

Texas Department of State Health Services

Pandemic Influenza Frequently Asked Questions October 25, 2005

1. What's the difference between a pandemic flu outbreak and just a bad flu season?

- Influenza pandemics are explosive global events in which most, if not all, people worldwide are at risk for infection and illness.
- With pandemic flu, there is a new strain of influenza against which there is little or no natural resistance and, until it can be developed, no vaccine.
- Seasonal flu outbreaks, even bad ones, are caused by variations of influenza viruses that have circulated previously and to which many people have some immunity.

2. How do strains of flu differ?

- Strains of flu differ based upon combinations of certain proteins on the surface of the virus.
- With human strains, minor changes, called drift, occur each flu season.
- Major changes, called shift, also can occur, and these strains tend to cause larger outbreaks of flu.
- The flu virus changes enough each year to make most people susceptible to getting the flu.
- Vaccine manufacturers modify the seasonal flu shot each year to reflect the changes in the circulating virus.
- In a typical flu season, several strains will be circulating.

3. Why is it difficult to prepare for a pandemic flu outbreak?

- It is difficult to prepare for a pandemic flu outbreak first in terms of vaccine development and production.
 - Vaccine is the first line of defense to protect people from getting the flu.
 - It is impossible to develop a perfect match vaccine until a new flu virus has shifted to human-to-human transmission and that strain has been identified and characterized so that a vaccine can be developed.

- Vaccine manufacturing plants currently are large enough to produce about 90 million doses a year to meet seasonal need. That covers about one third of the U.S. population.
- Flu vaccine production depends largely on chick embryos. A virulent avian flu strain may be lethal for chick embryos and make current vaccine production methods ineffective.
- The second issue centers around antivirals.
 - Antivirals such as Tamiflu® are helpful in treating flu symptoms and in lessening the potential for severe complications.
 - Current manufacturing capacity for antivirals cannot produce enough to treat everyone.
 - Today's antivirals may have limited effect against a new flu strain.
- Third is the relative speed with which infectious diseases can move given international travel.
 - While in a typical flu season, we have as many as six months to prepare, and we have some knowledge of the viruses, in a pandemic influenza outbreak, a new virus may reach the United States in hours or days.
 - That is why constant communication among U.S. states, between states and the federal government, and between world governments with the World Health Organization is critical.

4. When did officials in Texas become concerned about pandemic flu?

- A pandemic influenza outbreak is always on the watch list.
- On average, there are three pandemic influenza outbreaks in a century. The last pandemic flu outbreak was in 1968.
- Texas began developing its current Pandemic Influenza Plan in 2003.

5. What preparations have been made in Texas to prepare for a major flu outbreak?

- In Texas, the revised Pandemic Influenza Plan, with input from local and regional partners and the public, will be completed in November. The plan includes:
 - Guidance to local health departments for working with their community leaders;
 - Considerations surrounding the allocation and of distribution of vaccine and antivirals;

- Updated designs for mass vaccination clinics based on real-time, full-scale exercises;
- Development of information toolkits for health-care providers and community leaders.
- In Texas, influenza surveillance activities have been expanded from the ground up – from identifying Texas illnesses to monitoring global events.

6. What are the biggest challenges that remain in preparing for a pandemic outbreak?

- One of the biggest challenges in preparing for a pandemic outbreak in Texas is reaching all the state's residents quickly.
 - Texas has four of the largest cities in the nation in terms of population and also some of the most rural and sparsely populated areas in the country.
 - The number of square miles in Texas totals the same area as 14 of the smallest U.S. states combined.
- Another challenge, and one that faces all states, is preparing for a number of response scenarios depending on availability of vaccines and antivirals.
 - We may need to rely heavily on changing people's behaviors to reduce illness and death.
 - We may need to close schools and limit activities such as shopping or large-group activities.
 - Some businesses may need to shut down.
- People will need to understand that the priority groups to get any available flu vaccine or limited antivirals during a pandemic influenza outbreak may be different for the groups identified for flu shots during a typical flu season.

7. How do the lessons learned from the recent hurricanes apply to planning for a pandemic flu outbreak?

- Response to both Hurricane Katrina and Hurricane Rita has proved how critically important it is to have coordinated plans in place and have all levels of government – local, state, federal and in the case of a pandemic, international – know what is expected and what will happen at each level. And we need confidence in each other's ability to do the job.
- We need to continue to merit the public's trust. People will need to trust, respect, and follow the advice of those who deliver public health recommendations for any pandemic flu response effort to be successful.
- In times of crisis, people need a steady stream of information:

- What do people need to do, where they need to go or not go, what do we in public health know, and yes what don't we know as well.
- We will need people and equipment to deliver that information.
- In Texas, we have seen how crucial it is to identify special populations in communities that need assistance.
 - While evacuation will not be an issue in a pandemic flu outbreak, people will need to stay where they are – in their own homes, in long-term care facilities – and help will need to come to them.
 - We know that we will need to have ways to help those who have no place to stay.
 - We know that we will need to focus on food and water supplies, possibly for a long time.
 - We know that for those without transportation, we will need to find ways to get them to clinics or hospitals or get medication to them where they are.

8. What areas are the among the strongest in responding to an outbreak?

- As the Texas Department of State Health Services, we respond to infectious diseases and other public health threats daily. It's our job. We have been doing it and doing it well for a long, long time.
- In Texas, our ability to work with local, other state and federal agencies and with private partners has increased greatly through planned exercises and sudden, real-life emergencies.
- Now as other groups and others agencies have needed to work closely with public health in both planning and response, our systems are more organized, more flexible and have improved with each event.

9. To what extent can the average citizen protect against pandemic flu?

- During an outbreak, people can control their own behavior:
 - Wash your hands or use a hand sanitizer often
 - Cover your mouth and nose with a tissue when you cough or sneeze, then wash your hands
 - Avoid touching your eyes, nose, and mouth
 - Stay home from work or school when you are sick
 - Avoid close contact with those who are sick.
- If there is an outbreak, people will need to change what they do, if asked:
 - They may need to stop traveling
 - They may need to shop for groceries when stores are not crowded – early morning or late at night
 - They may have to stop attending sports or entertainment events
 - They may have to work from home.

- Right now, people can practice healthy behaviors:
 - Eat nutritious food
 - Get exercise
 - Get enough sleep
 - Get an annual flu shot at the right time to protect from strains that are circulating.
- Families can create their own safety plan, prepare a first aid kit and stock emergency supplies.

10. What should citizens expect from their local public health officials to help prepare for and respond to pandemic flu?

- People should expect frequent, truthful communication from their local public health officials.
 - Before an outbreak occurs, people should expect helpful personal and family preparation tips.
 - During an outbreak, people should get status reports and vaccine and medication information.
- People should expect local public health officials to have realistic, comprehensive plans in place to coordinate a response with local emergency management teams including hospitals and with state public health officials.
- People should expect that these plans be tested periodically, either by a planned exercise or through real-life events, and that changes be made based on these tests.
- People should expect fast response to the initial cases to attempt to control a pandemic flu outbreak.
- When antivirals and/or vaccine become available, citizens should expect adequate and organized dissemination of these materials.