$https://www.omaha.com/news/local/in-1918-flu-pandemic-omaha-had-second-surge-of-cases-after-lifting-restrictions/article_18d225a4-d89d-5184-9aa1-ba2b9b67c4e5.html\\$

In 1918 flu pandemic, Omaha had second surge of cases after lifting restrictions

By Steve Liewer World-Herald staff writer May 2, 2020



Nurses at Creighton University during Spanish flu pandemic in 1918. CREIGHTON UNIVERSITY ARCHIVES



After four weeks cooped up indoors because of a deadly pandemic, the people of Omaha wanted to party.

During October 1918, Omahans had chafed under restrictions that had closed churches, schools, movie houses, theaters and public gatherings, and had banned parades and large meetings. Already 442 people had died from the lung-clogging influenza — but business owners hated the loss of livelihood and feared that their customers wouldn't return.

So there was relief and excitement when Omaha Health Commissioner E.T. Manning and the State Board of Health announced that most restrictions would be lifted Saturday, Nov. 1.

The Gayety Theater decided to open for a 12:01 a.m. burlesque show, and crowds lined up for admission.

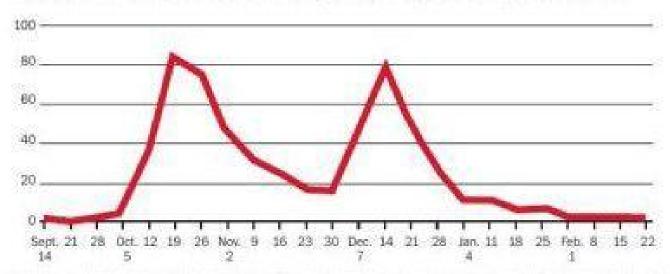
"The town had begun to wake up from its lethargy of the last month," the Omaha Daily Bee reported. "Restaurants and cafes were well filled and there were numerous other evidences that life in the old town was coming back to normal."

Except it wasn't back to normal. Not yet.

Within a week, Manning threatened to restrict gatherings again after 30 cases and 11 deaths were reported in one day. That heralded a "double hump" in flu cases, which surged after a massive Armistice Day celebration Nov. 11 and made December 1918 almost as deadly a month as October.

OMAHA'S EXCESS DEATHS DURING THE 1918 FLU PANDEMIC

Weekly excess death rate per 100,000, Sept. 14,1918 to Feb. 22nd, 1919



NOTE: "Excess deaths" are defined as a measure of the deaths which occurred over and above the regular death rate that would be predicted.

SOURCE: University of Michigan Center for the History of Medicine

THE WORLD-HERALD

Omaha was one of many cities that dropped their social distancing requirements too early and paid a price in sickness and death. Kansas City; Denver; Cincinnati; and Birmingham, Alabama, all experienced new waves of influenza after lifting restrictions. Even St. Louis, often praised for its aggressive response to the 1918 flu, experienced a second wave of deaths that exceeded the first.

"Suddenly, it's skyrocketing," said J. Alexander Navarro, assistant director of the University of Michigan's Center for the History of Medicine. "It was because they removed the nonpharmaceutical interventions, such as social distancing."

The 1918 experience raises questions about decisions today by state and local governments to ease restrictions, allowing businesses to reopen and small public gatherings to resume.

"The critical lesson is to be very careful about how we lift the social distance recommendations," Navarro said. "When you lift them, it's very difficult to put them back."

Douglas County Health Director Adi Pour, Manning's modern-day counterpart, acknowledged Friday that public fatigue with the restrictions is a factor today, too. She allowed county restrictions to expire late last week even in the face of climbing numbers of positive tests, though some state measures remain in place.

"We need to be realistic," she said, while urging residents to "be careful these next two weeks."



In St. Louis, as in other cities, the Motor Corps chapter of the American Red Cross ferried nurse volunteers to homebound patients.

CENTERS FOR DISEASE CONTROL AND PREVENTION

Navarro was part of a team of medical historians that spent several years in the 2000s studying the responses to the 1918 pandemic (known as the Spanish flu, although it was first detected in Kansas) in 43 U.S. cities, including Omaha.

They produced a groundbreaking paper for the Journal of the American Medical Association that calculated how many more people died during the height of the pandemic, from September 1918 to February 1919 than in a typical flu year, a statistic called "excess deaths."

They also looked at how the cities' nonpharmaceutical interventions (school closure, cancellation of public gatherings and isolation/quarantine) affected the trajectory of the epidemic. Or, as we have been saying it lately, how well they flattened the curve.

Their findings were clear, Navarro said: The cities that fared best imposed restrictions the earliest and kept them in place the longest.

The study found that more than 115,000 "excess deaths" occurred in the 43 cities studied. The highest rate was 807 extra deaths per 100,000 people, in Pittsburgh; the lowest was 267 per 100,000, in Minneapolis.

Omaha, where 14,000 or more people contracted the flu and at least 974 died from it, had a rate of 554 per 100,000, above the national average.

Worldwide, the pandemic is believed to have killed 50 million or more people, including at least 500,000 in the U.S.

After publishing the study, Navarro crafted a reader-friendly digital archive of its source work, with lively narratives and graphs telling the story of the pandemic in U.S. cities from coast to coast.

The archive, called The American Influenza Epidemic of 1918-1919: A Digital Encyclopedia, went up in 2012. Navarro said that during the COVID-19 pandemic, it has been getting as many as 200,000 visitors a day.



Indoor church services were prohibited during the 1918 Spanish flu pandemic. Creighton priests set up an altar outside the campus observatory to celebrate Mass outdoors.

CREIGHTON UNIVERSITY ARCHIVES

To be sure, there are differences between the Spanish flu of 100 years ago and today's COVID-19.

Influenza is a virus that is native to humans and is sustained in the human population, said Dr. Ali Khan, an epidemiologist at the University of Nebraska Medical Center's College of Public Health. The seasonal flu viruses we experience today are mutated variants of earlier ones, including the Spanish flu.

"Every couple of decades, it changes so much, it's like a brand-new coat," he said. That's what accounts for particularly virulent flu outbreaks; 1918's was the worst, but 1957, 1981, and, more recently, the H1N1 outbreak of 2009 were also bad. They evolve, but they don't go away.

"There's no way we can get rid of influenza. It's going to come back," Khan said.

The novel coronavirus, which causes COVID-19, is native to animals, and could in theory be eliminated from humans. The Severe Acute Respiratory Syndrome coronavirus (SARS) from 2003 is an example.

There were slightly more than 8,000 cases (just eight in the U.S.) and 774 deaths.

"We took care of business, and it went back into bats, or wherever it came from," Khan said.

Both influenza and the coronavirus are spread by droplets through coughs and sneezes, which means that they can be controlled through social distancing, said Dr. Robert Penn, medical director of infection and prevention at Omaha's Methodist Hospital.

Penn said how the novel coronavirus spreads is still being studied.

"It's plausible that coronavirus stays in the air a little longer and is more transmissible," he said. "We're trying to follow the data."
An influenza ward at Walter Reed Hospital in Washington, D.C., on Nov. 1, 1918. The COVID-19 pandemic has inspired many comparisons to the 1918 flu, sometimes called the Spanish flu.
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Both can be tackled with social distancing. Physically separating people who are sick is a technique that's been around for centuries, long before people understood the germ theory of disease.

Despite warnings that a 1918-scale pandemic was inevitable, Khan said, we weren't prepared for it when the novel coronavirus showed up early this year. We lacked a vaccine or effective treatment for a new disease against which we have no immunity, and we weren't prepared for large-scale testing, isolation and contact tracing.

"We have to default to an old social distancing strategy," he said. "It's a different disease, but some of the epidemiological principles are the same."

As bad as the Spanish flu was, Navarro said the nonpharmaceutical interventions of public health authorities at the time no doubt saved many lives.

The deadly wave of the virus struck Northeast cities first in late summer 1918, starting at an Army base called Camp Devens in Massachusetts. More than 10,000 soldiers there became sick, and at one point, 100 a day were dying. The New England Historical Society described the camp as a "hellhole of death."

Navarro said East Coast cities had fast, steep increases in cases and deaths because they had less time to react. Midwest and West Coast cities had some warning.

St. Louis, San Francisco, Kansas City and Milwaukee were among the fastest-acting cities and likely cut their transmission rate by as much as 50%.



In Omaha, he said, Manning closed schools and churches and ended large gatherings within 24 hours after the first handful of cases occurred at Fort Omaha. Manning thought that the restrictions might be needed only for a few days, and he faced significant pushback in the community.

Theater owners complained that the restrictions left 1,000 workers unemployed and were costing them \$5,000 a day, said Gary Gernhart, who researched the reaction to the Spanish flu in Omaha for his 1998 master's thesis at the University of Nebraska at Omaha.

"Has this hysterical scare merely resolved itself into unjust discrimination against the theaters ... by overzealous physicians?" asked one theater owner at a heated meeting, according to a contemporary report in The World-Herald.

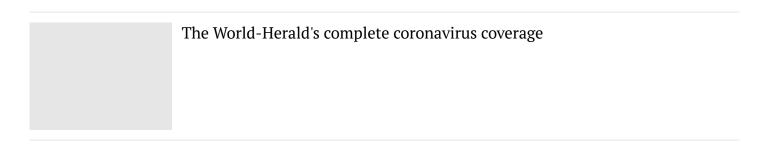
Omaha National Bank President Ezra Millard griped about an order that required his employees to wear masks, saying, "It would be an inconvenience to our employees and ... have a depressing effect on the public," Gernhart wrote in his thesis.

Most reportedly ignored the order, anyway.

Public health directors held out as long as they could against pressures from business and labor interests to halt the public health restrictions. Unlike today, there were no federal programs to reimburse businesses for their losses. Unemployment insurance didn't exist, either.

"It tended to be about three or four weeks, and then they started crumbling," Gernhart said.

Manning and the State Board of Health lifted the local restrictions after cases leveled off near the end of October, and Omaha returned, briefly, to something like normal.



Cases declined in November but surged in December. Neither Manning nor the people of Omaha had much stomach for new restrictions, though Manning promoted voluntary social distancing guidelines.

Flu cases continued into 1919, but deaths nearly ceased with the new year. It's not clear why.

There's generally agreed to have been three waves of the Spanish flu pandemic. The first was detected at an Army camp in Kansas in spring 1918 and spread in this country and then overseas by those soldiers as they deployed to the battlefields of World War I. That wave infected many millions of people, but few of them died.

The second wave was the deadly one, beginning in late summer and continuing into early 1919. The vast majority of the 50 million or more who died were killed in this compressed four-month spasm of sickness.

The third wave, spread out over 1919 and into early 1920, also produced relatively few fatalities and may have represented the virulent Spanish flu virus merging with or mutating into a less deadly seasonal strain.

Coronavirus timeline: How the pandemic unfolded in Omaha
By World-Herald staff

The Spanish flu precedent leaves epidemiologists today wondering where on the curve we are in the COVID-19 pandemic. Navarro said the cities that lifted their restrictions in 1918 had seen cases begin to decline.

"They thought they were right around the bend," he said. "Just because you come down the other side of the curve, doesn't mean the epidemic is over."

Few, if any, of the 20-plus states that have begun easing social distancing restrictions have met the federal guidelines of 14 straight days with fewer new confirmed cases. Certainly not Nebraska, where the number of new cases has set records several times in the past week.

"This disease is so explosive," Navarro said. "I just hope we don't repeat ourselves."

Khan said the easing of restrictions needs to be coupled with more aggressive testing, and then tracing the contacts of everyone who tests positive.

"If there are hidden cases, it's going to manifest itself," he said.

He doesn't think it's necessary to go back 100 years to see cautionary examples. He said COVID-19 cases in Germany have begun to rise after leveling off for a time, as have cases in parts of Japan.