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

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 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

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 Partially Lifts Influenza Ban

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

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

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. Mundick indicate that the influenza epidemic in Twin Falls is on the decline. In view of the fact that only two new cases were reported Tuesday, according to figures for the week, it does not seem likely that the county will have to add to its capacity of health officers.

The city's emergency hospital has been expanded to the capacity of eight patients, new patients being received on a day-to-day basis.

INOCULATION OF PUPILS TO BEGIN FRIDAY
Superintendent Hal G. Blue Announces Definite Arrangements for Safer Fall School Conditions

Superintendent Hal G. Blue announced Friday that arrangements for inoculation of pupils will resume Monday. The county health department will make its regular round of visits, and will begin inoculation on Monday.

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 closed since October 18, will reopen Thursday, November 21. The board of health has granted permission for the reopening of the Twin Falls theatres, which will be operated under new regulations.

WILL RE-OPEN SCHOOLS HERE TO GIVE SERUM
Pupils Who Desire Immunization Against Influenza Have Opportunity to Receive the Treatment This Week

Parents of Rock Creek children are urged to take advantage of the opportunity to receive the treatment. The school will be open Monday with a very light attendance. Most of the parents prefer to wait until all danger of recurrence of the influenza epidemic is past before sending their children to school. No new cases of influenza are reported here, but there is only one case of sickness now, in which the symptoms re-
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

- 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.
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](http://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