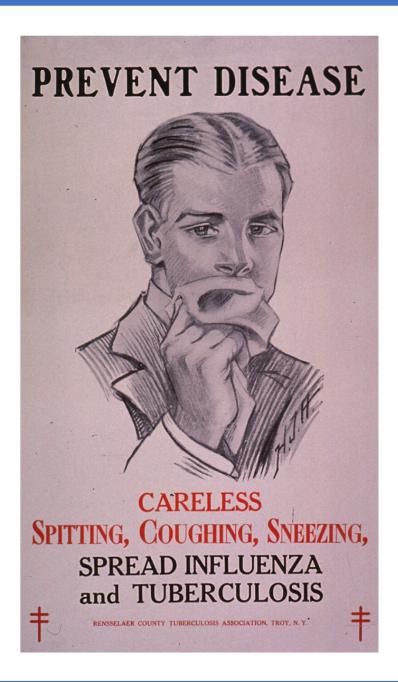
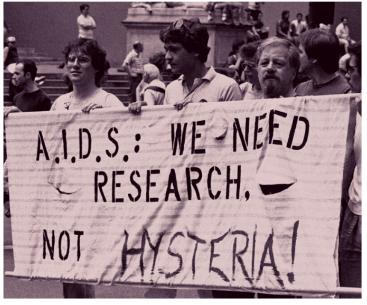
UCLA Luskin Center for History and Policy

PANDEMICS PAST AND PRESENT:

ONE HUNDRED YEARS OF CALIFORNIA HISTORY







Pandemics Past and Present: One Hundred Years of California History

Introduction

The Age of Corona appears without precedent in history. The pandemic has succeeded in bringing our fast-paced 21st-century world to a virtual standstill, forcing the lockdown of billions of people, the near-total standstill of economic activity from local to global levels, and the confused and chaotic responses of governments from Wuhan to Washington.

Of course, enormous health crises are far from unprecedented in history. A hundred years ago, it is estimated that 50 million people died in the Great Influenza Outbreak of 1918. Meanwhile, over the past forty years, the AIDS/HIV crisis₃ led to the deaths of more than 30 million people worldwide.

Consistent with our mission to study the past in order to illuminate the present (and thereby better the future), the UCLA Luskin Center for History and Policy (LCHP) undertook a study on the impact of these two past crises—the flu of 1918 and the AIDS/HIV epidemic—on the state of California. More particularly, we wanted to understand how governments, the private sector, communities, and individuals responded to the crises at hand. The report below offers case studies of these crises, focusing on government and public responses, as well as their economic consequences. We also examine a number of other major public health crises in the U.S. and California in the latter half of the 20th century and the early 21st century.

The present moment demands that we learn all that we can from the past. The Los Angeles Times contributed its share with a recent front-page article "Heed the Lessons of 1918" that explored the impact of the 1918 flu on Los Angeles and California and its legacy today. In related fashion, this report presents an informed analysis of the 1918 flu and other past health crises, and extracts from them a number of key lessons learned. First, in both the 1918 and the AIDS/HIV crises, there was a noticeable lack of government preparedness and a backseat role or delayed response by the federal government. Insofar as these features have surfaced again in the current COVID-19 pandemic, it would seem time to break a long historical pattern by investing far more in logistical preparation, inter-governmental coordination, and sophisticated modeling for future pandemics.

Second, the past examples reveal the tendency to associate the malady of the day either with a specific region or group. The 1918 epidemic was called the "Spanish Flu" and the AIDS virus was associated with the gay community. The act of naming or associating in this way can be relatively innocent, but it also contains within it the capacity to stigmatize or hold culpable certain groups or regions in unfair ways.⁴ This tendency reared its head in the current moment when President Trump and members of

¹ Cover image: 1918 influenza infirmary. This Photo by Unknown Author is licensed under CC BY-SA

² Cover image: Prevent disease. This Photo by Unknown Author is licensed under CC BY-SA

³ Cover image: AIDS: We need research not hysteria. This Photo by Unknown Author is licensed under CC BY-SA-NC

⁴ For examples of epidemics in which stigmatization did not play a major role, see Samuel Cohn, *Epidemics: Hate and Compassion from the Plague of Athens to AIDS* (Oxford: Oxford University Press, 2018).

his administration insisted on referring to the Coronavirus as the "Chinese Virus." Rather than clarify and expedite necessary steps to be taken, this tendency diverts attention and may take up precious time in forging a coherent and effective response.

Third, the economic effects of past crises have been varied, and sometimes unexpected. They are also difficult to separate from the broader economic contexts in which the pandemics arose and the stigma, or lack thereof, associated with its victims. Though we cannot necessarily use the past to predict the economic consequences of the current crisis, we do know that measures to protect public health and economic wellbeing do not need to be placed in opposition to one other. In fact, a survey of the past seems to suggest that stricter health measures have been strongly associated with economic recovery and growth. Moreover, economic support from the state that best acknowledges the interplay between health and other factors such as socioeconomic background or addiction is most effective at cutting costs and improving overall public health.

Laboring in less than ideal research conditions, the LCHP research team of Dr. Kirsten Moore-Sheeley, Jessica Richards, and Talla Khelghati worked with great dispatch to study past cases of pandemics and epidemics and help us understand how we got to where we are today. Their report brings the past into productive conversation with the present—and thereby prompts and challenges public officials to learn from history in forging more effective policy.

David N. Myers Director, UCLA Luskin Center for History and Policy

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1. Influenza Pandemic, 1918-1919 (or the "Spanish Flu" Pandemic)

Just over one hundred years ago, the influenza pandemic of 1918-1919 (also known as the "Spanish flu" pandemic) killed between 1-3% of the world's population, including roughly 675,000 in the U.S. (the equivalent of approximately 2,146,500 in the country today). This event occurred at the tail end of World War I, as the mobilization and demobilization of troops during the fall of 1918 exacerbated the spread of influenza in the pandemic's so-called "second wave." While people were familiar with influenza, medical authorities had not yet developed effective medical measures to cure or prevent the disease.

Although it was one of the largest American cities in 1918, and the most populous on the West Coast, Los Angeles experienced a lower death rate from this epidemic than did many other big cities at roughly 494 per 100,000 people (compared to 673 per 100,000 in San Francisco).7 Influenza first appeared in the city in mid-September aboard a naval vessel arriving in Los Angeles Harbor. The first civilian cases appeared on September 22, increasing steadily beginning in the second week of October. Deaths peaked during the week of November 2, totaling just under 400, and declining gradually thereafter.8 By mid-March of 1919, Los Angeles recorded approximately 3,184 deaths from influenza and pneumonia--the equivalent of roughly 22,000 deaths in the city today.9 By comparison, Philadelphia suffered an estimated 17,500 deaths during the first six months of the epidemic and a death rate of about 748 per 100,000.10

When the influenza broke out in 1918, little coordination existed between public health departments in the country. The federal government—whose public health response was led by the U.S. Public Health Service (USPHS)—was ill-prepared to confront an epidemic of this magnitude. The USPHS did not have the capacity to meet each state's needs for medical resources, focusing instead on disseminating information about influenza and tracking the epidemic by using state reports. The Red Cross helped recruit and allocate nurses nationwide, though it too could not overcome resource constraints. Local health and municipal authorities, therefore, largely took the lead in implementing control measures. The California State Board of Health made influenza a reportable disease on September 27, 1918 and gave state health officers legal power to isolate cases of the disease. While Governor William Stephens recommended control measures, such as voluntary wearing of gauze masks, cities decided for themselves

⁵ U.S. Centers for Disease Control and Prevention, "1918 Pandemic (H1N1 virus)."

⁶ This pandemic was characterized by three "waves" of higher-than-usual influenza rates: the first occurred in the spring of 1918, the second (and the most fatal) occurred during the fall and winter of 1918-1919, and the third occurred during the summer of 1919.

⁷ University of Michigan Center for the History of Medicine and Michigan Publishing [hereafter University of Michigan], "Los Angeles," *The American Influenza Epidemic of 1918-1919: A Digital Encyclopedia*.

⁸ Alfred Crosby, *America's Forgotten Pandemic: The Influenza of 1918*, Second ed. (Cambridge: Cambridge University Press 2003), 60-61.

⁹ Ibid.

¹⁰ Dan Barry and Caitlin Dickerson, "The Killer Flu of 1918: A Philadelphia Story," *New York Times*, April 4, 2020; University of Michigan, "Philadelphia," *The American Influenza Epidemic of 1918-1919: A Digital Encyclopedia*.

¹¹ Crosby, America's Forgotten Pandemic, 46-51.

¹² Ibid., 93.

whether to implement them. San Francisco, Oakland, and Berkeley, for instance, all adopted mandatory mask ordinances, requiring everyone to wear masks in public. The Los Angeles City Council, on the other hand, decided against a mandatory order, only calling for their use in cases in which the state required it, such as for the sick and for health workers.

Los Angeles city authorities implemented various public health measures during the fall and winter.14 Los Angeles Mayor Frederic Thomas Woodman organized a Medical Advisory Board to support City Health Commissioner Dr. Luther Powers. After meeting with the Advisory Board, businessmen, and various state, county, and local health officers, Woodman declared a state of public emergency on October 11, closing schools and banning all public gatherings, including in bars, restaurants, and theaters. He even banned an upcoming Liberty Loan Parade to support the war, which many cities (such as San Francisco) did not do. Powers worked with the City Council to appropriate funds to transform now vacant buildings into emergency hospitals, including repurposing the Mount Washington Hotel into a 100-bed convalescent hospital for the poor. The City Council also passed an ordinance requiring tenants to clean outside the front of their homes and another ordinance creating an official "cleanup week" to disinfect the city. The Council later approved staggered business hours to reduce crowding on streetcars. After a brief lifting of closures and bans on public gathering in early December, an uptick in cases led Powers and the Board of Education to close public schools quickly again on December 10. The City then focused its resources on public health education and on instituting a quarantine of the sick, carried out by temporary quarantine inspectors who also ran errands for some of those isolated. As cases declined during the winter, schools and public buildings reopened, fully doing so on February 6.15

While many people cooperated with public health measures, some defied the new orders. Over 120 white student nurses resigned from the LA County Hospital when the Board of Supervisors agreed to allow black student nurses to work alongside them. 16 Additionally, 29 people were punished for either breaking quarantine or disregarding their illness with a \$25 fine (the equivalent of about \$430 today) and up to 30 days in jail. 17 Many in the business community criticized Health Commissioner Powers' decision to close businesses. Large associations at times defied stay-at-home orders and business closures; for example, outspoken members of the Theater Owners Association argued that the city's partial business closures discriminated against their form of work. This association, whose businesses lost \$1 million (the equivalent of about \$17 million today) during the shutdown, also tried other tactics. In early November, they pressured authorities to institute a mandatory mask ordinance and close all non-essential businesses to curb influenza and start all businesses up again more quickly. Their efforts

¹³ University of Michigan, "Los Angeles," The American Influenza Epidemic of 1918-1919.

¹⁴ Some of this history is also provided in James Rainey and Rong-Gong Lin II, "California lessons from the 1918 pandemic: San Francisco dithered; Los Angeles acted and saved lives," *Los Angeles Times*, April 19, 2020.

¹⁵ University of Michigan, "Los Angeles," *The American Influenza Epidemic of 1918-1919*.

^{16 &}quot;This isn't the first time a virus caused social panic. The Spanish flu did too," *Los Angeles Times*, March 16, 2020.

¹⁷ Michael Holland, "The Archivist Files: How LA Handled the 1918 Flu Pandemic," Off-Ramp, April 22, 2015.

came to naught, as Commissioner Powers felt such measures would be too impractical to impose on roughly 600,000 city residents. Aware of the epidemic's economic ramifications, however, health officials did try to find a middle ground. They stipulated that cafes could no longer have live music but could play music from phonographs. To maintain school instruction and teacher salaries, the city implemented a system of mailin correspondence courses. Educators got some leeway to adapt in-person classes to mailed at-home lessons.

This epidemic had a number of longer-term economic consequences as well, some of which were surprising. Victims of the epidemic were thought to be in the "prime" of (their) life." Indeed, looking at a snapshot of the 94 Angelenos who succumbed to influenza in Los Angeles between October 17 and November 30, fifty-seven were between the ages of twenty and forty.20 On a nation-wide basis, the death of workingaged individuals led to an increase in the marginal product of labor and capital per worker, which translated to an increase in real wages.21 Economists modeled that one more death per thousand led to an average annual increase in economic growth of 0.2 percent per year for the next ten years.22 Public health measures also seemed to have had an impact on economic growth. A preliminary study by a group of economists suggested in April 2020 that cities such as Los Angeles that acted more emphatically to limit social and civic interactions in 1918 saw more economic growth following the period of restrictions, including higher levels of manufacturing employment and output, compared to cities that did not implement such measures as quickly or for as long.23At the same time, it is important to remember that policy responses were always contingent on other variables. Factors such as exposure to the flu or the quality of local healthcare institutions may be systematically linked to socio-economic characteristics of a region--and can play an important role in influencing post-pandemic economic outcomes as well. Just as the public health response varied among cities, so too did its health and economic impacts.

2. Acquired Immune Deficiency Syndrome (AIDS), 1981-Present

The emergence of the human immunodeficiency virus (HIV) responsible for the acquired immune deficiency syndrome (AIDS) pandemic has been traced back to a

- 18 University of Michigan, "Los Angeles," *The American Influenza Epidemic of 1918-1919. (See footnote 6).* See also Rainey and Lin II, "California lessons from the 1918 pandemic."
- 19 Alexandra Stern, "Closing the Schools: Lessons from the 1918-19 U.S. Influenza Pandemic," *Health Affairs* (2009), doi: 10.1377/hlthaff.28.6.w1066
- 20 N. Pieter M. O'Leary, "The 1918-1919 Influenza Epidemic in Los Angeles," *Southern California Quarterly* 86, no. 4 (2004): 391-403, doi:10.2307/41172237.
- 21 Thomas A. Garrett, "War and Pestilence as Labor Market Shocks: Manufacturing Wage Growth 1914-1919," Federal Reserve Bank of St. Louis Working Paper 2006-018B, 2006. This surprising conclusion mirrors a similar trend noted by historians and economists during the Black Death as well: C.W. *Plagued by Dear Labour*. The Economist. October 2013 https://www.economist.com/free-exchange/2013/10/21/plagued-by-dear-labour
- 22 Elizabeth Brainerd and Mark Siegler, "The Economic Effect of the 1918 Influenza Epidemic," Discussion Paper 3791, Centre for Economic Policy Research, 2003.
- 23 Sergio Correia, Stephan Luck, and Emil Verner, "Pandemics depress the economy, public health interventions do not: evidence from the 1918 flu," SSRN Working Paper, March 30, 2020.

period between 1910-1930 in an area then called Leopoldville, now known as Kinshasa, the capital of the Democratic Republic of the Congo.24

The first cases of what would later be named AIDS appeared in the Morbidity and Mortality Weekly Report (MMWR) in June 1981.25 Five young homosexual men in their twenties and thirties were treated for *Pneumocystis carinii* pneumonia in Los Angeles.26 The cases were noted as unusual since the condition typically presents in individuals with underlying immunodeficiency rather than among previously healthy young adults. Since all of the first cases were homosexual men, the report speculated that the pneumonia was associated with a gay lifestyle.27 Within a month, doctors had also linked a form of skin cancer, Kaposi's sarcoma, which rarely occurs in individuals younger than fifty, to male homosexuals. Medical researchers were puzzled and could not explain why homosexual men seemed to be especially susceptible to *pneumocystis* pneumonia and to skin cancer.28

For many in the gay community the mystery and fear surrounding the disorder was so pervasive that they simply referred to the disease as "It."₂₉ The CDC first used the term acquired immune deficiency syndrome in 1982.₃₀ AIDS cases were concentrated among hot spots with large populations of gay men and intravenous drug users. By 1983, 1,450 cases of AIDS had been reported nationwide with 237 cases and 71 deaths in San Francisco,₃₁ and 108 cases in Los Angeles, half of which from the Hollywood/West Hollywood area.₃₂

From the onset, gay communities in California disproportionately bore the brunt of the AIDS epidemic, with devasting effects on their health, well-being and civil liberties. San Francisco, the city with the highest per capita rate of AIDS in the country and the epicenter of the gay rights movement, exemplified the tension between public health and personal rights. Rising death rates among homosexual men in the prime of their lives instilled fear and grief. The personal and community impact of AIDS was chronicled by Paul Lorch, editor for *The Bay Area Reporter*, a weekly newspaper

24 P. M. Sharp and B. H. Hahn, "Origins of HIV and the AIDS Pandemic," *Cold Spring Harbor Perspectives in Medicine* 1, no. 1 (September 1, 2011): a006841–a006841,

https://doi.org/10.1101/cshperspect.aoo6841. HIV is of chimpanzee origin and although it is unknown exactly how humans came to acquire the simian precursor of HIV, researchers suspect that cross-species transmission occurred during bushmeat hunting. The emergence of AIDS in 1981 led to research efforts that identified HIV as the causative agent for AIDS in 1984. U.S. Department of Health and Human Services, "A Timeline of HIV/AIDS," n.d.

- 25 Centers for Disease Control and Prevention, "First Report of AIDS," Morbidity and Mortality Weekly Report (MMWR) (U.S. Dept. of Health, Education, and Welfare, 2001).
- 26 Harry Nelson, "Outbreaks of Pneumonia Among Gay Males Studied," *Los Angeles Times*, June 5, 1981. 27 Centers for Disease Control and Prevention, "Pneumocystis Pneumonia Los Angeles," Morbidity and Mortality Weekly Report (MMWR) (U.S. Dept. of Health, Education, and Welfare, 1981).
- 28 Harry Nelson, "Second Deadly Ailment Linked to Homosexuals," *Los Angeles Times*, July 3, 1981. 29 Joe Wright, "Only Your Calamity: The Beginnings of Activism by and for People With AIDS," *American Journal of Public Health* 103, no. 10 (October 2013): 1788–98, https://doi.org/10.2105/AJPH.2013.301381.
- 30 U.S. Department of Health and Human Services, "A Timeline of HIV/AIDS."
- 31 Philip Hager, "San Francisco to Pledge \$2 Million in Major Fight Against AIDS," Los Angeles Times, May 30, 1983.
- 32 Alan Citron, "Gays' Sex Life Haunted by AIDS Specter: Some Drop Out of Social Circuit; Bars, Bathhouses Lose Money," *Los Angeles Times*, July 17, 1983.

serving the local LGBT community. In 1983, Lorch came under fire in an open letter drafted by incensed AIDS patients who criticized him for what they considered to be sensationalized coverage of the AIDS epidemic. Lorch issued a withering rebuke, claiming "that for most of the names on your list, the only thing you have given to this Gay life is your calamity."₃₃ Galvanized by Lorch's condemnation and determined to rally support for the AIDS epidemic, 6,000 people participated in a candlelight march from the Castro to City Hall, marking the first political act of San Francisco's AIDS community.₃₄ At that march, San Franciscan Mark Feldman inspired a critical shift in the public discourse of AIDS when he addressed the crowd, "I am a person with AIDS... a human being, not a victim, and only a patient when I am in a hospital."₃₅ Bottom up organizing would become emblematic of AIDS activism and a key strategy for protesting government inaction. Later that month, Mayor Dianne Feinstein, supported unanimously by the Board of Supervisors, pledged more than \$2 million in city funds for AIDS-related research, patient care, and community education.₃₆

Both the gay community and local government were deeply divided on how best to save lives. Bathhouses – a symbol of sexual freedom and civil liberty to the gay community – became synonymous with high risk sexual behavior and consequently targeted for closure by San Francisco city health officials in 1984. Although not all bathhouse patrons participated in high risk sexual behavior, bathhouses were a common meeting place for men who engaged in high risk sexual behavior with multiple sexual partners and there was a strong association between having more sexual partners and HIV infection. The issue of whether to close bathhouses was highly controversial and a central AIDS policy issue in certain cities, including San Francisco. Many in the gay community rejected the idea, concerned that closing the bathhouses would lead to a nation-wide shut-down and might fuel discrimination against homosexuals, particularly among people living with AIDS.₃₇ Opponents also criticized the lack of evidence that closure of gay bathhouses would lead to a reduction in HIV transmission rates, and there was no consensus among public health officials as to the public health significance of closure.38 The city's chief administrator and Mayor Feinstein, who was instrumental in fundraising and educating other city mayors about the epidemic, supported closing the bathhouses. Yet due to City Charter constraints, the decision to close the bathhouses fell to Dr. Mervyn Silverman, director of the San Francisco Department of Public Health.₃₉ Silverman maintained an anti-closure stance for ten months but was

³³ Gary Schweikhart, "Angry AIDS Patients Organize; Lorch Sends Blistering Response," *The Sentinel*, April 28, 1983.

³⁴ Wright, "Only Your Calamity."

³⁵ Christopher Disman, "The San Francisco Bathhouse Battles of 1984: Civil Liberties, AIDS Risk, and Shifts in Health Policy," *Journal of Homosexuality* 44, no. 3–4 (August 4, 2003): 71–129, https://doi.org/10.1300/J082v44n03_05.

³⁶ Hager, "San Francisco to Pledge \$2 Million in Major Fight Against AIDS."

³⁷ Disman, "The San Francisco Bathhouse Battles of 1984."

³⁸ Gary A. Richwald et al., "Sexual Activities in Bathhouses in Los Angeles County: Implications for AIDS Prevention Education," *Journal of Sex Research* 25, no. 2 (May 1988): 169–80, https://doi.org/10.1080/00224498809551453.

³⁹ Christopher Disman, "The San Francisco Bathhouse Battles of 1984: Civil Liberties, AIDS Risk, and Shifts in Health Policy," *Journal of Homosexuality* 44, no. 3–4 (August 4, 2003): 71–129, https://doi.org/10.1300/J082v44n03_05.

compelled to respond to public pressure after a gay activist, Larry Littlejohn, announced his intention to circulate a petition for a ballot initiative to prohibit sexual activities among bathhouse patrons.⁴⁰ With Mayor Feinstein's support, San Francisco's bathhouses would ultimately be shuttered later that year. However, other cities in California, including Los Angeles, declined to close their bathhouses.

Dr. Shirley Fannin, deputy director of communicable disease control in Los Angeles, reasoned that closing the bathhouses would not change sexual behavior but would simply force patrons to go elsewhere, and that a better option would be to use bathhouses as educational centers. Although several lawsuits to force bathhouses to close in Los Angeles arose in the mid-eighties and later, bathhouse owners worked with AIDS prevention organizations to arrive at a collaborative policy solution. As a result, bathhouses identified in the lawsuit were required to adopt a protocol developed in partnership with AIDS organizations that would reduce risky behavior among their patrons. Within three years, California funneled more than \$20 million in tax dollars into AIDS-related programs and research at a rapid and unparalleled rate, amounting to a six-fold increase in state tax revenue and more than double the combined funding of the other 49 states. California state and local government responsiveness and financial commitment to the AIDS epidemic were spurred by delay and a lack of urgency at the federal level.

By the mid-eighties, the demand for serious leadership and federal support was reaching a boiling point. Los Angeles Mayor Tom Bradley accused the federal government of starting to "weasel and back off" from commitments to people living with AIDS and referred to the \$400,000 in federal money Los Angeles had received as "peanuts" relative to the magnitude of support needed to address the epidemic.44 Despite declarations that AIDS was the number one priority for the Reagan administration, President Reagan remained silent on the issue until 1987, by which time nearly 15,000 Americans had died from the disease.45

The stigmatization of people living with AIDS prompted cities to pass antidiscrimination legislation. Although health officials stated that AIDS could not be spread by casual contact, fear and misinformation led many to believe they were vulnerable to the disease simply by getting on a bus or going to a restaurant.46 An aide to California Representative William Dannemeyer handed out literature that implied that

⁴⁰ Disman.

⁴¹ Robert Jones and Drew Digby, "City Alarmed by AIDS Spread: Shutdown of Bathhouses Stirs Controversy in S.F.," *Los Angeles Times*, October 18, 1984.

⁴² William J. Woods and Diane Binson, "Public Health Policy and Gay Bathhouses," *Journal of Homosexuality* 44, no. 3–4 (August 4, 2003): 1–21, https://doi.org/10.1300/J082v44n03_01. 43 John Balzar, "Political Gains Endangered: Possible AIDS Backlash Worries California Gays," *Los Angeles Times*, December 1, 1985.

⁴⁴ Carol McGraw, "Bradley Seeks New Methods to Help L.A.'s AIDS Victims," *Los Angeles Times*, September 20, 1984.

⁴⁵ Tina L. Perez and George N. Dionisopoulos, "Presidential Silence, C. Everett Koop, and the *Surgeon General's Report on AIDS*," *Communication Studies* 46, no. 1–2 (March 1995): 18–33, https://doi.org/10.1080/10510979509368436.

⁴⁶ Hager, "San Francisco to Pledge \$2 Million in Major Fight Against AIDS."

all homosexuals were diseased and that casual contact could be fatal, and that gay men should be quarantined in regional detention centers.₄₇

In Los Angeles, a conservative political group distributed pamphlets that read "AIDS – the Liberals' Leprosy" and warned of the "Homosexual Holocaust." 48 Such claims led some to maintain that gay people should be denied access to public facilities and jobs in hospitals, food service, or child-care. 49 In some cases, healthcare professionals were reluctant or refused to provide care to people living with AIDS. 50 In 1985, Forest Lawn, a mortuary in Los Angeles, was sued for \$10 million after delaying a funeral service because embalmers thought the body carried the AIDS virus. 51 San Francisco, Los Angeles, and West Hollywood passed city ordinances banning AIDS discrimination -- the first of their kind in the nation. 52 Nevertheless, Los Angeles attorney Peter Laura of the National Gay Rights Task Force concluded that these measures alone would likely be insufficient to prevent people living with AIDS from losing their jobs. 53

The economic impact of AIDS was pronounced, fueling a staggering rise in healthcare costs and the need for fiscal intervention. Health insurance companies, worried by soaring AIDS-related costs, lobbied for access to patient information. People living with AIDS were fearful that their diagnosis would make them ineligible for health insurance or drive health insurance premiums up, leading California to pass legislation to make test results confidential in 1984.54 By 1994 AIDS-related claims in the healthcare industry cost life and health insurance companies a total of \$1.6 billion. It is estimated that the federal government spent \$2.95 per capita annually on AIDS prevention and treatment.55 However, due to the highly stigmatized nature of HIV/AIDS, responsibility, blame, and actual costs fell disproportionately on the individual rather than state or local government. Qualitative interviews of marginalized Californians revealed that stricter welfare laws that prevented low-income drug addicts from receiving benefits in turn *encouraged* those with little to lose to become HIV positive in order to access associated benefits such as subsidized housing. 56 Fiscal policies such as the Substance Abuse Prevention and Treatment (SAPT) Block Grant in California, which contributed more than \$12 million to HIV early intervention services.

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47 Lisa Ryckman, "Deadly AIDS Threat Mobilizes Homosexuals," Los Angeles Times, September 29, 1985. 48 Balzar, "Political Gains Endangered: Possible AIDS Backlash Worries California Gays." 49 Ryckman, "Deadly AIDS Threat Mobilizes Homosexuals."
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⁵⁰ McGraw, "Bradley Seeks New Methods to Help L.A.'s AIDS Victims"; John M. Luce, "A Strange New Disease in San Francisco. A Brief History of the City and Its Response to the HIV/AIDS Epidemic," *Annals of the American Thoracic Society* 10, no. 2 (April 2013): 143–47, https://doi.org/10.1513/AnnalsATS.201208-039PS.

⁵¹ William Nottingham, "Mortuary Hit With \$10-Million AIDS Discrimination Suit," Los Angeles Times, October 2, 1985.

⁵² Ann Japenga, "Job Discrimination Suit Is Legacy of an AIDS Victim," *Los Angeles Times*, November 29, 1985; Balzar, "Political Gains Endangered: Possible AIDS Backlash Worries California Gays." 53 Japenga, "Job Discrimination Suit Is Legacy of an AIDS Victim."

⁵³ dapenga, "Dob Discrimination Suit is Legacy of an ATDS Victing 54 Ryckman, "Deadly AIDS Threat Mobilizes Homosexuals."

⁵⁵ Oldham, Jennifer. "The Economic Cost of AIDS," *Los Angeles Times*, October 13, 1995.

⁵⁶ Johanna Crane, Kathleen Quirk, Ariane van der Straten, "Come back when you're dying:" the commodification of AIDS among California's urban poor, Social Science & Medicine, Volume 55, Issue 7, 2002, Pages 1115-1127, ISSN 0277-9536

allowed residents to receive collaborative care that combined HIV testing and care with substance abuse counseling. 57 Additionally, nationwide economic modeling projects that an increase in AIDS Drug Assistance Programs (ADAP) funding would result in a 30% decrease in the cost of all patients and increase state tax revenue and overall economic output. 58

As deaths escalated, innovative strategies were adopted to mitigate the spread of AIDS. When the AIDS epidemic peaked in San Francisco during 1992, Dr. Mitchell Katz, head of the AIDS office for the San Francisco Department of Public Health, observed that cities with clean needle exchanges had lower rates of AIDS among intravenous drug users than those that did not.59 Since California law prohibited the distribution of syringes without a doctor's prescription, scaling up San Francisco's underground needle exchange would be illegal. Katz circumvented this by using a state public health emergency law that allowed counties to suspend laws. This emergency law was intended to support recovery following a natural disaster; however, since AIDS was the leading cause of death among men in San Francisco at the time, Katz determined that AIDS constituted a public health emergency. Mayor Frank Jordan, with support from the Board of Supervisors, declared a local state of emergency to operate a needle exchange program.60 The emergency order was renewed every two weeks for nine years.61 This novel approach to a public health crisis created long-term changes by leading to state legislation on syringe dispensation, which now allows California counties to declare AIDS-related emergencies and in turn fund needle exchange.

3. Other Influenza Epidemics: 1957-58, 1968-69, and 2009

California faced a number of subsequent influenza epidemics following the epidemic of 1918. Together these events shed additional light on major themes, such as the uneven coordination of government responses, the origin and consequences of disease names, as well as on how lessons translate from crisis to crisis. These epidemics received place-based monikers akin to the "Spanish flu." In 1957-1958, the U.S. experienced an outbreak of H2N2 influenza dubbed the "Asian flu" because this strain first appeared in China.62 This outbreak occurred during a time when the U.S. was escalating its military presence in East Asia. It first affected Americans stationed on bases in Korea and Japan in May of 1957, reaching military sites on the east and west coasts of the U.S. in June.63 Meanwhile, in 1968, another influenza epidemic—this time H3N2—swept the U.S., acquiring the name "Hong Kong flu" after the first place to

57 Arnold, Emily. Use of HIV Set-Aside Funding from the Substance Abuse Prevention and Treatment (SAPT) Block Grant in California. California HIV/AIDS Policy Research Centers. March 2017 Report. 58 Goldman, D. P., Bhattacharya, J., Leibowitz, A. A., Joyce, G. F., Shapiro, M. F., & Bozzette, S. A. (2001). The Impact of State Policy on the Costs of HIV Infection. Medical Care Research and Review, 58(1), 31–53. https://doi.org/10.1177/107755870105800102.

⁵⁹ Mitchell Katz, *Leighton Lecture: How Mitchell Katz Changed San Francisco STD Response Policies* (University of Pennsylvania, 2014).

60 Richard Paddock, "S.F. to Provide Clean Needles to Drug Users," *Los Angeles Times*, March 16, 1993. 61 Katz, *Leighton Lecture: How Mitchell Katz Changed San Francisco STD Response Policies*.

62 Martin Enserink, "Swine flu names evolving faster than swine flu itself," *Science, New Series* 343, no. 5929 (2009), 871.

63 D.A. Henderson, et al., "Public health and medical responses to the 1957-58 influenza pandemic," *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 7, no. 3 (2009): 265-273, 266.

report an outbreak. At the height of the Vietnam War, travel between the U.S. and Asia had become more extensive and rapid, and military personnel were again some of the first to report cases of influenza.

More recently, the U.S. experienced an epidemic of H1N1 influenza in 2009-2010. The outbreak was first reported in Mexico, leading some to call it the "Mexican flu," though many more referred to it as "swine flu." 64 Still, Mexican Americans faced stigmatization and verbal attacks from the public and media during this epidemic scare. 65

Although these three influenza epidemics raised morbidity and mortality rates above those seen during a typical flu season, none was as devastating as 1918-19. The 1957-58 epidemic led to an estimated 116,000 deaths nationwide.66 Early on, national attention focused on California, which reported 18,000 of the 30,000 estimated cases by September 1957.67 The state's proximity to East Asia and large military population made California and its military bases early centers for the outbreak. Yet the disease did not appear to hit the general population of Los Angeles particularly hard. As of November 22, 1957, the city had recorded 235,000 cases and 17 deaths, which increased only moderately thereafter.68 Most of those who fell sick recovered at home. The 1968-69 epidemic had a slightly smaller impact in the U.S., leading to roughly 100,000 deaths.69 Within California, LA County and other areas in the south were hit hardest. By December 28, LA County reported 59 and 1,159 deaths from influenza and pneumonia, respectively for 1968. The 2009 H1N1 pandemic triggered a more effective government response in the U.S. but ultimately had a much smaller impact on mortality. According to the U.S. Centers for Disease Control (CDC), there were approximately 12,469 deaths due to H1N1 during the epidemic.70 California experienced the highest number of deaths nationwide, registering nearly 500 by the first week of January 2010.71

As in 1918-19, local authorities took the lead in implementing public health measures, relying on the federal and state government to help procure medical resources and track cases. In 1957 the U.S. Surgeon General allocated vaccines to states, which were sent to hospitals and physicians to distribute through routine commercial networks. Vaccine supplies trickled in slowly during the epidemic's early months, however, as drug companies had not produced enough ahead of the normal flu season. State health authorities called for targeted vaccination of vulnerable populations—including people with chronic medical conditions and the elderly—as well as health and some government workers, though there was not enough vaccine to do this fully.

64 Enserink, "Swine flu names evolving faster than swine flu itself."

⁶⁵ Julia Preston and Kirk Semple, "Immigrants' rallies draw small crowds in flu scare," *New York Times*, May 2, 2009.

⁶⁶ CDC, "1957-1958 Pandemic (H2N2 virus)."

⁶⁷ Purcelle Peck Smith, "Influenza - 1957: A survey of the situation in California," *American Journal of Nursing* 57, no. 10 (1957): 1310-1312, 1310.

^{68 &}quot;235,000 hit by Asian flu here, Uhl estimates," Los Angeles Times, November 22, 1957.

⁶⁹ CDC, "1968 Pandemic (H3N2 virus)."

⁷⁰ CDC, "2009 H1N1 Pandemic."

⁷¹ California Department of Public Health, "Influenza Update, 2009-2010," January 2010.

⁷² Henderson, et al., "Public health and medical responses to the 1957-58 influenza pandemic," 267.

⁷³ Graham Berry, "First Asiatic flu vaccine reaches city. Amount still too small to be given to priority groups," *Los Angeles Times*, September 6, 1957.

California also initiated annual surveillance of influenza cases and deaths beginning in 1957. At the city and county level, health authorities felt the epidemic would be relatively mild, and therefore decided it was not advantageous or practical to curtail public gatherings or close schools on a wide basis. Instead, schools merely closed or cancelled events as they saw fit.

During 1968-69, local officials took a similarly non-interventionist approach, recommending personal prevention measures to the public and targeted vaccination, while state and federal officials tried to accelerate vaccine production and coordinate epidemic surveillance.₇₄ The swine flu epidemic of 2009 saw a slightly more intensive government-led response. President Obama declared a national emergency in October to waive some federal health insurance requirements and facilitate emergency hospital treatment for influenza.₇₅ California Governor Arnold Schwarzenegger worked with federal, local, and Mexican public health experts to assist local health departments and activated the Joint Emergency Operations Center of the Department of Public Health to coordinate state-wide influenza surveillance and investigation.₇₆ Over time, health authorities working at different levels built up research and surveillance systems to respond to influenza epidemics. Much work remains to develop more effective responses to disease outbreaks.

Conclusion

In the midst of a rapidly evolving global emergency that is unprecedented, looking back at past epidemics and public health crises in California not only provides us with helpful context, but affords us new perspectives on and approaches to the present as well.

The Great Influenza outbreak of 1918, the subsequent outbreaks of the next hundred years, and the AIDS/HIV crisis that began in the 1980s reveal the pitfalls, advantages, and general tendencies of collective responses to public health emergencies. By availing ourselves of a hundred years of California history, we see the vital importance of local, state, and federal coordination, the danger of stigmatization against people and regions, the unexpected turns a post-crisis economy can take, and the opportunities for innovative public health solutions that can arise in the midst of crisis.

As we continue to confront COVID-19 in California, in the United States, and across the globe, we are reminded that just as we are connected to a collective past, so too are we connected to each other.

⁷⁴ Harry Nelson, "New flu vaccine urged by experts," *Los Angeles Times*, September 5, 1968 75 Barack Obama, "Declaration of a National Emergency with Respect to the 2009 H1N1 Influenza Pandemic," October 24, 2009.

⁷⁶ Press Release, "Gov. Schwarzenegger directs state swine flu response," April 24, 2009.

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Pandemics Past and Present: Key Takeaways

1918 <u>Infl</u>uenza

Government Coordination

Economic Effects

Public Health

During the 1918-19 influenza epidemic city governments took the lead in implementing public health measures.

Federal and state authorities compiled case statistics, disseminated information, and sought to gather what scarce health resources they could muster.

This division of responsibility between the different levels of government largely held for subsequent influenza epidemics in the 1950s, 1960s, and 2000s.

Cities which implemented public health measures more rapidly and for a longer duration saw greater gains in manufacturing employment and output after the 1918 influenza epidemic.

The 1918-19 influenza epidemic prompted closures that put an economic strain on people and businesses in the short term. It also led to a rise in wages because the death of people of working age resulted in in reduced labor supply.

Los Angeles municipal authorities implemented school and business closures, bans on public gatherings, quarantines of the sick, and disinfection measures to curb influenza in the fall and winter of 1918.

During subsequent influenza epidemics, city and county authorities focused much more on disease prevention through targeted vaccination and personal protection measures.

Influenza epidemics have a long history of receiving place-based names, often based on a flu strain's presumed origin (such as "Asian flu", "Hong Kong flu", "Mexican flu", or the erroneously named "Spanish flu").

At times this practice has had a stigmatizing effect not only on those places named but also on people associated with that place. HIV/AIDS

California **state and local responsiveness** to the AIDS epidemic was driven by **limited federal leadership and financial support** during the early 1980s.

California funneled \$20 million in tax dollars into AIDS-related programs and research while local authorities marshalled resources, implemented public health measures, and distributed health education materials.

By 1994 AIDS-related claims in the healthcare industry cost life and health insurance companies a total of \$1.6 billion.

Fiscal policies like the Substance Abuse Prevention and Treatment Block Grant in California, which contributed more than \$12 million to HIV early intervention services. allowed residents care that combined HIV testing with substance abuse counseling.

Local city health officials conducted public health campaigns to raise awareness, closed or regulated bathhouses to limit high risk sexual behaviors and improve access to condoms, and instituted novel approaches such a clean needle exchange to reduce the spread of HIV/AIDS.

HIV/AIDS was initially referred to as GRID, for gay-related immunodeficiency. Associating HIV/AIDS with homosexuality fostered a common misunderstanding that HIV/AIDS was a homosexual disease.

This led to public demand that gay people be banned from public facilities and denied jobs in fields such as healthcare, food services and childcare.

San Francisco, Los Angeles, and West Hollywood passed ordinances banning AIDS discrimination, the first of its kind in the nation.