have revealed the impact of inhaling particulates in the air. For instance, a 1920 report posited a 5 to 10 percent mortality rate for coalminers if the epidemic had lasted one year.⁹⁰ Similarly, novelist John O’Hara’s short story, “The Doctor’s Son,” highlighted conditions in Pennsylvania’s coal patches, where “men who already wheezed with miner’s asthma in their twenties stood no chance against the flu.”⁹¹ But one need not mine coal, or even work in steel mills, to compromise one’s health in Pittsburgh. University of Pittsburgh doctors at Mercy Hospital

⁸⁹ “Sproul Had No Part in Order to Close Bars.”

⁹⁰ Louis I. Dublin, “The Mortality of Bituminous Coal Miners from Influenza-Pneumonia, October to December, 1918,” *Journal of Industrial Hygiene* 1 (1920): 483.

⁹¹ John O’Hara, “The Doctor’s Son,” in *The Great Short Stories by John O’Hara: Stories from The Doctor’s Son and Other Stories and Files on Parade* (New York, 1956), 2.

may have glimpsed the damage wrought by Pittsburgh air when they noted that the death rate was not highest among those aged twenty to forty (the group for whom, generally, influenza proved most fatal in 1918). Rather, mortality rates increased with age, perhaps the result of longer exposure to the city's particulate pollution.⁹² Another result of the gloomy atmosphere was the duration—months longer than in any other major American city—of influenza and pneumonia outbreaks.

In some sense, the progress of the outbreak in Pittsburgh between September and mid-November mirrored most other large urban areas: a period of several weeks in which influenza sickened and killed increasing numbers of citizens, but not enough to rouse alarm, followed by steeply increased rates of sickness and death in the third or fourth weeks, and, finally, recognition by authorities of an epidemic in progress. Pittsburgh's response, however, offers compelling insight into the interplay of politics, large industry, small business, the war effort, and the science of public health. Pittsburgh, trapped by its own historical constraints of poor environmental conditions, insufficient housing for tens of thousands, and inefficient city government, also failed to ameliorate those deficiencies through acquiescing to state orders and suggestions. The political fights that followed, whether purely local, as in the case of the paltry sums of money the city offered to fund the fight or the decision to delay opening emergency hospitals, or between Babcock's administration and the state, highlighted fault lines in the conception of the rights and responsibilities of local and state governments. The disagreements also revealed the heightened role the federal government began to play in the lives of communities and individuals during the World War I-era, including its ability to manage the economy during wartime and, in the years that followed, to impose Prohibition. In any event, both Philadelphia and Pittsburgh faced longstanding barriers to efficient epidemic management, but Philadelphia's failure unfolded over the course of days during the most explosive outbreak in any major city in the Western world. Across the state, Pittsburgh's leadership made decisions over the course of months that pushed the epidemic beyond even Philadelphia's mortality rate and contributed to the longest outbreak during America's influenza epidemic.

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⁹²Lichty, "Clinical Descriptions of Influenza," 63.