COMMUNITY EMERGENCY RESPONSE TEAM

PANDEMIC INFLUENZA MODULE

PARTICIPANT GUIDE

September 2009
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The California Department of Public Health, Pandemic Planning and Response Section, of the Immunization Branch recognized the valuable role Community Emergency Response Teams (CERT) could provide before, during and after a pandemic to support their communities in times of need. This Pandemic Influenza training module for CERT members was developed and produced by Contra Costa Health Services (CCHS) under a grant by California Department of Public Health (CDPH) and supervised by Dr. Gwendolyn Hammer, project manager.

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Disclaimer
This training is not affiliated with, or part of, the FEMA CERT curricula. This training is a stand-alone module that is intended for delivery to individuals who are currently affiliated with a disaster volunteer program such as the Community Emergency Response Team (CERT) program.

Thank you for your interest in this Pandemic Influenza training module. The materials in the module are the result of collaboration between health service professionals and leaders from the California disaster volunteer program field.

Please consider these materials as an additional training resource that can be used to increase the knowledge and personal preparedness of disaster volunteers, and through them their families, communities, and California.

Any questions related to the content of these materials should be directed to Dr. Gwendolyn Hammer, CDPH at email address: Gwendolyn.Hammer@cdph.ca.gov.

Thank you for taking the steps to make California a safer, better prepared state.
COMMUNITY EMERGENCY RESPONSE TEAM
PANDEMIC INFLUENZA MODULE

MODULE OVERVIEW

As a Community Emergency Response Team (CERT) member, you provide invaluable support to your community in times of need. The core training you received helped prepare you to respond to disasters of all kinds – earthquakes, fires, floods, and other naturally occurring or man-made emergencies.

This pandemic influenza (flu) module was developed for CERT members with little or no medical background. For the purpose of this module, pandemic influenza will be referred to as pandemic flu. *(See Appendix A: Glossary of Terms)*

As a CERT member, you can play a critical role during an infectious disease outbreak such as pandemic flu by assisting local public health departments and other agencies in their response efforts.

The module was designed to identify possible CERT roles before, during, or after a pandemic flu outbreak. It includes information that you, your family, or your neighbors may need before, during, and after a flu pandemic.

This module was developed to serve as supplemental training once you have completed basic CERT training. You may only be taking this supplemental training to learn more about the topic. Or, perhaps, you are interested in learning about ways to get involved in your neighborhood before, during, or after a pandemic flu outbreak. You might be taking this training to learn how to better prepare yourself, your family, or your neighbors before a pandemic occurs.

After completing this training you may feel comfortable in roles designed to assist local health departments or other response agencies during a pandemic outbreak. Whatever role you choose, the information provided in this module can help you become better prepared to protect yourself, your family, and your neighbors from pandemic flu.
INTRODUCTION

Module Objectives
By the end of the pandemic flu module, you should be able to:
- Explain what pandemic flu is and how it is spread
- Demonstrate at least four ways CERT members can help protect themselves, their families, and their neighbors from getting pandemic flu
- Describe at least four roles CERT teams can play in their neighborhoods before, during, and after a pandemic flu

Why CERT Members Should Be Trained On Pandemic Flu
Neighbors will want to get information on pandemic flu from known and trusted sources such as a neighborhood CERT member.

CERT teams are already trained to respond to catastrophic disasters and a severe pandemic flu outbreak would be another type of catastrophic disaster.

What This Module Is
This module is:
- An overview of pandemic flu
- To train you as a CERT member to protect yourself, your family, and your neighbors from getting pandemic flu
- A review of CERT roles before, during, and after a flu pandemic
- For people with little or no medical background

What This Module Is Not
This CERT module is not:
- An in-depth look at the science of viruses that cause pandemic flu
- Designed to prepare you to provide medical care for your neighbors

Seasonal Influenza (Flu)
Seasonal flu is a respiratory disease of the lungs caused by a virus. It is spread easily from person to person when the respiratory droplets from an infected person come into contact with the eyes, nose or mouth of another person or are inhaled. The respiratory droplets are spread through coughing, sneezing, or talking. Seasonal flu occurs each year, usually during the winter months.

Pandemic Flu
Pandemic flu is a respiratory illness (disease of the lungs). It is caused by a new germ (virus) that suddenly appears (outbreak). People have little or no ability to fight off the disease (immunity). It spreads easily from person to person. It is found throughout the world.
COMMUNITY EMERGENCY RESPONSE TEAM
PANDEMIC INFLUENZA MODULE

The Definition Of Pandemic Flu Is:
- A new flu virus is found that causes illness;
- There is little or no immunity in the population;
- It spreads easily from person to person; and
- It is found throughout the world

Why Should Cert Teams Be Concerned About Pandemic Flu?
If a severe pandemic flu outbreak strikes, services and supplies we count on may not be available. Services provided by banks, stores, restaurants, government offices, the post office and public transportation may be disrupted. Students may be dismissed from schools and childcare facilities may be closed for an extended period of time. Hospitals and health care providers may be overwhelmed with people needing medical care as well as people seeking guidance and reassurance—the “worried well”.

When a pandemic strikes, people will want to get factual information from trusted and reliable sources such as CERT members from their own communities.

- CERT teams have already been trained to respond to catastrophic disasters such as earthquakes, fires, or floods, when emergency services are not available.
- A severe pandemic flu outbreak would be another type of catastrophic disaster affecting all aspects of our society.

CERT teams are known and trusted members of their communities. CERT members can play many important roles before, during, and after a pandemic flu outbreak.

Role Of Cert Teams
As a CERT member you can help yourself, your family, and your neighbors prepare for and respond to a flu pandemic by:

- Learning about the potential health and social impacts of pandemic flu
- Finding out about local health department or other government pandemic flu response plans
- Identifying community members whose needs might not be met during a severe pandemic
- Identifying activities that CERT members could safely perform during a pandemic
- Keeping neighbors informed and responding to rumors and misinformation with up-to-date and accurate information about pandemic flu to curb fear and confusion
- Helping neighbors learn what they can do to reduce their risk of getting sick by teaching basic hygiene techniques such as proper ways to cover a cough and hand washing
If properly trained and prepared, CERT volunteers can be important partners in helping to protect the public’s health and safety during a severe pandemic flu outbreak.

**How You Can Stay Updated About Pandemic Flu**

Flu outbreaks occur regularly throughout the world. Each year, seasonal flu kills about 36,000 people in the United States. When a new flu virus appears it could rapidly start a global disease outbreak called a pandemic flu. Pandemic flu occurs about every 30 – 40 years. The World Health Organization (WHO) is the agency responsible for declaring a global pandemic. In June 2009, WHO declared a pandemic flu caused by Influenza A H1N1 (H1N1), originally referred to as swine flu.

In the United States, the Centers for Disease Control and Prevention (CDC) provide guidance and assistance during significant disease outbreaks including pandemic flu. The California Department of Public Health (CDPH) provides support, guidance and technical assistance to local health departments throughout the state. Local health departments respond to disease outbreaks at the local level. They are responsible for implementing local activities to control the spread of disease.

You should check with your local health department or one of these reliable websites to stay updated on pandemic flu.

**CDC:**
http://www.pandemicflu.gov/

**World Health Organization:**
http://www.who.int/en/

**California Department of Public Health:**
http://ww2.cdph.ca.gov/Pages/default.aspx
COMMUNITY EMERGENCY RESPONSE TEAM
PANDEMIC INFLUENZA MODULE

PANDEMIC FLU BACKGROUND
It is important for you to be able to explain to others what is meant by pandemic flu. (See Appendix B: Pandemic Flu Background Information and Appendix C: Pandemic Flu Fact Sheet)

Seasonal Flu
Seasonal flu is a respiratory disease of the lungs caused by a virus. It is spread easily from person to person when the respiratory droplets from an infected person come into contact with the eyes, nose or mouth of another person or are inhaled. The respiratory droplets are spread through coughing, sneezing, or talking. Seasonal flu occurs each year, usually during the winter months.

Pandemic Flu
The definition of pandemic flu is:
• A new flu virus is found causing illness;
• There is little or no immunity in the population;
• It spreads it easily from person to person; and
• It is found throughout the world

Why People Should Be Concerned About Pandemic Flu
People should be concerned about pandemic flu because:
• There were three pandemics in the last century
• They ranged from a:
• mild pandemic that sickened and killed about the same number of people as seasonal flu (Seasonal flu kills about 36,000 people in the United States each year)
• To a severe pandemic that sickened and killed many people

The 1918 pandemic was known as the “Spanish Flu”. Between 20 and 40 million people died worldwide. There were about a half a million deaths in the U.S. alone.

The pandemic that occurred in 1957 was called the “Asian Flu”. It caused about 1 million deaths worldwide. About 70,000 of those were in the United States.

In 1968, the “Hong Kong Flu” caused about 1 million deaths worldwide. About 34,000 people died in the United States as a result of the “Hong Kong Flu”.

Pandemic Flu in The Last Century

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Death Count</th>
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<td>1918</td>
<td>“Spanish Flu”</td>
<td>20-40 million worldwide, 500,000 deaths USA</td>
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<tr>
<td>1957</td>
<td>“Asian Flu”</td>
<td>1 million deaths worldwide, 70,000 deaths USA</td>
</tr>
<tr>
<td>1968</td>
<td>“Hong Kong Flu”</td>
<td>1 million deaths worldwide, 34,000 deaths USA</td>
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In June 2009, the World Health Organization declared a pandemic. Early on it was called swine flu. The scientific name is Influenza A, H1N1, commonly referred to as H1N1.

**Why Is H1N1 Considered A Pandemic?**  
To be declared a pandemic flu the disease must meet certain criteria. H1N1 meets all of the criteria.

These criteria are:
- It is a new flu virus;
- It causes illness in people because there is little to no immunity;
- It spreads it easily from person to person; and
- It is found throughout the world

**General Overview Of Pandemic Flu**
- Flu pandemics are naturally occurring events  
- They occur about every 30 to 40 years  
- They can range from mild to severe  
- In a severe pandemic flu all health care systems will be overwhelmed  
- Businesses, transportation, and schools will all be affected due to absenteeism of workers

**Severe Pandemic Flu In The United States - Estimates**
What could happen if a pandemic flu became severe today?

In the United States, approximately:
- 1.8 million people could die  
- 9.9 million people could be hospitalized  
- 90 million people or 30% of the U.S. population could become ill  
- Hospitals would be overwhelmed  
- There would be shortages of supplies, equipment, and workers  
- There would be no “business as usual”  
- It would cause major disruptions in the workforce  
- Everyone would be affected because of illness or absenteeism
**PANDEMIC SEVERITY**
Pandemic severity refers to the number of people who get sick with pandemic flu and die.

- A pandemic flu can be mild
  This means about the same number of people die from pandemic flu as from seasonal flu
  (About 36,000 people in the United States die from seasonal flu each year)
- A pandemic flu can be moderate
- A pandemic flu can be severe
  This means many people die of pandemic flu

For example, during the 1918 pandemic flu about 500,000 people died in the United States.

A severe pandemic could impact all aspect of our lives including our ability to get health care, our ability to rely on communications systems, food supplies through transportation systems—virtually everything.

**Pandemic Severity Index**
The Centers for Disease Control and Prevention (CDC) have developed a scale to help measure the severity of flu pandemics. This scale is called the Pandemic Severity Index. It ranks the severity of flu pandemics using categories similar to those used to rank hurricanes (Category 1 being the least severe and Category 5 being the most severe).

This means that during a mild pandemic fewer people who become ill are expected to die. During a more severe pandemic, such as a Category 4 or 5, many more people with pandemic flu would die of the disease.
HOW A PANDEMIC IS DECLARED

The World Health Organization (WHO) is responsible for declaring flu pandemics. *(See Appendix D: World Health Organization Pandemic Phases)*

Before pandemic can be declared the disease must go through several phases.

In Phases 1 & 2: A new flu virus is found in animals. The new flu virus could cause illness in people. And there is little to no immunity in people.

During Pandemic Phase 3: A very small number of people have gotten the new flu. It is not spread easily from person to person.

During Phase 4: The new flu has spread among a very small number of people.

By Phase 5: The new flu has begun to spread person to person but is not found throughout the world.

Once the new flu is spread easily from person to person world wide it has now reached Phase 6 according to the World Health Organization’s pandemic flu phases. WHO will declare a pandemic.

**WHO Pandemic Phases**

A new flu virus is found in animals.

The new flu virus could cause illness in people.

There is little to no immunity in people.

A very small number of people have gotten the new flu.

It is not spread easily from person to person.

The new flu has spread among a very small number of people.

The new flu has begun to spread person to person but is not found throughout the world.

The new flu is spread person to person worldwide.

Pandemic Declared

| Phases 1 & 2 | Phase 3 | Phase 4 | Phase 5 | Phase 6 |
HOW LONG A PANDEMIC LASTS
A pandemic may last up to two years.

During a pandemic, illness will come in waves.

A pandemic flu wave is when many people in a community get the flu around the same time. Then the flu seems to disappear.

Several weeks or months later the flu comes back, making people sick who didn’t get the flu the first time around.

A wave of illness may last six to eight weeks in a community.

HOW A PANDEMIC CAN SPREAD
Pandemic flu can spread easily from person to person when a sick person coughs, sneezes, or talks, usually within 6 ft. of another person.

The respiratory droplets from the coughs and sneezes of the sick person come into contact with the eyes, nose, or mouth (mucous membranes) of a healthy person or are inhaled.

WHAT YOU CAN DO TO PREPARE FOR PANDEMIC FLU
As a first step in preparing for pandemic flu, you can learn the differences between the common cold, seasonal flu and pandemic flu. You can then explain these differences to people in your neighborhood to dispel myths and clarify misinformation.

THE DIFFERENCES BETWEEN THE COMMON COLD AND SEASONAL FLU
Different germs (viruses) cause the common cold and seasonal flu. The symptoms of each are very different as well. (See Appendix E: Common Cold Versus Seasonal Flu Fact Sheet)

Seasonal flu is the type of flu that occurs yearly, mainly in the late fall through spring.

The flu virus can spread to others 1 – 2 days before, and for another 3 to 4 days after, symptoms appear. A person will usually feel symptoms about 1 to 4 days after they have been infected with the flu virus.

With a cold, you may take some over-the-counter products for a stuffy head. You may feel badly for a couple of days and then get better.
With the flu, you feel as if you’ve been hit by a truck! The symptoms start very quickly and include: fever and cough or fever and sore throat plus, headache, tiredness, body aches, runny nose, and chills. People with the flu don’t usually spring back as quickly as from the common cold. In fact, thousands of people die each year from the flu—that is not the case with the common cold.

With the common cold, the onset of illness is usually gradual. You can sometimes feel subtle symptoms that make you suspect that you are “coming down with something”. But with the flu, the symptoms are sudden and there is no doubt that you are getting sick.

The symptoms of the common cold can include a cough and a stuffy head. With the flu, there is fever and a cough or fever and sore throat—but a fever is the hallmark of the flu.

To treat the symptoms of the common cold, people often use decongestants, cough medicines or fever reducers to ease general discomfort. To treat symptoms of the flu, many of these same approaches are used.

One important difference in treating these two illnesses has to do with the use of antivirals. With the common cold, antivirals are not effective. With seasonal flu, antivirals are possibly effective depending on the virus. Healthcare providers have the information about which flus may respond to antivirals.

In terms of preventing illness, there is no vaccine to prevent the common cold. With seasonal flu, however, a new vaccine is produced each year with the goal of preventing people from ill.

In terms of how long people are sick, with the common cold, some people feel better after a few days. With seasonal flu, people can be sick for a week or more. Seasonal flu can also be life-threatening for the very young, the very old, or those who have chronic conditions such as asthma or diabetes.

**SEASONAL FLU VERSUS PANDEMIC FLU — HOW THEY ARE DIFFERENT**

Even though there are a number of similarities between seasonal and pandemic flu, there are also several unique differences. *(See Appendix F: Seasonal Flu And Pandemic Flu Differences)*

As has already been mentioned, seasonal flu occurs every year, mainly in the late fall through spring.

Pandemic flu, however, only occurs about every 30 to 40 years.
A pandemic flu may be mild, moderate, or severe.

Severity refers to the number of people who become sick with the disease and die from it.

The milder a pandemic flu is the fewer number of people will die from it.

In contrast, the more severe a pandemic flu is, the greater the number of people will die from it.

Another important distinction between seasonal flu and pandemic flu is that variations of seasonal flu are present year to year. This means that there is some immunity among many people to the flu virus from year to year.

A pandemic flu, however, is caused by a new virus. This means that few, if any, people have been exposed to this virus in the past so there is little to no immunity to the disease.

There are several other unique differences between seasonal flu and pandemic flu.

For instance, with seasonal flu, vaccines are available each year, usually at the start of flu season.

In the case of pandemic flu, however, a vaccine to protect against it will not be available in the early stages of a pandemic.

It takes approximately six months to produce a vaccine against a new flu virus.

Another important distinction between the two types of flu is that with seasonal flu, between 5% and 20% of the population typically get infected. This is in contrast to about 30% during a pandemic flu outbreak. This is because so few people have immunity to the new virus.

There are a number of other important differences between the two types of flu.

During a typical annual seasonal flu outbreak in the United States over 200,000 people are hospitalized.

This is in contrast to estimates that up to 9.9 million people in the United States could be hospitalized over the course of a severe flu pandemic.

Another important distinction is found in the estimates for how many people die from these two types of flu. In the United States, it is estimated that about 36,000 people die from seasonal flu each year. If there were severe flu pandemic, estimates for the number of deaths in this country could reach 1.9 million people.
Other differences between seasonal and pandemic flu is who is at risk from dying from the diseases.

In the case of seasonal flu, more than 90% of the deaths are among people age 65 or older. And usually the very young and the very old are at greatest risk for serious complications from the flu.

With pandemic flu, deaths could occur among any age group because there is little to no immunity in the population. All people can be at risk for serious complications from pandemic flu.

Another difference is the time of year or seasons in which the two types of flu strike. With seasonal flu, it occurs mostly in the winter months.

With pandemic flu, it can occur year round and may last up to two years.

SEASONAL FLU VERSUS PANDEMIC FLU — HOW THEY ARE SIMILAR
Both seasonal flu and pandemic flu are respiratory illnesses of the lungs. Both are easily spread from person to person by coughing and sneezing. Both viruses can enter the body through the eyes, nose, or mouth. (See Appendix G: Seasonal Flu and Pandemic Flu Similarities)

While both seasonal and pandemic flu viruses are fragile and don’t survive well outside of the body, they have been shown to survive under some conditions for up to a day.

If you’ve touched a surface such as a telephone or doorknob that has been recently contaminated with either the seasonal or pandemic flu virus, you can pass the virus from your hand to your nose or mouth causing disease.

People are at greatest risk of getting infected in situations like crowded living conditions and schools where students sit closely together.

Both seasonal and pandemic flu have the same symptoms. These include: fever and cough or fever and sore throat plus, headache, tiredness, body aches, runny nose, and chills.

CERT ROLES BEFORE, DURING, AND AFTER PANDEMIC FLU
CERT members can learn what they can do to support their neighbors before a pandemic happens. (See Appendix H: Community Emergency Response Team, Pandemic Flu Community Preparedness and Response Planning Checklist)
Possible Roles For Cert Members Before A Flu Pandemic Include:
CERT members can begin identifying, in advance, safe ways to keep in contact with neighbors.

They can give neighbors information about what pandemic flu is.

CERT teams can encourage neighbors to prepare ahead of time – by adding recommended items to their regular emergency supplies.

CERT Members can teach neighbors ways to prevent the spread of pandemic flu by demonstrating proper hand washing skills and ways to cover coughs.

They can identify neighbors with special needs that may not be met during a pandemic flu outbreak and identify resources that could be available to help.

They can identify accurate sources of information about pandemic flu.

CERT members can encourage neighbors to get their annual flu shot.

They can read their local health department’s pandemic flu plan.

They can hold neighborhood events, staff a booth at a community fair, and distribute educational pamphlets about pandemic flu.

Possible Roles For Cert Members During A Flu Pandemic Include:
During a pandemic, depending on its severity, CERT members can help dispel myths and rumors by providing neighbors accurate information.

CERT members can let neighbors know about any school closures or cancellations of public events or changes in other public service programs impacted by pandemic flu.

CERT members can let neighbors know where any public health mass vaccination clinics or Point of Dispensing sites (POD) are being conducted.

CERT members can also assist local response agencies by transporting supplies or assisting local health departments at vaccination clinics at Points of Dispensing sites (PODS).

CERT members assisting at a POD site will receive any necessary vaccinations, personal protective equipment, or just-in-time training required for their role.

During a pandemic CERT teams may also share public health guidelines about when and where to seek medical care as well as guidelines for caring for sick people at home.
CERT members can help neighbors prevent the spread of pandemic flu by teaching them proper hand washing skills and ways to cover coughs.

**Possible Roles For Cert Members After The Pandemic Or Between Waves**

After a pandemic there are a number of things that CERT members can do.

Continue to promote healthy habits including reinforcing proper hand washing techniques and ways to cover coughs.

CERT teams can meet with health or other emergency planners to discuss what worked well and what can be improved.

CERT members can clarify CERT team roles and expectations for the next pandemic wave or outbreak.

CERT members can restock supply kits and educate neighbors about where to get replacement supplies.

They can organize neighborhood events to support neighbors and help renew a sense of community.

And they can begin planning for future emergencies that can occur.

**What Else CERT Team Members Can Do To Prepare For Pandemic Flu**

**Stay Informed**

You can seek out information from sources that are accurate, reliable, and up-to-date. Such sources include web sites from local health departments, state health departments, the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO).

**Coordinate Activities**

Another way that CERT members can stay informed is to meet with health and other emergency responders to plan and coordinate activities.

**Learn How to Reduce the Spread of Disease**

You can learn how to protect yourself and your family through good hand washing, covering coughs and sneezes, getting an annual flu shot, and staying home from work or school if you are sick.

You can also learn how to protect yourself and your family by avoiding being around others who are sick and wearing a mask if you are sick and around others.
As a CERT member you can learn to protect yourself and your family by using equipment such as surgical masks, gloves, disposable gowns, eye protection, or N-95 respirators if advised by health officials or CERT leaders to do so.

Perhaps the best protection we have for protecting ourselves, our families, and our neighbors from becoming sick with pandemic flu are washing our hands and covering coughs.

Develop Good Hand Washing And Respiratory Etiquette Skills
You can learn good hand washing skills and proper ways to cover coughs and sneezes – these techniques are called respiratory, or cough etiquette. It is very important that you stay home when you are sick and avoid being around others who are ill.

Why Is Proper Hand Washing So Important?
According to the CDC and the World Health Organization, hand washing is the single most important way of preventing the spread of disease. Research shows that washing with water is not enough; proper hand washing requires soap and only a small amount of water.

Using soap works by breaking down the grease and dirt that carry most germs. The friction from rubbing the hands together dislodges the germs. With proper use, all soaps are effective at rinsing away disease causing germs. (See Appendix I: Hand Washing Fact Sheet and Appendix J: Hand Washing 6-Steps Visual)

The steps for proper hand washing are:
1. Wet hands with warm running water
2. Apply and lather soap
3. Rub hands together for at least 15 seconds
4. Rinse hands well
5. Pat dry with a clean paper towel
6. Turn off the water with the paper towel
7. Use the paper towel to open the bathroom door

When You Should Wash Your Hands
It is important to wash your hands before preparing food, before eating, and before caring for someone who is sick.

It is also important to wash your hands after coughing sneezing or blowing your nose. You should wash your hands after being in a public place such as in store or on public transportation. It is essential to wash your hands after using the bathroom, handling garbage, or changing diapers.
Using a hand gel or alcohol-based hand sanitizer (containing at least 60% alcohol) is another excellent way of controlling the spread of disease. You should learn and follow the steps for properly using an alcohol-based hand sanitizer.

### How to Use an Alcohol Based Hand Sanitizer (containing at least 60% alcohol) If Hands Are Not Visibly Soiled

1. **Visual:**
   - Step 1: Place a size appropriate amount of sanitizer on the hands.
   - Step 2: Rub hands together until they are dry.
   - Step 3: Rub behind the neck of each hand.
   - Step 4: Rub the back of each hand.
   - Step 5: Rub between the fingers.

### Personal Preparedness

You have already been trained on the importance of personal preparedness, and most likely have an up-to-date emergency kit in your home, car and workplace. When preparing for a severe flu pandemic, people will need to include additional items in a basic emergency supply kit. *(See Appendix K: Purchasing Personal Preparedness Supplies)*

In addition to regular emergency supplies, such as non-perishable food and water, if possible, households should also have a one to two-month supply of medicines on hand that the family regularly uses, including prescription drugs and fever reducing medications such as acetaminophen and ibuprofen.

Talk to your health care provider about the possibility of getting a two-month supply of prescription medications.

Other supplies to include are soap and alcohol based hand sanitizer as well as a supply of facemasks that cover the nose and mouth, disposable gloves, disposable gowns, eye protection, and N-95 respirators.

If disposable gowns are not available two large button-up shirts that cover from the neck to the waist can be used—one buttoned in front—the other buttoned in back.

Don’t use clothes such as t-shirts that have to be pulled off over the head as this can spread germs from the shirt to the face. Clothes used for this purpose can be washed and re-used.
Preparedness kits should also include household disinfectants and unscented household chlorine bleach, a medicine dropper and measuring spoons and cups.

Include a recipe for making a rehydration solution, as well as packaged drink mixes that contain sugar and salt.

By adding a few additional essential items to personal preparedness kits, community members and CERT teams can be better able to protect themselves during a pandemic flu.

**PERSONAL PROTECTIVE EQUIPMENT**

If you know how to reduce your risk from getting sick with pandemic flu you can be effective in teaching others how to protect themselves. *(See Appendix L: How To Fit Test A Disposable Respirator For Home (Non-Employee) Use, Appendix M: Respirator Fit Check, and Appendix N: Donning and Removal of Personal Protective Equipment)*

During a pandemic flu, health officials will issue guidelines for caring for people sick with pandemic flu. These guidelines may include the use of personal protective equipment (PPE) including gloves, N-95 respirators, disposable gowns, or eye protection such as a face shield or goggles.

No form of personal protective equipment, however, can provide 100% protection from disease.

**Differences Between Surgical Masks and N-95 Respirators**

CERT members should learn the differences between surgical masks and N-95 respirators.

**Surgical Masks**

A surgical mask is used by a sick person to contain respiratory droplets from coughs and sneezes.

An N-95 respirator may be recommended to reduce the chance of becoming ill when caring for a person sick with pandemic flu. (Surgical masks are on the left and N-95 respirators are on the right).

People should consider having both surgical masks and N-95 respirators in personal preparedness kits. The N-95 respirator is for the caregiver and the surgical mask is for the sick person.
N-95 Respirators
An N-95 respirator is a respiratory protective device designed to achieve a very close facial fit and very efficient filtration of airborne particles. In addition to blocking splashes, sprays and large droplets, the respirator is also designed to prevent the wearer from breathing in very small particles that may be in the air.

There are things you need to know before wearing an N-95 respirator. For example, anyone can buy an N-95 respirator at a hardware or medical supply store. Most people, however, are not used to wearing an N-95 respirator and will find it uncomfortable because it makes breathing difficult.

The ‘N-95’ designation means that when subjected to careful testing, the respirator blocks at least 95% of very small test particles. If properly fitted, the filtration capabilities of N-95 respirators exceed those of face (surgical) masks. However, even a properly fitted N-95 respirator does not completely eliminate the risk of illness or death.

N-95 respirators are not designed for children or people with facial hair. Because a proper fit cannot be achieved on children and people with facial hair, the N-95 respirator may not provide full protection.

To work as expected, an N-95 respirator must be fit tested. CERT members need to follow specific directions to make sure they are wearing the right size respirator. CERT members should always refer to the manufacturer’s instructions.

People with chronic respiratory, cardiac, or other medical conditions that make it harder to breathe should check with their healthcare provider before using an N-95 respirator because the N-95 respirator can require more effort to breathe. Some models have exhalation valves that can make breathing out easier and help reduce heat build-up.

CERT members, in community, non-work settings, may wish to wear a respirator to reduce their risk of becoming infected with the pandemic flu virus. Check with your instructor about additional training on this topic.

To find one that will work the best, you will need to try on various styles and sizes and then perform a fit test.

CERT members should know that wearing a properly fitted N-95 respirator will provide the best protection from airborne droplets from coughs and sneezes.

CERT members can also educate neighbors about how to use personal protective equipment if advised by health officials to do.
CERT members can let neighbors know when to wear disposable gloves, gowns, N-95 respirators, and eye protection such as face shields or goggles as well as where neighbors can purchase these supplies.

People should practice wearing an N-95 respirator before they actually need to wear one for protection and get used to how long they can tolerate it.

**BASIC HOME CARE**

During a severe pandemic flu, hospitals may be overwhelmed. Health officials may give guidance about when to go to the hospital and when to stay at home. As a result, many people may need to be cared for at home. *(See Appendix O: Basic Home Care Guidelines and Appendix P: Recommendations on Basic Cleaning for Influenza in Non-Healthcare Settings)*

It is not the goal of this module to train CERT members to care for sick people outside of their homes with pandemic flu. CERT members should never give medical advice nor provide medical care unless they are trained and qualified to do so. During a CERT team activation, members should take great caution to protect themselves from exposure to pandemic flu. CERT members, however, can play an important role in helping to educate neighbors about how they can care for sick members of their households at home.

Some basic home care guidelines are general enough that they can be given to anyone at any time.

**Home Care Guidelines**

General home care guidelines include:

- If possible, separate sick people from others in the home in a separate room
- If possible, designate one person to be the caregiver for the sick person
- Try to limit contact of other people in the home with the sick person
- Encourage all household members to wash their hands often
- Frequently clean all surfaces using cleaning agents that are usually used in the home and follow the directions on the labels
- Try and relieve the discomfort of the sick person from fever and body aches
- Keep a record of the temperature of the sick person
- Encourage the sick person to drink plenty of fluids to prevent dehydration
- Regular urination is a sign of good hydration

**Preventing Dehydration**

A person sick with pandemic flu may suffer from dehydration. Dehydration occurs when the body loses too much fluid. This can happen when a person stops drinking water or loses large amounts of fluid through diarrhea, vomiting, sweating, or exercise. *(See Appendix Q: Rehydration Solution Guidelines)*
Not drinking enough fluids can cause the body to lose important salts called electrolytes. Electroytes are salts found in the body that help nerves and muscles work properly. A person suffering from dehydration may experience muscle cramps. A person may also feel faint. Usually the body can reabsorb fluid from blood and other body tissues. But by the time a person becomes severely dehydrated, there may no longer be enough fluid in the body to get blood to vital organs. This could cause a person to go into shock, which is a life-threatening condition.

The signs of dehydration are:
- Weakness or unresponsiveness
- Decreased saliva, dry mouth and tongue
- Skin tenting - when the skin is pinched it stays in a “tent” position instead of going flat
- Not urinating often
- Urine very dark in color

CERT members can inform neighbors about good fluids for people with dehydration.

Caffeine free soft drinks that contain water, sugar and salt can be used to prevent dehydration (bottled soft drinks, packaged drink mixes, sports drinks, etc.)

Prepared rehydration products can also be found at drug stores or pharmacies. Ask your doctor or pharmacist about prepared rehydration products.

An oral rehydration solution can be made using water, sugar and salt.

CERT members can also teach neighbors how to make a simple rehydration solution. Knowing how to do this can save lives.

**MODULE SUMMARY**
CERT teams are known and trusted members of their communities. They are important members of emergency response efforts in their neighborhoods. CERT members can play many important roles before, during, and after a pandemic flu outbreak.

As a result of this training, you should now be able to explain to neighbors what pandemic flu is and how it is spread.

You should be able to identify at least four ways CERT members can help protect themselves, their families, and their neighbors from getting pandemic flu.

You should also be able to identify at least four roles CERT teams can fulfill in their neighborhoods before, during, and after a pandemic flu.
COMMUNITY EMERGENCY RESPONSE TEAM
PANDEMIC INFLUENZA MODULE

APPENDICES

- Appendix A: Glossary of Terms
- Appendix B: Pandemic Flu Background Information
- Appendix C: Pandemic Flu Fact Sheet
- Appendix D: World Health Organization Pandemic Phases
- Appendix E: Common Cold vs. Seasonal Flu Fact Sheet
- Appendix F: Seasonal Flu And Pandemic Flu Differences
- Appendix G: Seasonal Flu and Pandemic Flu Similarities
- Appendix H: Community Emergency Response Team, Pandemic Flu Community Preparedness and Response Planning Checklist
- Appendix I: Hand Washing Fact Sheet
- Appendix J: Hand Washing 6-Steps Visual
- Appendix K: Purchasing Personal Preparedness Supplies
- Appendix L: How To Fit Test A Disposable Respirator For Home (Non-Employee) Use
- Appendix M: Respirator Fit Check
- Appendix N: Donning and Removal of Personal Protective Equipment
- Appendix O: Basic Home Care Guidelines
- Appendix P: Recommendations on Basic Cleaning for Influenza in Non-Healthcare Settings
- Appendix Q: Rehydration Solution Guidelines
# Appendix A: Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Airborne transmission</strong></td>
<td>The transmission of organisms, such as a bacteria or viruses, through the dispersion of very small infectious droplets (less than 5 microns in diameter). Such droplets can remain suspended in the air for long periods of time and may be inhaled into the lungs.</td>
</tr>
<tr>
<td><strong>Antiviral Medication</strong></td>
<td>Medication used to treat individuals who show early sings and symptoms of influenza and to prevent illness among those exposed to the influenza virus.</td>
</tr>
<tr>
<td><strong>Asymptomatic</strong></td>
<td>Now showing signs or symptoms of disease.</td>
</tr>
<tr>
<td><strong>Avian Influenza (&quot;bird flu&quot;)</strong></td>
<td>A disease caused by influenza viruses carried and spread among birds. On rare occasions, avian influenza viruses have crossed the species barrier to infect humans.</td>
</tr>
<tr>
<td><strong>CDC</strong></td>
<td>Centers for Disease Control and Prevention.</td>
</tr>
<tr>
<td><strong>Case Fatality Ratio</strong></td>
<td>The number of people who become sick and die from pandemic influenza.</td>
</tr>
<tr>
<td><strong>Clinical attack rate</strong></td>
<td>The percentage of the population that develops influenza with symptoms of infection.</td>
</tr>
<tr>
<td><strong>Communicable Disease</strong></td>
<td>An illness due to a specific infectious agent or its toxic products that arises through transmission of that agent or its products from an infected person, animal or inanimate reservoir to a susceptible host; either directly or indirectly through an intermediate plant or animal host, vector or inanimate environment.</td>
</tr>
<tr>
<td><strong>Communicable Period</strong></td>
<td>The time during which an infectious agent may be transferred directly or indirectly from an infected person to another person, from an infected animal to human, or from an infected person to animal, including arthropods (insects and related species).</td>
</tr>
<tr>
<td><strong>Contact transmission</strong></td>
<td>Transmission of infection through direct physical contact and/or indirect contact via an intermediate object such as contaminated instruments, door handles, etc.</td>
</tr>
<tr>
<td><strong>Contagious</strong></td>
<td>Able to spread from person to person or from living object to nonliving object (such as person to object to person).</td>
</tr>
<tr>
<td><strong>Disinfection</strong></td>
<td>The killing of infectious agents on objects and surfaces by direct exposure to chemical or physical agents.</td>
</tr>
<tr>
<td><strong>Electrolyte</strong></td>
<td>Is a medical term for salts found in the human body. Electrolytes are important because they are what your cells need to help nerves and muscles work properly.</td>
</tr>
<tr>
<td><strong>Endemic</strong></td>
<td>The constant presence of a disease or infectious agent within a given geographic area or the usual prevalence of a given disease within an area.</td>
</tr>
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</tr>
<tr>
<td></td>
<td>The occurrence of cases of an illness (or an outbreak of illness) in a community or region more often than would normally be expected.</td>
</tr>
<tr>
<td></td>
<td>The branch of medical science dealing with the transmission and control of disease, including the study of epidemics and epidemic diseases.</td>
</tr>
<tr>
<td></td>
<td>An abbreviation for influenza which is highly contagious and common respiratory illness cause by a virus. There are three known types of influenza virus – A, B, and C.</td>
</tr>
<tr>
<td><strong>H1N1 Influenza (swine flu)</strong></td>
<td>This virus was originally referred to as “swine flu” because laboratory testing showed that many of the genes in this new virus were very similar to influenza viruses that normally occur in pigs (swine) in North America. But further study has shown that this new virus is very different from what normally circulates in North American pigs. It has two genes from flu viruses that normally circulate in pigs in Europe and Asia and bird (avian) genes and human genes. Scientists call this a “quadruple reassortant” virus.</td>
</tr>
<tr>
<td><strong>Immunity</strong></td>
<td>Resistance to an infectious agent usually associated with the presence of protective antibodies or cells.</td>
</tr>
<tr>
<td><strong>Immunize</strong></td>
<td>To make immune, that is able to resist a particular disease, most often through administration of a vaccine delivered by a needle.</td>
</tr>
<tr>
<td><strong>Incubation Period</strong></td>
<td>The time interval between initial contact with an infectious agent and the first appearance of symptoms associated with the infection.</td>
</tr>
<tr>
<td><strong>Infection</strong></td>
<td>A condition in which organisms multiply within the body and cause a response from the host’s immune defenses. Infection may or may not lead to clinical disease.</td>
</tr>
<tr>
<td><strong>Infectious</strong></td>
<td>Capable of spreading disease.</td>
</tr>
<tr>
<td><strong>Infectious Disease</strong></td>
<td>A disease of humans or animals resulting from an infection.</td>
</tr>
<tr>
<td><strong>Influenza</strong></td>
<td>A highly contagious and common respiratory illness caused by a virus. There are three types of influenza virus – A, B, and C.</td>
</tr>
</tbody>
</table>
### Influenza-like illness
Acute onset of respiratory illness with fever and cough and one or more of the following: sore throat, joint aches, muscle aches or extreme exhaustion, which could be due to the influenza virus.

### Isolation
Separation and restriction of movement of sick individuals. Isolation is recommended for the time period the individual is deemed infectious.

### Morbidity
Illness; departure from a state of well being, either physiological or psychological.

### Mortality
Death.

### Mortality Rate
The number of deaths occurring in a population during a specified period of time, usually a year, relative to the number of persons at risk of dying during the period.

### Mutation
A permanent, transmissible change in the genetic material of a cell.

### Pandemic
An epidemic occurring worldwide, or over a very wide area, crossing international boundaries, and usually affecting a large number of people.

### Pandemic flu
Pandemic flu is virulent human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person.

### Pandemic Severity Index
A tool developed by the CDC to categorize future pandemics based upon the number of people who become sick and die (case fatality ratio). Pandemics will be categorized into one of five categories of severity (Category 1 – mild to Category 5 - severe).

### Personal Protective Equipment (PPE)
Attire used to protect workers against airborne or droplet transmission of an organism and against exposure to blood and body fluids. PPE generally includes masks, eye goggles, face shields, gloves, gowns and foot-covers.

### Pneumonia
An inflammation of the lungs caused by infection.

### PPE
Personal protective equipment.

### Public Health Measures
Non-medical interventions used to reduce the spread of the influenza virus during a pandemic.
<table>
<thead>
<tr>
<th><strong>Quarantine</strong></th>
<th>Separation and restriction of movement of persons who are well, but may have been exposed to an infectious agent. Quarantine typically lasts for as long as the disease incubation period (time between exposure and onset of symptoms) after the last known exposure.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respiratory Etiquette</strong></td>
<td>Simple tips to keep respiratory infections from spreading such as covering your nose and mouth every time you sneeze or cough; using a tissue when you blow your nose; putting used tissues in the trash; and washing your hands frequently, especially if you or someone you are close to is sick.</td>
</tr>
<tr>
<td><strong>Seasonal Flu</strong></td>
<td>Seasonal (or common) flu is a respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available.</td>
</tr>
<tr>
<td><strong>Secondary Infection</strong></td>
<td>A secondary infection is an infection that occurs during or after treatment of another, already existing infection. It may result from the treatment itself or from alterations in the immune system. For example, the development of bacterial pneumonia following a viral upper respiratory infection.</td>
</tr>
<tr>
<td><strong>Social distancing</strong></td>
<td>A way to reduce the risk of exposure to an organism, such as the influenza virus, by reducing or avoiding contact with other people as much as possible.</td>
</tr>
<tr>
<td><strong>Stockpile</strong></td>
<td>Reserve; goods saved for future use or a special purpose.</td>
</tr>
<tr>
<td><strong>Surveillance</strong></td>
<td>An on-going, systematic method for continuous monitoring of diseases in a population, in order to detect changes in disease patterns and implement prevention and/or control measures in a timely fashion.</td>
</tr>
<tr>
<td><strong>Susceptible</strong></td>
<td>A person or animal not possessing sufficient resistance against a particular pathogenic agent to prevent contracting infection or disease when exposed to the agent.</td>
</tr>
<tr>
<td><strong>Swine flu</strong></td>
<td>See H1N1 Influenza.</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>Any perceptible change in the body’s normal function, appearance or sensation which is experienced by the patient and indicates a disease process.</td>
</tr>
<tr>
<td><strong>Transmission</strong></td>
<td>Any mechanism by which an infectious agent is spread from a source of infection to other persons or animals.</td>
</tr>
<tr>
<td><strong>Vaccination</strong></td>
<td>The act of administering a vaccine.</td>
</tr>
<tr>
<td><strong>Vaccine</strong></td>
<td>A dead or weakened form of an infectious organism that is injected into the body to stimulate an immune response, without causing disease, and thereby protect against subsequent infection by that organism.</td>
</tr>
<tr>
<td>-----------------</td>
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</tr>
<tr>
<td><strong>Virulence</strong></td>
<td>The ability of an organism to cause disease.</td>
</tr>
<tr>
<td><strong>Virus</strong></td>
<td>A group of infectious agents characterized by their inability to reproduce outside of a living host cell. Viruses may subvert the host cells’ normal functions, causing the cell to behave in a manner determined by the virus.</td>
</tr>
<tr>
<td><strong>WHO</strong></td>
<td>World Health Organization.</td>
</tr>
</tbody>
</table>
Appendix B: Pandemic Influenza (Flu) Background Information

Pandemics

The definition of a flu pandemic is:

- A new flu virus is found causing illness;
- There is little or no immunity in the population;
- It spreads easily from person to person, and
- It is found throughout the world

During the last century there were three flu pandemics: 1918, 1957, and 1968. In June 2009, the World Health Organization (WHO) declared a new flu pandemic – Influenza A H1N1. Early on H1N1 was referred to as swine flu.

Two of the three flu pandemics of the past century - one that occurred from 1957 - 1958, and one in 1968 - 1969 - are considered to have been mild to moderate pandemics, meaning that the number of people who became ill and died was close to or somewhat higher than the numbers associated with annual seasonal flu. While these pandemics spread rapidly throughout the world, they were not as severe as the third pandemic, that of 1918 - 1919 which caused an estimated 40 million deaths worldwide in persons of all ages.

H1N1 Flu

The H1N1 virus was originally referred to as “swine flu” because laboratory testing showed that many of the genes in this new virus were very similar to influenza viruses that normally occur in pigs (swine) in North America. But further study has shown that this new virus is very different from what normally circulates in North American pigs. It has two genes from flu viruses that normally circulate in pigs in Europe and Asia and bird (avian) genes and human genes. Scientists call this a “quadruple reassortant” virus. The H1N1 virus is contagious and spreads easily from person to person.

The symptoms of H1N1 flu in people are similar to the symptoms of regular seasonal flu and include fever, cough, sore throat, body aches, headache, chills and fatigue. Some people have reported diarrhea and vomiting associated with H1N1 flu.

CERT members and instructors are encouraged to seek out reliable sources of information about pandemic flu. CERT members and instructors should check with their local health department or one these reliable websites for information on the current status of pandemic flu.
APPENDIX B: PANDEMIC FLU BACKGROUND INFORMATION

CDC website:
http://www.pandemicflu.gov/

World Health Organization:
http://www.who.int/en/

California Department of Public Health:
http://ww2.cdph.ca.gov/Pages/default.aspx

Avian Influenza
Avian influenza is an infectious disease of birds. Since an H5N1 outbreak in chickens in Hong Kong was first reported to infect humans in 1997, the H5N1 virus has spread in wild bird and poultry populations throughout Asia, the Middle East and some parts of Africa and Europe. While many wild bird species carry this virus with no apparent signs of harm, avian influenza has a kill rate in poultry approaching 100% in 48 hours.

Since 2003, there have been several hundred reported human infections with H5N1, all having caused severe illness, with an overall death rate of about 60%. Most of these cases were in people who had close contact with infected chickens. (*Note: For updated information on the worldwide number of cases and deaths from avian influenza see: http://www.who.int/csr/disease/avian_influenza/en/index.html)

Pandemic Severity
The CDC will categorize pandemics based upon the number of people who become sick and die (case fatality ratio). Pandemics will be categorized using the Pandemic Severity Index (PSI). Pandemics will be assigned to one of five categories of severity (Category 1 – mild to Category 5 - severe). The PSI is a tool that communities can use to help decide which activities to implement and when to help reduce the spread of disease.
Pandemic Severity Index

Medical Approaches
Vaccines
A vaccine is a dead or weakened form of the flu virus. When it is injected into the body it stimulates an immune system response that helps the body fight off infection by the flu virus.

Antivirals
Antivirals may help minimize illness of people sick with pandemic flu. Not all antivirals, however, may be effective in treating people sick with pandemic flu.
Non-medical Approaches
Because a vaccine won’t be available early on in a pandemic, other actions for slowing the spread of disease may be taken. These actions are called “social distancing” measures. These actions are designed to minimize close personal contact among people in communities, especially children.

Isolation
Isolation is designed to keep sick people away from those who are well.

Quarantine
Quarantine is used to keep people who have been in close contact with a person sick with pandemic flu, but isn’t yet sick, away from those who are well. This is because the person may actually have the pandemic flu virus but not yet have symptoms of the disease. A person who has pandemic flu but does not yet have symptoms of the disease may be able to spread pandemic flu to others.

Neither isolation nor quarantine will be of much use once pandemic flu is widespread in a community.

Other Social Distancing Measures
Other social distancing measures include dismissing students from schools and daycare centers and closing other gathering places where there typically is close personal contact such as in theaters, concerts, and sporting events.

Flattening the Outbreak Curve
If many people get sick at the same time in a community it can create a surge of people seeking health care or needing hospitalization. The goal of medical and non-medical approaches is to reduce the number of people getting sick at the same time. If fewer people get sick with pandemic flu at the same time, it helps “flatten” the outbreak curve. This, in turn, will reduce the burden on hospitals, and student and worker absenteeism.
Changing the Outbreak Curve

Hand Hygiene and Respiratory Etiquette Techniques
Many infection control experts believe that covering coughs and sneezes, in addition to hand washing, are other important ways for reducing the spread of pandemic flu. These activities are referred to as hand hygiene and respiratory etiquette techniques.

Pandemic Alert Phases
The World Health Organization has developed six alert phases for pandemic influenza planning and response. Worldwide, government agencies use these alert phases to decide which activities to implement and when to help reduce the spread of disease.

The phases are:
- Phases 1 – 2: there is no new influenza virus infecting humans
- Phase 3: there is a new influenza virus infecting humans but there is no or limited person-to-person transmission
- Phases 4 – 6: new influenza virus infecting humans and there is increased and sustained person-to-person transmission

As of June 11, 2009, the World Health Organization (WHO) declared a pandemic alert phase 6 – meaning there is a new flu pandemic. There is a new flu virus - H1N1; it is causing illness; it is spread easily from person to person; and, it is found throughout the world.

In addition, the H5N1 avian (bird) flu virus remains at a WHO alert stage 3 – meaning there is limited person-to-person transmission.

Portions adapted from: Influenza Pandemic, Preparation and Response: A Citizen’s Guide; Mid-Peninsula Citizen’s Preparedness Committee, Written by Sarah Booth & Kelsey Hills-Evans, Foreword written by Dr. David L. Heymann, World Health Organization, Executive Director, Communicable Diseases, and, the CDC Community Mitigation Guidance
Appendix C: Pandemic Flu Fact Sheet

- **Pandemic Flu Definition:**
  - a new flu virus is found causing illness
  - there is little or no immunity in the population
  - it spreads easily from person to person
  - it is found throughout the world

- Influenza pandemics are rare but recurring events. Three pandemics occurred in the past century. In June 2009, the World Health Organization declared a flu pandemic of Influenza A, H1N1, referred to as “swine flu”.

<table>
<thead>
<tr>
<th>Years</th>
<th>Flu</th>
<th>Virus</th>
<th>Mortality</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918-1919</td>
<td>“Spanish”</td>
<td>Type A (H1N1)</td>
<td>20 million worldwide</td>
<td>Severe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>550,000 US</td>
<td></td>
</tr>
<tr>
<td>1957-1958</td>
<td>“Asian”</td>
<td>Type A (H2N2)</td>
<td>70,000 US</td>
<td>Moderate</td>
</tr>
<tr>
<td>1968-1969</td>
<td>“Hong Kong”</td>
<td>Type A (H3N2)</td>
<td>34,000 US</td>
<td>Mild</td>
</tr>
<tr>
<td>June 2009</td>
<td>“Swine Flu”</td>
<td>Type A (H1N1)</td>
<td>Unknown*</td>
<td>Unknown*</td>
</tr>
</tbody>
</table>

* This information was unknown as of the printing of this material because the pandemic was on-going.

**Assumptions**

- A severe flu pandemic is a public health emergency that rapidly takes on significant political, social, and economic dimensions.

- No amount of planning will allow response to a major pandemic to be “business as usual.”

- A flu pandemic could last 18 months or longer with at least two peak waves of illness.

- Social distancing such as school closures, travel restrictions, public information and risk communication, and promoting good hand hygiene and cough etiquette, will be some of the principal means of disease control until supplies of vaccine and/or antiviral medications are available.

- Vaccines and antiviral medicines may be the most effective medical strategies to combat the disease. However, effective vaccines may not exist for the first six months of the pandemic and antiviral medications may be less effective and supplies may be limited.

- Local Health Departments will distribute vaccines and/or antiviral medications based upon their availability and a prioritization plan.
WHO Pandemic Phases

Phases 1 & 2

Phase 3

Phase 4

Phase 5

Phase 6

The new flu is spread person to person worldwide.

Pandemic Declared
# Appendix E: Common Cold versus Seasonal Flu Fact Sheet

<table>
<thead>
<tr>
<th></th>
<th>Common Cold</th>
<th>Seasonal Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onset</strong></td>
<td>• Gradual</td>
<td>• Sudden</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>• Cough</td>
<td>• Fever and cough or fever and sore throat</td>
</tr>
<tr>
<td></td>
<td>• Stuffy head</td>
<td>• Fever and cough or fever and sore throat</td>
</tr>
<tr>
<td><strong>Treatment of</strong></td>
<td>• Decongestants</td>
<td>• Decongestants</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>• Cough medicine</td>
<td>• Cough medicine</td>
</tr>
<tr>
<td></td>
<td>• Fever reducers</td>
<td>• Fever reducers</td>
</tr>
<tr>
<td><strong>Antivirals</strong></td>
<td>• Not effective</td>
<td>• Possibly effective</td>
</tr>
<tr>
<td><strong>Prevention</strong></td>
<td>• Vaccines not effective</td>
<td>• Annual flu vaccine</td>
</tr>
<tr>
<td><strong>How Long Illness</strong></td>
<td>• Feel better after a few days</td>
<td>• Can be sick for a week or more</td>
</tr>
<tr>
<td><strong>Lasts</strong></td>
<td></td>
<td>• Can be life-threatening</td>
</tr>
</tbody>
</table>
## Appendix F: Seasonal Flu And Pandemic Flu Differences

<table>
<thead>
<tr>
<th></th>
<th>Seasonal Flu</th>
<th>Pandemic Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Occurs every year, usually</td>
<td>Occurs about every 30 – 40 years</td>
</tr>
<tr>
<td></td>
<td>in winter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Some immunity</td>
<td>Little to no immunity</td>
</tr>
<tr>
<td></td>
<td>Annual vaccine is available</td>
<td>Pandemic flu vaccine will not be available in the early stages of a pandemic</td>
</tr>
<tr>
<td></td>
<td>Between 5% and 20% of people</td>
<td>Up to 30% of population could get infected</td>
</tr>
<tr>
<td></td>
<td>get infected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 200,000 people are</td>
<td>9.9 million could be hospitalized</td>
</tr>
<tr>
<td></td>
<td>hospitalized annually</td>
<td></td>
</tr>
<tr>
<td></td>
<td>About 36,000 people in the U.S.</td>
<td>1.9 million people in the U.S. could die</td>
</tr>
<tr>
<td></td>
<td>die annually</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More than 90% of the deaths</td>
<td>Unknown, deaths could occur among any age group</td>
</tr>
<tr>
<td></td>
<td>are among people age 65 or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>older</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Usually the very young and the</td>
<td>All people can be at risk for serious complications</td>
</tr>
<tr>
<td></td>
<td>very old at risk for serious</td>
<td></td>
</tr>
<tr>
<td></td>
<td>complications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Occurs yearly mostly during</td>
<td>Can occur year round and may last up to 2 years</td>
</tr>
<tr>
<td></td>
<td>winter months</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix G: Seasonal Flu and Pandemic Flu Similarities

<table>
<thead>
<tr>
<th>Seasonal Flu</th>
<th>Pandemic Flu (Mild, Moderate, or Severe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Both seasonal and pandemic flu are:</td>
<td></td>
</tr>
<tr>
<td>- Respiratory illnesses of the lungs</td>
<td></td>
</tr>
<tr>
<td>- Easily spread from person to person by sneezing and coughing</td>
<td></td>
</tr>
<tr>
<td>- Can enter the body through the eyes, nose, or mouth (mucous membranes)</td>
<td></td>
</tr>
<tr>
<td>• Both the seasonal and pandemic flu viruses can:</td>
<td></td>
</tr>
<tr>
<td>- Live on surfaces such as doorknobs, toys, telephones, computers, and shopping baskets for up to 1 day</td>
<td></td>
</tr>
<tr>
<td>• Both seasonal and pandemic flu have the same symptoms:</td>
<td></td>
</tr>
<tr>
<td>- Symptoms include fever and cough, or fever and sore throat plus:</td>
<td></td>
</tr>
<tr>
<td>- Body aches</td>
<td>- Chills</td>
</tr>
<tr>
<td>- Headache</td>
<td>- Tiredness</td>
</tr>
<tr>
<td>- Runny nose</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix H: Community Emergency Response Team, Pandemic Flu Community Preparedness and Response Planning Checklist

#### 1. Identify activities that CERT members could perform before a pandemic.

<table>
<thead>
<tr>
<th>Completed</th>
<th>In Progress</th>
<th>Not started</th>
<th>Key Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERT members can meet with local organizations or groups (senior citizen organizations, local chamber of commerce, civic and service organizations) to host a neighborhood meeting to identify ways to prepare for a flu pandemic.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT teams can become familiar with their local health department’s pandemic flu plans and can meet with local health departments or other emergency responders to plan and coordinate activities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members can teach proper hand washing and respiratory hygiene techniques (covering coughs) to neighborhood residents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members can identify safe methods to keep in contact with neighbors – telephone trees, text messaging, email, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members may want to identify where and how to get information on topics such as the use of masks for the general public, guidelines for caring for sick people at home, and the status of school closures in their community.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members can demonstrate the use of personal protective equipment for community (non-clinical) settings to neighborhood residents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members can partner with local health departments and other agencies to provide neighbors with up-to-date and accurate information about health and other needed services related to pandemic flu.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members can teach people about what pandemic flu is, how it is different from seasonal flu, and what they can do to prepare ahead of time, including where to get supplies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERT members can encourage neighbors to get their annual flu shot and teach proper ways to wash hands and cover coughs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Identify community members whose needs might not be met during a pandemic:

<table>
<thead>
<tr>
<th>Category</th>
<th>Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young families – especially single parents</td>
<td>What are their needs?</td>
</tr>
<tr>
<td>Older people living alone</td>
<td>What are their needs?</td>
</tr>
<tr>
<td>People with disabilities</td>
<td>What are their needs?</td>
</tr>
<tr>
<td>People in isolated areas</td>
<td>What are their needs?</td>
</tr>
<tr>
<td>People who are non-English speakers</td>
<td>What are their needs?</td>
</tr>
<tr>
<td>People whose caregiver is sick, and may be unable to care for them (e.g., elderly or disabled person living with a caregiver, children in foster care)</td>
<td>What are their needs?</td>
</tr>
<tr>
<td>People who depend upon social support services (e.g. In-home support, meals on wheels, in-home hospice care, etc.)</td>
<td>What are their needs?</td>
</tr>
</tbody>
</table>
Neighborhood facilities that care for the vulnerable – residential care facilities for the elderly, etc.
What are their needs?

### 3. Identify activities that CERT members could safely perform during a pandemic:

<table>
<thead>
<tr>
<th>Completed</th>
<th>In Progress</th>
<th>Not started</th>
<th>Key Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can let neighbors know about any school closures or cancellations of local public gatherings such as concerts, performances, or sporting events.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can help neighbors reduce the spread of pandemic flu by teaching good hand washing techniques, how to cover coughs, proper ways to use masks and respirators, and promoting guidelines for caring for sick people at home.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can help dispel myths and rumors by providing neighbors with accurate information about the disease including how severe it is and ways they can help protect themselves from getting it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT teams can assist local response agencies by transporting supplies, providing information to the public, or taking part in vaccination clinics at Points of Dispensing, or PODS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can fulfill an important role in helping to reduce the burden on the health care delivery system by sharing public health guidelines about when and where to seek medical care.</td>
</tr>
</tbody>
</table>
### 4. Identify activities that CERT members could perform after a pandemic.

<table>
<thead>
<tr>
<th>Completed</th>
<th>In Progress</th>
<th>Not started</th>
<th>Key Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can meet with local health departments or other emergency planners to discuss what worked well and what needs improvement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can meet with other team members to clarify their roles and expectations for the next wave of the pandemic or disease outbreak.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can promote stress debriefings or other social support services offered by local mental health providers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CERT members can restock their supply kits and educate their neighbors about where to get replacement supplies.</td>
</tr>
</tbody>
</table>
CERT members can play a vital role in helping neighborhoods renew their sense of community by organizing neighborhood events or gatherings that bring people together to share their experiences and begin planning for future emergencies that may occur.

<table>
<thead>
<tr>
<th>Other:</th>
</tr>
</thead>
</table>

| | |
| | |
Appendix I: Hand Washing Fact Sheet

Why is hand washing important?

Hand washing, when done correctly, is the single most effective way to prevent the spread of communicable diseases. Good hand washing technique is easy to learn and can significantly reduce the spread of infectious diseases among both children and adults. Follow these six simple steps to keeping hands clean:

1. Wet your hands with warm running water.
2. Apply soap.
3. Rub your hands together, making a soapy lather. Do this away from the running water for at least 10 seconds (20 seconds is preferred), being careful not to wash the lather away. Wash the front and back of your hands, the center of your palm, as well as between your fingers and under your nails.
4. Rinse your hands well under warm running water. Let the water run back into the sink, not down to your elbows.
5. Pat hands dry with a clean paper towel.
6. Turn off the water with a paper towel.
7. Use paper towel to open bathroom door and dispose in a proper receptacle.

What is good hand washing technique?

There is more to hand washing than you think. By rubbing your hands vigorously with soapy water, you pull the dirt and the oily soils free from your skin. The soap lather suspends both the dirt and germs trapped inside and are then quickly washed away.

What type of soap should be used?

Any type of soap may be used. However, bar soap should be kept in a self-draining holder that is cleaned thoroughly before new bars are put out. Liquid soap containers should be used until empty and cleaned before refilling. To prevent chapping, use a mild soap with warm water, pat rather than rub hands dry and apply lotion liberally and frequently.

What about alcohol rubs/gels/rinses?

Alcohol rubs/gels/rinses are excellent hand sanitizers if they contain 60% alcohol or more. They are widely used in health care settings after washing hands or in situations when water is not available.
How do I use alcohol-based hand sanitizers?

- Dirt should be removed from your hands.

- Apply the size of a dime of sanitizer on your hands, enough so that when you rub your hands together it will cover all areas of your hands, including under your nails. Use a rubbing motion to evenly distribute the sanitizer product for about 15 seconds or until your hands feel dry, whichever is longest.

How safe are alcohol-based hand sanitizers?

They are very safe. The alcohol content of the sanitizer product completely evaporates in 15 seconds. You may want to use hand lotion after each use of the alcohol-based hand disinfectant to balance the drying effect of alcohol on your skin.

Is it safe to use alcohol-based sanitizers for the hands of children?

Yes, it is safe. It should not be swallowed; therefore, young children should be supervised when using it. Store it safely. After application of the sanitizer to hands, the alcohol content evaporates and children can safely touch their mouth or eyes.

What are some mistakes I should avoid regarding hand washing?

- Don’t use a single damp cloth to wash a group of children's hands.

- Don’t use a standing basin of water to rinse hands.

- Don’t use a common hand towel. Always use disposable towels, especially in childcare or food preparation settings.

- Don’t use sponges or non-disposable cleaning cloths unless you launder them on a regular basis, adding chlorine bleach to the wash water. Remember that germs thrive on moist surfaces.

What are some ways to help children with good hand washing technique?

It is important to encourage and help children to wash hands before eating, after playing outdoors or playing with pets, after using the bathroom, and after blowing their noses. Even though hands may appear to be clean, they may carry germs or microorganisms that are capable of causing disease. Don’t assume that children know how to wash their hands properly. Supervision, especially in a childcare setting, is an essential element in forming good hand washing habits in children. Children learn by example. Let them observe good hand washing technique from the adults who care for them.
Hand washing is the best way to prevent infections!

1. Wet hands with warm water to melt the soap
2. Apply soap to produce lather
3. Rub for 10-20 seconds to remove 80% of germs
4. Rinse away germs
5. Dry hands with paper towel
6. Turn off tap with paper towel
Appendix K: Purchasing Personal Preparedness Supplies

Disposal Gloves
Store Pharmacies such as CVS/Longs, Target, Walgreens
Online Site to Store: order online and they will ship free to store near you

Walmart - www.walmart.com
Ace Hardware – www.acehardware.com
Website: www.esafetysupplies.com

Face Masks (also known as surgical masks)
Store Pharmacies such as CVS/Longs, Walgreens
Websites:  http://practicon.com; www.probuy.net

N-95 Respirators
Store Pharmacies such as Walgreens or at Ace Hardware, Home Depot
Website: www.tcpglobal.com

Disposal Gowns (also known as isolation gowns)
Medical Supply Stores in your area: Go to www.local.com and type in medical supply and your city for the local listing
Websites:  www.healthcareapparel.com;  http://practicon.com

Eye Protection (also known as goggles, face shields)
Hardware or Home Improvement Stores: Ace Hardware, Home Depot, Lowes

Websites:  http://practicon.com,  www.probuy.net  - also have medical mask with face shield

Alcohol Based Sanitizers
Stores: Target, Walmart, CVS/Longs, Walgreens or most stores that carry soap/hygiene products
Website: http:// practicon.com

Most medical supply stores in your area will carry all of these products. To find a medical supply store in your area, go to www.local.com and type in medical supply and your city.
Appendix L: How To Fit-test A Disposable Respirator For Home (Non-Employee) Use

1) Try several respirators of different brands, styles, and sizes until you find the one that best fits your face shape.

2) Don’t run out and buy a particular respirator just because someone said it was “good”. It may not fit you as well as it fits them. See if you can buy an individual respirator (or a small quantity) and try it out first (note: some online vendors sell “sample packs” with 1 each of several styles so you can try before you buy).

3) Keep in mind that the stiffer the edge of a respirator is, the less it can mold to your face (this is especially true for disposable respirators), so if you have tried several cone/cup style respirators with no luck, try a flat fold style respirator or a reusable silicone respirator (the silicone is the most moldable of the respirators and is most likely to give the best fit on a variety of face shapes).

4) Carefully read the instructions that come with your respirator and make sure that you are donning and adjusting the respirator in the manner the manufacturer recommends. It will take repeated practice to get this just right. *How you put the respirator on and adjust it makes a BIG difference in the fit.* Do this in front of a mirror so you can see what you are doing.

5) Be aware that respirators come in sizes. If you try a respirator that seems to fit pretty well, but has a small leak here or there that is not eliminated by tightening the straps or adjusting the respirator on your face, try the same style respirator in a smaller or larger size, if available.

6) Be aware that if you have a small head or face, you may need to shorten the respirator straps (if they are adjustable), even on a disposable respirator, to get a good fit.

7) Follow the manufacturer’s directions for doing a wearer “fit check” AND then do the following;

Put on a pair of glasses and see if they fog up, indicating a leak at the nose.

Then have someone hold long wisps pulled from a cotton ball or a very light, loose feather up to your face at points all around the seal edge of the respirator to see if there is any air leaking around the sides and the chin area. When you breathe, the cotton ball wisps or feather will move slightly if air is escaping out of or being sucked in thru a leak.

Also check by putting your hands around the area where the respirator touches your face and feel for air or warmth. If you find leaks, readjust the respirator until they are eliminated. If you make several tries and there are still leaks, this may not be a good respirator for your face. Try a different style respirator and repeat the procedure.
APPENDIX L: HOW TO FIT TEST A DISPOSABLE RESPIRATOR FOR HOME (NON-EMPLOYEE) USE

8) Once you feel you have a good fit, really give your respirator a work out by performing these tests:
   a. Breathe normally for 30 seconds while testing for leaks with the cotton ball wisps or feather. Then
      breathe slowly and deeply for 30 seconds while checking for leaks.
   b. Turn head as far as it will go to one side. Hold in that position and check for leaks. Test again,
      turning head to the other side.
   c. Tilt head back and look at the ceiling. Hold that position and check for leaks.
   d. Tilt head down toward chest, hold, and check for leaks.

9) Read the following passage slowly out loud - loud enough that a person standing half way across the
   room can clearly hear you. This passage is recommended by NIOSH for testing because it causes you to
   move all of the muscles around the mouth:

   “When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a
   division of white light into many beautiful colors. These take the shape of a long round arch, with its path
   high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of
gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his
friends say he is looking for the pot of gold at the end of the rainbow.” Check for leaks as you read.

10) Next bend down to touch your toes, come back up and check for leaks (if you cannot bend over, briefly
    jog in place). Then make exaggerated facial movements: a deep frown, a grimace, and a big grin and then
    check for leaks.

    IF you do ALL of the above, you will have done every segment of a professional fit test except for having a
    nebulized sweet or bitter solution sprayed at you to see if you can taste it.

    If you detect any leaks that cannot be eliminated by adjusting the respirator, make careful note of where the
    leaks are.

    If the respirator leaks only at the sides near the mouth, you may need to try a respirator that is a bit wider or
    narrow at that part of the respirator or that has a softer seal flange.

    If the respirator leaks around the nose, you may need a respirator that is flatter or more moldable in the nose
    area.

    If it leaks at the chin or at both the nose and the chin you may need a respirator that is longer or shorter from
    top to bottom or you may need a respirator that is wider or narrower at the nose or the chin area.

    If the chin leaks and the respirator is a style that comes down under your chin as some of the “duck bill” and
    “pleated” styles do, you may need a larger or smaller size. Also, some respirators that tuck under the chin
    have a soft seal strip on the edge - make sure it has not gotten rolled up when you put the respirator on.
If your respirator passes ALL of the above tests and you detect no leaks, then you can be fairly confident that you have as good a fit as can be achieved short of being professionally tested.
Appendix M: Respirator Fit Check

FITTING INSTRUCTIONS (Must be followed each time respirator is worn)

1. Cup the respirator in your hand, with the nosepiece at your fingertips, allowing the headbands to hang freely below your hand.

2. Position the respirator under your chin with the nosepiece up. Pull the top strap over your head resting it high at the top of your head. Pull the bottom strap over your head and position it around the neck below the ears.

3. Place your fingertips from both hands at the top of the metal nosepiece. Using two hands, mold the nose area to the shape of your nose by pushing inward while moving your fingertips down both sides of the nosepiece.

   * Pinching the nosepiece using one hand may result in improper fit and less effective respirator performance. USE TWO HANDS.

4. Perform a User Check Seal prior to each wearing. To check the respirator-to-face seal, place both hands completely over the respirator and exhale. Be careful not to disturb the position of the respirator. If air leaks around nose, readjust the nosepiece as described in step 3. If air leaks at the respirator edges, work the straps back along the sides of your head.

   * If you CANNOT achieve proper seal, then YOU ARE NOT protected and should not be administering hands on care or come within 3 to 6 feet of the ill person.
Donning and Removal of Personal Protective Equipment

Personal protective equipment (PPE) is designed to protect health care providers in health care settings from exposure to potentially infectious material. When providing care to patients, these products protect the skin and mucous membranes of the eyes, nose, and mouth from exposure to blood, body and respiratory secretions.

Always perform hand hygiene immediately before donning and after removing PPE.

Always don your PPE before contact with patients.

Sequence for donning PPE
- perform hand hygiene
- gown (if applicable)
- mask
- eyewear
- gloves (if applicable)

1. How to don a gown
   - opening is in the back
   - fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
   - secure at neck and waist
   - if gown is too small, use two gowns: the first ties in front, the second ties in back

2. How to don a mask
   - secure on head with ear loops
   - place over nose, mouth, and chin
   - fit flexible nose piece over bridge
   - adjust fit – snug to face and below chin

3. How to don eye protection
   - position eyewear over eyes and secure to head using ear pieces

4. How to don gloves
   - don gloves last
   - insert hands into gloves
   - extend gloves over gown cuffs (if wearing gown)

5. How to use gloved hands
   - keep gloved hands away from face
   - avoid touching or adjusting other PPE
   - remove gloves if they become torn; perform hand hygiene before donning new gloves
   - limit surfaces and items touched

Sequence for removing PPE
- all items must be removed and discarded carefully
- perform hand hygiene after gloves/gown removal before your hands go near your face (for removal of masks and eye protection) and after completion of PPE removal, and any time you suspect your hands are contaminated during PPE removal.

1. Glove removal
   - outside of glove is ‘dirty’; use glove-to-glove/ skin-to-skin handling method
   - grasp outside edge near wrist
   - peel away from hand, turning glove inside out hold in opposite gloved hand
   - slide ungloved finger under wrist of remaining glove
   - peel off from inside, creating a bag for both gloves
   - discard

2. Gown removal
   - gown front and sleeves are ‘dirty’; handle by inside/back of gown
   - unfasten ties
   - peel gown away from neck and shoulder
   - turn contaminated outside surface toward the inside
   - fold or roll into a bundle
   - discard

3. Perform hand hygiene

4. Eyewear removal
   - outside of eyepiece is ‘dirty’; handle by earpieces grasp earpieces with ungloved hands
   - pull away from face
   - place in designated receptacle for reprocessing

5. Mask removal
   - front of mask is ‘dirty’; handle by ear-loops remove from face, in a downward direction, using ear-loops
   - discard

6. Perform hand hygiene immediately after removing PPE.

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Appendix O: Basic Home Care Guidelines

CERT members can give information to others about how to care for people sick with pandemic flu at home. This is a list of basic home care guidelines:

• Separate sick people from others in the home in a separate room:
  – Designate one person to be the caregiver for the sick person
  – Limit contact of other individuals in the home with the sick person

• If advised by health officials to do so:
  - Wear disposable gloves and gowns
  - Wear an N-95 respirator
  - Wear eye protection such as a face shield or goggles

• Encourage all household members to wash hands often.

• Relieve discomfort from fever and body aches.
  – Keep a record of the temperature
• Prevent dehydration.

What is Dehydration?
• Dehydration is:
  - When people have severe vomiting or diarrhea and have lost body fluids that contain electrolytes.
  - Electrolytes are salts found in the body that help nerves and muscles work properly.

• Signs of dehydration:
  - Weakness or unresponsiveness
  - Decreased saliva
  - Dry mouth and tongue
  - Skin tenting – when the skin is pinched it stays in a “tent” position instead of going flat
  - Urine is very dark in color and the person is not urinating often

• Caffeine free soft drinks that contain water, sugar and salt can be used to prevent dehydration:
  - Bottled soft drinks, packaged drink mixes, sports drinks, etc.
• Prepared rehydration products can also be found at drug stores or pharmacies.
  - Ask your doctor or pharmacist about prepared rehydration products

• An oral rehydration solution can be made using water, sugar and salt.
Appendix P: Recommendations on Basic Cleaning for Influenza in Non-Healthcare Settings

Influenza is an extremely fragile virus. It can remain infectious for only minutes if exposed to air. It is easy to kill. It can remain infectious for hours, however, if it is not exposed to air. This can occur when respiratory secretions from coughs or sneezes of an infected person land on surfaces. Simple cleaning will remove most of virus along with other material, leaving the remaining virus to be exposed to air and rendered non-infectious within minutes.

Frequently clean all surfaces that are commonly touched by multiple people, such as elevator buttons, shared equipment, doorknobs, etc. Use the cleaning agents that are usually used in these areas and follow the directions on the label. No additional disinfection beyond routine cleaning is recommended.

School staff should routinely clean areas that students and staff touch often (for example, shared keyboards) with the cleaners they typically use. They should also clean these areas immediately when visibly soiled. Use the cleaning agents that are usually used in these areas. Special cleaning with bleach and other non-detergent-based cleaners is not necessary. No additional disinfection of environmental surfaces beyond the recommended routine cleaning is required.
APPENDIX Q: REHYDRATION SOLUTION GUIDELINES

REHYDRATION SOLUTION GUIDELINES

- Adults: 4 cups as tolerated over an 8 – hours period
- Children: 4 cups as tolerated over an 8 – 24 hour period
- Infants: 4 cups as tolerated over a 24 – hour period

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Dehydration can be a serious problem for people who are sick with high fevers, vomiting and diarrhea.

**REHYDRATION SOLUTION**

- 4 cups of clean water
- 2 tablespoons of sugar
- ½ teaspoon of salt

Mix all the ingredients until the sugar disappears. Drink the solution at room temperature. DO NOT boil the solution.