### PANDEMIC INFLUENZA

## INTRODUCTION AND OVERVIEW

A pandemic is a global disease outbreak. Pandemics are characterized by the sudden onset of an extremely virulent pathogen with potentially lethal results. Though historically pandemics have been caused by a wide variety of diseases, today influenza poses the greatest risk to reach pandemic proportions.

Pandemic influenza differs from seasonal influenza. While the threat of a global flu pandemic is relatively remote, preparedness is essential to managing a pandemic.

### PANDEMIC FLU AND YOUR COMMUNITY

Like any other community-wide disaster, the most important step in pandemic flu preparedness is to have a sound plan. Research and experience has shown that the implementation of a community strategy can significantly delay or reduce the impact of a pandemic.

It is the job of your local community to establish a sound plan to enact in the event of pandemic. Individuals can, however, help by preparing in their homes and workplaces.

#### **ASSESSING THE RISK**

The likelihood of a pandemic influenza event occurring is nearly impossible to predict with any certainty. Hindsight indicates that a pandemic is likely to occur at least once every century, although recent advances in medicine may decrease that statistic in the future.

Regardless of the statistical likelihood, almost all competent sources suggest that the practical likelihood of pandemic flu occurring in the future is approaching 100 percent.

Historically, pandemics tend to have the greatest affect on the members of society with weakened immune systems. Those groups include:

- Infants
- Adults with autoimmune diseases.
- Elderly

The Great Influenza Pandemic of 1918 was an exception to this general rule. In the 1918 event, the virus proved most deadly to the young adult population. There is no sure understanding of why this was so, but it serves as an apt reminder that an influenza pandemic is unpredictable, and can affect anyone and everyone in a given population.

The "Pandemic Influenza Storybook" is a resource of narratives from survivors, families, and friends who experienced the 1918 and 1957 pandemics. The online narratives are available at https://www.cdc.gov/publications/panflu/index.html.

#### PERSONAL AND FAMILY PREPAREDNESS

Though relatively unlikely, should a pandemic occur, individuals should be aware of and prepared for widespread effects. Like many disasters, a flu pandemic would alter many aspects of society and would drastically influence how the world operates.

#### **ESSENTIAL SERVICES DISRUPTED**

You should plan for the possibility that usual services may be disrupted. These could include services provided by:

- Hospitals and other healthcare facilities
- Banks
- Restaurants
- Government offices
- Telephone and cellular phone companies
- Post offices

## For example:

- Stores may close or have limited supplies. Make sure you have your disaster supply kit ready!
- Transportation services may be disrupted and you may not be able to rely on public transportation. Plan to take fewer trips and store essential supplies.
- Public gatherings, such as volunteer meetings and worship services, may be canceled. Prepare contact lists including conference calls, telephone chains, and email distribution lists, to access or distribute necessary information.
- The ability to travel, even by car if there are fuel shortages, may be limited.

- You may not be able to communicate with family and loved ones. You should also talk to your family about where family members and loved ones will go in an emergency and how they will receive care.
- In a pandemic, there may be widespread illness that could result in the shut down of local ATMs and banks. Keep a small amount of cash or traveler's checks in small denominations for easy use.

#### ACCESS TO FOOD AND WATER LIMITED

In a disaster environment, food and water are often the most vulnerable to failure and are often the first supplies to be depleted. A pandemic event would be no different.

To prepare for the possibility that access to fresh food and water may be limited, the Centers for Disease Control and Prevention (CDC) recommends keeping a two-week supply of non-perishable food and water available at all times.

## Food

- Store two weeks of non-perishable food.
  - Select foods that do not require refrigeration, preparation (including the use of water), or cooking.
- Ensure that formulas for infants and any child's or older person's special nutritional needs are a part of your planning.

### Water

- Store two weeks of water.
  - 1 gallon of water per person per day (2 quarts for drinking, 2 quarts for food preparation/sanitation), in clean plastic containers.
  - Avoid using containers that will decompose or break, such as plastic milk jugs or glass bottles.

#### PANDEMIC AND THE WORKPLACE

Tips for preparing for pandemic in your workplace:

- Ask your employer how business will continue during a pandemic.
  - Discuss staggered shifts or working at home with your employer.
  - Discuss telecommuting possibilities and needs, accessing remote networks, and using portable computers.
  - Discuss the possibility of on-site daycare if needed and not already available.
- Discuss possible flexibility in leave policies. Discuss with your employer how much leave you can take to care for yourself or a family member.
- Plan for possible loss of income if you are unable to work or the company you work for temporarily closes.

#### PANDEMIC PREPAREDNESS IN SCHOOLS

Schools, including public and private preschool, childcare, trade schools, and colleges and universities may be closed to limit the spread of flu in the community and to help prevent children from becoming sick. Other school-related activities and services could also be disrupted or cancelled including: clubs, sports/sporting events, music activities, and school meals. School closings would likely happen very early in a pandemic and could occur on short notice.

How to prepare for extended school closures:

- Talk to teachers, administrators, and parent-teacher organizations about your school's pandemic plan, and offer your help.
- Plan now for children staying at home for extended periods of time, as school closings may occur along with restrictions on public gatherings, such as at malls and movie theaters.
- Plan home learning activities and exercises that your children can do at home. Have learning materials, such as books, school supplies, and educational computer activities and movies on hand.
- Talk to teachers, administrators, and parent-teacher organizations about possible activities, lesson plans, and exercises that children can do at home if schools are closed. This could include continuing courses by TV or the Internet.

Plan entertainment and recreational activities that your children can do at home. Have materials, such as reading books, coloring books, and games, on hand for your children to use.

### PREVENTION AND TREATMENT

The best ways to prevent and mitigate an outbreak of pandemic flu are to stay healthy and be prepared. The previous topic covered how individuals might prepare for the possibility of a pandemic event. This topic will discuss ways to stay healthy.

These steps may help prevent the spread of respiratory illnesses such as the flu:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue away immediately after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. If you are not near water, use an alcohol-based (60-95%) hand cleaner.
- Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.
- If you get the flu, stay home from work, school, and social gatherings. In this way you will help prevent others from catching your illness.
- Try not to touch your eyes, nose, or mouth. Germs often spread this way.

#### **VACCINATION**

Vaccines are used to protect people from contracting a virus once a particular threat is identified.

- After an individual has been infected by a virus, a vaccine generally cannot help to combat it.
- Unfortunately, a specific pandemic influenza vaccine cannot be produced until a particular pandemic influenza virus emerges and is identified.
- Once a pandemic influenza virus has been identified, it will likely take 4-6 months to develop, test, and begin producing a vaccine.

Supply of pandemic vaccine will be limited, particularly in the early stages of a pandemic.

- Efforts are being made to increase vaccine-manufacturing capacity in the United States so that supplies of vaccines would be more readily available.
- In addition, research is underway to develop new ways to produce vaccines more quickly.

While promising for future use, a vaccine cure-all for pandemic influenza is still many years away.

### **ANTIVIRAL MEDICATION**

The Federal Food and Drug Administration (FDA) has approved several antiviral medications to treat seasonal influenza.

- Such medications may be effective in mitigating the impact and spread of a pandemic influenza virus.
- With little awareness of how a pandemic flu virus will look and act, the success of using these antivirals is difficult to predict.
- Doctors and experts in the community warn that their effect may be moderate to minimal.

These antivirals are currently available by prescription only.

### **GET INFORMED AND STAY INFORMED**

Knowing the facts is the best preparation. Identify sources you can count on for reliable information. If a pandemic occurs, having accurate and reliable information will be critical.

- Reliable, accurate, and timely information is available at <u>www.pandemicflu.gov</u>.
- Another source for information on pandemic influenza is the Centers for Disease Control and Prevention (CDC) Hotline at 1-800-CDC-INFO (1-800-232-4636).
- Look for information on your local and state government Web sites. Links are available to each state department of public health at www.pandemicflu.gov.
- Listen to local and national radio, watch news reports on television, and read your newspaper and other sources of printed and web-based information.
- Talk to your local health care providers and public health officials.

