



What You Should Know About Influenza!

NJ Department of Health and Senior Services

August 2009

Seasonal Flu

Influenza Pandemic

Novel Influenza

What you will learn...

- The difference between the terms seasonal, pandemic and novel influenza
- The steps people can take to prevent the spread of respiratory illness
- Where to locate reliable information about the flu

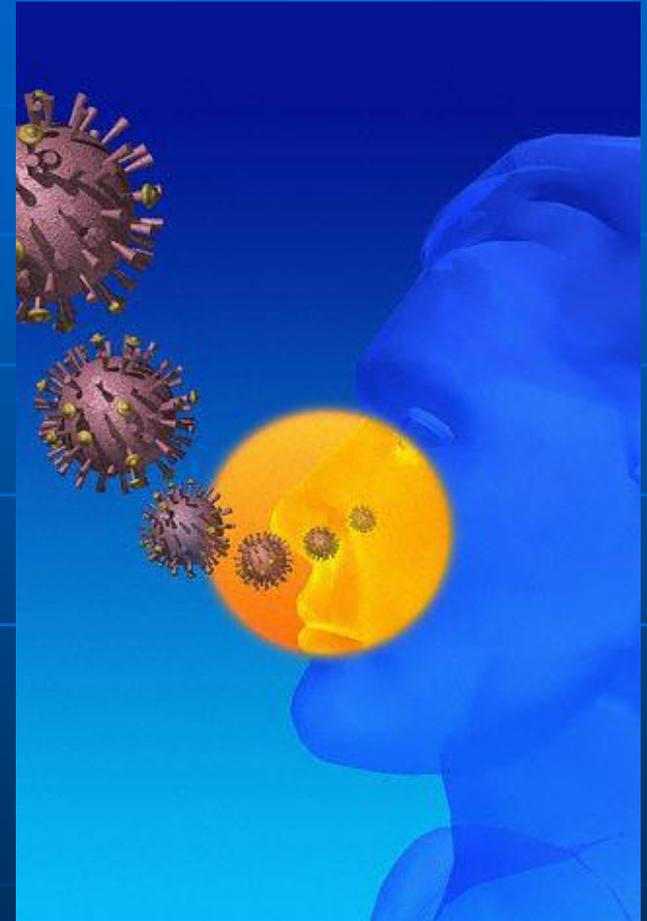
What is Influenza?

- Disease of upper respiratory tract
- Incubation period: 1-3 days
- Symptoms: fever, cough, sore throat, runny/stuffy nose, body aches, headache, chills, and fatigue
- Infectious period: 24 hours before symptom onset and up to 7 days after symptom onset (children - up to 14 days)



Seasonal Influenza

- Occurs annually, Oct. – April
- 36,000 die and 200,000 hospitalized
- Elderly, people with weak immune systems and young children are at high risk for complications
- Vaccine preventable



What is a *pandemic*?

- Epidemic = community or regional outbreak of an infectious disease
- Pandemic = global epidemic

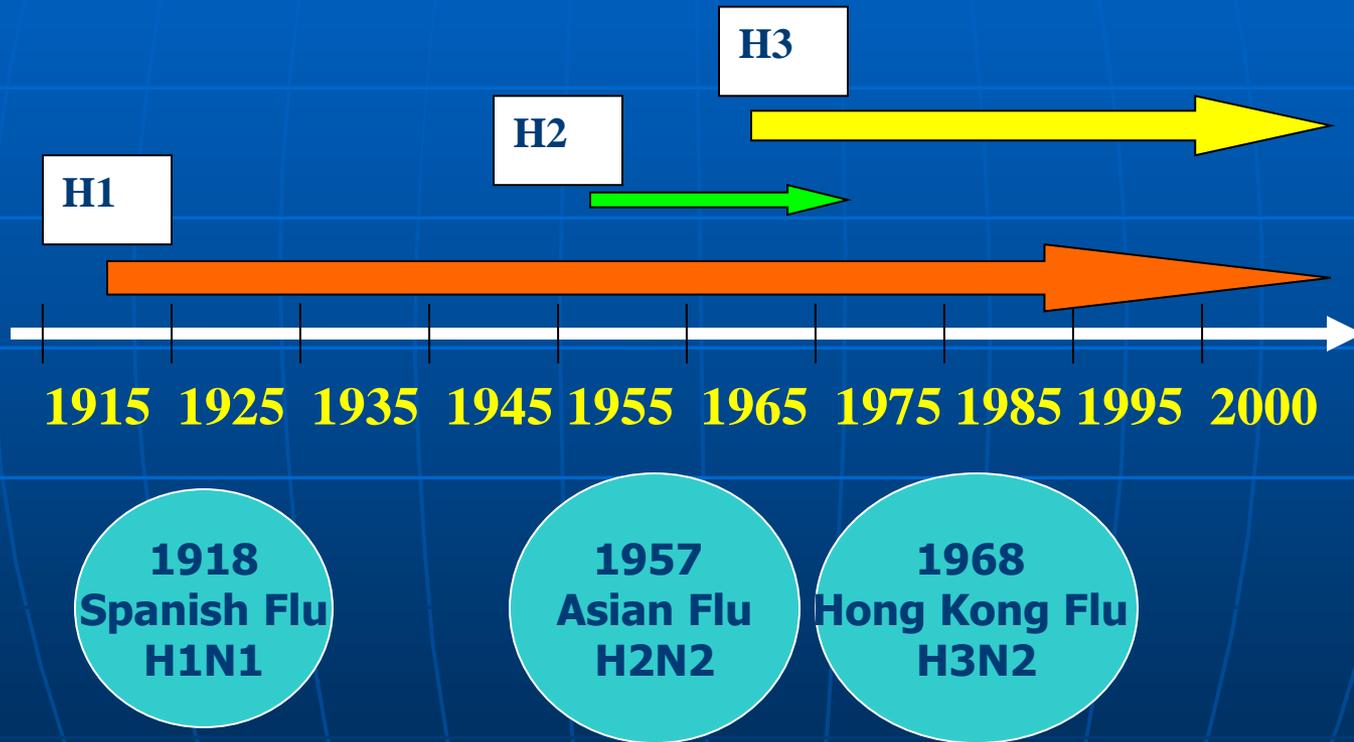
NOTE: Pandemics sweep the globe in several waves a few months apart. Waves can last 2-3 months in a given community.

What causes a flu pandemic?

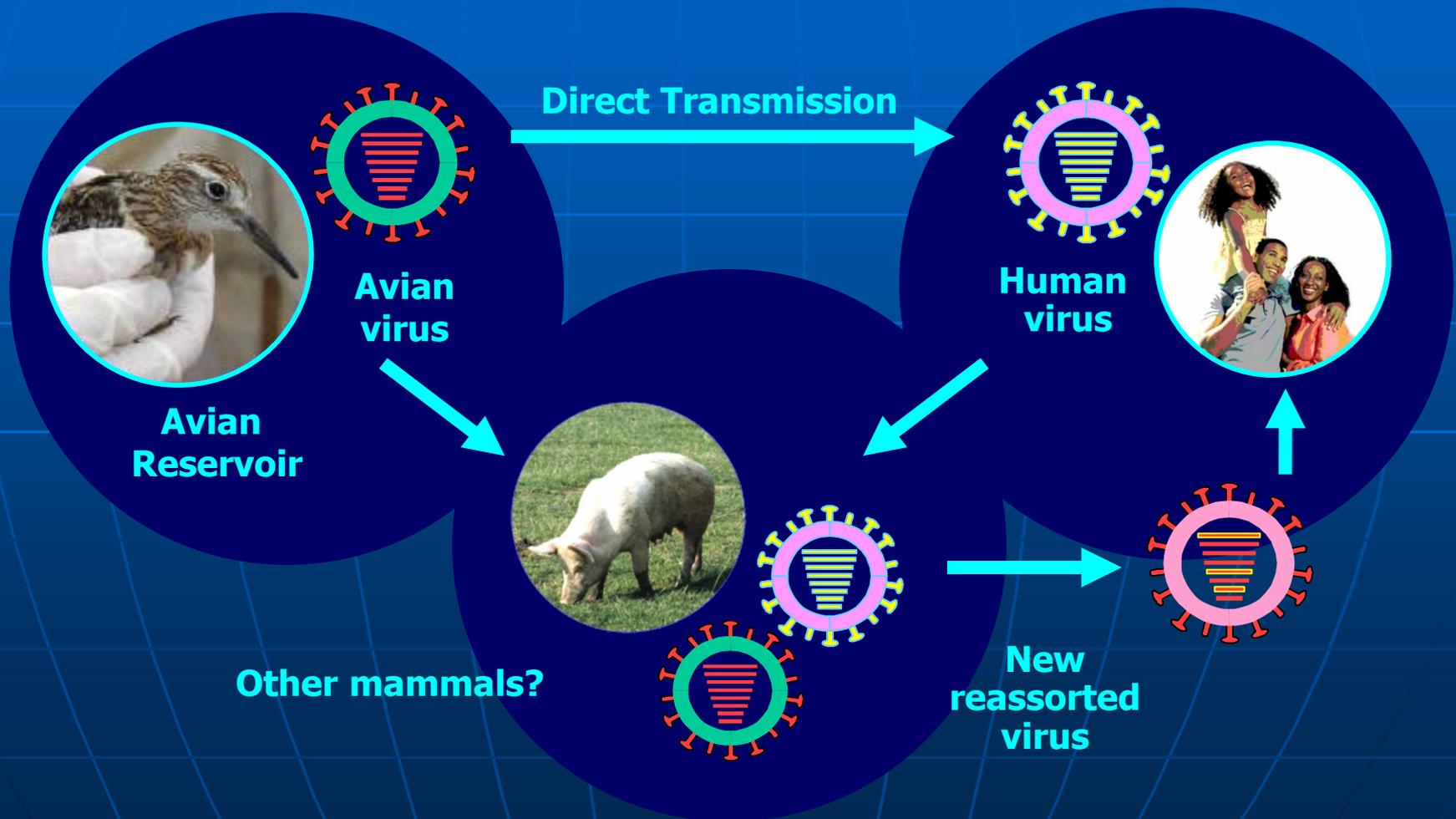
- New (novel) strain of a virus
- Easy person-to-person spread

There is no predicting when a flu pandemic will occur!!!

Pandemics in History



Where do novel flu strains come from?



Recent Novel Flu Strains

Avian H5N1

- Flu in birds
- Causes serious illness and death in humans
- Not easily transmitted person-to-person
- Has pandemic potential

2009 H1N1

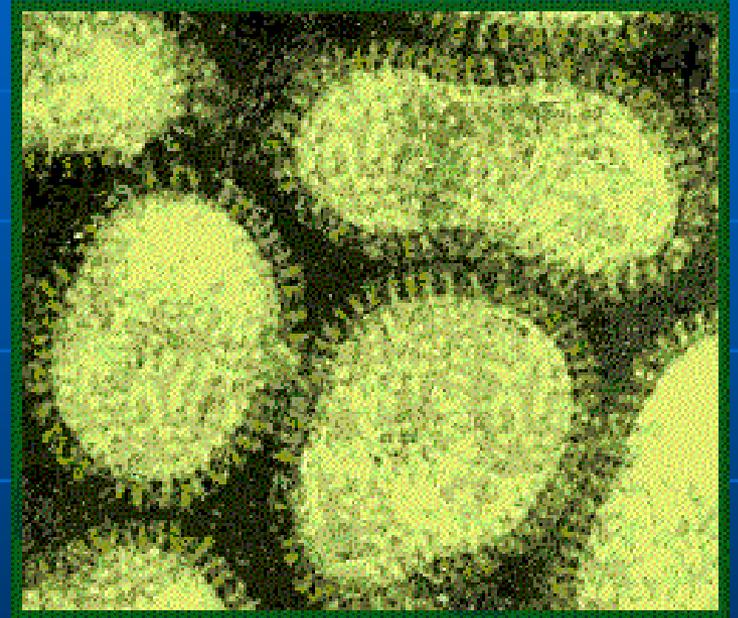
- Flu in pigs
- Causes mild illness and few deaths in humans
- Easily transmitted person-to-person
- Has already resulted in a pandemic

What is H1N1 (Swine) Flu?

- H1N1 Influenza (swine flu) is a respiratory disease of pigs caused by type A influenza virus that regularly causes outbreaks in pigs.
- The classic swine flu virus type A H1N1 virus was first isolated from a pig in 1930.

Emergence of New Viruses

- Like all influenza viruses, swine flu viruses change constantly.
- Pigs can be infected by avian influenza and human influenza as well as swine influenza.
- Viruses from different species can swap genes and form new viruses.



Human-to-human spread of H1N1 Swine Flu

- Pigs harbor influenza viruses that can be passed to humans.
- These viruses do not normally infect humans, however, on rare occasions, swine flu can mutate (change in biological make-up), causing the disease in humans.
- However, there have been documented cases of swine flu in humans.
- This is what has happened with the current H1N1 Influenza outbreak.

How does H1N1 Influenza (Swine Flu) spread?

- Spread of this H1N1 influenza A virus (swine flu) is thought to be happening in the same way that seasonal flu spreads.
- Flu viruses are spread mainly from person to person through coughing or sneezing from people with influenza.
- Sometimes people may become infected by touching something with flu viruses on it and then touching their mouth or nose.

When and for how long is a person able to spread the flu?

- Adults may be able to spread the disease to others beginning one day **before** getting symptoms and up to seven days **after** getting sick.
- You can give someone the flu before you know you're sick as well as when you are sick.
- Children may be contagious for longer than a week.

What are the signs and symptoms of the H1N1 flu in people?

The symptoms of H1N1 flu in humans are similar to the symptoms of seasonal influenza and include:

- fever greater than 100 degrees
- coughing, sore throat, chills,
- headache & body aches, fatigue, respiratory congestion,
- some cases, diarrhea and vomiting

H1N1 Vaccine

- Vaccine
 - Will not be available until mid-October
 - Priority groups
 - Pregnant Women
 - Infant Caregivers
 - Healthcare/EMS Workers
 - 6 months to 24 years of age

Can I get H1N1 influenza from eating or preparing pork?

- NO. H1N1 Influenza viruses are not spread by food.
- You cannot get swine influenza from eating pork or pork products.
- Eating properly handled and cooked pork products is safe.

Media Issues

The Economist
MAY 28th - 31st 2009
Economiist.com

Obama's first 100 days
Latin America's economic resilience
Pakistan attacks the Taliban
Wall Street's angry shareholders
The dancing parrot

The pandemic threat

How scared should you be?



MAY 2ND-8TH 2009
Worldwide cover

NATIONAL GEOGRAPHIC
OCTOBER 2009

NATIONAL GEOGRAPHIC



The Next Killer Flu

Can we stop it?

FROM HAWAII'S OUTER KINGDOM ...
Africa's Deadly Desert ... Battle of Baghdad ... Missouri State High ...
Sword Guardians of Thailand ... Zepher's Triple Beam ...

DAILY NEWS
\$1.25
WEDNESDAY, MAY 27, 2009

BEANTOWN BEATDOWN
LOST WORKERS ALL FEELING ALL THE SWEET TASTE OF UNEMPLOYMENT

SWINE FLU SPREADS!

- Feds fear virus could turn deadly in U.S.
- Mayor says don't panic as cases confirmed

EVERYTHING YOU NEED TO KNOW — SEE PAGE E-1

WHICH COMES FIRST?



creative loathing
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BIRD FLU How worried should you be?



'Imagine what would happen if a Category 5 viral storm hit every state'

By Steve Sternberg
USA TODAY

In Turkey: Authorities in the province of Balıkesir begin slaughtering chickens on Monday after avian flu was detected in the area. Health officials from all over the world are scrambling to...

Tools in Our Toolbox



- Pandemic vaccine
 - NOT likely available during the first wave of a pandemic
- Antiviral medications
 - Effectiveness
 - Quantities
 - Distribution issues



Community Strategies

Keeping people apart helps slow the spread of flu!

- Isolation and treatment – for sick people

Social Distancing

To decrease contact between healthy and infected people:

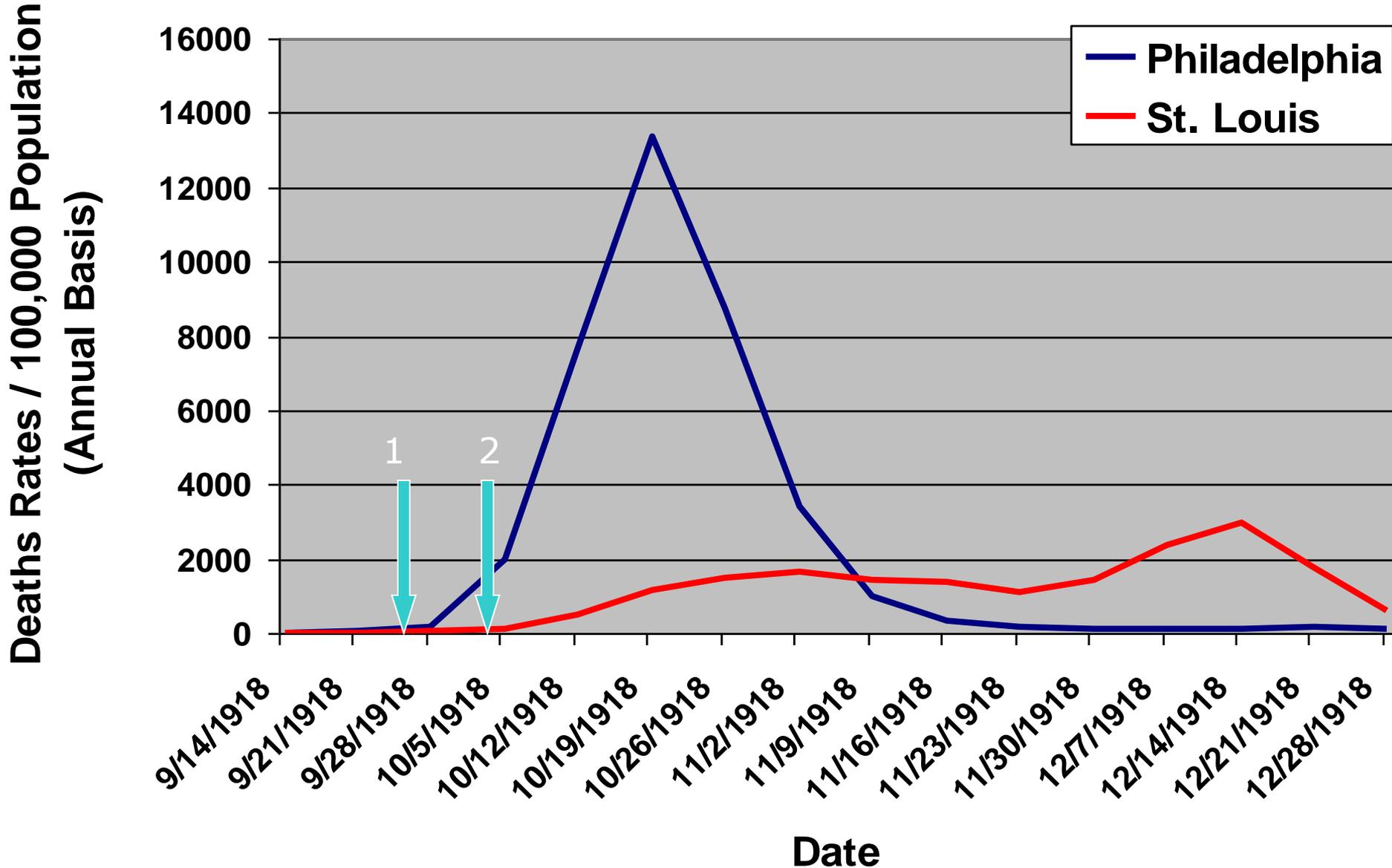
- Voluntarily stay home
- Limit time spent in crowds

The Public Health Response

If necessary, additional social distancing measures may be taken by authorities such as:

- Cancellation of public gatherings
- Closure of public places and schools
- Restrictions on travel

1918 Death Rates: Philadelphia v St. Louis



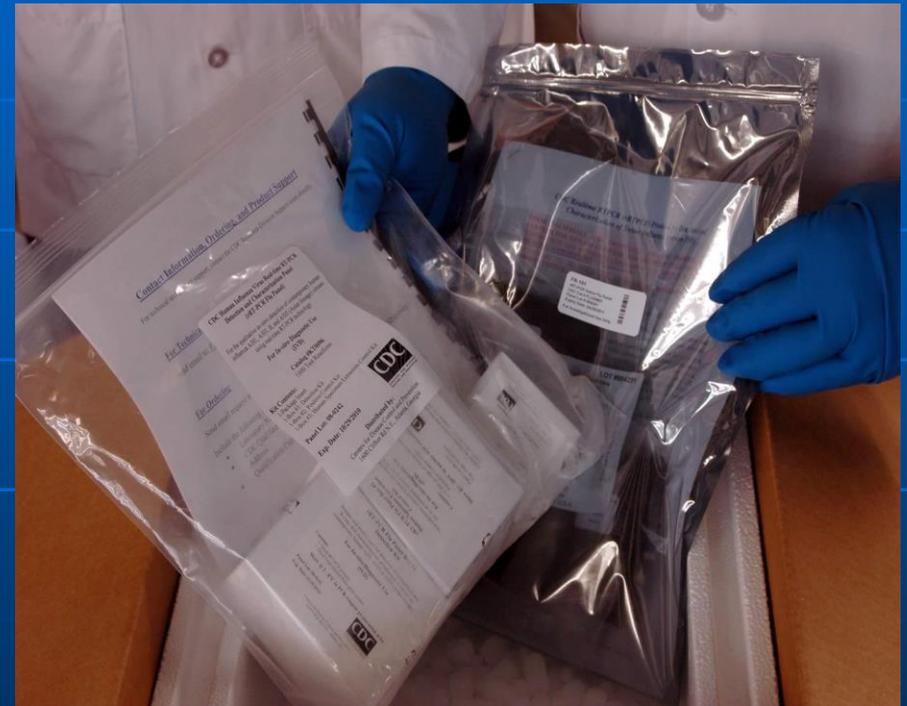
School Closure



- Who decides whether to close a school?
- Should schools be disinfected before they reopen?

Testing for Flu

- Why is testing done?
- Clinical testing
- Public Health testing



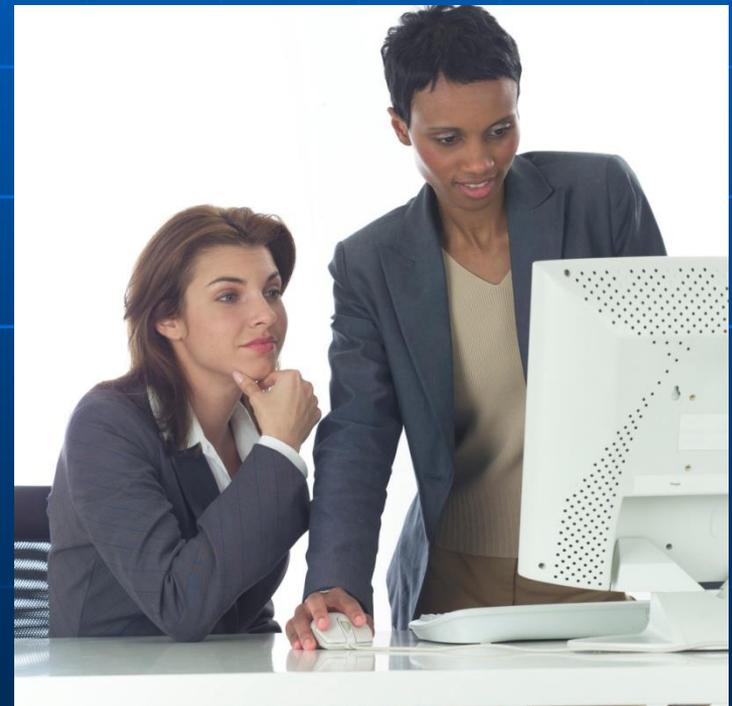
Clinical Testing

- Used for clinical decision-making (i.e. to evaluate & treat individuals)
- Rapid influenza testing
 - Results are immediate



Public Health Testing

- Identify and monitor illness patterns in communities
- Partners:
 - Healthcare providers
 - Healthcare facilities
 - Schools
 - Health depts.
 - Laboratories



Looking for Flu!



Challenges

Personal

**School
Work
Goods
Services
Medical Care
Travel
Information**

Community

**Community
Services
Business
Civil Order**

Health Care

**Workforce
System
Overwhelmed
Medications
Vaccines**

What YOU Can Do

Get flu ready, New Jersey

- Have a personal emergency plan
- Practice healthy habits
- Keep informed and listen to advice from public health experts



Pan Flu Personal Emergency Plan

- Keep a supply of food, water, and other daily essentials
- Keep a supply of medical, health, and emergency items
- Write down health conditions and medications taken by family members
- Develop a care plan for your household

How is the flu spread?

- Primarily through respiratory droplets

- Coughing
- Sneezing



- Touching respiratory droplets on yourself, another person, or an object, then touching your own mouth, nose or eyes without washing hands

Practice Healthy Habits to Prevent the Spread of Flu!



- Cover mouth and nose when you cough or sneeze
- Don't touch your face
- Wash your hands
- Stay home if you are sick

Wash Your Hands



Wet



Soap



Scrub



Rinse



Dry



Turn the Water Off

How long should I wash?

As long as it takes to sing your ABC's!

When to wash hands...

■ Before:

- Preparing/eating food
- Caring for someone who is sick
- Treating a wound

■ After:

- Caring for someone who is sick
- Treating a wound
- Blowing nose, coughing or sneezing
- Using the toilet
- Changing diapers or assisting anyone who has gone to the bathroom
- Handling garbage
- Touching any animal or its waste
- Touching any surface or object that is frequently touched by others

...and wash
your hands
anytime they
look dirty!!!

What if you get sick?

- Know when it is appropriate to call your healthcare provider
- Stay home and away from others for seven days after symptoms begin
- Treat symptoms
- Cover coughs and sneezes
- Wash hands frequently
- Drink plenty of fluids
- Rest

Keep informed and listen to advice from public health experts

Federal www.pandemicflu.gov

State www.njflupandemic.gov

Local
www.co.burlington.nj.us/health

Conclusions

- Seasonal, novel and pandemic flu are different
- Vaccine can largely prevent seasonal flu
- Covering coughs/sneezes, washing hands, and staying home when sick help prevent the spread of flu
- Federal, state, and local public health agencies are reliable sources of information

Resources

- Pandemic Influenza Awareness Program
<http://www.nj.gov/health/training/panflu/>
- Pandemic Flu Personal Emergency Plan
<http://www.nj.gov/health/training/panflu/>
- Caring for the Flu at Home: A Self-Help Guide
http://www.nj.gov/health/flu/documents/flu_guide.pdf