Flu Home Care Guide
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**Intended Audience and Disclaimer**

The San Francisco Department of Public Health, Communicable Disease Control and Prevention Section, produced the Flu Home Care Guide for San Francisco residents. The content, however, is appropriate for people from other jurisdictions. Because of the evolving nature of diseases in general, and influenza in particular, the information in the Flu Home Care Guide should be supplemented with up-to-date information from your medical provider, and in the event of pandemic influenza, from the San Francisco Department of Public Health and other reliable sources.
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The San Francisco Department of Public Health should be appropriately acknowledged. For more information about flu and pandemic flu, visit our website at www.sfcdcp.org
I HOW TO USE THIS GUIDE

A. Introduction
B. Review the Flu Home Care Guide
C. Start Now
A. INTRODUCTION

Every year, approximately 35 million Americans get the flu. Many of these infections can be avoided. It is important to know how to prevent the spread of infectious diseases including the flu. When illness does occur, you should be ready to safely monitor and care for people with the flu. During a pandemic flu, this will be especially important. Experts believe a pandemic flu is inevitable. Being prepared will help you and your family get through a pandemic flu.

This guide provides advice on how to care for someone with the flu, how to prevent the spread of infectious diseases, and how to prepare for infectious disease emergencies. The following information is a general guide and is not intended to take the place of medical advice from a doctor or medical provider. During a pandemic flu or other infectious disease emergency, the San Francisco Department of Public Health will provide additional information to supplement this guide.

B. REVIEW THE FLU HOME CARE GUIDE

Take time to review the guide. You may be surprised to see how easy it is to prepare for infectious disease emergencies, practice healthy habits that prevent the spread of infectious diseases, and monitor and care for someone with flu.

Make note of this symbol ☞ Pandemic Flu, which means an activity is appropriate when there is a pandemic flu. If a pandemic flu is occurring, the San Francisco Department of Public Health will inform the public.

C. START NOW

There are steps you can take now to keep yourself and your family protected from seasonal and pandemic flu.
Practice Healthy Habits Everyday
Preventing the spread of infectious diseases is the best strategy to protect yourself, your family, and your community. Learn healthy habits and begin practicing them. Teach healthy habits to your family and friends.

Get a Flu Vaccine Every Year
Because the influenza virus changes a little bit all the time, you need to get a new flu vaccine every year. You can get a shot or you may be able to receive an intranasal (nose spray) vaccine depending on your age and health.

Make an Infectious Disease Emergency Kit
Pandemic flu or other infectious disease emergencies could occur at any time. It’s important to have the right supplies close by. Use the Infectious Disease Emergency Kit List on page 18 to identify the items you need for an infectious disease emergency.

Stay Informed
Throughout the year, stay informed about flu and other infectious diseases that affect our community. Visit www.sfcdcp.org for more information.

Store the Flu Home Care Guide
Store this guide in a safe and easily accessible place.
II FLU FACTS

A. Seasonal Flu
B. Pandemic Flu
A. SEASONAL FLU

You have probably heard of the flu, and you may have even had it before. The flu, also called seasonal flu or influenza, is one of the most common human infectious diseases. Infectious diseases are caused by germs (microorganisms). The germ that causes the flu is the influenza virus.

The flu affects the respiratory (breathing) system. Every year approximately 5 to 20% of people get the flu. Almost everyone will catch the flu at some point and some may catch it many times during their lifetime. The flu usually causes a fever, headache, sore throat, dry cough, muscle aches, and extreme tiredness. These symptoms usually last from several days up to 2 weeks. Most people have mild symptoms, but some people get very sick.

The Flu Can be a Serious Disease
The flu can cause severe illness and complications. Complications of the flu include sinus infection, ear infection, bronchitis, pneumonia, encephalitis, dehydration, and worsening of chronic diseases like asthma, diabetes, and heart disease. The flu can also lead to death. Every year in the United States, an average of:

- 35 million Americans get the flu
- Over 200,000 people are hospitalized with the flu
- 36,000 people die from the flu

Usually it is the very young, chronically ill, and the elderly who have severe disease.

The Flu is Contagious
The flu is a contagious disease – which means that it is passed from one person to another. For a person to get the flu, they need to be exposed to the influenza virus. Then, the virus needs to multiply inside the body and cause disease. Not everybody who is exposed to the influenza virus will get sick, but many will.
The influenza virus spreads through tiny wet drops produced when a contagious person coughs, sneezes, or talks. A person without the flu can be infected by breathing in these wet drops or by touching something that was recently contaminated and then touching their mouth, nose, or eyes.

A contagious person can pass it to others during a specific time period - the infectious period. Usually people who have the flu can infect others approximately 1 to 2 days before their symptoms start and up to 5 days or more after they become sick. Children and immune-compromised people may be contagious for even longer. This means that someone can spread the flu even before they know they are sick. Although it’s uncommon, some people get the flu but do not have symptoms. Nevertheless, they can spread it to others.

**Healthy Habits Can Limit the Spread of the Flu and Other Infections**

Healthy habits are steps people can take to prevent the spread of germs. Some healthy habits are:

- Wash hands often
- Cover your cough and sneeze
- Get vaccinated
- Stay home when sick
- Clean and disinfect commonly used surfaces
- Don’t share personal items
- Handle and prepare food safely
- Avoid touching wild animals

Because you may not know when someone is sick, these healthy habits should be practiced all the time. Learn, practice, and teach these healthy habits. They will protect you and your family against the flu and many other infectious diseases.

**Flu Vaccines are the Best Prevention**

The influenza virus is tricky. It changes or mutates a little bit every year. That is why you can catch the flu many times. It also explains why you need to get a flu vaccine every fall. Scientists monitor the influenza virus throughout the year and then design a flu vaccine to match the latest virus.
The best place to receive a flu vaccine is at your medical provider or doctor’s office. **Between October and March**, flu vaccine is usually available as a shot or an intranasal (nose) spray. Each has its advantages. Your doctor or medical provider may recommend one or the other for you depending upon your age and your health. If your doctor or medical provider does not have flu vaccine, you can schedule an appointment with the Adult Immunization and Travel Clinic or attend a San Francisco Flu Clinic. Visit [www.sfcdcp.org/aitc](http://www.sfcdcp.org/aitc) for more information.

There are other germs that cause flu-like illness. Even if you get a flu vaccine, you might get one of these other illnesses. You need a special test from your doctor to really know if the illness you have is the flu.

**Medicines**
There are some over-the-counter medicines, like cough drops and pain relievers, that can help people feel better when they have the flu. There are also prescription medicines that can reduce the duration of flu symptoms if taken within 2 days of when symptoms started. Scientists monitor the effectiveness of these medicines because it changes over time as the influenza virus changes. A doctor should always be consulted before prescription medicines are used.

**Is it a Cold or the Flu?**
In general, the flu is worse than the common cold. With the flu, symptoms such as fever, body aches, extreme tiredness, and dry cough are more common and intense. Colds are usually milder than the flu. People with colds are more likely to have a runny or stuffy nose. Colds generally do not result in serious health problems.
# FLU VERSUS COLD

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Flu</th>
<th>Cold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Usually 102°F, but can go up to 104°F and usually lasts 3 to 4 days</td>
<td>Rare in adults and older children, but can be as high as 102°F in infants and small children</td>
</tr>
<tr>
<td>Headache</td>
<td>Sudden onset and can be severe</td>
<td>Rare</td>
</tr>
<tr>
<td>Muscle Aches</td>
<td>Usually, and often severe</td>
<td>None or mild</td>
</tr>
<tr>
<td>Tiredness and Weakness</td>
<td>Can last 2 or more weeks</td>
<td>Mild</td>
</tr>
<tr>
<td>Extreme Exhaustion</td>
<td>Sudden onset and can be severe</td>
<td>Never</td>
</tr>
<tr>
<td>Runny Nose</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>Cough</td>
<td>Usually, and can become severe</td>
<td>Mild to moderate</td>
</tr>
</tbody>
</table>

## B. PANDEMIC FLU

Pandemic flu is like seasonal flu but much worse. It is a global flu outbreak that occurs when a new influenza virus emerges for which there is little or no immunity in the human population. This strain of influenza virus begins to cause serious illness and then spreads easily from person to person across the world. In the past, all flu pandemics have originated from bird flu viruses.
Key features of a pandemic influenza virus are:

- It is so new and different that no one has immunity to the virus
- It spreads easily from one person to another
- It is able to infect many people around the world
- It can cause severe illness and/or death

Just like with earthquakes, experts believe another pandemic is inevitable, but they are unable to predict when it will occur.

### DIFFERENCES BETWEEN SEASONAL AND PANDEMIC FLU

<table>
<thead>
<tr>
<th></th>
<th>Seasonal</th>
<th>Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
<td>Every fall and winter</td>
<td>In the past: every 10 – 40 years</td>
</tr>
<tr>
<td><strong>People Most Affected</strong></td>
<td>Very young&lt;br&gt; Elderly&lt;br&gt; Immune-compromised</td>
<td>Varies</td>
</tr>
<tr>
<td><strong>US Deaths</strong></td>
<td>About 36,000 per year</td>
<td>In the past: 36,000 – 500,000</td>
</tr>
<tr>
<td><strong>Prevention</strong></td>
<td>Vaccination&lt;br&gt; Use of healthy habits&lt;br&gt; Antiviral medicines (in special situations only)</td>
<td>Use of healthy habits&lt;br&gt; Stockpiled vaccine (may be effective)&lt;br&gt; New vaccine&lt;br&gt; Antiviral medicines (may be effective)</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>Antiviral medicines</td>
<td>Antiviral medicines (may be effective)</td>
</tr>
</tbody>
</table>
Previous Flu Pandemics
Flu pandemics have occurred in the past. There were three in the 20th century. The most severe flu pandemic occurred in 1918, during which healthy young adults were the most sick. Approximately 40 – 50 million people died worldwide. Less severe flu pandemics occurred in 1957 and 1968.

How Could a Pandemic Flu Affect our Community
A pandemic flu could last many months and up to 2 years. During this time, it could cause:

- Illness in approximately 30% of our population - and many deaths
- Up to 50% of people to miss work
- Shortages in routine supplies and services
- Dismissal of children from school
- Hospitals and clinics to be stressed or overwhelmed
- Cancellation of large public gatherings

Although we can’t stop pandemic flu once it starts, by preparing now, we can slow the spread and minimize the effects.
A. Why Prepare
B. San Francisco is Preparing
C. Prepare Yourself
   C.1 Learn About the Flu and How it Spreads
   C.2 Practice Healthy Habits
   C.3 Get a Flu Vaccine Every Year
   C.4 Create an Infectious Disease Emergency Kit
A. WHY PREPARE

Most people will have the flu many times. When illness occurs in your family, it is useful to know how to safely monitor and care for those with the flu. It is also important to prepare for illness in your family and for infectious disease emergencies like pandemic flu.

B. SAN FRANCISCO IS PREPARING

The San Francisco Department of Public Health works to control the spread of seasonal flu and is actively preparing for pandemic flu. Key activities include:

- Providing seasonal flu vaccines each fall and winter
- Monitoring and responding to local flu outbreaks
- Identifying effective strategies to prevent the spread of flu
- Developing pandemic flu response plans
- Coordinating plans with local hospitals, businesses, schools, and organizations that meet the needs of special populations
- Coordinating plans with regional public health and business partners
- Conducting emergency response exercises
- Strengthening our ability to share emergency information

C. PREPARE YOURSELF

Individual preparedness is essential. There are simple steps you can take to prepare yourself, your family, and your home for seasonal and pandemic flu.

C.1 Learn About the Flu and How it Spreads
To learn more about seasonal and pandemic flu, visit www.sfcdcp.org/flu and www.sfcdcp.org/pandemicflu or call the San Francisco Department of Public Health’s flu information line at (415) 554-2681 anytime throughout the year.
C.2 Practice Healthy Habits

The best way to prevent the spread of flu and other diseases is to learn, practice, and teach healthy habits. These include:

**Wash hands often**

Our hands touch everything and can carry germs to our eyes, nose, and mouth. Because germs are invisible to the human eye, it is important to wash your hands often even if they don’t look dirty. Always wash before and after cooking, serving food, eating, changing diapers, and treating a cut or wound. Wash after using the bathroom, coughing, sneezing or blowing your nose, handling garbage, touching another person’s hands, or touching an animal or pet. Wash hands with soap and water for 20 seconds (the time it takes to sing the Happy Birthday song twice!) or if they don’t look dirty, hand sanitizer can be used.

**Cover your cough and sneeze**

If you are sick, the air that comes out of your mouth when coughing or sneezing can contain tiny drops with germs. Someone close by, who breathes in your air, or touches a surface contaminated with your germs, can become ill. The best way to cough or sneeze is to use a tissue or your shirt sleeve to cover your mouth. Remember to throw away the tissue and wash your hands. Avoid coughing or sneezing into your hands – your hands can spread germs when you touch a surface or shake another person’s hand.

**Stay home when sick**

Staying home and resting when you are sick helps you get better faster and protects others from becoming infected with your germs.

**Clean and disinfect commonly used surfaces**

Germs can live on surfaces. Cleaning with soap and water is usually enough. However, you should disinfect your bathroom and kitchen regularly. Disinfect other areas if someone in the house is ill. You can use an EPA certified disinfectant (look for the EPA registration number on the label), bleach solution, or rubbing alcohol.
Get vaccinated
Vaccines can prevent many infectious diseases. Some vaccines you get in childhood and some you need to get as an adult a few times or even every year. Special situations like pregnancy and travel are important times for vaccines too. Make sure you and your family are up-to-date on your vaccinations. Your regular doctor’s office is the best place to get vaccinated. If they do not offer the vaccines you need, visit the Adult Immunization and Travel Clinic – www.sfcdcp.org/aitc

Don’t share personal items
Avoid sharing items, like toothbrushes and razors, that can’t be disinfected, or sharing items like towels between washes. Needles should be used only once, thrown away properly, and never shared.

Handle and prepare food safely
Food can carry germs. Wash hands, utensils, and surfaces often when preparing any food, especially raw meat. Always wash fruits and vegetables. Cook and keep foods at proper temperatures. Don’t leave food out - refrigerate promptly.

Avoid touching wild animals
Animals can carry germs that cause infectious diseases in people and pets. You and your pets should avoid touching wild animals. If you are bitten, talk to your doctor. Just like with people, make sure that your pet’s vaccinations are up-to-date.

C.3 Get a Flu Vaccine Every Year
Because the influenza virus is continually changing, we can get the flu over and over. Scientists monitor the changing influenza virus and create a new vaccine every year. Get a flu vaccine every year to protect yourself against the changing influenza virus.

C.4 Create an Infectious Disease Emergency Kit
Every family should have a basic emergency kit to be prepared for any disaster. (For more information and a list of basic emergency supplies, visit www.72hours.org)
It is also important to have the right supplies and information before someone is sick with the flu and especially before a pandemic flu.

Add the following items to your basic emergency kit to be prepared for an infectious disease emergency.

### INFECTIOUS DISEASE EMERGENCY KIT LIST

**Food and Water**
- 1-2 month supply of non-perishable food
- 1 week supply of water

**Medicines**
- 1-2 month supply of prescription medicines
- 2 month supply of fever medicines (e.g., ibuprofen, acetaminophen)

**Hygiene and Home Care**
- First aid kit
- Critical papers like lists of medical conditions, treatments, allergies
- Thermometer (non-mercury)
- Tissues
- Soap
- Hand sanitizer (with at least 60% alcohol content)
- Unscented bleach
- Face masks (that cover nose and mouth)
- Gloves
- Plastic bags

Everyone in the family should know where to find your infectious disease emergency kit.
IV PREVENT THE SPREAD OF FLU

A. How the Flu is Spread
B. How to Prevent the Spread of Flu within your Home
   B.1 Separate the Ill – Isolation
   B.2 Find the Right Space for the Sick Person
   B.3 Identify a Caregiver
   B.4 Wash your Hands
   B.5 Wear Personal Protective Equipment
   B.6 Clean and Disinfect
A. HOW THE FLU IS SPREAD

The flu spreads through body fluids like mucus, spit, and tiny wet drops (which can sometimes be invisible) caused by coughing, sneezing, or talking. A person may catch the flu by:

- Breathing in the tiny drops produced when an infected person coughs, sneezes, or talks.
- Getting the tiny drops in their nose, eyes, or mouth. This may happen when a person without symptoms touches a surface recently contaminated with drops from an infected person and then touches their nose, eyes, or mouth.

B. HOW TO PREVENT THE SPREAD OF FLU WITHIN YOUR HOME

The first step is to recognize that someone is ill or is at risk for catching the flu (because they were recently around someone with the flu). Someone who has the flu is contagious (can spread disease). See page 29 for a description of flu signs and symptoms. Usually a person who has the flu can infect others approximately 1 to 2 days before their symptoms start and up to 5 days or more after they become sick. Also, an infected person may not have symptoms, but they can still spread the flu. Once the first signs of flu appear, you should take steps to limit the spread of disease in your home by using the strategies in this section.

Practicing healthy habits will help prevent the spread of disease during the period before symptoms begin. See page 16 to learn about these habits.

Remember that this symbol 🌍 Pandemic Flu means a certain section or activity is appropriate when there is a pandemic flu in the community. You should follow the guidance marked by this symbol when there is a pandemic flu (not seasonal flu).
B.1 Separate the Ill – Isolation

Separating the sick person from the rest of the household is the first step in protecting others from becoming infected. When a person is sick with a contagious disease like the flu, they ideally need to be separated from others who are not sick. Health professionals call this “isolation.” Isolation means that the sick person is isolated (separated) from people who are not sick.

People with the flu are usually contagious for approximately 1 to 2 days before symptoms develop and up to 5 days or more after. These people should be encouraged to stay home.

Pandemic Flu: During a pandemic flu, the San Francisco Department of Public Health will provide specific recommendations for isolation. The sick person should stay at home and remain in their space or room except for essential visits, for example, to see a medical provider or doctor. Also, they should not have visitors except when medically necessary or to receive essential care like food or bathing.

B.2 Find the Right Space for the Sick Person

When possible, choose a room in your home where the sick person can stay alone while they are contagious. The ideal space should have as many of the following as possible:

- A door that shuts
- Windows that open to let in fresh air
- Windows that let in natural sunlight
- A trash can where used tissues and other contaminated items can be thrown away
- A bathroom that is attached or nearby. It is best if those who are not sick with the flu use a separate bathroom.
- For shared spaces, attempt to keep people separated by 6 feet.

B.3 Identify a Caregiver

Identify one person to care for the sick individual. Reducing the number of people who come in contact with the ill person will help limit the spread of disease. Make
sure that everyone in the household knows who the caregiver is. All other household members should have no contact (by staying greater than 6 feet away), or very limited contact.

To prevent the spread of infection, the main caregiver will:

- Wash hands before and after caring for the sick person or touching items used by them
- Ensure that appropriate cleaning and disinfection occurs as described on page 25-27

**Pandemic Flu:** Be the only person going in and out of the sick person’s room or space

**Pandemic Flu:** Wear protective equipment when caring for the ill person (e.g., face masks)

The main caregiver will also:

- Monitor the patient
- Treat the patient’s symptoms
- Keep the patient hydrated (give fluids)
- Call a medical provider if needed (see page 41 for criteria to help you decide)

### B.4 Wash your Hands

Everyone, and especially the caregiver, should frequently wash their hands especially before and after caring for the sick person or touching items used by them.

The best way to clean hands is to wash them with soap and water.

Make sure to clean your hands before and after:

- Using the bathroom or changing diapers
- Eating
- Cooking or serving food
- Treating a cut or wound
- Contact with the sick person
- Putting on and removing protective equipment like a face mask
Clean your hands after these actions:

- Coughing, sneezing, or blowing your nose
- Touching another person’s hands or touching an animal or pet
- Handling garbage
- Touching contaminated items like used tissues, dishes, utensils, dirty laundry, or frequently touched areas in the sick room

### How to Wash Hands with Soap and Water*

1. Wet hands and apply soap.
2. Rub hands for at least 20 seconds. Scrub all surfaces.
3. Rinse hands.
4. Dry hands with a clean cloth or paper towel. If in a public place, use the paper towel to turn off the faucet. Then, throw in the trash.

*When helping a child, wash their hands first, and then your own.

### How to Use Hand Sanitizer*

1. Use hand sanitizer if soap and water are not available and if your hands do not look dirty. To be effective, hand sanitizer must have at least 60% alcohol content.
2. Apply hand sanitizer to both hands.
3. Rub hands covering all surfaces until dry. If your hands dry before 10 seconds you did not use enough. Apply more and repeat.

*Although not as effective as washing one’s hands with soap and water or using hand sanitizer, pre-moistened cleansing towelettes with at least 60% alcohol content can be an alternative.
B.5 Wear Personal Protective Equipment

If able, the ill person should wear a face mask at all times when uninfected people are around them (within 6 feet) and especially when outside of their room or space.

**Pandemic Flu:** The main caregiver should wear a face mask when in direct face to face contact or when caring for the ill person.

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**DEFINITION: FACE MASK**

Face masks are loose-fitting masks that cover the nose and mouth, and have ear loops or ties for a secure fit. These include products labeled as surgical, dental, medical procedure, isolation, and laser masks. Facemasks help limit the spread of tiny infected drops that are released when someone talks, coughs, or sneezes. When supplies are abundant, disposable masks should be used once and then thrown in the trash. You must also change and throw away masks when they become moist. Other face masks called respirators (e.g., N95 masks) may also be used and may offer more protection to the wearer. If supplies become limited during a pandemic flu, please check the San Francisco Department of Public Health website at [www.sfcdcpc.com](http://www.sfcdcpc.com) for other mask options.

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### How to Safely Put on a Face Mask

1. First, clean your hands with soap and water or hand sanitizer.

2. Make sure you know which side of the mask to put near your mouth. Face masks come in different colors and models. Usually the white side goes towards your mouth and the colored side faces outwards.

3. Hold the mask by the ear loops* with the stiff edge on the top to be placed against your nose.

4. Place a loop* over each ear. Then, pinch or mold the stiff edge to the shape of your nose.

5. Finally, pull the bottom of the mask over your mouth and chin.

*If the mask does not have ear loops, follow the manufacturer’s instructions for how to put on the face mask.
Face masks become less effective when they are damp or wet. Sometimes breathing through a mask for a long time can make the mask damp. If this occurs, replace your mask with a new one. If supplies become limited during a pandemic flu, please check the San Francisco Department of Public Health’s website at www.sfcdcp.com for other mask options.

### How to Safely Take off a Face Mask

1. First, clean your hands with soap and water or hand sanitizer.

2. Then, hold both of the ear loops* and gently lift and remove the mask away from your face.

3. When it is off, throw the mask in the trash.

4. Clean your hands again.

   *If the mask does not have ear loops, follow the manufacturer’s instructions for how to take off the face mask.

If adequate hand washing occurs, it is not necessary to wear gloves. Frequent hand washing protects the caregiver and others.

#### B.6 Clean and Disinfect

The influenza virus may live up to 2 days on hard surfaces like door knobs, sinks, handles, railings, counters, and other objects. Influenza virus may live up to 12 hours on soft surfaces like cloth, paper, or tissues. Cleaning is the removal of visible dirt or soil, whereas disinfecting kills germs. You will need to both clean and disinfect commonly touched surfaces that may be contaminated with influenza virus.

**What to clean and disinfect**

Germs can be transmitted to other people through objects. To prevent the spread of the influenza virus it is important to disinfect properly.
• **Dishes and utensils**
  Wash dishes thoroughly with warm water and dish soap or in a standard dishwasher. Everyone’s dishes can be washed together.

• **Laundry**
  Wash dirty or contaminated clothes and other items with laundry detergent and warm water. Everyone’s clothes can be washed together. Handle dirty laundry carefully because it may be contaminated. Do not “hug” the laundry to yourself when carrying dirty laundry. Make sure to wash your hands after handling dirty laundry.

• **Surfaces and items**
  Clean and disinfect frequently touched items such as microwaves, refrigerator handles, phones, remote controls, doorknobs, toilet seats and handles, faucets, light switches, toys, and other items. Use the correct disinfectant (see page 27 for details).

  🧼 **Pandemic Flu:** Clean and disinfect frequently touched surfaces and all areas where the sick person has been at least once a day.

• **Air**
  Let fresh air and sunlight into all rooms in the living space to reduce the number of germs. When possible, open windows a few times a day for 10 to 15 minutes each time. It should be done in all rooms of the house, especially in the sick person’s room or area.

**Disinfectant solutions**
Influenza viruses are killed by many EPA approved disinfectants. Clean the surface to remove dirt and soil with a cleaning agent and disinfect by following manufacturer’s recommendations (see table below). Hands must then be washed after cleaning and disinfecting. The following products can be used to disinfect surfaces:
# DISINFECTANT SOLUTIONS

<table>
<thead>
<tr>
<th>Disinfectants</th>
<th>Recommended Use</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EPA-Approved Disinfectant</strong></td>
<td>Use to disinfect only after cleaning the surface first. Follow directions on label for proper dilution and contact time.</td>
<td>Follow precautions on label.</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sodium Hypochlorite</strong></td>
<td>Use to disinfect only after cleaning the surface first. Leave solution on the surface for at least 10 minutes.</td>
<td>• Use in well-ventilated areas.</td>
</tr>
<tr>
<td>(Bleach)</td>
<td></td>
<td>• Avoid inhalation</td>
</tr>
<tr>
<td>1 part bleach to 100 parts of water, or 1:100 dilution. Usually achieved by 2 1/2 tablespoons bleach into 1 gallon of water.</td>
<td>• Wear gloves while using bleach solution.</td>
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<tr>
<td></td>
<td></td>
<td>• Do not mix with strong acids or ammonium based products to avoid release of noxious fumes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Corrosive to metals and certain materials.</td>
</tr>
<tr>
<td><strong>Alcohol</strong></td>
<td>Use to disinfect only after cleaning the surface first. Make sure the surface becomes wet or damp with the alcohol and then dries completely.</td>
<td>• Flammable and toxic. Used in well ventilated areas.</td>
</tr>
<tr>
<td>Isopropyl alcohol 70% (rubbing alcohol), or Ethyl alcohol 60%</td>
<td></td>
<td>• Avoid inhalation.</td>
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<tr>
<td></td>
<td></td>
<td>• Keep away from heat sources, electrical equipment, flames, and hot surfaces.</td>
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<tr>
<td></td>
<td></td>
<td>• Dry completely- this usually takes about 10 minutes</td>
</tr>
</tbody>
</table>

*Look for the EPA (U.S. Environmental Protection Agency) registration number on disinfectant products. This indicates that the product has met efficacy and safety standards.*
V MONITOR THE PATIENT

A. Why Monitor
B. Flu Symptoms, Signs, and Typical Illness
C. High Risk Medical Conditions
D. Complications and Severe Consequences of the Flu
E. Keep a Log
F. How to Take a Temperature
G. How to Measure Heart Rate
H. How to Measure Breathing Rate
I. How to Identify Dehydration
J. When to Seek Medical Assistance
A. WHY MONITOR

The goal of monitoring the patient is to understand how the patient is doing. Monitoring a patient lets the caregiver know when the patient is getting better or worse and how to help them best.

A caregiver should monitor both a patient’s symptoms and physical signs. Symptoms are what the patient experiences. Signs are what the caregiver observes. The most important signs to monitor are the vital signs which include temperature, heart rate, and breathing rate. Vital signs tell how a patient’s essential body functions are doing (e.g., heart beat, breathing).

B. FLU SYMPTOMS, SIGNS, AND TYPICAL ILLNESS

Symptoms and signs of flu may develop quickly and without warning. They may include:

- Fever higher than 100.4°F (38°C)
- Chills
- Muscle aches or pains
- Headache
- Extreme tiredness
- Cough
- Sore throat
- Runny or stuffy nose (sometimes)
- Signs of dehydration such as decreased urine, dry mouth and eyes, dizziness
- Upset stomach and possible diarrhea or vomiting (sometimes)

These symptoms usually last from a few days to 2 weeks. Most people have mild symptoms, but some people get very sick. It is common for a patient to have high fever (up to 102°F) for up to 5 days. The heart rate often increases when a patient has
fever (See page 39 for normal values). It is also common for people to feel very tired and sick. The general course is to get worse and worse for several days and then begin to feel better.

**C. HIGH RISK MEDICAL CONDITIONS**

The following groups of people are at higher risk for severe disease and complications of seasonal flu:

- Children less than 5 years old especially those less than 6 months
- Persons aged 65 or older
- Pregnant women
- Adults and children with the following medical conditions:
  - chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological or metabolic disorders (including diabetes mellitus)
  - immunosuppression (including immunosuppression caused by medications or by HIV)
  - any condition that can increase the risk for breathing in secretions (e.g., decreased mental alertness, spinal cord injuries, seizure disorders, or other neuromuscular disorders)
- Persons who take aspirin therapy might be at risk for Reye syndrome after influenza virus infection. Reye syndrome is a rare but severe condition that affects the liver.

**Pandemic Flu:** High risk groups may be different during a pandemic flu.
D. COMPLICATIONS AND SEVERE CONSEQUENCES OF THE FLU

Seasonal flu can cause severe illness and complications like sinus infections, ear infections, bronchitis, pneumonia, encephalitis, dehydration and worsening of chronic medical conditions like asthma, diabetes, or heart disease.

E. KEEP A LOG

Use a Care Log to keep track of the patient’s symptoms and vital signs. It will help you know when the sick person is getting better or worse and when to seek medical attention.

*Please see next page for a sample care log.*
CARE LOG

Patient name: _______________________________________________________

Caregiver: _______________________________________________________

Monitor the patient’s symptoms and signs multiple times a day and fill in the table.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Temperature</th>
<th>Heart Rate</th>
<th>Breathing Rate</th>
<th>Symptoms</th>
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</table>

*Any observations such as what the person is doing, liquids or foods consumed, etc.*
Medical provider name: ________________________________

Medical provider contact information: __________________________

<table>
<thead>
<tr>
<th>Medications</th>
<th>Other*</th>
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</table>
F. HOW TO TAKE A TEMPERATURE

Temperature – A Vital Sign
Fever (or a body temperature that is above normal) is a sign that the body is fighting an infection. Usually it goes away as the ill person gets better. Body temperatures vary during the day (body temperature is usually lowest in the morning and highest in the late afternoon). When possible, take the ill person’s temperature at the same times each day.

NORMAL BODY TEMPERATURES

<table>
<thead>
<tr>
<th>Method</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>98.6° F (37° C)</td>
</tr>
<tr>
<td>Rectal</td>
<td>99.4° F (37.5° C)</td>
</tr>
<tr>
<td>Ear</td>
<td>99.4° F (37.5° C)</td>
</tr>
<tr>
<td>Armpit</td>
<td>97.9° F (36.6° C)</td>
</tr>
</tbody>
</table>

Some people have normal body temperatures that are lower or higher.

Moderate fevers are not harmful and many experts believe that fever is helpful in fighting infections. Caregivers should try to lower fever in certain circumstances:

- The ill person is a child less than 5 years old and the fever is greater than 102.2° F (39° C). Some young children will have seizures when they have very high fevers (febrile seizures).
- The fever makes the ill person feel very uncomfortable.

Using a Thermometer
Thermometers can become contaminated with the influenza virus when used. Either use a thermometer with a disposable cover or disinfect after each use. See page 37 for details on how to disinfect thermometers.
Types of thermometers
There are many types of thermometers and most are very reliable. Choose a thermometer that is reliable and that you find easy to use.

Preferred thermometers
- **Digital thermometers** are made of plastic with a display window at one end and the temperature probe at the other end. They can be used in the mouth, rectum, or armpit and are quick. Digital thermometers are widely available, reliable, and can be used for taking various types of temperatures.
- **Disposable thermometers** are thin flat pieces of plastic with colored dots and temperature markings that are used in the mouth. These are reliable.

Other thermometers
- **Ear thermometers** are small cone-shaped thermometers that are inserted into the ear canal. They are not as reliable as the preferred thermometers mentioned above.
- **Forehead plastic temperature strips** (forehead thermometer or fever strip) are less reliable than other thermometers.
- **Pacifier thermometers** are inserted in a baby or child’s mouth and are less reliable than other thermometers.
- **Glass thermometers containing mercury** are not recommended. Mercury is toxic and can be released if the thermometer breaks. If you have a glass thermometer, exchange it for a digital thermometer at no charge by going to:

  Department of the Environment
  11 Grove St., San Francisco, CA 94102
  (415) 355-3700
  www.sfenvironment.org

If your glass thermometer breaks, call the California Poison Action Line: 1-800-222-1222.
Steps for Taking a Temperature with a Thermometer

**Step 1**  DECIDE WHICH THERMOMETER TO USE.

**Step 2**  TAKE THE TEMPERATURE.

**How to take an ORAL temperature**

Use this method for adults and children older than 4 years old. To get an accurate temperature, the person must be able to breathe through their nose. If this is impossible because of a stuffy nose or lack of cooperation, use the rectum or armpit.

1. Do not eat or drink anything hot or cold for 10 minutes before taking an oral temperature.
2. Place the thermometer under the tongue, just to one side of the center, and close the lips tightly around it.
3. Leave the thermometer in place for the amount of time recommended by the thermometer manufacturer (usually 1 to 3 minutes).

**How to take RECTAL temperature**

Rectal temperatures are used with children younger than 4 years of age and people who cannot hold a thermometer safely in their mouths.

1. Apply a lubricant jelly or petroleum jelly, such as Vaseline®, on the bulb of the thermometer so that you can insert it easily.
2. Place the child’s belly down across your lap or on a firm surface such as a bed. Choose a quiet place so that the child won’t be distracted or move around too much. Hold the child by placing your palm against his lower back, just above his buttocks. Or place the child face up and bend his legs to his chest. Rest your free hand against the back of the thighs.
3. With the other hand, insert the thermometer about 1/2 inch (1.3 cm) to 1 inch (2.5 cm) into the anal opening. Do not insert it too far. Hold the thermometer in place with two fingers close to the rectum (not near the end of the thermometer). Pressing the buttocks together will help keep the thermometer in place.
4. Leave the thermometer in place for the amount of time recommended by the manufacturer (usually 1 to 3 minutes).

**How to take an ARMPIT temperature**
Armpit temperatures are not as accurate as taking an oral or rectal temperature.

1. Place the thermometer under the arm with the bulb in the center of the armpit.
2. Press the arm against the body.
3. Leave the thermometer in place for the amount of time recommended by the manufacturer (usually 1 to 3 minutes).

**Step 3** **REMOVE THE THERMOMETER AND READ.**
Follow the manufactures instructions for reading the thermometer.

**Step 4** **DISINFECT THE THERMOMETER.**
Never return a thermometer to the storage case without first disinfecting or, if using a disposable plastic cover for the end of the thermometer, discarding the cover into the trash. Follow the manufacturer’s instruction or the steps below to disinfect a thermometer.

1. Use alcohol wipes (with an alcohol content of 60% or greater) or a cotton ball (saturated with 70% isopropyl alcohol or rubbing alcohol).
2. Rub the alcohol wipe over the entire thermometer.
3. Dry the thermometer with a clean dry cloth or cotton ball.

---

**G. HOW TO MEASURE HEART RATE**

**Heart Rate – A Vital Sign**
The heart rate is the number of times the heart beats in one minute. A steady, strong, not too fast heart rate is one indication of good health. Normal heart rates vary a lot.
What is abnormal for one person may be normal for another. A person’s heart rate usually increases when they are active and decreases when they are at rest. Ideally you should know a person’s heart rate when they are feeling healthy and have been resting – this is called the resting heart rate. If the sick person’s resting heart rate is unknown, refer to the ranges on page 39.

Monitoring the heart rate of someone who is sick is useful. A slightly rapid heart rate in a patient with a fever is expected. However, a heart rate that keeps rising may indicate severe disease, dehydration, or a complication of the flu.

**How to Measure a Heart Rate**
To measure a heart rate, place your index and middle finger over the inside of the patient’s wrist; their palm should be facing up. Do not use your thumb to measure the pulse. Press firmly with flat fingers until you feel a pulse. Once you find the pulse, count the beats for 1 full minute (or for 30 seconds and multiply by 2). This will give the beats per minute.
H. HOW TO MEASURE BREATHING RATE

Breathing Rate – A Vital Sign
The breathing rate (or respiratory rate) is another vital sign. It is the number of breaths a person takes in one minute. Steady, medium deep, not too fast breathing that does not produce noise or discomfort is one indication of good health. Normal breathing rates vary. Ideally a person’s breathing rate when they have been well and resting should be known. If it is not known, then refer to the ranges listed on page 40. Following the breathing rate over time is extremely useful. A slightly fast breathing rate in a patient with an infection and fever is expected. However, very rapid or very slow breathing, breathing that keeps getting faster, shallow breathing, noisy breathing or breathing that takes a lot of work may indicate severe disease or a complication of flu.

How to Measure a Breathing Rate
Measure the breathing rate when the person is at rest by counting how many times the chest rises for one minute.
People with the flu often feel tired or ‘winded’ when performing any activity that normally may be easier (including going to the bathroom, walking, etc).

I. HOW TO IDENTIFY DEHYDRATION

Dehydration means the body does not have as much water and fluids as it should. Dehydration happens when a person loses fluids through fever, sweating, vomiting or diarrhea and they don’t take in enough fluids to replace those losses. An ill person feels worse when dehydrated. When severe, dehydration can be a life-threatening emergency. Infants and small children can become dehydrated quickly and should be watched for early signs and symptoms of dehydration. It is very important to prevent dehydration and to recognize and correct it when it happens.

Signs and Symptoms of Dehydration

Common early signs and symptoms:
- Thirst
- Headache
- Slightly elevated heart rate
- Dizziness upon standing
**Other signs and symptoms:**
- Flushed face
- Dry mouth
- Weakness
- Dry, warm skin
- Cramping in the arms and legs
- Skin loses its firmness and looks wrinkled
- Dark yellow urine
- Decreased urination (or stools in infants)
- Sunken fontanel (soft spot) in infants

**Signs and symptoms of severe dehydration:**
- Rapid heart rate
- Rapid and deep breathing
- Sunken, tearless eyes
- Little or no urine output for 8 hours
- Confusion, excessively irritable
- Unusually sleepy and hard to wake

**J. WHEN TO SEEK MEDICAL ASSISTANCE**

**When to Contact your Doctor or Medical Provider**
Contact a doctor or medical provider immediately if any of the following occur:

**Fever:**
- Fever that went away for 1 or 2 days (when not on fever medicines) and then comes back
- Infant under 3 months old with a rectal temperature of 100.4° F or higher
- Infant 3 to 6 months with a rectal temperature of 101° F (even if the child doesn’t seem sick)
- Child 6 months to 5 years with a temperature over 103° F
- Infant or child has a temperature of 101.4°F or greater for more than 3 days
- Fever in persons with immunosuppression (for example HIV infection, cancer, immunosuppression due to medicines)
- Febrile seizures

**Heart rate:**
- A very abnormal heart rate that persists over time (for example does not slow down with rest)
- A continually rising heart rate
- A newly irregular heart rate

**Breathing rate:**
- A very abnormal (rapid or slow) breathing rate
- Shortness of breath while resting
- Retractions (sucking in the muscles between the ribs with each breath, so that the ribs stick out)
- Grunting while breathing out
- Flaring (widening) of the nostrils (nose)
- Significantly increased shortness of breath with activity

**Dehydration:**
- Rapid heart rate
- Rapid and deep breathing
- Sunken, tearless eyes
- Dramatic decrease in urine output
- Confusion, excessively irritable
- Unusually sleepy and hard to wake

**Pain:**
- Moderate to severe chest pain
- Severe ear pain
Other:
- A cough that produces large amounts of blood
- Coughs with a croupy or “barking” sound
- Cough lasting longer than 4 weeks
- A person with a chronic medical condition (heart or lung disease, HIV/AIDS, cancer, etc.) and their overall condition is getting worse

When to Call 911
Call 911 if you think the sick adult or child has a life threatening emergency or if they have any of the following symptoms:

- Difficulty breathing (with or without: wheezing, grunting, nose flaring)
- Bluish lips, fingertips, or skin
- Steady and/or severe chest pain
VI PROVIDE CARE

A. Why Provide Care
B. Fever
C. Dehydration
D. Vomiting
E. Diarrhea
F. Sore Throat
G. Body Aches
H. Congestion
A. WHY PROVIDE CARE

Home care helps. When a person is sick with the flu, there are steps that can be taken to make them feel better and help them stay hydrated.

B. FEVER

In most cases, fever is not serious. In fact, it usually is a positive sign that the person’s body is fighting an infection. The average body temperature is 98.6° F, but it varies from person to person and each person’s temperature can vary during the day. Most flu fevers last between 2 or 3 days but may last up to 5 days or more. Usually the temperature of someone with the flu is between 101°F and 104°F; it may go higher in children.

The main reasons to treat a fever are to: 1) prevent seizures in some children (5 years of age and younger) who are at risk for seizures when their temperature rises above 102.2° F; and 2) to make the ill person more comfortable.

How to Reduce a Fever

- **Minimal clothing.** Too much clothing and bedding may make someone who is sick have a higher fever. Clothing should be kept to a minimum to allow heat to escape from the body. If the ill person has chills or is shivering, use a light blanket only. Heavier blankets increase body heat.

- **Fever-reducing medicines.** Give acetaminophen or ibuprofen. By two hours after a sick adult or child has been given these drugs, the fever is usually reduced by 2° to 3° F. Follow the manufacturer’s instructions for dosage instructions. You should not give ibuprofen to a child under 6 months of age, aspirin to anyone under age 20, or acetaminophen to persons with liver disease unless approved by their doctor or medical provider. Giving too much fever-reducing medicine can cause poisoning.
• **Children’s cold medicine.** Over-the-counter cold medicines are not recommended for use in children younger than 14.

• **Sponging.** Sponging is preferred over medicines if the ill person is known to be allergic or unable to tolerate acetaminophen or ibuprofen or is vomiting and unable to keep the medicine down. To sponge a person, put them in a bath with several inches of lukewarm water (85° to 90° F). Do not use cold water because that will be uncomfortable and may cause shivering, which can raise their temperature. Have the person sit in the bathtub and use a clean washcloth or sponge to spread water over their torso, arms, and legs. The water will evaporate and cool the body. Keep the room about 75° F, and continue sponging until their temperature has reached an acceptable level. Usually sponging will bring down the fever in 30 to 45 minutes. Never put alcohol in the water; it can be absorbed into the skin or inhaled, which can cause serious problems.

**C. DEHYDRATION**

One of the most important parts of caring for a person with the flu is making sure that they receive enough fluids every day to either prevent dehydration or to treat dehydration if it is present. As an individual slowly drinks the liquids and the electrolytes (salt and sugar) that the body needs, they feel better. And their health is better too.

**To Prevent Dehydration**
Make sure the sick person drinks enough liquids. It is okay if the ill person doesn’t want to eat but they must continue to drink fluids. Give them small amounts frequently. You must help them - don’t stop trying.
**AVERAGE AMOUNT OF LIQUID THAT A HEALTHY PERSON SHOULD DRINK TO PREVENT DEHYDRATION**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevent Dehydration</th>
<th>Treat Dehydration</th>
</tr>
</thead>
</table>
| Infants (under 1 year of age) | • Breast milk  
• Standard infant formula  
• Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte®  
• Diluted juices* (1/2 water, 1/2 juice) (Do not give any juice to infants less than 4 months old.) | • Breast milk  
• Standard infant formula  
• Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte®  
*“Cups” in this chart refers to measuring cups. One cup equals 8 fluid ounces. |

Sick persons should drink more liquid than what is listed above, especially those with fever, fast breathing, vomiting, or diarrhea. Watch for a steady amount of urine that is light in color. Infants should be urinating every 4 to 6 hours.

**LIQUIDS TO PREVENT AND TREAT DEHYDRATION IN DIFFERENT AGE GROUPS**
<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevent Dehydration</th>
<th>Treat Dehydration</th>
</tr>
</thead>
</table>
| **Toddler** (1-3 years of age) | • Milk  
• Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte®  
• Broth, soup  
• Jell-O® Water (1 package per quart of water, or twice as much water as usual)  
• Popsicles including Pedialyte® popsicles  
• Gatorade®  
• Kool-Aide®  
• Juices* | • Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte®  
• Pedialyte® popsicles  

*Do not give apple and pear juice because they include a certain type of sugar that increases water loss.*  

| **Children** (over 3 years), Teens, Adults | • Water  
• Broth, soup  
• Jell-O® Water (1 package per quart of water, or twice as much water as usual)  
• Popsicles  
• Gatorade®  
• Kool-Aide®  
• Juices*  
• Ice cream | • Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte®  
• Gatorade®  

*Alternative: home-made Oral Rehydration Solution. See page 49 for recipe.*
RECIPE FOR ORAL REHYDRATION SOLUTION

You can make this water-based drink to treat dehydration for children over the age of 3, teens, and adults. It provides necessary fluid and electrolytes to the body.

- 4 cups water
- 3 tablespoons sugar or honey (honey should not be given to infants under 1 year of age)
- 1/4 teaspoon salt

Mix together. Add lemon, lime, or mint for flavor.

Note: Use of homemade Oral Rehydration Solution should be considered a last option because of the chance for mixing mistakes.

RECIPE FOR CEREAL-BASE ORAL REHYDRATION SOLUTION (CBORS)

For children under 3 years of age, you can make this cereal-based oral rehydration solution at home.

Ingredients
- 2 cups of cold or warm water
- 1/2 cup of instant baby rice cereal
- 1/4 level teaspoon table salt

Mix ingredients together. (Do not boil. This will concentrate the ingredients.)

Note: Use of homemade CBORS should be considered as a last option because of the chance for mixing mistakes, which could be a problem for infants. Children are also less likely to take cereal-based solutions than sugar-based solutions. When properly mixed and used, CBORS has been found to be as effective as Pedialyte® in maintaining hydration.
How to Treat Dehydration:

**Give liquids.** Give sips or spoonfuls of liquids every 5 - 20 minutes over a four-hour period until they are able to take fluid on their own. See the table for details on what types of liquids to use. The ill person may not want, or may be unable, to take fluids. You must help them - don't stop trying.

**Get medical help.** Call a doctor or medical provider if the patient has signs of severe dehydration (See page 41 for description). Fluids may need to be given by a medical professional through an intravenous (IV) line.

**D. VOMITING**

Vomiting can occur with the flu. Dehydration can develop rapidly as the body is unable to absorb nutrients or fluids well. Begin offering the sick person liquids as soon as he or she can tolerate them after vomiting. Start with a teaspoon of fluid. Even if the patient continues to vomit, they may be keeping down more than you think. Continued vomiting, however, should prompt you to contact a doctor or medical provider. Over the counter anti-nausea medications are not usually effective and are not recommended for children.

**E. DIARRHEA**

Diarrhea can occur with the flu. Dehydration can develop quickly if diarrhea is frequent. Give the patient liquids and monitor how often they have diarrhea. Over the counter anti-diarrhea medicines are usually not needed, can be harmful with certain infections, and are not recommended for children.
F. SORE THROAT

Providing the sick person with warm liquids (like soup) or cold foods (like ice cream) can help their throat feel better. Throat lozenges, like cough drops or hard candy, may also help temporarily (do not give young children any foods that could cause choking). You may also have them gargle with warm salt water. To add flavor, you may mix in a small amount of honey (do not give honey to children less than 1 year old) or lemon juice.

Provide acetaminophen or ibuprofen if the person feels pain when coughing. Over-the-counter cough medicines have not been shown to reduce coughing, and therefore are not recommended.

G. BODY ACHES

A warm shower or bath may make body aches feel better. Acetaminophen or ibuprofen are also helpful at reducing aches and pains. Follow package directions for dosage and intervals between doses.

H. CONGESTION

People with the flu may feel stuffed up. Having them drink fluids may help thin mucus. Also try these tips:

- Use extra pillows to raise their head while in bed. This may also help if coughing keeps them awake.
- Humidify the air to help moisten breathing passages. One can use a humidifier or a cool mist vaporizer.
- Have the ill person breath moist air produced from a hot shower or sink filled with hot water.
VII MAINTAIN A HEALTHY STATE OF MIND
Caring for a family member or friend can be a very rewarding personal experience. It can also be challenging and stressful. It is important to care for yourself too. Both you and the person you are caring for will benefit if your needs are being met.

**Learn and use stress-reduction techniques**
Stress reducers can be simple activities like walking and other forms of exercise, gardening, meditation, or having coffee with a friend. Identify some stress reducers that work for you and do them.

**Attend to your own healthcare needs**
Make sure you take your own medicines, keep your own doctor’s appointments, and follow your doctor’s recommendations for your own health.

**Get proper rest and nutrition**
Adequate sleep and proper nutrition are essential. You cannot provide good care when you are tired and poorly fed.

**Exercise regularly**
Exercise helps you sleep better, decreases stress and depression and increases energy and alertness. Find activities you enjoy. Walking is a great way to get started. Walking 20 minutes a day, three times a week is beneficial.

**Take time off without feeling guilty**
Make time for yourself so that you can re-energize and be a better caregiver.

**Change the way you view the situation**
Remember that your mind believes what you tell it. Try thinking positive statements like: “I’m good at doing this.”

**Seek and accept the support of others**
Help can come from community resources, family, friends, and professionals. Ask them. Don’t wait until you are overwhelmed and exhausted.
Talk to a friend or counselor
Talk to others about the situation and your feelings. This will help relieve stress and may help you realize that your feelings are shared by others.

Identify and acknowledge your feelings
Our emotions are messages to which we need to listen. They exist for a reason and are useful tools for understanding what is happening to us. Some feelings are more comfortable than others. When you find that your emotions are intense, they might mean the following:

- That you need to make a change in your caregiving situation
- That you are experiencing increased stress

Pandemic Flu: During a pandemic flu, it will be more challenging to care for an ill person. It may also be challenging to provide for your household’s basic needs. This may cause stress and anxiety for some or all members of the household. In the event of a pandemic flu, the San Francisco Department of Public Health will provide further guidance on managing stress and mental health conditions.
VIII RESOURCES
Use these resources to find additional information about seasonal and pandemic flu:

San Francisco Department of Public Health – Communicable Disease Control and Prevention
www.sfcdcp.org

US Department of Health and Human Services
www.pandemicflu.gov

Medline Plus – A service of the National Library of Medicine and the National Institutes of Health
www.medlineplus.gov

American Academy of Family Physicians
www.familydoctor.org

Family Caregiver Alliance/ National Center on Caregiving
www.caregiver.org
IX GLOSSARY
<table>
<thead>
<tr>
<th><strong>Avian Influenza</strong></th>
<th>Avian influenza, also referred to as bird flu, is a common disease of birds (e.g., ducks, chickens) caused by the influenza virus.</th>
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</thead>
<tbody>
<tr>
<td><strong>Contact</strong></td>
<td>A person who has been exposed to someone who is contagious (able to spread disease) and is now at risk for developing disease.</td>
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<td><strong>Epidemic</strong></td>
<td>A disease that affects many people in a community or region at the same time.</td>
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<td><strong>Flu</strong></td>
<td>See Influenza, Seasonal Influenza, Pandemic Influenza.</td>
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<tr>
<td><strong>H5N1</strong></td>
<td>H5N1 is a subtype of influenza A. It causes avian (bird) flu. H5N1 has caused human disease in people who have had close contact with ill birds in other parts of the world, but this has happened infrequently as of 2008.</td>
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<td><strong>Hand Hygiene</strong></td>
<td>Hand hygiene means cleaning of one’s hands. This is usually done with soap and water or hand sanitizer. Hands must be washed with soap and water for 20 seconds. Hand sanitizers must be used for 10 seconds and have an alcohol content of at least 60% to effectively kill germs.</td>
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<td><strong>Health Officer</strong></td>
<td>The Health Officer is the Chief Medical Director of a Public Health jurisdiction. In California, typically each county has a Health Officer. As the medical authority for a county, the Health Officer (or their deputy) intervenes to control disease, makes recommendations to improve the public’s health, and enforces public health laws and regulations.</td>
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<td><strong>Human-to-Human Transmission</strong></td>
<td>Human-to-human transmission means an infectious disease can be spread from one person to another. Influenza virus is an example of an infectious disease that can be spread human-to-human.</td>
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<td><strong>Immunity</strong></td>
<td>Immunity is the ability to successfully fight off infection or disease. People's immune systems may do this as a part of their normal immune response, after exposure to germs, or from vaccination.</td>
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<td><strong>Infection Control</strong></td>
<td>Infection control is a broad term used to describe a number of actions that prevent and contain the spread of contagious diseases. Actions include hand washing, respiratory etiquette (proper coughing and sneezing), use of personal protective equipment (PPE), prophylaxis (preventive medicines), isolation, and quarantine.</td>
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<tr>
<td><strong>Infectious Disease</strong></td>
<td>An infectious disease is a disease caused by a microorganism or a “germ.” Most germs are not harmful but some cause disease. There are many types of germs (e.g., bacteria, viruses, fungi, parasites).</td>
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<tr>
<td><strong>Influenza</strong></td>
<td>Influenza (the flu) is an infectious disease caused by the influenza virus. In humans it usually causes high fever, sore throat, cough, muscle aches, and extreme tiredness.</td>
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<td><strong>Isolation</strong></td>
<td>Isolation is when sick people who are contagious (can spread disease) are kept away from people who are not sick, until the sick person can no longer spread disease. Isolation can occur in the hospital, at home, or another site/facility. A Health Officer has the ability to take any measure needed to protect the public’s health.</td>
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<tr>
<td><strong>Pandemic Influenza</strong></td>
<td>Pandemic influenza (flu) is a worldwide outbreak of flu. A pandemic flu could happen if an influenza virus emerges that is: 1) so new and different that no one has immunity to the virus; 2) able to spread easily from one person to another; 3) able to cause significant illness and/or death; 4) able to infect many people around the world.</td>
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</tbody>
</table>
**Personal Protective Equipment (PPE)**

PPE is specialized clothing or equipment worn to protect someone against a hazard including an infectious disease. A face mask is an example of PPE.

**Prophylaxis**

Medicines (or other therapy) taken by a healthy person to prevent disease.

**Quarantine**

Quarantine is when people without symptoms of the disease but who have been exposed to a contagious person are asked to stay away from the general public until it can be determined that they are not infected. Quarantine can occur in the home or another facility. A Health Officer has the ability to take any measure needed to protect the public’s health.

**Respiratory Etiquette**

Respiratory etiquette is good coughing and sneezing technique. Respiratory etiquette can limit the spread of germs that are passed human-to-human via tiny drops that come out of the nose or mouth when a person coughs, sneezes, or talks. Healthy and sick people should cover their nose and mouth with the inside of their elbow or tissue when sneezing, coughing, or blowing their nose. If a tissue is used, it should be put in the trash and hands washed.

**Seasonal Influenza**

Seasonal influenza, commonly referred to as the flu, is an infectious disease caused by the influenza virus. In the United States, flu season usually occurs between November and March. Also see Influenza.

**Social Distancing**

Social distancing is keeping people safely separated so that human-to-human spread of infectious disease does not occur. Examples of social distancing include avoiding large public gatherings and altering workplace environments and schedules.

**Treatment**

Medicines (or other therapy) taken by an ill person to cure or improve their condition.