

Influenza Pandemic: CitizenReady® Training

Non-Procedure Instructor's Guide *February 2014*

Prepared by:

Italo Subbarao, DO, MBA Jim Lyznicki, MS, MPH Frederick M. Burkle Jr, MD, MPH, DTM Frederick C. Nucifora Jr, DO, PhD, MHS

Designed by: Vangent, Inc., Pawcatuck, CT

© 2013 Society for Disaster Medicine and Public Health. (SDMPH). All rights reserved. CitizenReady® is a trademark of the SDMPH.

This was originally created and produced by the American Medical Association. The original project was supported by Cooperative Agreement Number 2007-GT-T7-K002 administered by the U.S. Department of Homeland Security, Office of Grants and Training. Points of view or opinions in this document do not represent the official position or policies of the U.S. Department of Homeland Security.

CitizenReady® Disclaimer

No part of the CitizenReady® course materials may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Society for Disaster Medicine and Public Health.

The authors, editors and publishers of the CitizenReady® course materials have checked with sources believed to be reliable in their efforts to confirm the accuracy and completeness of the information presented in these materials and that the information is in accordance with the standard practices accepted at the time of publication. However, neither the authors, nor the publisher nor any party involved in the creation and publication of this work warrant that the information is in every respect accurate and complete, and they are not responsible for any errors or omissions, or for any consequences from application of the information in this course.





Table of Contents

Introduction	
Administration Page	
Duration	
Scope Statement	1
Resources	1
Suggested Instructor to Participant Ratio	2
Reference List	
Preparing for the Session	4
Slide-by-Slide Instructor Guide	

This page intentionally left blank.

Influenza Pandemic: CitizenReady® Training Introduction

It is recommended that you review this guide before you present the CitizenReady® pandemic training session to a group in your community. The guide explains the purpose and goals of this session, things you need to do before the session, the schedule and outline, and resources required to facilitate the exercises included in the training.

Administration Page

Duration

30 minutes - 1.5 hours

Scope Statement

The CitizenReady® Program is a standardized disaster health education program that can help attain national all-hazards preparedness goals by providing critical medical and mental health information to enable individual citizens to play a more effective role in local disaster planning and response, and ensure their integration into the overall emergency response system. The overarching goals of the program are to build individual and community readiness and resilience to disasters by providing knowledge and skills to minimize injury, illness, and death, as well as increase individual motivation to become more engaged in local volunteer initiatives. Ultimately, the CitizenReady Program will provide the most essential information that people need to know to make the critical difference in a large-scale emergency or disaster situation.

The CitizenReady Program seeks to empower individuals by providing the information and skills they need to protect their health and safety. Informed individuals are better able to understand their personal responsibilities (eg, to stay at home when they are ill and to practice personal hygiene to prevent the spread of illness). They know where to turn for up-to-date information about an evolving incident and when and where to seek medical attention; and have the means to take action to help others in need of assistance.

The CitizenReady Program can help achieve national all-hazards preparedness goals by enabling community groups and individual citizens to participate more effectively in local disaster response and ensure their integration into the overall emergency response system. Citizens learn how to: (1) recognize potential life-threatening situations and act appropriately, while protecting personal health and safety; (2) contact and interact with the local emergency medical and public health systems; (3) make timely decisions with limited resources and data; (4) access disaster health preparedness information and resources; and (5) become more involved in local preparedness and response efforts through additional education and training, as well as participation in volunteer initiatives such as the Citizen Corps, Medical Reserve Corps, and American Red Cross.

Resources

For a complete list of the required materials and resources needed to conduct this session, please refer to the "Preparing for the Session" section found on page 4.

Suggested Instructor to Participant Ratio

1:50

Reference List

American Public Health Association (APHA)—The APHA is the oldest and largest organization of public health professionals in the world. The APHA is concerned with a broad set of issues affecting personal and environmental health, including federal and state funding for health programs, pollution control, programs and policies related to chronic and infectious diseases, a smoke-free society, and professional education in public health.

Website: http://www.apha.org

American Red Cross—The Red Cross helps communities prepare for emergencies and keeps people safe every day. Each year, the Red Cross responds immediately to more than 70,000 disasters. These disasters include apartment fires, natural and man made disasters, explosions, and more.

Website: http://www.redcross.org

Centers for Disease Control and Prevention (CDC)—The CDC is the lead federal agency for protecting the health and safety of people at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. The CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

Website: http://www.cdc.gov

Citizen Corps—The Citizen Corps was created to help coordinate volunteer activities to make communities safer, stronger, and better prepared to respond to any emergency situation (e.g., crime threats, terrorism, and disasters). The Citizen Corps is coordinated nationally by the DHS. In this capacity, the Department of Homeland Security (DHS) works closely with other federal entities, state and local governments, first responders, emergency managers, the volunteer community, and the White House Office of the USA Freedom Corps. Currently, there are about 2,300 Councils serving 223 million people, which is about 78% of the population.

Website: http://www.citizencorps.gov

Department of Homeland Security (DHS)—The DHS was established after the terrorist attacks against the United States on September 11, 2001 to coordinate 22 previously disparate domestic agencies into one department. Its first priority is to protect the nation against further

terrorist attacks. Component agencies analyze threats and intelligence, guard US borders and airports, protect our critical infrastructure, and coordinate the response to future emergencies.

Website: http://www.dhs.gov

Medical Reserve Corps (MRC)—The MRC Program reports directly to the U.S. Surgeon General. The MRC aims to improve the health and safety of communities across the country by organizing and utilizing public health, medical, and other volunteers who donate their time and expertise to prepare for and respond to emergencies. Volunteer MRC units accomplish this mission by supplementing existing emergency and public health resources during local emergencies. The Medical Reserve Corps is dedicated to establishing teams of local volunteer and public health professionals to contribute their skills and expertise. These volunteers will help the communities when something happens, such as an influenza pandemic. The Medical Reserve Corps is a partner program with Citizen Corps.

Website: http://www.medicalreservecorps.gov

National Association of County and City Health Officials (NACCHO)—NACCHO represents local health departments. It provides community and environmental health programs to towns and cities, for example. NACCHO helps local health departments provide key programs and services.

Website: http://www.naccho.org

Society for Disaster Medicine and Public Health (SDMPH)—The Society for Disaster Medicine and Public Health is a forum for health professionals to collaborate on issues related to the advancement of the discipline of disaster health. Members will participate in the creation of policies and programs that work toward global health security before, during, and after disasters

Website: http://www.sdmph.org

Preparing for the Session

The Facilitator Guide follows the PowerPoint slide sequence used to deliver the CitizenReady session. Before arrival at the presentation site, ensure access to a computer and LCD projector, with the capacity to run PowerPoint 2003 or PowerPoint 2007; cables to connect the computer to the projector; and a projection screen. Before the session, practice opening the presentation (select **Slide Show** from the PowerPoint **View** menu). Practice moving through the slides and talking through the content. The Facilitator Guide provides most of the information needed to deliver the presentation. If available, use a white board, chalk board, or flip chart to write down ideas or questions generated by the group for use in future presentations.

Download Presentation Materials

The CitizenReady program provides the following materials to facilitate presentation of the influenza pandemic session:

- Powerpoint slide deck (27 slides)
- Instructor Guide
- Evaluation
- Assessments

These materials can be accessed and downloaded from the SDMPH's website at: http://www.sdmph.org/free-resources

Review the Online CitizenReady Pandemic Influenza Module

Information about accessing the web-based training module is available from the SDMPH website, http://www.sdmph.org/free-resources.

Gather Information About Local Resources

This CitizenReady training program is about preparing communities to act in an influenza pandemic. For people to feel prepared, they need to know about the resources they will have available. These resources include:

- Local public health pandemic influenza plan.
- Local sources of information, such as the health department, emergency mangement agency, and mayor's office, as well as local radio and TV stations
- Local emergency response systems, such as the local 911 or 411 system
- Local community groups with established communication networks (such as places of worship, schools, and interest groups)

Gather Information About National Resources

The Facilitator Guide includes a list of websites of national organizations such as the Society for Disaster Medicine and Public Health (SDMPH), the American Red Cross, and the Centers for Disease Control and Prevention (CDC). Visit these sites before you present the session. In addition, plan on printing (or copying) the sheet and then distributing it to participants during the session. It is also extremely important to have knowledge about your local public health influenza plan and to be able to provide necessary details regarding some issues such as whether your local public health system has a hotline.

Set Up the Agenda

Prepare an agenda listing the topics that will be covered in this session. If appropriate for your group, you can fill in the length of time you expect to spend on each topic as well as the overall length of time of the session.

You may want to practice the session and time yourself to ensure you know how long it will take.

Suggested agenda

Introduction (2 to 3 minutes)
Pre-assessment (5 minutes)
Didactic presentation (30 to 45 minutes)
Group exercise (20 minutes)
Summary (2 to 3 minutes)
Post-assessment and evaluation (10 minutes)

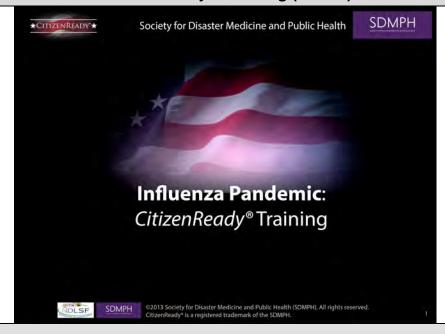
Instructor Tips and Knowledge

You need to present only very basic information about viruses, which is provided as instructor notes in this guide. It is also useful to have a reasonable understanding of the local community pandemic influenza response plan to assist with addressing specific issues related to your community.

It is strongly recommended that the presentation be presented jointly by a representative from the local public health agency and a local healthcare professional (eg, physician, nurse). If you are not a health professional, it is recommended that you ask a local doctor, nurse, or public health official to help deliver the presentation or be available to help answer questions from the audience.

Slide-by-Slide Instructor Guide

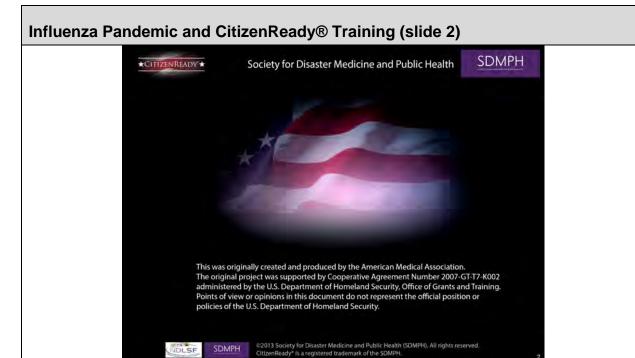
Influenza Pandemic and CitizenReady® Training (slide 1)



Purpose: Title slide for the session

Special instructions: Have this slide displaying as the group gathers. Introduce yourself and then start the session. Provide any necessary information to the group before you begin. This includes locations of restrooms, available food and refreshments, session length, and any other necessary logistical considerations (e.g., turn off cell phones).

Script: Welcome to this CitizenReady® training session. Let's go over a few things before we get started. The most important of these is to either turn off your cell phones or put them on vibrate.

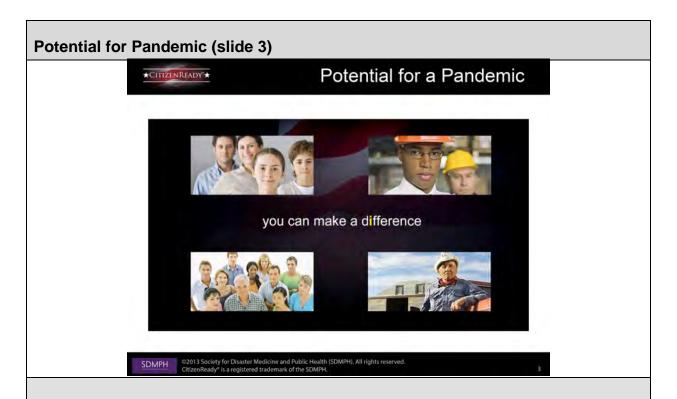


Purpose: Title slide for the session

Special instructions: Display this slide while finishing your welcome.

Script: This session is about how we, as a community and as individuals, can become more prepared for a health emergency. We all know about seasonal flu outbreaks—they happen every year. Today, we are going to talk about the outbreak of a new flu virus, called novel H1N1 influenza A. Many people throughout the United States and across the world have been affected by this virus, which has caused a global pandemic.

Over history, influenza pandemics have occurred every century more or less. In 1918, an influenza pandemic killed about 675,000 people in the United States and between 20 and 50 million people around the world. The recent H1N1 pandemic reaffirms the need for preparedness at all levels to help ensure that we can respond effectively to this and future influenza outbreaks...



Purpose: Show a slide that provides the basis for individual and community preparedness for a pandemic.

Scrpit: In April 2009, global attention was fixated on the emergence and spread of a potentially serious H1N1 influenza A virus in Mexico and other countries. As a consequence of confirmed cases of H1N1 disease in four states, on April 26, 2009, the acting secretary of the U.S. Department of Health and Human Services, declared the existence of a public health emergency, recognizing that the H1N1 virus had significant potential to affect national security. On June 11, 2009, the World Health Organization declared the existence of a global pandemic.

Countries took action to organize, communicate, and implement plans to control the spread of this virus.

Health experts agree that the best action the public can take is to prepare in advance for this type of public health emergency.

Based on past experience, in a severe influenza pandemic, experts estimate that 90 million people in the United States will be infected, millions will be hospitalized, and many will die.

Are you prepared for this type of emergency? Do you know what to do to reduce your risk of getting the disease?

In a pandemic, each of us can make a difference. As individuals....families....and communities....Together, we can work to slow the spread of the disease. When it comes... will you know how to respond?

Citizen Ready Program (slide 4) - Designed to help the U.S. population prepare - Provides basic life-saving and support information for public health emergencies - Helps build physical and mental health resilience in the community **Community** CitizenReady* Program What do I need to do? What do I need to do? Where do I go If need medical assistance? Where do I go If need medical assistance?

Purpose: Explain the purpose of the CitizenReady® program.

Special instructions: The last item on this slide refers to "resilience." That term is defined in the Script below. The instructor may want to provide an example of resilience from your own experience.

Script: To address the challenges faced in a pandemic, federal, state, and local public health authorities are working together to develop and coordinate community plans. Such plans include the essential role and responsibility of community groups, families, and individual citizens. Through the CitizenReady program, communities can become better prepared and empowered to take necessary action in a pandemic or other serious public health emergency. At the end of this session, I hope you will be motivated to learn more about pandemic influenza and to get involved with community preparedness efforts.

In a public health emergency, you will likely want to know how to get answers to questions such as:

- "What should I expect in an influenza pandemic?"
- "What should I do if an influenza pandemic affects the community?"
- "Where should I go if I or a family member needs medical assistance?"
- "How can I slow the spread of the virus?"
- "How can I get involved with local community response groups?"

We'll talk about answers to these questions today.

Simply knowing the answers to these questions makes you better prepared to help yourself, your family, and your community. You won't have to wonder what to do. You will know. That is what "resilience" means. Maybe you've heard the saying, "When the going gets tough, the tough get going." That's really about resilience. It's about being able to deal with stressful and tragic events and find ways to cope, bounce back, and move forward.

Program Goals (slide 5)

*CITIZENREADY *

Program Goals

- Empower you, as an individual and member of a community, to take appropriate action
- Increase your sense of control
- Help individuals, families, and communities prepare to address health risks
- Support the U.S. "National Health Security Strategy"



SDMPH

2013 Society for Disaster Medicine and Public Health (SDMPH). All rights reserved

Purpose: Explain the goal of the CitizenReady® program.

Special instructions: Be sure to emphasize that families and individuals are empowered by knowing what to do. This program is about helping citizens gain a sense of control by answering the questions on the previous slide.

Script: Knowledge is power. That is cliché but true. CitizenReady is about decreasing fear and anxiety by getting informed and being prepared. CitizenReady is about knowing what to do in an emergency.

Caring for people who get sick is only part of what we need to do. As a community, we have to help each other get over our fears and act appropriately.

Today's program is divided into three parts. First, I will provide some general background on influenza and the history of influenza pandemics. Then we will talk about actions that individuals and communities can take to limit the spread of a pandemic virus. The final section will involve discussion of the H1N1 irffluenza pandemic and actions we can take to protect ourselves and our community.

Fortunately, we have learned lessons from past pandemics as well as other infectious disease outbreaks that are helping us plan, respond, and recover more effectively. Federal, state, and local disaster plans are being put into place, which require the combined efforts of well-informed and motivated government officials and citizens.

In December 2009, federal authorities released the "National Health Security Strategy of the United States of America." An important element of this strategy is the need to build an "informed, empowered, and resilient population." This includes community-level public education on how individuals can prepare for, respond to, and recover from health

emergencies. The CitizenReady Program supports the National Health Security Strategy by helping to empower individuals to take appropriate action for the protection of personal and public health and safety.

Program Objectives (slide 6)

★CITIZENREADY ★

Program Objectives

- Explain the difference between seasonal and pandemic influenza
- Describe actions communities can take to prepare for an influenza pandemic
- Describe actions you can take to prepare for an influenza pandemic
- Describe public health directives that may be issued in a pandemic
- Describe actions you can take to limit the spread of an influenza pandemic

DMPH ©2013 Society for Disaster Medicine and CitizenReady® is a registered trademark

Purpose: Explain the objectives of the CitizenReady program

Special instructions: None

Script: We will try to achieve a lot today as we talk about the influenza pandemic. This includes the timeframe in which the pandemic is likely to spread through the community and across the United States. We'll talk about helpful actions to protect yourself and loved ones and control the spread of the virus.

In addition, we'll talk about how to stay informed throughout the emergency to help cope with the physical and emotional impact of this event.

Let's begin by summarizing the objectives for the presentation, which you see listed on this slide.

Now let's talk about flu viruses and the differences between seasonal and pandemic influenza.

What is Seasonal Influenza (slide 7)

*CITIZENREADY *

What Is Seasonal Influenza?

Seasonal Influenza

- Caused by a virus; commonly called "flu"
- Symptoms: fever, headaches, sore throat, body aches, congestion
- 200,000 hospitalized and 36,000 deaths annually
- Virus is spread through respiratory droplets (coughing/sneezing)
- Most vulnerable (elderly, pregnant, children, chronic disease)



SDMPH

2013 Society for Disaster Medicine and Public Health (SDMPH), All rights reserved. ItizenReady* is a registered trademark of the SDMPH.

Purpose: Describe flu viruses and flu symptoms.

Special instructions: Stress that influenza is caused by a virus; antibiotics are not effective in treating viral infections.

Script: Respiratory infections are often caused by viruses. A virus is a microorganism, or germ, that infects human, animal, and plant cells. All viruses must get into a living cell of some kind in order to reproduce. The entrance of a virus into a cell is called a viral infection. In humans, viruses cause diseases such as influenza, chickenpox, herpes, and the "common cold."

Influenza is a contagious respiratory disease caused by an influenza virus. The disease can be mild to severe, and at times it can lead to death. Typical symptoms include fever, muscle aches, headache, and runny nose. Abdominal symptoms such as nausea, vomiting, and diarrhea, also occur but are more common in children than adults. Seasonal flu occurs each year from December to March. Each year in the United States, about 5% to 20% of Americans get the flu; more than 200,000 people are hospitalized; and about 36,000 people die.

Older people, young children, and people with certain health conditions are at higher risk for serious flu complications. Examples of health conditions that increase the risk of being hospitalized from influenza include lung diseases like asthma or chronic obstructive pulmonary disease (COPD), diabetes, heart disease, and neurologic disease.

People who have influenza spread it to others through coughing or sneezing. Sometimes, people may become infected by touching or sharing something that is contaminated with flu viruses, such as a doorknob, and then touching their eyes, mouth, or nose.

For seasonal influenza, most healthy adults are able to infect others one day before their symptoms develop and up to five days after they become sick. That means you may be able to pass on the flu to someone else before you know you are sick, as well as while you are recovering.

Treatment usually includes rest, fluids, and medications for fever and muscle aches. Specific antiviral medications may also be available, but they need to be prescribed within 72 hours of symptoms. Antibiotics are not effective against the flu virus.

Preventing Seasonal Influenza (slide 8) Take Personal Action Get vaccinated Wash hands well Practice cough etiquette Assist vulnerable individuals Get trustworthy information and follow directions from local public heath authorities Establish social networking for local updates (e.g., Facebook, Twitter) Stay home if you are sick

Purpose: Describe prevention of seasonal flu outbreaks.

Special instructions: Stress that good hygiene habits are recommended for the prevention and control of all infectious diseases, including influenza.

Script: When flu viruses reproduce, minor changes (or mutations) commonly occur. This process ensures that the virus will remain infectious within the community. Even though the changes may be slight, they can be enough to allow the virus to fool your immune system and cause illness. Each year a new flu vaccine is produced, and this vaccine is designed based on predictions of the changes that are likely to occur in the virus. To reduce your risk of getting the disease, you need a flu shot yearly to help your immune system recognize and protect you against these minor changes.

An essential way to slow the spread of the virus is to prevent its transmission to others through the practice of good health habits like covering your mouth or nose when coughing or sneezing, washing your hands, and avoiding close contact with people who are sick. This is what we have called "breaking the chain of transmission."

Coughing and sneezing are two ways the virus is transmitted. The virus is passed through droplets in the air when you sneeze or cough. Others nearby can inhale these droplets through their noses and mouths. Using proper technique when coughing or sneezing can help reduce airborne transmission of the virus.

To avoid contaminating your hands, the preferred practice is to cough or sneeze into your elbow. If you must cough or sneeze into your hands, it is important to use a tissue or handkerchief, throw the tissue away (or washing the handkerchief), and washing the hands immediately using disposable towels.

How long do you think you need to wash your hands? To properly wash your hands, you need to run your hands under warm water, apply soap, scrub all surfaces of your hands (including between the fingers and under the finger nails). You need to wash your hands for 15 to 20 seconds at a minimum. And then rinse your hands thoroughly with running water, dry your hands completely with a clean towel, and turn off the faucet with the towel in case the faucet is contaminated. We are reminded about hand washing from the time we are toddlers, but how many of us can honestly say we wash our hands this way?

If soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. You can find them in most supermarkets and drugstores. If using gel, rub your hands until the gel is dry. The gel doesn't need water to work; the alcohol in it kills the virus on your hands. If soap and water are not available and alcohol-based products are not allowed, other hand sanitizers that do not contain alcohol may be useful.

Individual and Community Preparedness for a Pandemic (slide 9)

Individual and Community
Preparedness for a Pandemic



SDMPH ©2013 Society for Disaster Medicine and Public Health (SDMPH). All rights reserved

Purpose: Show a slide that provides the basis for individual and community preparedness for a pandemic.

Script: In 1918, an influenza pandemic killed about 675,000 people in the United States and between 20 and 50 million people around the world. More soldiers died from this disease than from combat in World War I. Influenza pandemics also occurred in 1957 and 1968, but were much less severe than the 1918 outbreak.

In 2003, an outbreak of another viral disease, SARS, or severe acute respiratory syndrome, occurred in several countries, including the city of Toronto in neighboring Canada.

Fortunately, we have learned important lessons from these outbreaks. Federal, state, and local pandemic plans have been created based on what we have learned.

We know that citizens play an important role. Each of us needs to be prepared and ready to help.

During the 1918 influenza pandemic there was a marked difference in health outcomes between Philadelphia and St. Louis. In St. Louis, citizens complied with strong directives to limit travel and social functions, which helped greatly to control the spread of the disease. We will talk more about these directives later in this module.

During the SARS outbreak in 2003, Toronto hospitals were overwhelmed with sick patients. Local health officials asked citizens to take various actions to reduce the burden on local healthcare resources. This included calling a designated hotline for up-to-date health information and instructions.

While a hotline may seem like a simple solution, it performed wonders in Toronto.

People listened and understood what they needed to do. Those who were not sick listened to the advice of health officials and stayed away from hospitals where they would have increased their risk of being exposed to the illness. This allowed busy healthcare workers to focus on caring for critically sick SARS patients, as well as patients with other urgent medical issues (such as women in labor, victims of heart attack and stroke, and those with critical injuri es).

Local authorities set up alternative sites away from hospitals for the care of others who were less ill. Fewer people got sick because they knew what to do to protect themselves, their families, and neighbors.

This critical step helped reduce demands on health resources, slowed the spread of the virus in the community, and stabilized the local health system.

Knowing what to do in an emergency can help you feel in control...and gives hope. Having access to credible information is step one.

This module will start you on your way to knowing what to expect in an influenza pandemic....and how to cope so that you are better able to help yourself, your family, and your neighbors.

What is Pandemic Influenza? (slide 10)

*CITIZENREADY *

What Is Pandemic Influenza?

- Affects wide geographic area, high proportion of population
 - New virus to which the population has limited to no immunity
 - Can spread across US in 5 weeks
 - Will infect communities for 6-8 weeks before receding
 - No vaccine will be present in the early stages
 - Effectiveness of antivirals may be unknown



SDMPH 02013 Society for Disaster Medicine and Public Health (SDMPH), All rights reserve

Purpose: Describe the differences between seasonal and pandemic influenza.

Special instructions: It is important to emphasize the importance of non-pharmacologic approaches to limit disease spread, particularly early in the course of the outbreak.

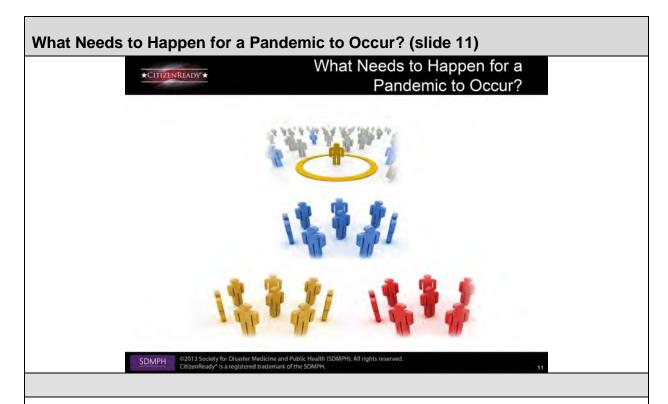
Script: As we just saw, for an influenza pandemic to occur, a flu virus must undergo a major change or mutation. This makes the virus unrecognizable by the immune systems of most people. As a result, these people will have little or no protective immunity to the changed virus. This large pool of "susceptible" people allows the new virus to spread broadly and rapidly.

The difference between a flu pandemic and the seasonal outbreaks that occur each year is the ability of the virus to cause infection and spread rapidly among diverse populations across large regions. A pandemic can start when three conditions have been met:

- A new disease emerges in a population in which the community has little to no immunity.
- The disease has the ability to infect humans, causing serious illness.
- The disease spreads easily among humans.

A disease or condition is not a pandemic just because it is widespread or it kills a lot of people. To be a pandemic, a disease must be infectious (meaning it can be easily spread from one person to another).

It is unlikely that a vaccine will be available right away to protect against the major changes in the new influenza virus. The seasonal flu vaccine may provide some immunity and is recommended. It is uncertain whether medications such as antivirals will be effective or be available. Initial medical treatment will probably consist of drinking fluids and controlling pain and fever (such as by taking acetaminophen).



Purpose: Display an a slide that depicts how major changes in a virus can result in a highly infectious illness.

Script: Let's look more closely at the reasons why pandemic flu could spread quickly in your community. We have seasonal flu every year, but we don't have a major influenza pandemic. What has to happen for a flu pandemic to occur?

To explain, let's start with a community of people...and our seasonal flu virus. Many of these people have had the flu before. Quite a few of them get the flu vaccine every year, so a lot of people in this community have built up some level of immunity to the seasonal flu virus. We'll symbolize this immunity as a red shield. Some people have more immunity than others, which you can see in the color of the shields.

Let's say a new influenza virus now enters the community to which people have no preexisting immunity. The immune systems of most of the people in this community will not recognize this new virus. They have no protection against it. All of them may get sick, creating the potential for a serious public health emergency.

People go about their business...working, playing, shopping, going to school...

And the new virus spreads rapidly through the community. The people's red shields do not protect them from this new virus. In a very simplified form, that is how a pandemic influenza outbreak can occur, even though many people in this community have immunity against seasonal flu.

Seeking Medical Care (slide 12)

*CHIZENREADY *

Seeking Medical Care

- Going to hospital could contribute to spread of infection
- Instead, consider alternative care sites, such as primary care clinics, designated flu clinics, or point of distribution sites
- Be aware that the allocation of medical resources may depend upon expected treatment outcomes



477

Purpose: Explain seriousness of a pandemic and continue with a discussion of what people can expect.

Special instructions: Emphasize that, during a pandemic, the hospital is not necessarily the first place or the right place to go.

Script: During a pandemic, large numbers of infected people, and those who believe they may be infected, will flock to hospitals and other medical facilities. This influx of people may overwhelm medical and public health systems, causing a critical shortage of available resources. It will also lead to transmission of the virus to those who were not exposed but came to the hospital because they feared they were exposed or ill.

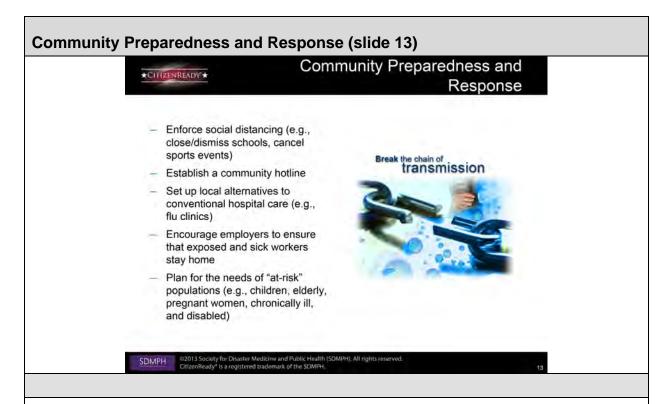
It is important to realize that hospital staff may be overwhelmed and medical supplies in short supply. Special vaccine and medication distribution sites will be established by the local health department in the community. You will need to call the local hotline or health department for the location of such facilities.

Even more important, going to the hospital can contribute to the spread of the virus. After all, there will be sick people there, which puts you at risk of being exposed to the virus. When you return home, you may become ill and then spread the virus to your family and possibly your neighbors. That is how the cycle of transmission works and continues. The only way to stop the virus is eliminate its spread within the community.

During the early stages of the pandemic, no vaccine will be available. There also may not be any medication that helps. For many people, the best advice will be to stay home, where family members or neighbors can take care of them. Local resources such as volunteer organizations and public health nurses will be called on to help as necessary.

The best therapy will be to drink fluids and control pain and fever, such as by taking acetaminophen. In most cases, you do not need to go to the hospital unless you have been advised by a health professional or a hotline operator.

During the 2003 SARS outbreak, Toronto hospitals were inundated with anxious but uninfected people who increased their risk of exposure to infected patients by going to the hospital. This led to increased transmission of the SARS virus and prolonged the pandemic.



Purpose: Identify actions that communities can take to prepare for and respond to an influenza pandemic.

Special instructions: Emphasize the important role of public health authorities in coordinating pandemic preparedness and response efforts.

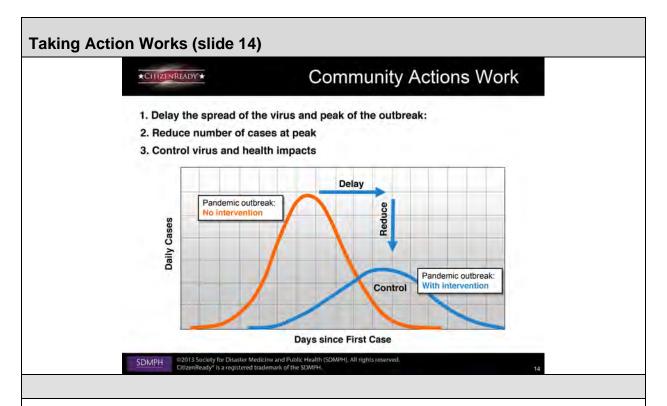
Script: During the early stages of the pandemic, it is likely that health and law enforcement authorities will set up containment zones around neighborhoods or cities in which the initial cases of influenza have been reported. This is necessary to slow the spread of the virus as well as to give health authorities time to implement additional control measures. Significant restrictions will likely be placed on people inside the containment area. No one will be able to enter or leave the area without permission from local authorities. Containment also includes identifying and treating people who are sick and isolating them from others.

It is important to understand that containment will only be an option very early in the outbreak. Once the disease spreads within a community, state, country and beyond, containment becomes less effective. Public health authorities will take action by implementing additional social distancing measures.

Let's discuss what local community actions can be taken to allow the citizens and the local health system to better cope with a pandemic:

 During a pandemic, people will be advised to prevent exposure to the virus by limiting or avoiding contact from contact with sick and infected people. This may involve travel limitations and staying at home, if possible. In a serious outbreak, people may even be required to cancel weddings, sporting events, and other public gatherings. Every time we travel or meet with others, we risk catching or spreading the disease. You may be

- thinking, "That sounds like a good idea, but how on earth do we make that work? How will we get food and medication? Who will take care of the children?" We will talk more about these difficult but real questions a little later.
- In addition, we will need to set up alternatives to conventional hospital care. Hospitals may be overwhelmed, both with people who are sick with influenza and with other medical conditions, like heart problems, stroke, and so on.
- Public health authorities in every community will work to provide timely and accurate
 information on TV, radio, and the internet. There will be ongoing need to counter rumors
 and other misinformation about the pandemic. In addition, citizens and health
 professionals will need access to up-to-date information on the unique needs of children,
 the elderly, and persons with underlying medical and mental health conditions.
- During the pandemic, a dedicated hotline may be set up in the community. This will be an
 important source of information about what to do if you think that you or a loved one has
 the flu. Hotline operators can help assess whether your symptoms warrant going to the
 hospital or to alternative facility (such as school gymnasiums) within the community. The
 major health hotline service in Toronto handled over 20, 000 calls per day during the
 2003 SARS outbreak and was such a success that it is now the first line of public health
 triage for all of Canada.



Purpose: Emphasize the importance of action and taking control.

Special instructions: None

Script: Despite the potential severity of a pandemic, it is important to remember that we are not helpless. Individual and community actions can make a difference, as indicated in the Toronto SARS outbreak, previous flu pandemics, and the H1N1 situation to date.

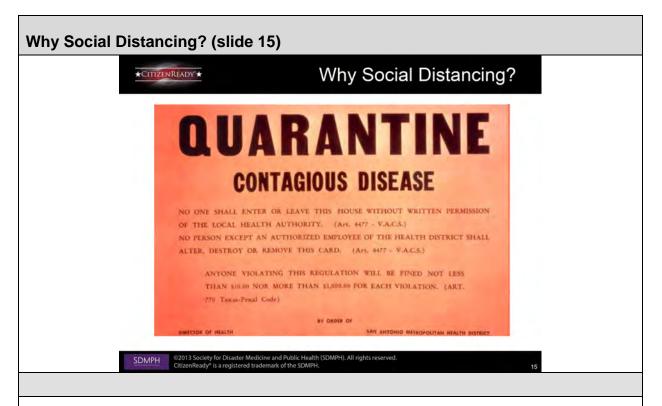
On this slide, the blue curve shows how an influenza infection can move through a community. A lot of people would get sick fast. The health system, as you can imagine, could be swamped.

By taking action, we can do three things.

Look at the blue curve, or hill. First, we can delay the peak of the outbreak. The bottom axis of the chart shows days since the first case. The later the peak occurs, the more time the community has to react and the more time public health authorities have to prepare for and respond to the outbreak.

Second, we can reduce the number of cases at the peak. If fewer people are ill, the likelihood of spreading the infection is reduced. This in turn reduces the burden on community health facilities, and allows for the already limited medical resources (such as ICU beds and ventilators) to be available to more sick people.

Finally, we can reduce the total number of people who get sick and further reduce impacts on the health system.



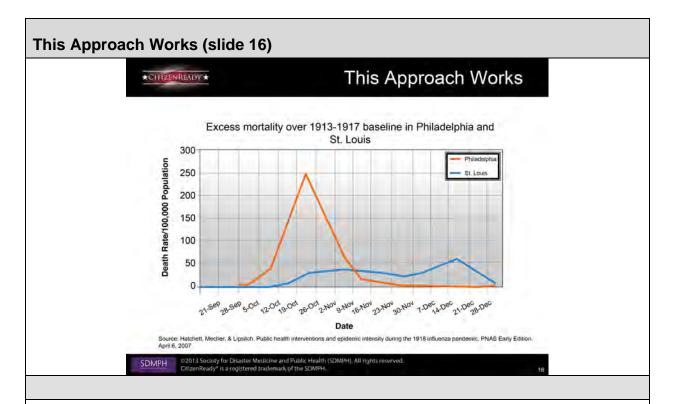
Purpose: Underscore the rationale for social distancing to prevent and control disease transmission.

Special instructions: None

Script: I really need to emphasize the concept of social distancing. This will be an important public health strategy to slow the spread of the virus and "break the chain of transmission."

Think for a minute about your day-to-day activities. Many of these probably bring you into close contact with others, and well within the distance needed to spread an infection by sneezing, coughing, or touching contaminated surfaces. Avoiding close contact with others who are sick or infected is key.

The challenge is really how to get the things we need, such as food, medications, and other essentials, while being socially distant from others.



Purpose: Show an example of how social distancing was effective.

Special instructions: None

Script: During the 1918 influenza pandemic there was a marked difference in health outcomes between Philadelphia and St. Louis. In St. Louis, citizens complied with strong directives to limit travel and social functions, which helped greatly to control the spread of the disease.

The orange line represents the city of Philadelphia. There, the mayor did not heed the pleas from public health authorities to act fast and limit social gatherings to control the spread of the infection. Little was done to stop transmission of the virus.

The blue line is the level of infection in the city of St. Louis. There, the mayor took the necessary but difficult actions of ordering the cancellation of public gatherings. Look at the difference.

Strict social distancing decisions at the community level made the difference between Philadelphia suffering high death rates, while St. Louis experienced low rates.

We've talked about keeping people apart as an important way to stop the spread of the virus. You break the chain of transmission.

Can a Pandemic Happen Again?(slide 17)



Purpose: Summarize details about the H1N1 situation, and discuss what can be expected from this outbreak.

Special instructions: If possible, instructors should look up information about the H1N1 outbreak on the CDC and WHO websites or on the websites of their state and local health agencies.

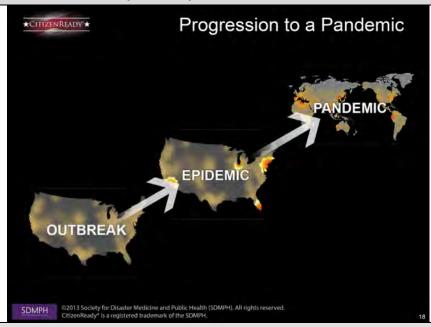
- A table showing reports of flu-related cases and deaths since April, 2009, is available on the CDC website at http://www.cdc.gov/h1n1flu/updates/us/.
- The World Health Organization (WHO) continues to report updated 2009 H1N1 fluassociated laboratory-confirmed cases and deaths on its Web page (http://www.who.int/csr/disease/swineflu/updates/en/). These laboratory-confirmed cases represent a substantial underestimation of total cases in the world, as many countries focus surveillance and laboratory testing only on people with severe illness.
- For a directory of local/regional public health agencies, see www.naccho.org/about/lhd/
- For a directory of state public health agencies, see www.cdc.gov/mmwr/international/relres.html

Script: There was no way to accurately predict the course of the H1N1 influenza pandemic. Flu seasons are unpredictable in a number of ways, including when they begin, how severe they are, how long they last and which viruses will spread. Severe illnesses and deaths from 2009 H1N1 occurred in every age group.

The CDC recommended a three-step approach to fighting the flu pandemic:

- (1) Vaccination is the first and most important step in protecting against the flu. Supplies of the 2009 H1N1 vaccines were ample, so that anyone who wanted to reduce their risk of influenza was encouraged to get vaccinated;
- (2) Daily preventive actions included covering coughs and sneezes, frequent hand washing, and staying home when sick; and
- (3) Correct use of antiviral drugs, as recommended by a physician. It is very important that antiviral drugs be used early to treat the flu in people who are very sick (for example, people who are in the hospital) and people with a greater chance of getting serious flu complications, such as people with asthma or diabetes and pregnant women.

Progression to a Pandemic (slide 18)



Purpose: Show the escalating severity moving from a localized flu outbreak to an epidemic to a pandemic.

Special instructions: Highlight the difference between influenza outbreaks that we experience each winter and large-scale epidemics and pandemics.

Script: The difference between an epidemic and a pandemic is based on how widespread the disease occurs. Typically, a pandemic spreads across a large region, such as a continent or even worldwide.

As we learned earlier in this presentation, to cause a large-scale disease outbreak, an influenza virus must change, or mutate, to a form that is not recognized by the immune systems of many people, thus making them more likely to get sick. In the H1N1 flu pandemic, the new form of the virus was different enough from other flu viruses that any immunity people acquired from past flu infections (involving different strains of the flu virus) would not provide immunity to the new H1N1 strain.

Projected Toll of the H1N1 Pandemic in the United States (slide 19)

Projected Toll of the H1N1
Pandemic in the U.S.

- >50% who become ill will seek medical care
- Illness: 60 - 120 million individuals
- Outpatient medical care: 30 - 60 million visits
- Hospitalizations: 1.8 million admissions
- Intensive care: 300,000 admissions
- Deaths: 30,000 - 90,000 deaths

*Report to the President on U.S. Preparations for 2009-H1N1 Influenza. August 7, 2009.
Available at:
http://www.whitehouse.gov/assets/documents/PCAST_H1N1_Report.pdf

Purpose: Explain seriousness of the H1N1 pandemic and continue with a discussion of what people can expect.

Special instructions: Provide statistics on the disease in your community and state, as well as nationally. Information is available from state and local health agencies and from the Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/flu/weekly/weekly/archives2009-2010/09-10summary.htm

Script: In August 2009, U.S. health experts predicted that a serious pandemic could affect more than 60 million people, which is about 20% of the U.S. population. Of those, 45 million would be treated as outpatients and 1.8 million would require hospital care. Of the patients who are hospitalized, thousands would need specialized treatment in intensive care units; many would require a ventilator to help them breathe. The death toll was estimated at 30,000 or more. Fortunately, these statistics were not realized. In August 2009, the CDC and the Council of State and Territorial Health Epidemiologists (CSTE) instituted cumulative, jurisdiction-level reporting of influenza-associated hospitalizations and deaths referred to as Aggregate Hospitalization and Death Reporting Activity (AHDRA). From August 30, 2009 - April 3, 2010, 41,914 laboratory-confirmed, influenza-associated hospitalizations were reported to CDC; and 2,125 laboratory-confirmed, influenza-associated deaths were reported to CDC through AHDRA.

If a pandemic situation should become more serious, it is important to be prepared for a potential shift in healthcare practice, with more medical resources going to people who have the best chances of survival. In any pandemic, doctors and other health professionals may need to shift thier usual practice of devoting most of their resources to critically ill patients to:

- Focusing on people who are likely to survive with the resources available; and
- Preventing others from being infected

Recognizing the reasons for this potential change in healthcare practice is critical to the well being of the entire community and is an important concept for everyone to understand.

Vaccination (slide 20) - H1N1 vaccine: - Side effects no different than seasonal flu vaccine - 2010-2011 seasonal influenza vaccine included an H1N1 pandemic strain - Priority groups for vaccination - Pregnant women - Household contacts and caregivers for children younger than 6 months of age

- · Healthcare and emergency medical services personnel
- All people from 6 months through 24 years of age
 Persons aged 25 through 64 years who have health conditions associated with higher risk of medical complications from influenza

©2013 Society for Disaster Medicine and Public Health (SDMPH). All rights reserved.

Purpose: Stress the importance of vaccination for H1N1 and seasonal flu

Special instructions: If possible, take time to review the CDC web site to ensure up-to-date information is presented.

CDC Vaccine Recommendations (http://www.cdc.gov/h1n1flu/)

- People should receive the flu vaccine every eyar. After being vaccinated, ones' immunity declines over time and may be too low to provide protection after a year.
 - Parents were encouraged to ensure that children less than 10 years old get their second dose of 2009 H1N1 vaccine if they had only received one dose of the vaccine.
 - The recommended interval between the first and second dose should be at least 28 days.
- When an adequate supply of vaccine was available, the CDC encouraged 2009
 H1N1 influenza vaccination for anyone who wanted protection against the disease,
 including people 65 years of age and older.
- Vaccination of people with certain health conditions is especially important because they are more likely to get serious flu-related complications. Health conditions that increase the risk of being hospitalized from 2009 H1N1 include lung disease like asthma or chronic obstructive pulmonary disease (COPD), diabetes, heart, or neurologic disease, and pregnancy, among others.

Script: There was a window of opportunity for most people to get vaccinated for 2009 H1N1 flu and provide protection for another wave of disease.

In February 2010, the WHO announced that the 2010-2011 seasonal flu vaccine would include a strain of the H1N1pandemic virus. This would help ensure that the vaccine is protective against pandemic H1N1 and seasonal influenza viruses, thus eliminating the need for separate immunizations.

Building Resilience Through Preparation and Planning (slide 21)

Building Resilience Through
Preparation and Planning



SDMPH ©2013 Society for Disaster Medicine and Public Health (SDMPH). All rights reserved.

Purpose: Show a narrated slide montage that emphasizes the importance of preparation and planning for pandemics.

Script: Let's take a few minutes to talk about pandemic planning in our community. This includes the need for personal and family plans, plans for schools and businesses, as well as a community plan...

Control of the pandemic requires coordination of resources and personnel. Individuals should create a personal/family pandemic plan; have a system for calling relatives, health professionals, and others in an emergency; know how to get supplies if forced to stay home; have a plan for working from home or taking care of loved ones if transportation systems, businesses, and schools are closed; and have access to the latest public health information.

During a pandemic, we may fear for ourselves, our families, and our friends. We will feel other emotions as well, such as uncertainty, anxiety, anger, grief, and sadness. In a serious pandemic, we may lose some control over our lives. We may not be allowed to travel where we want or enjoy social activities with friends and coworkers. The most important thing that we can do is to plan and prepare in advance, become better educated and informed about this disease, and clarify questions we have to best help ourselves and support others during potentially stressful and difficult times.

You will need access to reliable sources of information to be aware of measures that are being put in place to prevent or control the disease. Listen to TV news and visit reliable Internet sites, such as the Centers for Disease Control and Prevention (CDC), state and local public health agencies, and health organizations such as the American Red Cross.

The effects of a pandemic can be reduced if preparations are made ahead of time. Pandemic planning is a responsibility of elected officials, business leaders, school officials, and all citizens. Just as we plan and prepare for natural disasters (such as hurricanes), we also need to plan and prepare for the effects of a severe pandemic.

In a national emergency, help from outside the community may be days or even weeks away. Will you, your family, and your community be prepared to respond successfully?

Community pandemic preparedness plans must consider regional and local needs, resources, and capabilities. Local businesses, churches, schools, and other organizations bring individuals together that know each other and can be a great strength in mobilizing community action. All of these groups need to be part of local pandemic planning.

The more diverse the community the greater the challenges, but with planning and cooperation a coordinated response will save lives and speed recovery.

Knowing what to expect in a pandemic will help you plan more effectively. Being prepared increases your sense of control, and will allow you to help others understand the potential impact of this disease.

Group Exercise (slide 22)



Purpose: Section divider in the session.

Special instructions: Instructor will lead a facilitated group discussion about individual and community response to an influenza pandemic.

Give participants 10 to 15 minutes to talk about what they would do.

Script: During a pandemic, the focus and priority for controlling the disease moves from individuals and their homes and work places to the entire population. The community, and every member in it, needs to work together for the protection of everyone, not just themselves. In fact, they may be legally required to act for this common purpose.

This is an important concept. By protecting the community, you are protecting yourself and your family.

Let's take some time to discuss actions we can take in our own community to limit the spread of an influenza virus, as well as to prepare for future influenza outbreaks.



Purpose: Facilitate group discussion about individual and community response to an influenza pandemic.

Special instructions: For small groups (10 to 15 people), consider breaking into 3 smaller groups to discuss the proposed questions. For much larger groups, instructors will likely need to facilitate one large group discussion.

Give the groups 10 minutes to talk about what they would do.

Script: You have just been informed that 4 cases of a pandemic illness have been reported in the local elementary school, which your children attend. Take some time to talk about actions you can take as a community and as individuals. Think about how you would handle the logistics of everyday life if social distancing measures were put into place.

Group Exercise (slide 24) Group Exercise (continued) In your group, discuss: Who will care for the children? How can families plan ahead for school dismissal? What steps should employers take to plan for absenteeism? How will children be entertained and taught at home? How will needed school services be replaced? Are there concerns about unsupervised children?

Purpose: Complete the group exercise.

Special instructions: A list of possible questions is listed on the slide. After 10 minutes, bring the groups together to share their responses. Encourage the groups to be creative in thinking of ways to handle the issues they identify.

Script: Let's talk about the logistics of how to handle social distancing. Here are some of the questions you could consider.

- If someone is ill in the home, how do others practice social distancing within the home itself?
- If I am ill, who will care for the children?
- How can families plan ahead for school dismissal?
- What steps should employers take to plan for absenteeism?
- How will children be entertained and taught at home?
- How will needed school services be replaced?
- How can you help your neighbors?
- Are there concerns about unsupervised children?
- How will people get needed food and regular medical prescriptions?

General concerns regarding access to food, water, and other essential services (power) will be addressed by local public health authorities; however, each locality may be different. Ensuring adequate childcare and education is a personal and local school system issue.

After the exercise:

After all the groups have shared their recommendations, summarize by seeing how many of the helpful and appropriate actions listed below have been identified. Then talk about less appropriate actions and explain your rationale.

Examples of Appropriate Actions

Call the designated hotline if you or loved ones are worried about being sick.

Find out information from trustworthy sources and pass that to other members of the community.

Ensure that people who live alone or who cannot get out easily have food and other necessities.

Work with other members of your organization to set up a schedule for volunteering assistance.

Work with co-workers to figure out how to get work done from home. Consider having everyone who can work from home do so.

Ensure that local businesses and schools promote good hygiene (frequent hand-washing, cough etiquette)

Summary (slide 25)



Purpose: Section divider in the session

Special instructions: none

Script: The focus during an influenza pandemic is on individuals, families, the community, and the population as a whole. During a pandemic, there will be public health announcements that require us to take certain actions that will limit normal activities (such as recreation, travel, work, and worship). We must understand the reasons for and importance of those actions. They are the right thing to do.

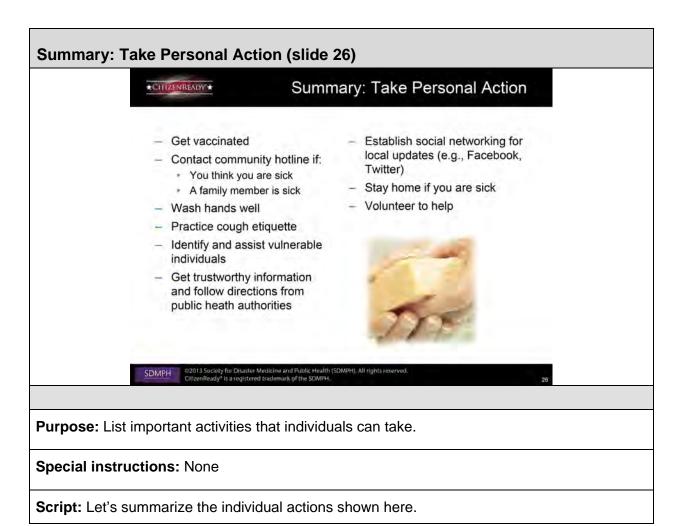
We may be tempted to think, "I need to go to the hospital. I need a vaccine. I need some medication to protect me." But the best way to protect yourself is to avoid close contact with others, practice good health habits, and stay informed. By protecting each other, we protect ourselves.

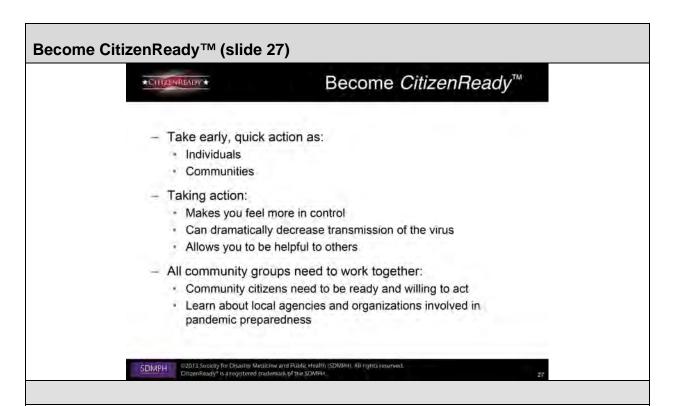
Let's summarize.

- A serious flu pandemic flu could significantly disrupt conventional health care systems.
- Federal, state, and local public health agencies already have pandemic influenza preparedness plans in place, which are being tested and tweaked on an ongoing basis.
- There are critical measures that we as individuals and communities can take to help prevent or slow the spread of an influenza pandemic.
- If we take these measures, the health system will be less likely to be overburdened and will be better able to manage sick patients.

Finally, all community groups need to work together. We need to understand the resources

that organizations such as the Red Cross, the Citizens Corps, the Medical Reserve Corps, the CDC, and others provide us and make use of them. As a network of people, we can protect ourselves—if we are prepared.





Purpose: Summarize the actions required to become CitizenReady.

Special instructions: None

Script: To respond to a pandemic or other public health emergency, it is important to prepare ahead of time. We need to think about all the items on this screen.

In a serious pandemic, people will likely be cared for where they live or at alternate care facilities, rather than hospitals. Together, we will have to develop systems for supporting the most vulnerable people, such as children, people without homes or families, the frail elderly, pregnant women, and people with chronic illnesses and disabilities.

If you have not already done so, take the time to review the online CitizenReady pandemic flu module to reinforce the content in this presentation. It is available through a link provided on the SDMPH website, as listed in the "Free Resources" list.

Learn about local agencies and organizations that are involved in pandemic preparedness. And most importantly, be sure that you and your family have a plan.

Thank you.

These pages were intentionally left blank

These pages were intentionally left blank

These pages were intentionally left blank

