1918-1919 INFLUENZA PANDEMIC IN IDAHO

Pandemic influenza arrived in Idaho sometime before the end of September, 1918. The Public Health Service did not require states to report influenza before September 27, 1918. On September 30th, officials reported several cases of influenza in Canyon County. Less than two weeks later, the number of

cases had grown to such an extent that the state was unable to track the disease accurately. By late October, influenza cases were reported from Boise, Coeur d'Alene, Idaho Falls, Lewiston, Moscow, Pocatello, Twin Falls, Wallace, and many other towns.





Figure 1: Influenza hit Boise, shown here in 1909, in October. [Credit: The Library of Congress]

than 70,000). Rural Idaho suffered terribly from the pandemic. Russell Clark, a resident of Paris, Idaho remembered the impact of the pandemic this way: "There was a feeling of depression and sadness



Figure 2: 1918, Because service workers, who frequently came into contact with the public, were at a greater risk of contracting influenza, they often wore masks in attempt to ward off the disease. The masks, however, were ineffective in preventing the spread of influenza. [Credit: National Archives and Records Administration]

because neighbors, you see, were passing away." The mortality rate was nearly 50 percent in Paris, Idaho.

State officials and newspapers urged calm. In Rexburg, the local paper insisted that there was "no occasion for panic" but then went on to discuss the need to enforce the town's quarantine. *The Northern Idaho News* of Sandpoint also urged calm, but then noted that, as a precautionary measure, schools would be closed indefinitely, and churches, picture shows and all public gatherings of every kind would be prohibited. The newspaper also issued a warning to parents to keep their children away from the railway depots as a precaution against infection. To their dismay, many officials found that quarantines had no real impact on the spread of the disease.

Watkin L. Roe from *The Franklin County Citizen Newspaper* wrote to Surgeon General Rupert Blue on the behalf of "many prominent citizens" in January 1919. He wrote "this county has been closed tight, that is so far as schools, academy, theaters, and picture shows are concerned." But, he noted, "In looking up similar conditions in other towns, we find that the said towns have been opened in spite of the prevalence of the epidemic. And reviewing these cases, we find that the conditions in those places have been much worse that

what we have had in this section." Roe wrote that 1,300 of the county's 7,500-8,000 residents had been sickened by the flu and 31 had died. Mr. Roe asked the Surgeon General if there was "any virtue in the

vaccines and serums which the doctors are using." What was a community to do? How could officials know when the disease had truly run its course? The Surgeon General did not send an answer.

Though social distancing measures likely helped, many Idahoans were still afflicted. In Idaho, as elsewhere, the disease simply ran its course, unchecked by actions taken by state, local or federal officials. While influenza rates lessened during the late fall, it was not until the summer of 1919 that the disease began to disappear from the state.

At the Idaho State Pandemic Influenza Summit held in Boise on March 27, 2006 the Secretary of Health and Human Services, Mike Leavitt warned Idahoans:



Figure 3: The Bureau of Indian Affairs found themselves overwhelmed as influenza swept through the state's reservations. Influenza swept through rural reservations, killing thousands in its wake. [Credit: The Library of Congress]

"The final toll that the pandemic took in Idaho will never be known. But the echoes of suffering and loss remain. When it comes to pandemics, there is no rational basis to believe that the early years of the 21st century will be different than the past. If a pandemic strikes, it will come to Idaho."

INFLUENZA AMONG THE AMERICAN INDIANS 1918-1919

Native Americans suffered disproportionately from the 1918 influenza pandemic. The Bureau of Indian Affairs was overwhelmed as influenza swept through rural reservations, killing thousands. During the period from October 1st 1918 to March 31st 1919, there were 73,651 reported cases of influenza and 6,270 deaths out of a total Indian population of 304,854. This case mortality rate of 8.5% was substantially higher than that of the general population (2.5%). The reporting of the attacks is probably incomplete, suggesting even higher mortality in the American Indian population. The mortality varied in different localities especially being high among the Indians of the Mountain States (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming). Out of a total Indian population in these Mountain States of 91,475, the attacks numbered 32,285 and of these 3,553 or 11 per cent, died. The highest mortality occurred among the Indians in Utah, Colorado, Idaho, Arizona, and New Mexico. Out of a reported population of 4,208 Indians in Idaho, there were 650

	C4.			22	Population (Indians).	Influenza.		Case
-t io	Sta					Cases.	Deaths.	Per Cent.
Arizona					45,707	17,237	1,948	11.3
California		-	-		16,416	4,398	256	5.8
Colorado		-	-		1,222	490	59	12.0
Florida .		-			585	66	10	15.1
daho .					4,208	650	75	11.5
lowa -			-	-	356	125	9	7.2
Kansas .					2,275	860	20	2.3
Michigan -			-		1,097	50	2	4.0
finnesota			-	-	12,003	2,052	122	5.9
fississippi					1,253	649	61	9-4
fontana -			-		12,079	2,132	139	6.5
Vebraska -		-			2,834	861	60	6.9
Vevada -		-	-	-	11,190	3,594	271	7.5
New Mexic	0		-	-	22,005	10,971	1,245	11.3
New York		-			5,982	800	80	10.0
North Caro	lina		-	-	2,343	781	37	4.7
North Dake	ota	-		-	9.216	2,349	120	5.1
)klahoma -		-	-	-	118,227	15,227	861	5.7
)regon -		-	-		4,355	1,097	94	8.6
outh Dake	ota		-	-	23,890	8,559	755	8.8
Jtah -	0	-	-		1,704	482	77	15.9
Vashington	1		-		10,315	2,021	172	8.5
Visconsin		-	-	-	9,696	2,710	158	5.8
Vyoming -		-		•	1,696	16	1	6.3
Total		-		320,654	78,177	6,632	8.5	

Gases of Influenza and Deaths among Indians in United States* from 1st October 1918 to '60th June 1919.

* From the U.S.A. Public Health Reports for 17th October 1919. Figure 4: This table gives the incidence of influenza and the mortality from it among the Indian population of the various States, from October 1918 to June 1919. influenza cases and 75 deaths (case mortality of 11.5%). These figures are taken from a statement furnished to the U.S. Public Health Service by the Office of Indian Affairs, Department of the Interior.* (* U.S. Public Health Reports, 9th May 1919, http://ykalaska.wordpress.com/2006/12/20/.)

A second wave of influenza developed among the Indian population in April 1919.

1957-1958 INFLUENZA PANDEMIC ("ASIAN FLU")

The 1957-1958 Pandemic was first detected in Asia in February 1957. Because of improved surveillance and technology, the novel virus was identified quickly and vaccine production began in May 1957. Limited supplies of vaccine were available by August. The pandemic arrived in the United States during the summer of 1957. Infection rates were highest in school-age children, young adults, and pregnant women while death rates were highest in the elderly. A second wave hit the U.S. in January and February of 1958, this time infecting mostly elderly people. The Asian Flu pandemic caused at least 70,000 deaths in the United States and an estimated 1-2 million deaths worldwide. In Idaho, 49 deaths were attributed to the pandemic (Idaho Department of Health and Welfare Bureau of Health Policy and Vital Statistics).

1968-1969 INFLUENZA PANDEMIC ("HONG KONG FLU")

The mildest pandemic of the 20th century was first detected in Hong Kong in early 1968. The first cases in the United States began in September, but the pandemic didn't become widespread there until December. Deaths peaked in December 1968 and January 1969, mostly in those over 65 years old. A combination of factors are credited with the relatively mild nature of this pandemic. First, the Hong Kong Flu was similar to the Asian Flu of 1958-1959, affording some immunity to those living



Figure 5: Policemen in Seattle wore masks in the belief that these would protect them from influenza. The masks provided no real protection. c. 1918.

during those years. Second, infection rates did not become high until near the school holidays in December so school children were not infecting each other or their families. Lastly, improved medical care and medications reduced the number of complications from flu and probably reduced mortality attributed to the pandemic. The Hong Kong flu caused nearly 34,000 deaths in the United States. In Idaho, 61 people died from pandemic influenza in 1968-1969 (Idaho Department of Health and Welfare Bureau of Health Policy and Vital Statistics).

PANDEMIC "THREATS" IN THE 20TH AND 21ST CENTURIES

The "Swine Flu" of 1976 was identified in Fort Dix, New Jersey and at first was thought to be related to the 1918 virus. A mass vaccination of US citizens contained the threat to the Fort Dix area and later research determined that the virus would probably not have been as serious at the 1918 pandemic if it had spread.

In May 1977 the "Russian Flu" emerged in north China and spread rapidly in children and young adults worldwide. Because of similarities to other A/H1N1 viruses that had circulated before 1957, most people over 23 years of age had some immunity to the disease and therefore the epidemic was not considered a true pandemic. Vaccine for this virus was not available during the 1977-1978 flu season, but the virus was included in the seasonal vaccine for the 1978-1979 flu season.

In 1997 (H5N1, "Avian Flu", "Bird Flu") and 1999 (H9N2) two new influenza pandemic threats emerged in Hong Kong. Both of these avian viruses have infected humans directly without having been altered first by infecting pigs as an intermediate host. These viruses are currently found in birds. In 1999, two children were infected and became ill with A/H9N1. After initially killing 18 people in Hong Kong in 1997 (www.PandemicFlu.gov), the A/H5N1 virus has gone on to infect at least 387 people (confirmed by WHO) in 15 countries killing 245 (confirmed by WHO) as of September 10, 2008. The highest number of deaths has occurred in Indonesia where 82% of those who are infected have died. Much of the current pandemic preparedness efforts in Idaho, the United States, and elsewhere in the world have been predicated on the potential of A/H5N1 becoming the next pandemic influenza. Human-to-human transmission of the virus has occurred, but only in a few instances on a very limited basis between family members and close contacts.

Unless the virus becomes easily transmitted between humans through random changes in the viruses makeup or through genetic drift, H5N1 will not become a pandemic.