

Pandemic Influenza

What you need to know



South Central

Public Health District

Prevent. Promote. Protect.

South Central Public Health District

- Serving 8 counties: Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Rupert, and Twin Falls
- Received pandemic influenza grant to conduct preparedness activities such as:
 - Response plan development
 - Preparedness exercises
 - Education
 - Consultation

What is Influenza?



- Acute, feverish respiratory illness affecting nose, throat, bronchial tubes, and lungs
- Epidemics caused by influenza viruses A and B
- Occurs worldwide, causing considerable morbidity (illness) and mortality (death) each year
- Symptoms appear rapidly and include abrupt onset of fever, headache, severe discomfort, muscle tenderness or pain, nonproductive cough, sore throat, and a very runny nose.

How Do You Get the Flu?

- Typical incubation: 2 days (range: 1-4 days)



- Viral shedding
 - Can begin 1 day before symptom onset
 - Peak shedding during first 3 days of illness
 - Correlates with temperature
 - Subsides after 5 days in adults, can be 10+ days in children
- Transmission is predominately droplet spread

Tools for Control of Pandemic and Seasonal Influenza

- Vaccine
 - Availability
 - Efficacy
- Antiviral medications
 - Efficacy
 - Limited availability / prioritization / safety
- Quarantine and isolation; social distancing
- Health messaging
 - Cover your cough and sneeze
 - Wash your hands
 - Stay home when you are sick
 - Have a supply of food and water on hand



Quarantine and Isolation

- *Quarantine:*
 - Restriction of movement to and from a specific place
- *Isolation:*
 - Restricting the movement of persons diagnosed with a contagious disease
- *Social Distancing:*
 - Stay home when sick
 - Avoid close contact with sick people

Influenza Vaccine Production



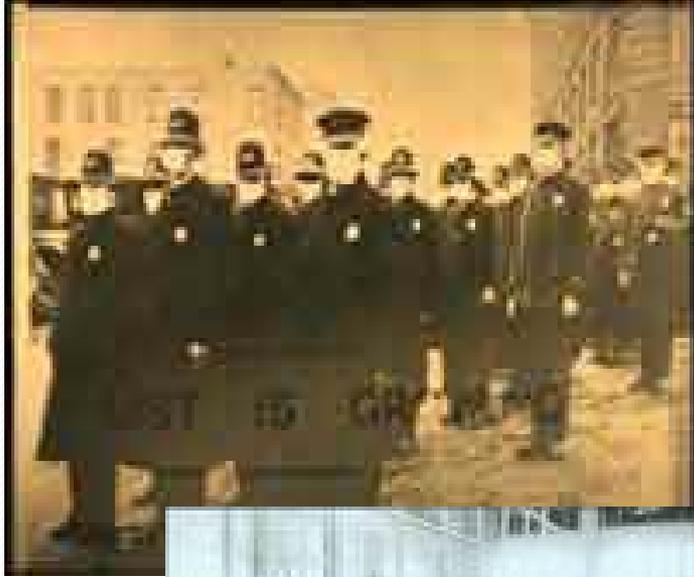
- Requires large egg supply
- Lengthy production time
- Strain selected in February for September distribution
- Limited number of manufacturers
- Pandemic virus may be detected after strains are selected for seasonal vaccine
- Experimental vaccine may be produced more rapidly, but supply will be limited

The Burden of Seasonal Influenza



- Globally each year:
 - 250,000 to 500,000 deaths
- In the United States each year:
 - 36,000 deaths
 - >200,000 hospitalizations
 - \$37.5 billion in economic costs from influenza and pneumonia
- In Idaho each year:
 - 12.8 deaths on average
 - Average age is 50 and older

What is an Influenza Pandemic?



- A global influenza outbreak
 - Caused by a brand new (novel) flu virus
 - Most severe occur when there are changes in both surface proteins
 - Viruses can be isolated at any time of year
- Because it is a new virus, few or no people would be immune
- Many people would get sick in every part of the world
- Asia is the source of many outbreaks because swine, birds, and humans live under the same roof, providing opportunity for viral mixing

Past Influenza Pandemics

- Pandemic flu is unpredictable, like the flu virus itself
- 1968-69 Hong Kong flu
 - 34,000 deaths in US
- 1957-58 Asian flu
 - 70,000 deaths in US
- 1918-1919 Spanish flu
 - >500,000 deaths in US
 - 50 million deaths
 - Worst case scenario



1918 Influenza in Idaho

- No definitive records on number of people who were sick or died
- Epidemic raged from October – December 1918
- At the same time, local men were dying in Europe during the final stages of WWI, there was a smallpox outbreak in Twin Falls' schools, and life went on

Influenza in the News

INFLUENZA HERE ONLY SUSPECTED

There is no case of Spanish influenza in Twin Falls county so far as the actual knowledge of the county physician, Dr. C. D. Weaver, goes, according to this morning. There has been no sickness reported here.

CLOSES PUBLIC ASSEMBLAGES AS PRECAUTION

Mayor F. F. Bracken Issues Orders in Compliance With State Board' Action on Spanish Influenza Situation

Directing the closing of all public

DRASTIC RULES TO REGULATE FLU EPIDEMIC

County Board of Health Requires Strict Patient and Which He Is

Regulations adopted board of health at a meeting Saturday for the purpose of the spread of influenza.

EPIDEMIC IS INCREASING OVER COUNTY

Further and More Stringent Regulations May Be Necessary in Order to Successfully Combat Influenza

As the result of an investigation made Wednesday afternoon by members of the board of county commissioners and the county board of health.

BOARDS ADOPT NEW RULES IN FIGHT ON FLU

City and County Health Officers Unite on Enforcement of Rigid Quarantine and Partial Lifting of Closing Order

Ordering a more extensive and rigid quarantine against individual cases of influenza and conditioning lifting of provisions of the closing order as appropriate.

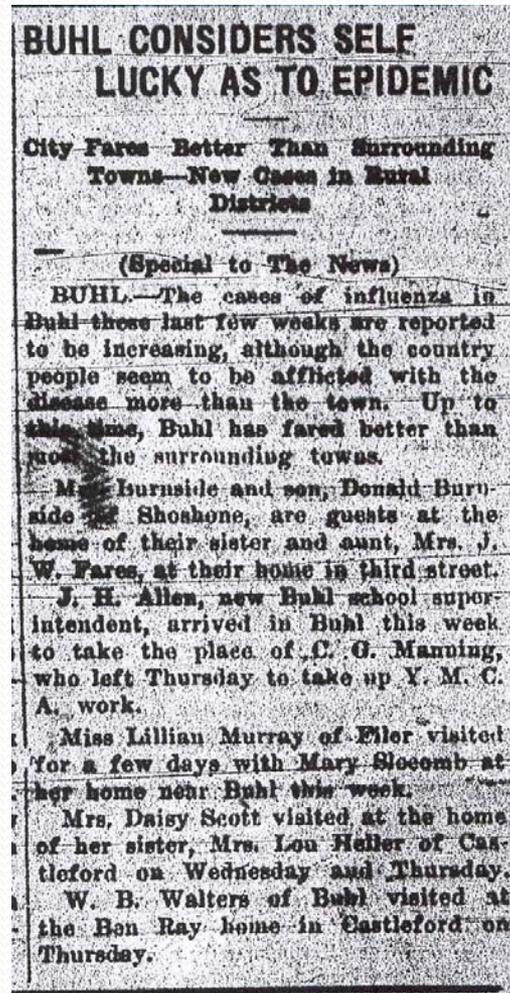
Twin Falls
Weekly News
Oct.- Dec. 1918

Influenza on the Home Front

Buhl Considers Self Lucky
as to Epidemic

*City Fares Better Than
Surrounding Towns - New
Cases in Rural Districts*

Twin Falls Weekly News
Nov. 28, 1918



Influenza on the Home Front

**INFLUENZA EPIDEMIC
TOLL LIGHT AT CURRY**

**Few Cases in Community Are Reported
and All Patients Are Recovering**

(Special to The News)

CURRY.—Curry has had but few influenza cases and they are all recovering nicely.

The Hanson Bros., who have been doing contract work at the beet dump here moved their camp away. All of the beets will be cared for this week.

Chas. Crist and family from Churchill were visitors at Curry Sunday.

Mr. Geo. Patton has gone east with a sheep train for Anderson & Case of

**Influenza Epidemic Toll
Light at Curry**

*Few Cases in Community
are Reported and All
Patients are Recovering*

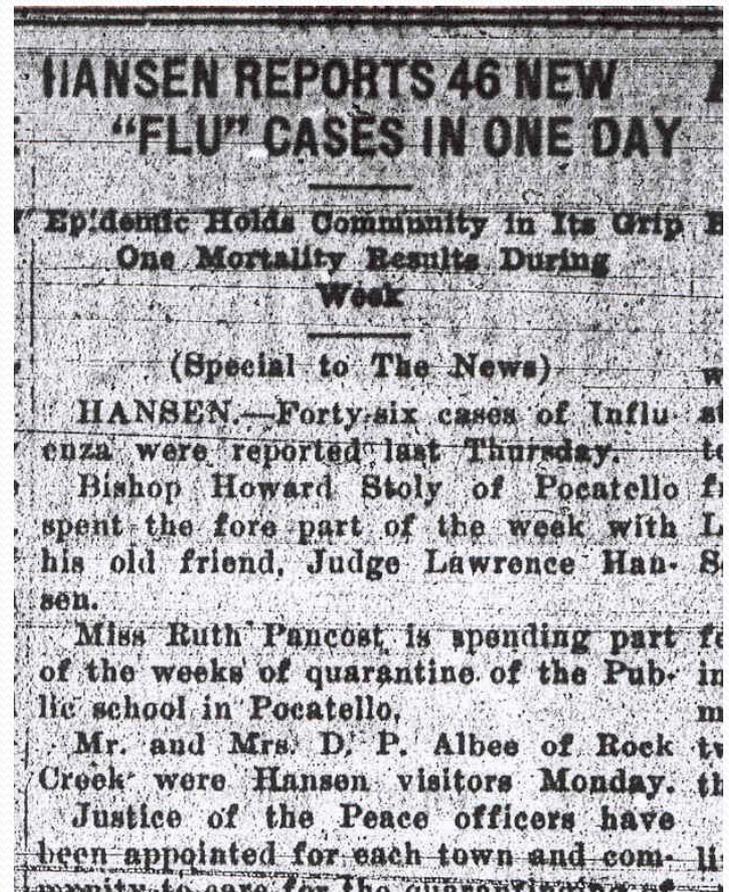
Twin Falls Weekly News
November 21, 1918

Influenza on the Home Front

Hansen Reports 46 New
"Flu" Cases in One Day

*Epidemic Holds Community in Its Grip,
One Mortality Results During Week*

Twin Falls Weekly News
November 21, 1918



Influenza on the Home Front

**MALADY RAGES
AT HOLLISTER**

Fifteen Cases of Spanish Influenza Are Reported by the County Physician

There are fifteen cases of Spanish influenza at Hollister, according to the statement of Dr. C. D. Weaver, county physician, this morning. There are also two cases which have been diagnosed as Spanish influenza in Twin Falls, but so far there have been no other cases of the malady in this county reported, Dr. Weaver stated.

Dr. Weaver has investigated the cases at Hollister, and has recommended to the trustees that the schools there be closed for a time as a means of preventing the spread of the malady in that locality.

ARREST AT LONG BEACH

Malady Rages at Hollister

Fifteen Cases of Spanish Influenza Are Reported by the County Physician

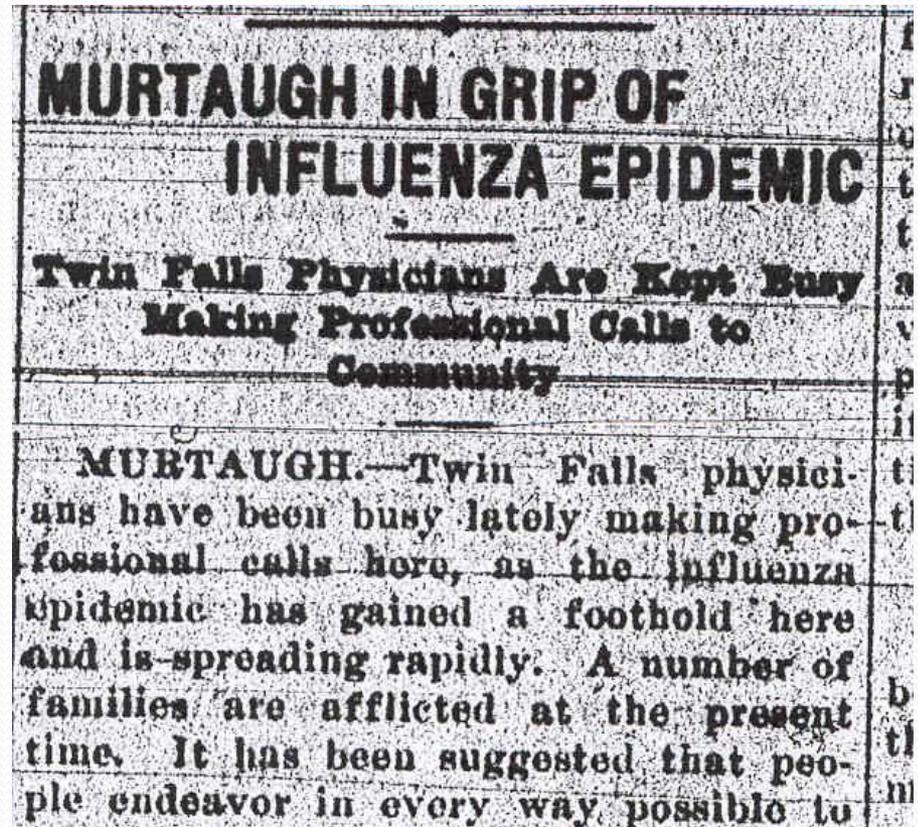
Twin Falls Weekly News
October 17, 1918

Influenza on the Home Front

Murtaugh in Grip of
Influenza Epidemic

*Twin Falls Physicians
Are Kept Busy Making
Professional Calls to
Community*

Twin Falls Weekly News
November 21, 1918



Influenza on the Home Front

POCATELLO UNDER BAN

Pocatello is quarantined and no one can enter there unless he possesses a health certificate less than 24 hours old. Lehi, Provo, American Fork, Spanish Fork, Springville and other points in Utah county are also under the ban.

Pocatello Under Ban

Pocatello Partially Lifts Influenza Ban

Theatres, Pool Halls, Fountains and Schools to Open; Public Meetings and Dances Barred

POCATELLO PARTIALLY LIFTS INFLUENZA BAN

Theatres, Pool Halls, Fountains and Schools to Open; Public Meetings and Dances Barred

POCATELLO, Idaho—The city board of health at a meeting Tuesday night raised the ban on influenza, permitting theatres, movies, pool halls, soda fountains and schools to resume on December 15, says the Idaho Statesman. The public schools will reopen December 30. The Idaho Technical institute opens the regular and night and winter courses on December 16.

The ban is still on public meetings and all dances. All persons entering Pocatello must show a health certificate. The situation is much improved. Ten new cases reported in the past week and two deaths.

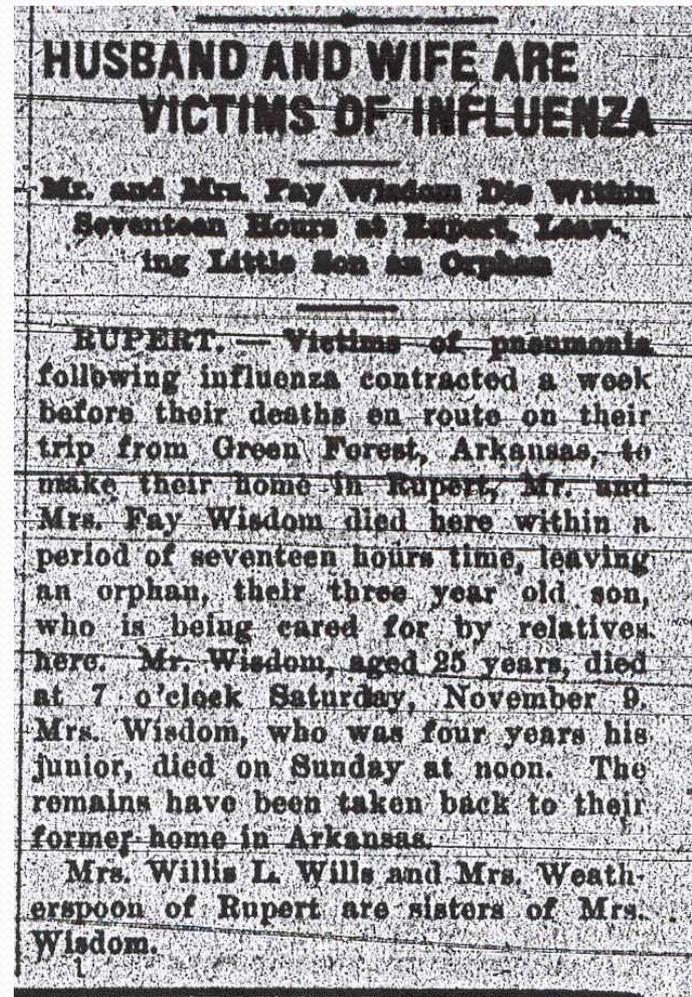
Twin Falls Weekly News
December 12, 1918

Influenza on the Home Front

Husband and Wife Are
Victims of Influenza

*Mr. and Mrs. Fay Wisdom Die
Within Seventeen Hours at
Rupert, Leave Little Son an
Orphan*

Twin Falls Weekly News
November 21, 1918



Influenza on the Home Front

In Twin Falls...

Health Board Closes
Schools for Two Weeks

*Takes Drastic Action to
Prevent Spread of Smallpox
Among Pupils*

Closes Schools
Throughout Ida

*State Board of Health Makes
Further Order to Stop
Epidemic Spread*

HEALTH BOARD CLOSES SCHOOLS FOR TWO WEEKS
Takes Drastic Action to Prevent Spread of Smallpox Among the Pupils—Several Cases Are Reported

Because of the appearance of smallpox in the Twin Falls schools, the county board of health, following an investigation Friday, issued an order closing the schools for two weeks beginning Monday next, and providing that readmission to schools at the expiration of that time should be contingent upon the pupil being vaccinated or presenting a physician's certificate showing that he had recovered from the disease.

CLOSES SCHOOLS THROUGHOUT IDA
State Board of Health Makes Further Order to Stop Epidemic Spread

Public and private schools in Idaho have been closed until further orders by the state board of health as a means of preventing the spread of the influenza epidemic. Judges of the several district courts also have been asked by the state board of health to postpone hearings until the crest of the epidemic is passed.

Prior to the receipt of the order closing the public schools, on Saturday afternoon, Miss Brittomart Wolfe, county superintendent, telephoned to Dr. E. T. Biber, secretary of the state board of health, asking for authority to close the schools of this county, because the attendance was falling off so seriously. The receipt of the telegram issued Saturday by the state board of health,

Twin Falls Weekly News -- October 24, 1918

Influenza on the Home Front

OFFICIALS SAY EPIDEMIC HERE IS ON THE WANE

Number of New Cases Reported
This Week Considerably Less
Than Previously—Directors
May Require Immunization

Reports made by attending physicians to City Clerk W. A. Munnick indicate that the influenza epidemic in Twin Falls is on the decline. This is in view of the fact that 12 cases were reported Tuesday and 10 for the day preceding. The number of new cases reported on corresponding days of last week was considerably higher.

The county emergency hospital is filled to its capacity of eight patients, new patients being received Sunday to take the places of those discharged.

WILL RE-OPEN SCHOOLS HERE TO GIVE SERUM

Pupils Who Desire Immunization
Against Influenza Have
Opportunity to Receive the
Treatment This Week

Not for the resumption of studies discontinued in October as a result of orders of the board of health.

INNOCULATION OF PUPILS TO BEGIN FRIDAY

Superintendent Hal G. Blue Announces Definite Arrangements for Safety Falls School C

Superintendent Hal G. Blue in Twin Falls schools following announcement

ATTENDANCE AT SCHOOL LIGHT ON OPENING DAY

Parents of Rock Creek Children Unwilling to Take Chance on Recurrence of Epidemic

(Special to The News)

ROCK CREEK—School reopened here Monday with a very light attendance. Most of the parents prefer to wait until all danger of a recurrence of the influenza epidemic is past before sending their children to school. No new cases of influenza are reported here, and there is only one case of sickness here now in which the symptoms re-

THEATRE LIGHTS TO SHINE AGAIN WHEN BAN LIFTS

Playhouses, Long Closed as a Public Health Measure, Resume Performances Under New Regulations

Twin Falls theatres, which have been dark since October 10 in compliance with the board of health closing order, will reopen for Saturday afternoon matinees and regular performances thereafter under the provisions of a tentative decision reached last Saturday by the county and city boards of health, which provisions permit also the re-

Twin Falls
Weekly News

Nov.-Dec. 1918

Seasonal vs. Pandemic Influenza

- Seasonal flu
 - ILL: About 5–20% of U.S. population
 - DEATHS: 36,000 in U.S./yr (mostly elderly)
 - Up to 500,000 deaths worldwide
- “Moderate” pandemic flu prediction
 - ILL: About 25% of U.S. population
 - DEATHS: 500,000 deaths in U.S.
 - Potentially 2 to 7.4 million deaths worldwide
 - Estimates vary widely

Potential Pandemic Flu Impact on South Central Idaho

- In **South Central** Idaho:
 - Potential Deaths: 912
 - Potential Cases Hospitalized: 3,927
 - Potential Outpatient Visits: 22,795



Necessary Factors for a Pandemic



*Influenza
Virus*

- Ability of virus to infect humans
- Immunologically naïve global human population
- Virus capable of causing disease in humans
- Efficient human-to-human transmission

Avian Influenza...

Is It the Next Pandemic?

- Avian influenza - commonly called "bird flu" - is an infection caused by influenza viruses that occur naturally in birds.
- Human H5N1 influenza infection was first recognized in 1997 when this virus infected 18 people in Hong Kong, causing 6 deaths.
- Wild birds can carry the viruses, but usually do not get sick from them. However, some domesticated birds, including chickens, ducks, and turkeys, can become infected, often fatally.

Avian Influenza...

Is It the Next Pandemic?

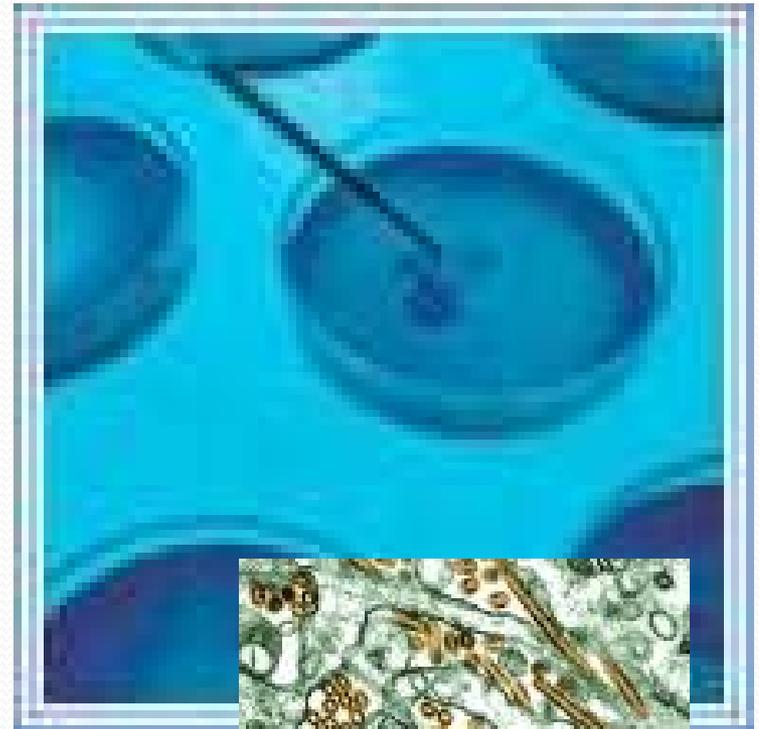


- One strain of avian influenza, the H₅N₁ virus, is endemic in much of Asia and has recently spread into Europe.
- Currently, close contact with infected poultry has been the primary source for human infection. Though rare, there have been isolated reports of human-to-human transmission of the virus.

Avian Influenza...

Is It the Next Pandemic?

- H5N1 mutates rapidly. Should it adapt to allow easy human-to-human transmission, a pandemic could ensue — it has not done so to date.
- Vaccines to protect humans against H5N1 viruses currently are under development.



*Avian
Influenza
Virus*

Protecting the US Poultry Supply



- Far-reaching control measures are in place within the U.S. poultry industry to detect or control an avian influenza outbreak.
- Remember, proper cooking of chicken kills avian influenza virus.

What Should Business Do?

- ***Plan for the impact of a pandemic on your business:***
 - Identify a pandemic coordinator
 - Identify essential employees and critical products
 - Establish an emergency communications plan to communicate with your employees and customers
 - Determine the potential impact on your business' financial status
- ***Plan for the impact of a pandemic on your employees and customers:***
 - Determine how to handle employee absences for personal or family illness
 - Implement guidelines to modify face-to-face contact
 - Encourage annual flu vaccination



What Should Business Do?



- ***Establish policies to be implemented during a pandemic:***
 - Compensation and sick-leave absences
 - Flexible worksite (telecommuting options)
 - Prevent influenza spread at the worksite
 - Restrict travel to affected geographic areas
- ***Allocate resources to protect your employees and customers during a pandemic:***
 - Make alcohol gel and disinfectant wipes available
 - Enhance communications technology to support telecommuting

What Should Business Do?

- ***Communicate to and educate your employees:***
 - Disseminate materials covering pandemic flu fundamentals
 - Plan communication activities to minimize employee fear and anxiety
 - Tell your employees about your business' pandemic plan
- ***Coordinate with external organizations and help your community:***
 - Collaborate with insurers, health plans, and local healthcare providers to share your pandemic plan
 - Collaborate with federal, state, and local agencies to share your plan and understand their plans
 - Let agencies know the assets or services your business could contribute to the community
 - Share your best practices with other businesses in your community, especially your local Chamber of Commerce



What Should Local Government Do?



- Develop a continuity of operations plan
 - Address essential operations for all local government agencies
- Begin now to train staff about pandemic flu
- Participate in preparedness exercises

What Should Healthcare Do?

- Develop a continuity of operations plan
- Ensure policies are in place for infection control measures -- hospitals, clinics, private offices
- Identify a



What Should YOU Do?

- Stay home when you are sick
- Cover your cough and sneeze ... *“arm your sneeze”*
- Wash hands regularly with soap and water and use alcohol hand gel
- Avoid touching eyes, nose, and mouth



What Should YOU Do?



- Store a 3-week supply of food and water
 - Check www.redcross.org for guidelines
- Store nonprescription drugs and health supplies at home
- Plan with family members about:
 - Caring for loved ones who are ill
 - Caring for children when schools/daycares are closed

Resources

- www.flu.gov
- www.panflusouthidaho.org



**South Central
Public Health District**

Prevent. Promote. Protect.