

A History of Public Health and Opposition in the United States: Epidemic Response Across the 20th and 21st Centuries

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Abstract

Modern epidemic response in the United States was largely designed by evaluating the problems and shortcomings of responses to previous epidemics and finding solutions to prevent these issues in the future. The 1976 swine flu incident in the United States was especially important in reshaping the response to the recent COVID-19 pandemic and is an underlying reason for political caution. By compiling information from government records, citizen accounts, and news articles, this project's goal in building a timeline of significant changes of policy as a result of the unnecessary response of the 1976 swine flu was highly successful. This timeline traces back to the government's relaxed response to the 1918 Spanish flu before jumping to intermediate policy changes and government panic leading up to and during the 1976 flu. Important policy changes, shifts in government and public views on pandemic response, and the resulting anti-vaccination argument are also included. This suggests that public policy can benefit from evaluating past mistakes or problems to streamline and improve pandemic responses, as seen in the case of COVID-19. While this project currently consists of a general analysis of the three aforementioned pandemics, future research can be done to look further into possible problems in COVID's response that can be solved for future pandemics. Further analysis can also be used to evaluate the possible shortcomings of comparing response to flu-based pandemics to that of a different virus, like COVID-19.

Introduction

Throughout the 20th century and particularly following the 1918-1920 flu outbreak, national response to epidemics has been largely revised to correct the shortcomings that made that particular instance so widespread. Therefore, later epidemic and pandemic response in the US were heavily based off that of the 1918 influenza. These later response differed from that in 1918 in many ways, including:

- scale of response
- effectiveness of response
- measures implemented

In evaluating these aspects of response, one can see the how later responses, specifically the 1976 outbreak and the 2019 COVID-19 pandemic, were refined and edited versions of what was seen in 1918.

Figure 1: Traffic cop in New York City wearing mask, 1918 (National Archives)



Figure 2: Traffic cop wearing mask during COVID-19 pandemic, 2020 (Brookings Institute)

Methods

Data collection and analysis was completed in three main steps:

1) Analysis of Individual Responses (1918, 1976, 2019)

- impact reach
 - cases (in relation to population at time of epidemic)
 - deaths
 - vaccines administered
- level of response
 - local, state, or national

2) Comparison of Responses

- similar implemented measures
 - masks
 - societal shutdown
- differences
 - vaccines relative to cases
 - level of response
 - uncontrollable circumstances

3) Timeline of Response Development

- ways in which evaluation of past responses were a direct result of later responses

All of three of these steps were done using CDC statistic reports and past research articles.

References

This goal of this project is to compile an entire timeline of medical public policy in the United States. Due to the extent of that task, each student is working on different times and events. The topic presented on this poster was researched only in collaboration with Dr. Joseph Gabriel, professor and researcher at Florida State University.

Notable Event Time

1918 influenza

- January 1918 - First "Spanish flu" in Kansas
- August 1918 - second wave surges in Boston
- September 1918 - Red Cross recommends citizens to wear masks
- October 1918 - cases dip as a result of restrictions
- Thanksgiving 1918 - cases surge followed relaxed restrictions after cases dip
- January 1919 - third waves surges in Los Angeles, New York City, and other large cities
- February 1920 - cases drop, epidemic is essentially over

1976 swine influenza

- January 1976 - soldiers at Fort Dix in New Jersey are tested and found to have strains of flu similar to that of 1918 outbreak
- March 1976 - President Gerald Ford issues outbreak memo
- August 1976 - small outbreak in Philadelphia though to be swine flu
- September 1976 - nationwide immunization began
- December 1976 - cases of Guillain-Barré syndrome arise following vaccine administration
- February 1977 - immunization program is ended

COVID-19

- January 2020 - first case in United States
- February 2020 - first confirmed death in US
- March 2020 - federal government advises against international travel
- April 2020 - several state and city governments enact quarantines
- July 2020 - numerous experts request national two-month quarantine period
- January 2021 - national face mask requirement on public transit
- September 2021 - cumulative COVID -19 death count passes that of the 1918 outbreak, making it the deadliest epidemic in U.S. history.



Figure 3: Denver residents wait in line to get vaccine for 1976 swine flu (Denver Libraries)



Figure 4: Mass COVID-19 testing site in Colorado (Colorado Newswire)

Results and Findings

Essential Question: How do the successes and failures of early pandemic responses in the United States influence responses to later pandemics?

1918 influenza:

- Local responses were prevalent, federal government did not have capacity to react
- 675,000 deaths/ 26-28 million cases (25% of population)
- masks recommended (See Figure 1)
- Largely ineffective
 - response was too late
 - local governments couldn't handle scale of pandemic as millions of soldiers returned from Europe (WW1) carrying the disease

1976 influenza:

- National overreaction, vaccines pushed out before scale of outbreak was known
- 1 death/ ~230 cases (13 hospitalizations)
 - 43-45 million vaccines administered in resulting program
- National response, technically effective but highly unnecessary
- rushed vaccines resulted in heightened cases of Guillain-Barré Syndrome (GBS), in which immune system attacks peripheral nerves.

COVID-19:

- Widespread national response
- ~837,000 deaths (by end of 2021)/ 50 million confirmed cases (~15% of population)
- Largely ineffective
 - late response (early relative to 1918 influenza)
 - hesitation in rolling out vaccine as a result of 1976 response
- mask mandate/ social distancing limited spread

Image Resources

Brookings Institute. "Masked Policeman during COVID-19 Mask Mandates." Brookings Institute, Apr. 2020, www.brookings.edu/articles/the-military-policing-and-covid-19/. Accessed 21 Feb. 2026.

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National Archives War Department. "Medical Department - Influenza Epidemic 1918 - Masks for Protection against Influenza. Traffic "Cop" in New York City Wearing Gauze Mask." National Archives Catalog, 16 Oct. 1918, catalog.archives.gov/id/45499301. Accessed 21 Feb. 2026.

Importance

The findings of this project are highly important for the future of epidemic and pandemic response in the United States. As shown in the timeline above, a century of medical and political progress was unable to create much of a difference in preventing deaths from disease. This could be contributed to a considerable increase in population in that century, but a delayed response and political hesitance were also problems that could be highlighted for future use. In the past century, the U.S. experienced two large epidemics and was threatened by a third, so it can be assumed that it will experience another sometime in the next century. It is essential that historians and politicians continue to evaluate strengths and weaknesses of past responses in order to maximize efficiency in responses to come. However, further researchers should be cautious in their evaluations of past pandemics, as not all pandemics are caused by the same virus and may vary in valid prevention methods. It is also important to note that this project specifically highlights public policy in the United States, but analysis of public policy would be beneficial for all countries looking to improve their epidemic response and protect the health of their people. This project is still ongoing and will continue to evaluate the strengths and weaknesses of these responses at a deeper level.

Informational Resources

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