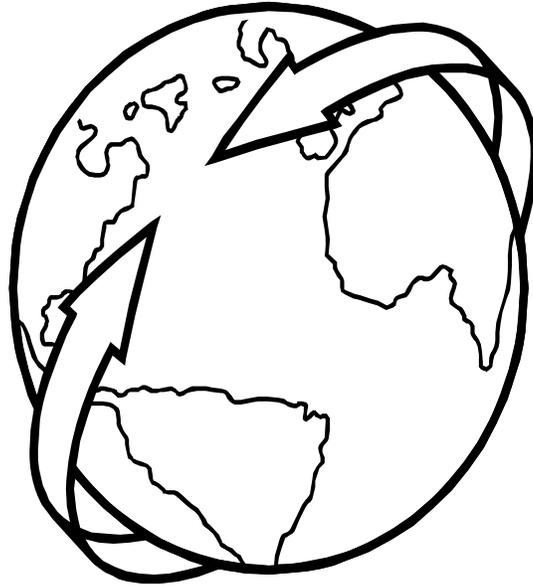


# PANDEMIC H1N1 FLU



## HOME CARE GUIDE

SOMERVILLE-RARITAN-MANVILLE  
HEALTH DEPARTMENT  
(908) 725-2300 ♦ [www.somervillenj.org](http://www.somervillenj.org)

Developed by :  
Suzanne Rose, M.S. and Marcie Tyson, B.A.



**Public Health**  
Prevent. Promote. Protect.

# TABLE OF CONTENTS

	PAGE
Family First Aid and Medical Care Resource Books .....	1
Glossary of Terms .....	2
Introduction .....	4
Flu Symptoms .....	5
Is It a Cold or the Flu? .....	6
General Infection Control Strategies .....	7
Isolation, Quarantine, and Social Distancing .....	10
Important Skills for “At Home” Sick Care .....	16
Dehydration .....	18
How to Monitor Breathing .....	22
When to Call for Medical Advice .....	23
Emergency Preparedness Shopping List .....	25
Keep Your Immune System Strong! .....	26
Stress and Mental Health During an Emergency .....	28
Symptom and Care Log for “At Home” Care .....	33
Emergency Contact and Resource Information .....	34
“File of Life” Medical Summary Form .....	35

# FAMILY FIRST AID AND MEDICAL CARE RESOURCE BOOKS



This **PANDEMIC INFLUENZA HOME CARE GUIDE** gives you information about how to care for someone sick with the flu. However, you will want to be prepared to deal with the many other health care problems that can arise during both long and short term emergencies. It is a good idea to have a first aid and a general health care resource book at home. The following books are written by reputable organizations and can help guide you through first aid and other medical care problems at home.

Choose *one* first aid book:

- ◆ **The American Medical Association Handbook of First Aid and Emergency Care**  
(American Medical Association, copyright 2009)
- ◆ **American College of Emergency Physicians First Aid Manual - Second Edition**  
(American College of Emergency Physicians - Jon R. Krohmer, Michael Webb, Michael R. Bond, Peter Beale, copyright 2004)

Choose *one* general health care book:

- ◆ **The American Medical Association Family Medical Guide - Fourth Edition**  
(American Medical Association, copyright 2009)
- ◆ **The Johns Hopkins Complete Home Guide to Symptoms and Remedies**  
(Authors of the John Hopkins Medical Letter and Simeon Margolis, copyright 2004)
- ◆ **Mayo Clinic Family Health Book - Third Edition**  
(Mayo Clinic, copyright 2003)

# GLOSSARY OF TERMS

(Adapted from [www.pandemicflu.gov](http://www.pandemicflu.gov))

This glossary provides explanations of many terms and acronyms used throughout this document, and in the resource literature that addresses pandemic influenza.

**ANTIBIOTIC** A substance that destroys or prevents the growth of bacteria and fungi. Antibiotics are never used to treat viral infections.

**ANTIBODY** A protein produced by the body's immune system in response to a foreign substance (antigen). An antibody reacts specifically with the antigen that has triggered its formation. Our bodies fight off an infection by producing antibodies that inactivate the antigen.

**ANTIGEN** Any foreign substance, usually a protein, that stimulates the body's immune system to produce antibodies. The name antigen reflects its role in stimulating an immune response - "**antibody generating**".

**ANTIVIRAL** A drug that is used to prevent or cure disease caused by a virus by interfering with the virus's ability to multiply in number or spread from cell to cell. Different than an antibiotic, which is prescribed to treat a bacterial or fungal infection.

**ASYMPTOMATIC** Although there is an infection with a pathogen, there are no signs or symptoms of the disease.

**AVIAN FLU** A highly contagious viral disease in domestic fowl caused by influenza A virus subtypes H5 and H7. All types of birds are susceptible to the virus but outbreaks occur most often in chickens and turkeys. The infection may be carried by migratory wild birds, which can carry the virus but show no signs of disease. At this time, humans are only rarely affected.

**CDC** Centers for Disease Control and Prevention, the U.S. government agency that leads the public health efforts to prevent and control infectious and chronic diseases, injuries, workplace hazards, disabilities, and environmental health threats.

**CONTAGIOUS** A disease that is easily spread person-to-person by contact with the pathogen that causes the disease. The pathogen may be in droplets of liquid particles made by coughing or sneezing, contaminated food utensils, water or food.

**DRIFT** The process in which influenza virus undergoes mutation (genetic change). The amount of change can be subtle or dramatic, but eventually as drift occurs, a new strain of the virus will become dominant. This process allows influenza viruses to change and reinfect people repeatedly through their lifetime. It is the reason influenza virus strains in vaccine must be updated each year.

**EPIDEMIC** A disease that occurs suddenly in humans in a community, region, or country in numbers that are clearly in excess of the normal number of cases.

**H5N1** A type of avian (bird) influenza. While currently a strain that is transmitted bird-to-human, H5N1 may mutate or reassort into a strain capable of efficient human-to-human transmission.

**IMMUNE SYSTEM** The cells, tissues and organs that help the body to resist infection and disease by producing antibodies and/or altered cells that identify and destroy the foreign pathogens.

**INFLUENZA** A highly infectious disease caused by viruses that infect the respiratory (breathing) tract.

**ISOLATION** The separation of sick people from healthy people to prevent the spread of disease. Isolation measures can be undertaken in hospitals or homes, as well as in alternative care facilities.

**MRC** The Medical Reserve Corps establishes teams of local medical and public health professionals who can volunteer their skills and expertise throughout the year and during times of community need or crisis.

**MUTATION** Any alteration or change in the genetic material in a cell. Specific mutations in influenza viruses cannot be predicted, making it difficult - if not impossible - to know if or when a virus such as H5N1 might acquire the properties needed to spread easily among humans.

**PANDEMIC** A worldwide disease outbreak in humans in numbers that are clearly in excess of the normal number of cases.

**PATHOGEN** An organism that can cause disease, e.g. bacteria, virus, parasite, or fungus.

**PROPHYLACTIC** A medical procedure or practice that prevents or protects against a disease or condition, e.g. vaccines, antibiotics, and antiviral drugs.

**QUARANTINE** The separation of people who have been exposed to an infectious disease from other healthy people. Before the era of antibiotics, quarantine was one of the few available means of halting the spread of infectious disease, and is still employed today as needed. The list of quarantinable diseases in the U.S. includes cholera, diphtheria, infectious tuberculosis, plague, smallpox, yellow fever, viral hemorrhagic fevers, and SARS (severe acute respiratory syndrome). In 2005, influenza caused by novel or reemergent influenza viruses that can cause, or have the potential to cause, a pandemic was added to the list.

**REASSORTMENT** The rearrangement of genes from two distinct influenza strains to produce a novel, genetically different viral strain.

**SEASONAL FLU** Also known as the common or winter flu, it is a respiratory illness that can be transmitted person-to-person. Most people have some immunity from exposure to previous seasons' flu viruses. Since the virus that causes seasonal flu will drift from year to year, a new vaccine is available for each year's flu strains.

**SHIFT** The process in which the existing proteins on the outside of the flu virus - H (hemagglutinin) and N (neuraminidase) - are replaced by significantly different H and N proteins. These new H or H/N combinations will be new and unfamiliar to the human immune system, so most people will not have pre-existing antibody protection to these novel viruses.

**SWINE FLU** Swine influenza A (H1N1) virus infection is defined as a person with an acute respiratory illness with laboratory confirmed swine influenza A (H1N1) virus infection.

**VACCINE** A preparation consisting of antigens which stimulates the immune system to produce antibodies to recognize - and destroy - that specific disease-causing microorganism. The antigen in the preparation can be the whole microorganism (killed or weakened) or parts of the organism. Vaccination produces immunity to the disease-causing microorganism.

**VIRUS** A microorganism smaller than a bacteria, which cannot grow or reproduce apart from a living host cell. A virus invades living cells and uses their chemical machinery to keep itself alive and then to replicate itself. Viruses are typically not considered living organisms.

# HOME CARE DURING A PANDEMIC INFLUENZA OUTBREAK

The threat of a pandemic influenza (flu) is real. Public health experts say it is not a question of IF a pandemic will occur, but WHEN it will occur. Whether or not it is the swine flu virus that causes the next pandemic, it can start anywhere and will spread quickly.

A flu pandemic will create a public health emergency. This emergency will be different than other emergencies we have faced before - it will last longer (18 months to two years), make more people seriously ill and may cause more deaths than any other health crisis in our time.

Preparing **now** will make it easier for you and your family to cope during a pandemic. During a pandemic, you may need, or want, to stay home for an extended period of time. Essential goods may be in short supply. Preparing **before** a pandemic occurs will make it easier for you to follow important health advice such as staying home for long periods of time.

If everyone who **can** prepare - **does** prepare - emergency medical responders will be able to help more people, particularly those most in need, during a pandemic. Our government cannot do this alone. It's up to each of us to prepare at home, in the community, and at work.

For more information about pandemic influenza and emergency preparedness, visit the following web sites:

- ◆ [www.cdc.gov](http://www.cdc.gov)
- ◆ [www.pandemicflu.gov](http://www.pandemicflu.gov)
- ◆ [www.ready.gov](http://www.ready.gov)
- ◆ [www.redcross.org](http://www.redcross.org)

## PROVIDING SICK CARE AT HOME

Many people will be sick at the same time during a pandemic, so families and friends or neighbors will need to take care of each other in a home environment. It will be important for caregivers to know how to provide sick care and be prepared to do this ahead of time. First aid and medical supplies, medicine (over the counter and prescription) and personal protection equipment (gloves and masks) may not be as available during a pandemic influenza so you will need to have the right supplies ahead of time (**see Emergency Preparedness 8 Week Shopping List on page 25**).

Family members, friends and neighbors will need to know: how to isolate (keep separate) the sick at home, how to treat their symptoms and when to call for medical advice. You will also need to know how to control the spread of the disease in a home environment. Ideally **all people in the community** old enough and able to understand basic medical care should learn how to care for people sick with influenza.

**MOST PEOPLE WILL SURVIVE THE FLU PANDEMIC.** Once the sick person has fully recovered, they will be immune to that type of pandemic flu again. The information provided in this **HOME CARE GUIDE** will help you prepare and be better able to care for the sick at home.



## FLU SYMPTOMS

Watch for the first signs of influenza in a family or household member - the sooner you start caring for and isolating the sick person, the better. Once the first signs of influenza appear, take the actions you need to control the spread of disease in your own home.

Flu symptoms may develop very quickly and without much warning:

- ◆ Sudden fever higher than 100.4° F (38° C)
- ◆ Chills
- ◆ Muscle aches or pain
- ◆ Headache
- ◆ Feeling of weakness and/or exhaustion
- ◆ Cough or sore throat
- ◆ Runny or stuffy nose
- ◆ Signs of dehydration such as decreased urine, dry mouth and eyes, dizziness, etc.
- ◆ Diarrhea, vomiting, abdominal pain (may happen at any time in children)

Patients are most infectious during the 24 hours before the onset of symptoms and for 3-5 days after the onset of illness.

When a person is sick with influenza, they need to rest and drink plenty of liquids. Monitoring flu symptoms and giving over-the-counter medications can help to lessen the flu symptoms but can't speed up recovery.

Do not rush to the hospital or doctor's office unless absolutely necessary. Remember that the healthcare system will probably be overwhelmed - unless you are experiencing serious symptoms, stay home (**see pages 23-24 for when to seek professional care**).

It is important that individuals stay home and **NOT** immediately return to work or school when they start to feel better. Stay home and rest for at least 4-5 days after recovering from the flu. The body is in a weakened state and is more susceptible to secondary infections. In past pandemic influenza outbreaks many people who survived the flu died of secondary infections – especially pneumonia.

# IS IT A COLD OR THE FLU?

Every year, one billion Americans get a cold, and millions more suffer with seasonal flu. Although colds and other viruses may cause similar symptoms, influenza weakens a person much more than other viruses and can lead to complications.

The **COMMON COLD** is caused by over 200 different viruses. A cold will develop gradually, and is spread through hand-to-hand contact and by sneezes and coughs from someone who has a cold, or by touching a hard surface or object that a person with a cold has recently touched.

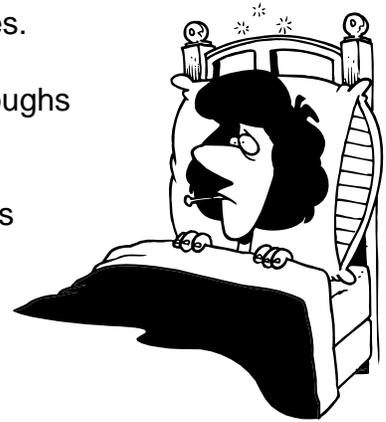
The **FLU** is a highly contagious respiratory disease caused by viruses.

Symptoms often appear abruptly, and can be spread by sneezes, coughs and hand contact.

NOTE: Anti-viral drugs taken within the first 24 to 48 hours of the flu's onset can reduce the duration of uncomplicated illness.

Don't ask your doctor for antibiotics for a cold or flu.

**ANTIBIOTICS CANNOT TREAT A VIRUS**, and should not be prescribed unless you develop a secondary bacterial infection.



SYMPTOM	COLD	FLU
✓ FEVER	Rare	High fever very common
✓ HEADACHE	Rare	Sudden - can become severe
✓ ACHES and PAINS	Slight	Usual - often severe
✓ FATIGUE and WEAKNESS	Mild & Brief	Sudden - can last 2-3 weeks
✓ EXTREME EXHAUSTION	Never	Early and prominent
✓ STUFFY NOSE	Common	Sometimes
✓ SNEEZING	Usual	Sometimes
✓ SORE THROAT	Common	Sometimes
✓ CHEST DISCOMFORT and COUGH	Mild to Moderate	Common - can be severe

# GENERAL INFECTION CONTROL STRATEGIES

Practice infectious disease control strategies **BEFORE** the pandemic influenza affects your community. Droplets containing the flu virus (seasonal or pandemic) from an infected person's cough or sneeze can stay in the air for 4-6 feet. Those same droplets can contaminate everything in their path before they fall to a surface. Since this means the virus is everywhere, there are some common sense steps to prevent the spread of germs.

Since an individual is infectious (can spread influenza) for 24 hours before symptoms appear, it is important to practice basic infection control practices on an everyday basis. Basic infection control practices include (1) hand hygiene, (2) cough etiquette, (3) cleaning and disinfecting contact surfaces and (4) taking personal responsibility for your behavior such as staying home when you're sick.



## HAND HYGIENE BASICS

Based on research studies, it is possible for an influenza virus to survive on non-porous surfaces (doorknobs, telephones, computer keyboard and mouse) for 24-48 hours and on cloth, paper, and tissues for 8-12 hours. This means if you touch a contaminated surface or object and then touch your own eyes, nose, or mouth you can still be infected ... even if the surface or object looks clean. This surface-to-hand transfer of virus makes it critical to wash your hands ... whether or not you were wearing gloves!

Soap combined with the scrubbing action helps dislodge and remove germs. It's always best to wash your hands with soap and water, but when water isn't available you can use an alcohol-based product (with at least 60% alcohol) to sanitize your hands.

## WHEN SHOULD YOU WASH YOUR HANDS?

- ◆ Before and after tending to someone who is sick
- ◆ Before and after treating a cut, burn or wound
- ◆ After blowing your nose, coughing or sneezing
- ◆ Before rubbing your eyes
- ◆ After going to the bathroom
- ◆ Before preparing or eating food
- ◆ After handling uncooked foods, particularly raw meat, poultry, eggs or fish
- ◆ After handling an animal (especially a reptile) or animal waste
- ◆ After changing a soiled/wet diaper or cleaning up a child who has gone to the bathroom
- ◆ After handling garbage

## WASH YOUR HANDS WITH SOAP and WATER

Since the flu virus can live on surfaces that we touch each day, our hands become a potential vehicle for infection. Effective hand washing helps remove the flu virus as well as other germs.

- ◆ Use soap and water. The soap helps lift germs off the skin.
- ◆ Rub your hands vigorously. The friction also helps loosen germs from the skin.
- ◆ Completely wash all surfaces of your hands and wrists, between fingers, the knuckles, under the fingernails and the backs of hands. This should take 15 - 20 seconds (sing the Happy Birthday song twice, say your ABC's, or count to 20).
- ◆ Rinse all soap off completely. Leave the water running.
- ◆ Dry your hands with a paper towel. Never use a cloth towel in a public restroom.
- ◆ Use the paper towel to turn off the faucet. If you touch the faucet with your clean hands, you have just recontaminated yourself.
- ◆ Use the paper towel to open the bathroom door. Remember, many people do not wash their hands after using the bathroom and have touched that doorknob!



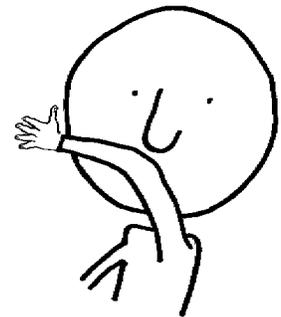
Soap does not need to be antibacterial to get your hands clean - regular bar or liquid soap is sufficient. It is the friction and rinsing action of hand washing that gets your hands clean. In addition, there is concern that antimicrobial soap may eventually contribute to the growing problem of antibiotic resistance.

## SANITIZING YOUR HANDS WITH ALCOHOL BASED PRODUCTS

Alcohol based gel, foam or towelette sanitizers don't need water to work, significantly reduce the number of microorganisms on skin, are fast acting, and usually cause little skin irritation. Apply the product to the palm of one hand and rub your hands together for at least 15 seconds. Cover all surfaces of your hands and fingers (pay special attention to fingertips, fingernails, creases of the palms and outer edges of the hands) until entire hands are dry. While alcohol does kill germs, alcohol based products do not remove dirt. "Dirty hands" must still be washed with soap and water as soon as possible.

## COUGH & SNEEZE ETIQUETTE

- ◆ Sneeze and cough into your sleeve or the crook of your arm to avoid contaminating your hands.
- ◆ When you cough or sneeze - turn your head away from people.
- ◆ Use a tissue to cover your mouth and nose when you cough or sneeze. Drop your used tissue in a waste basket – never reuse a tissue. If you must use your hand to cover a cough or sneeze, make sure to wash your hands or use an alcohol based sanitizer immediately to avoid spreading the germs to objects or people you touch. Cleaning your hands often keeps you from spreading germs.
- ◆ You may be asked to wear a mask if you are coughing or sneezing.



## KEEP YOUR HANDS AWAY FROM YOUR FACE!

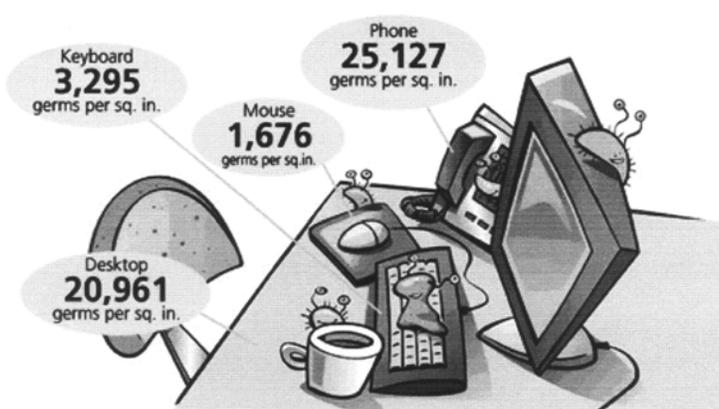
Even with good hand washing habits, our hands carry many germs and we can easily infect ourselves by touching the “T” zone of our face - the eyes, nose, and mouth. Begin to notice how often you rub the corner of your eyes or use your finger to remove a little “sleep” from your eye, do a quick wipe underneath your nose, scratch an itch inside your nose (when no one is looking!), bite a fingernail or chew a cuticle.

**Start to change your habits now.** Whether or not there is a pandemic, good infection control behaviors will help you experience fewer illnesses and have a healthier life.

### IS THIS YOUR DESK?

(Statistics based on a study by Dr. Charles Gerba, University of Arizona, 2001)

#### DID YOU KNOW:



- ◆ There are over 10 million germs in the area where you rest your hand on your desktop.
- ◆ Telephones are the most germ infected objects in the office, followed by desktops, water fountain handles, microwave door handles, keyboards and computer mice.
- ◆ An average desktop has 400 times more bacteria on it than the average toilet seat.

How did these germs get there? **YOUR HANDS!** Most germs are spread hand-to-surface, so it's virtually impossible not to contaminate your work surface, even if you wash your hands regularly.

#### WHAT YOU CAN DO

- ◆ Wash your hands often - it will reduce the number of germs on your hands. Use soap and warm water and wash for 20 seconds, or use an alcohol based hand sanitizer.
- ◆ Remember that cleaning crews seldom touch desktops, phones, computer keyboards, etc. Be aware that some cold and flu viruses can survive on surfaces for up to 72 hours, so clean the surface of your desk, phone, keyboard, and mouse with a disinfecting wipe regularly, and especially after someone else uses them.
- ◆ Disinfecting wipes or sprays suitable for cleaning office surfaces are not meant for cleaning your hands. Keep alcohol based sanitizing gel or moist towelettes at your desk that are safe for use on your skin.
- ◆ Remember to sanitize your cell phone! Think about it ... we hold it against our face, breathe on it, touch it with our dirty hands, and then keep it nice and warm in our pocket.

# ISOLATION, QUARANTINE and SOCIAL DISTANCING



Social distancing, isolation and quarantine are three effective strategies that communities and public health officials can use to slow and reduce the spread of influenza.

We have no way of knowing the severity of the next influenza pandemic. We are planning for the worst possible scenario (a severe epidemic like the 1918 Spanish Flu) and hoping for a more mild epidemic like the Hong Kong Flu in the 1960s.

We do know that we will not have a vaccine for the first 6-9 months of the pandemic, and that antivirals will be of limited use or unavailable. We will need to rely on community-based, non-drug strategies. Since flu is spread where people spend a lot of time together, an important strategy will be to keep people apart, including:

**ISOLATION** - the separation of sick people from healthy people.

Isolation is for people who are already sick. People in isolation may be cared for at home, in hospitals or other healthcare facilities. In most cases isolation is voluntary, but federal, state and local health officials have the power to require the isolation of sick people to protect the general public's health.

**QUARANTINE** - the separation of people who have been exposed but are not ill.

Quarantine separates people who have been exposed to an infectious disease and may be contagious from healthy people. Remember - a person infected with the flu virus can spread to others up to 24 hours **before** they feel sick or have any symptoms of the flu. While the quarantined people may or may not become sick, they were exposed to a contagious disease and may still become contagious or sick and spread the disease to others.

Quarantine is often voluntary, particularly when home confinement is needed. Other quarantine measures include restricting travel for those who have been exposed to a contagious disease, and restrictions on people coming or going into a specific area. States have the power to enforce quarantine within their borders.

**SOCIAL DISTANCING** - preventing the gathering of groups of people, and encouraging individuals to keep their distance from others. Social distancing measures are taken to limit when, and where, people can gather to stop or slow the spread of contagious diseases.

Social distancing can be required by public health officials or voluntarily practiced by individuals. In New Jersey, the Health Officer has the legal authority to order social distancing measures. Since these measures will have a huge impact on our community, any action to start social distancing measures would be done in line with other local agencies such as cities, police departments and schools, as well as with state and federal partners.

Health experts have looked at past pandemics and found that the spread of the disease followed public gatherings such as parades, conferences, and church services. Since a pandemic cannot be stopped once it has started, social distancing measures will be used to slow the spread of the disease when pandemic influenza is first identified in our community.

Examples of **COMMUNITY BASED** social distancing measures that may occur during a pandemic include:

- ◆ Closing all public and private K-12 schools and facilities, as well as all childcare centers and public or private colleges, delaying classes, using web-based learning, canceling all large campus meetings and gatherings.
- ◆ Cancelling all indoor and outdoor events that attract large crowds, including sports events, concerts, parades and festivals.
- ◆ Closing community centers, malls, theaters, gyms, public or private libraries changing their operation, and postponing or suspending services at all places of worship.
- ◆ Mass transit systems may also be temporarily closed or only be used for necessary travel.
- ◆ Changing businesses company practices (flexible work shift plans, having employees telecommute, video conferencing instead of in person meetings, cancelling large meetings or conferences).

Examples of **PERSONAL** social distancing that individuals can use at home, work or in a crowd of any kind include:

- ◆ Keeping 4-6 feet away from people, especially if they are coughing or sneezing.
- ◆ Turning your head away from a person who coughs or sneezes in close quarters.
- ◆ Walking away if you are standing in line (at the bank, in the supermarket or pharmacy) if the service provider or another patron is coughing or sneezing.

Other public health measures to limit the spread of pandemic influenza include increased observation (surveillance) and reporting of the disease, monitoring people for symptoms, and quick diagnosis of the disease, providing treatment for those who become ill and preventative treatment for people who are in quarantine.

## **WHAT CAN I DO?**

It is always important to avoid close contact with people who are sick. Health officials recommend that if you get sick, stay home and away from others as much as possible. ***Do not go to work sick and do not send sick children to school or day care.*** This will be especially important during a pandemic.

Even though it may seem simple, practicing good hygiene habits such as washing and/or sanitizing your hands and practicing cough etiquette (coughing or sneezing into the crook of your arm, or covering your cough or sneeze with a tissue) will help stop or slow the spread of many diseases.

During a pandemic, it will be critical to understand what you may be asked or required to do. It will be important to follow any social distancing instructions or any other instructions or orders given by health officials. Stay informed and plan ahead. Complete the form for **EMERGENCY CONTACT AND RESOURCE INFORMATION on page 34** with local information you may need during a pandemic . Remember, while pandemic influenza is likely to be more serious than any other public health emergency, most people who become sick with pandemic influenza will survive.

## ISOLATING A SICK PERSON AT HOME

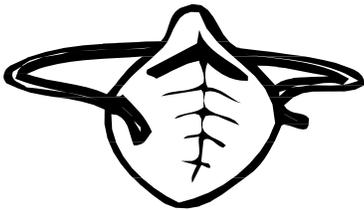
When an adult or child is sick with an infection that can spread to others, such as pandemic flu, they will need to be in isolation.



Pandemic influenza can be easily spread by being near someone who is sick and coughing or sneezing (within 4-6 feet), and by touching surfaces that the sick person has touched, coughed or sneezed on. By separating the sick person in your home, and putting the following guidelines in place, you can help limit the spread of pandemic influenza in your home.

Remember - ISOLATION means that the **sick person** is isolated (separated) from people who are not sick.

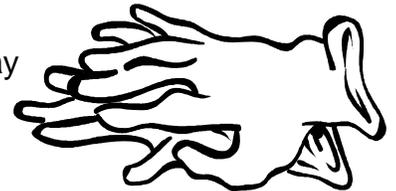
- ◆ Isolate the sick person(s) within your home. This means choosing a room (or area if you do not have a separate room) in your home where the sick person(s) can stay for the entire time they are sick. Ideally the room should have a window that opens to circulate air, as well as natural UV sunlight and a door that shuts. Keep the door closed or hang sheets to separate the sick person's area. If possible, this room would have a bathroom that is attached or nearby. It is best if those who are not sick use a separate bathroom. If this is not possible make sure that the bathroom is stocked with paper towels, hand soap dispenser, hand sanitizer and a disinfectant.
- ◆ Reduce person-to-person contact at home when one or more members of the family are sick. Sick persons should not leave their room during the time they can spread pandemic flu. This period of isolation is likely to last at least 5 days and may last up to 14 days. If you have to take the sick person out of their room or home, such as for a medical appointment, the sick person should wear a mask and cover their mouth and nose with tissues when coughing or sneezing. Always make sure the sick person washes their hands or uses hand sanitizer after coughing or sneezing, touching dirty tissues, and after removing their mask.
- ◆ Make one person in the household the main caregiver. The main caregiver should be the only person going in and out of the sick person's room or area. They bring the sick person their meals, drinks, and medicines. Other household members should have no contact, or very limited contact, with the sick person. Do not have visitors while the person is sick. The main caregiver will also closely watch the symptoms of influenza and call their medical care provider if symptoms change or get worse (**see When to Call for Medical Advice on pages 23-24**).
- ◆ Ask your physician about using a protective mask or respirator ahead of time. If you have a chronic heart or lung condition you may not be able to wear any type of respiratory protection because of the extra stress it puts on the heart and lungs.



- ◆ Wear a protective face mask (CDC recommends N-95 masks) and disposable gloves when you are in the sick person's room, or cleaning up body fluids from a sick person. Read the instructions that come with the mask that you purchase. You should stock up on N-95 masks ahead of time because there will most likely be a shortage of masks during a pandemic influenza.

- ◆ Certain practices related to taking care of a person infected with influenza at home can create potentially infectious droplet aerosols, such as giving nebulizer treatments to a child with asthma who also has influenza. This will require more vigilant use of a respirator or mask by the caregiver in the home. If possible, the sick person should wear a mask anytime the caregiver (or any well person) comes into the room.
- ◆ Sick persons should not leave the home unless they must seek additional medical care during the period when they are most likely to be infectious to others - when they have a fever, or for at least 5 days after they first became ill.
- ◆ If the sick person must leave the household to see a health care provider, attempt to contact the provider by phone or email so that appropriate advice can be given and isolation arrangements can be made at the health care site. When movement outside the home is necessary the patient should follow respiratory hygiene/cough etiquette and should wear a mask if available and can be tolerated by the patient.

- ◆ Change and throw away disposable masks and gloves after each use - they are not designed for multiple use. You must change and throw away masks when they become moist. After you've used these items, put them into a plastic bag, tie or knot the bag, and throw the bag away in a wastebasket or garbage can.



- ◆ Wash your hands after contact with the sick persons, after removing and throwing away mask or gloves, and after touching possible contaminated or dirty surfaces. Don't touch the "T" zone of your face – eyes, nose or mouth - without first washing your hands with soap and water or using a hand sanitizer. Wash your hands before and after going to the bathroom. If hands are visibly dirty, wash with soap and warm water. If hands are not visibly dirty, you can use an alcohol based hand sanitizer with at least 60% alcohol.
- ◆ Sick people should cover their nose and mouth with a tissue when sneezing or coughing. Tissues used by the sick person should be immediately thrown away in a plastic bag. **Never reuse a tissue.** The bag should be tied or knotted and thrown away with other household garbage. The sick person should then wash and sanitize their hands.
- ◆ Do not share personal items with the sick person, including eating utensils, cups, computer keyboards, hand held game devices, toys, phones, pens, clothes, towels, blankets, and bed sheets.
- ◆ Clean and disinfect common area. On a daily basis, clean surfaces and objects that are used or touched often, such as door knobs and handles, light switches, microwaves doors, phones, remote controls, toilet seats and handles, faucets, toys and other surfaces that are commonly touched around the home or workplace. Use a household product labeled as a disinfectant or a chlorine bleach disinfectant solution.

## MAKING YOUR OWN DISINFECTANT SOLUTION

If you do not have a store bought disinfectant, you can make your own disinfectant solution - **mix 1/4 cup of household bleach in 1 gallon of water**. A new batch of disinfectant solution must be mixed each day. Don't be misled by the "bleach" smell: the solution loses its effectiveness to destroy pathogens within 24 hours.

**DO NOT** mix bleach with any ammonia-containing cleaning products. The combination of chlorine in the bleach and ammonia releases a toxic gas, which breaks down to hydrochloric acid when it contacts the moisture in the mucus membranes of the nose and lungs. Hydrochloric acid is corrosive and can cause serious damage to the human body.

### CLEANING AND DISINFECTING GUIDELINES



**IT'S A FACT:** keeping hands clean and surface areas disinfected will help control the spread of flu (seasonal and pandemic), colds, and other commonly transmitted diseases.

Hand hygiene and cough etiquette are always important for infection control. But when you're around someone who has an infectious disease, there are additional steps that can be taken to avoid spreading the infection to family and friends. Remember to:

- ◆ Clean shared surface areas daily with an EPA-registered disinfectant according to the manufacturer's directions. Look for the EPA registration number on the product label - it should clearly state that the product is "EPA approved" for killing bacteria and viruses. Disinfect all shared non-disposable items and surface areas including door knobs, phones, keyboards, stair rails, light switches panel, counter tops, desks, floors and all high frequency human contact surfaces throughout the home.
- ◆ A list of EPA-registered products effective against bacteria and viruses can be found at <http://epa.gov/oppad001/chemregindex.htm>.
- ◆ Read the instruction label on cleaners for safe and appropriate use. Follow all manufacturer instructions on how to use each product including proper dilution, recommended ventilation, use of personnel protective equipment, and clean up after use.
- ◆ Environmental cleaners and disinfectants should **not** be used to treat skin wounds or infections.
- ◆ Teach family members how to properly use gloves (reusable and disposable). If gloves are reusable – wash the gloves at the end of cleaning while the gloves are still on, **then** remove gloves and immediately wash hands.
- ◆ Hands should be washed immediately after gloves are removed because the gloves are contaminated, even if they look clean. Wash hands between any glove changes.
- ◆ After all surfaces are cleaned and disinfected, clean all cleaning supplies and equipment including sponges, cleaning cloths, brooms, mops, brushes, buckets, cleaning supply bottles and containers. Although this is a labor intensive effort, it is essential step in breaking the chain of contamination.

Increase the frequency of cleaning and disinfecting of:

- ◆ Bathrooms - clean sink faucet, toilet, flush handles, walls surrounding the toilet, door handles, and both sides of bathroom doors.
- ◆ Rooms, tables and counter tops where people eat or prepare food.
- ◆ Rooms or areas that are used to isolate sick family members.
- ◆ Soiled linens and clothes with warm water and laundry detergent. If possible, dry them in a hot dryer.

AND ... remember to:

- ◆ Get fresh air into the room to reduce the amount of germs in the room by diluting the germ-contaminated air with clean air. Whenever possible, open windows to bring in fresh air. This should be done a few times a day, for 10 to 15 minutes each time, in all rooms of the house, but especially in the room where the sick person is placed.
- ◆ Wash all dishes, and cooking or eating utensils with warm water and dish soap. It is not necessary to separate dishes and eating utensils between sick and healthy persons as long as they are thoroughly washed. Everyone's dishes can be washed together by hand with warm water and dish soap, or in a standard dishwasher.
- ◆ Wash general laundry with detergent and warm water. Everyone's clothes can be washed together, but handle dirty laundry carefully so that you do not spread the virus to other parts of your house. Use disposable gloves to handle dirty laundry. Do not "hug" the laundry to yourself when picking up or moving dirty laundry. Spray the laundry basket with a disinfectant before putting clean laundry back in the basket. Make sure to wash your hands after handling dirty laundry.



*Graphic from Seattle & King County Health Department's "Health Matters"*

# IMPORTANT SKILLS FOR “AT HOME” SICK CARE

Since most adults and children sick with pandemic flu will be cared for by another person in the same household, it will be important for the caregiver to know how to do certain basic health-care tasks. This section gives the caregiver information about how to take a temperature, how to treat and reduce fevers, how to look for signs of dehydration, and how to rehydrate a sick household member, as well as information about when to call for medical advice.

## ABOUT FEVER



Fever is usually caused by an infection. Infections can be caused by a number of different kind of germs such as bacteria and viruses. Fever is the body’s normal response to an infection and plays a role in fighting the infection by stimulating the body’s immune system.

The body’s average temperature is 98.6 degrees, but it can change during the day. A mild temporary rise in temperature (100.4 to 101.3 degrees) can be caused by exercise, excessive clothing, a hot bath or hot weather. Warm food or drink can also raise body temperature.

The normal range for fever due to the flu is between 101 and 104 degrees, and even higher (up to 105 degrees) in children. The fever may last up to 5 days.

## TAKING A TEMPERATURE

Getting an accurate temperature can take some practice. Rectal temperatures are the most accurate of the kinds of temperatures you can take. Oral (by mouth) temperatures are also accurate if they are done properly. Taking a temperature at the armpit is the least accurate. For a child younger than 5 years old, a rectal temperature is best. For anyone older than 5 years old, it’s usually best to take an oral temperature.

Purchase a digital thermometer and safely dispose of older glass mercury thermometers. Most counties in New Jersey have a mercury thermometer collection program – call your local health department or county recycling center for more information.

### Digital Thermometer

A digital thermometer records temperatures with a heat sensor and runs on a button battery. Digital thermometers can measure a temperature in usually less than 30 seconds. The temperature is displayed in numbers on the screen.

### Stick-on Thermometer

Stick-on thermometers (for the forehead) are not very accurate but are easy to use but can be useful to initially indicate that there is an elevated temperature.

## HOW TO ... TAKE A TEMPERATURE CORRECTLY

### Taking a Rectal Temperature

Have the child lie down on your lap with stomach down. Apply some petroleum jelly to the end of the thermometer and to the opening of the anus. Insert the thermometer into the rectum about 1 inch, but do not force it in. Hold the child still while the thermometer is in and leave the thermometer in the child's rectum for **2 minutes**. If the rectal temperature is over 100.4 degrees the person has a fever.

### Taking an Oral Temperature

Make sure the sick person has not had a drink, cold or hot, within the last 10 minutes. Place the tip of the thermometer under the tongue and toward the back. Hold the thermometer in place with lips and fingers (not teeth) and breathe through the nose, keeping the mouth closed. Leave the thermometer inside the mouth for **3 minutes**. If the mouth cannot close because of a stuffy nose, try to clean the nose out before taking the temperature. If the oral temperature is over 99.5 degrees the person has a fever.

### Taking an Oral Temperature with a Digital Electronic Pacifier Thermometer

With a pacifier thermometer, have the child suck on the pacifier until it reaches a steady state and you hear a beep. This usually takes **3 to 4 minutes**. If the temperature is over 100 degrees the child has a fever.

## TREATING AND REDUCING A FEVER

### DRINK LOTS OF LIQUIDS

Encourage the sick person to drink extra liquids to replace the body fluids lost due sweating from a fever. Popsicles, iced drinks and ice cubes are also helpful.

### REMOVE EXTRA CLOTHING

Do not bundle up a person with a fever because it may cause the fever to increase. Clothing should be kept to a minimum to allow heat loss through the skin. If the sick adult or child feels cold or is shivering (the chills), give them a light blanket.

### USE FEVER-REDUCING MEDICINES



Medicines such as ibuprofen or acetaminophen work well for reducing fever. It is better to use these medicines only if the sick person is very uncomfortable or if the fever is very high and preventing the sick person from taking liquids. Fever-reducing medicines should lower the fever 2-3 degrees within two hours after taking an age appropriate dose.

Children and infants can be given either ibuprofen or acetaminophen. Ibuprofen is more effective for reducing fevers. Both medicines are available in both liquid and chewable forms. Give the correct dosage for the child's weight or age as listed on the bottle.

**DO NOT** give aspirin to any child under 21 years of age. It can cause Reyes syndrome, a very serious illness affecting all body organs, with the liver and brain suffering most seriously.

Use the measuring cap that comes with liquid medicines to give the right dose. Wash the measuring cap with soap and water after each use. Follow the instructions on the bottle or package - do not give medicine more often, or in larger doses, than the instructions recommend. Keep giving the medicine while the sick adult or child has a fever, and stop giving the medicine once the fever is done.

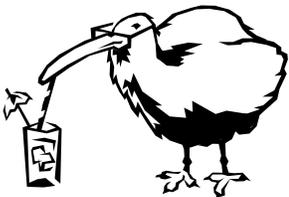
Do not mix or combine different acetaminophen and ibuprofen-containing medicines. This will not help reduce the fever, and it can cause accidental overdose poisoning. If you are already using a fever reducing medication, do not combine it with other medicines such as OTC cold and flu medicines that also contain acetaminophen or ibuprofen as an active ingredient. **READ THE LABEL** on all OTC medications to make sure that they don't have the same ingredients.

## SPONGE BATH

A sponge bath in lukewarm water can help a sick person feel better, **but it does not reduce a fever**. It is important to first give the sick adult or child a fever-reducing medicine. Wait at least 30 minutes after giving fever-reducing medicine to give a sponge bath so the medicine has a chance to start working.

If the fever does not come down after taking the medicine, then a sponge bath may help a sick person feel better, **but it still will not reduce their fever**. To give a sponge bath, fill the tub with about 2 inches of lukewarm water (85-90 degrees) and wet the sick adult or child's skin with a sponge. Do not add ice, ice water or rubbing alcohol to the water because these things do not help reduce fevers. Do not sponge alcohol directly onto skin because it will be absorbed into the body and does not reduce fever.

## DEHYDRATION



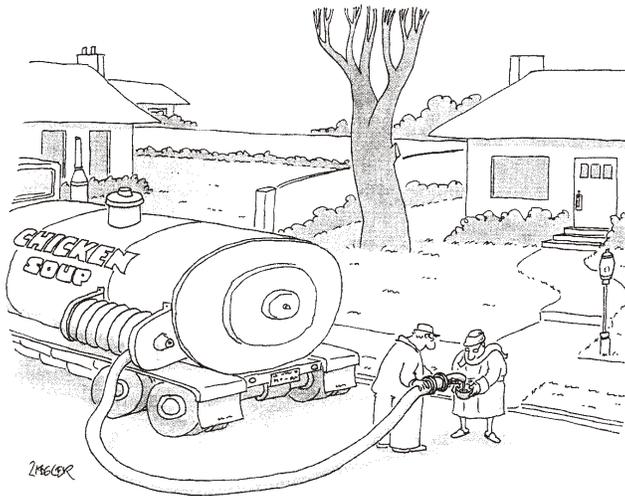
Dehydration is a common flu symptom and happens when the body loses too much water and the water is not replaced quickly enough. Body fluids are lost during fevers because of sweating and fast breathing. It is important that anyone who is sick drink lots of liquids to help them fight off and recover from the flu.

Give an adult or child who is sick plenty of liquids to drink, even if they do not feel thirsty. Water is always a good choice - see **DEHYDRATION PREVENTION & TREATMENT on page 18** for additional options. If the sick adult or child has mild diarrhea or is vomiting, give them liquids with electrolytes (to replace the loss of salt and sugar in the body) such as sports drinks like Gatorade, or Pedialyte for children.

If the sick adult or child has not urinated in more than 12 hours (6 hours for infants) and has symptoms such as dry mouth, dry eyes or little or no tears, and has an overall sick appearance, it is important to call for medical advice.

## **SIGNS OF DEHYDRATION INCLUDE:**

- ◆ Little or no urine or dark and concentrated urine
- ◆ Dry mouth with decreased saliva
- ◆ Dry eyes with little or no tear production
- ◆ Sunken eyes
- ◆ Weakness and/or tiredness
- ◆ Headache
- ◆ Loss of skin elasticity (doughy or loose skin)
- ◆ Dizziness when the sick adult or child stands or sits up and/or fainting



## **GIVING LIQUIDS**

It is important to begin giving liquids at the first sign of the flu to maintain hydration. Anyone who is sick may not feel thirsty or want to drink liquids, but it is important to continue to offer a variety of liquids.

Throughout the day, offer liquids to sick adults and children. If the sick adults or children don't want to drink, offer them small amounts of liquids frequently. For example, give sips or spoonfuls of liquids every 5 to 10 minutes over a four hour period.

Watch for an increase in urination, a lighter color of urine and overall improvement of flu symptoms. These are signs that the liquids are working.

## **IF THE SICK ADULT OR CHILD IS VOMITING**

- ◆ Do not give any liquids or food by mouth for at least an hour.
- ◆ Let the stomach rest and then give a clear liquid (like water) in small amounts. Start with one teaspoon to one tablespoon every 10 minutes.
- ◆ If they continue to vomit, let the stomach rest again for another hour, then try to give small but frequent amounts of clear liquids.
- ◆ When the sick adult or child has stopped vomiting, gradually increase the amount of liquids. If tolerated, give liquids with electrolytes (salt and sugar).
- ◆ After 6 to 8 hours of the adult or child taking clear liquids without vomiting, you can start to give them easy-to-digest solid foods such as saltine crackers, soup, mashed potatoes, or rice.

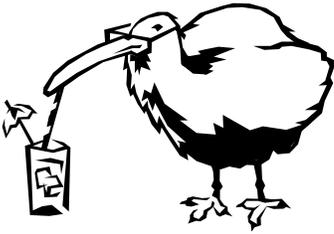
## DEHYDRATION PREVENTION AND TREATMENT

AGE GROUP	PREVENT DEHYDRATION (if eating)
<b>Infants</b> <b>Less than 1 year of age</b>	<ul style="list-style-type: none"> <li>• <b>Breast milk</b></li> <li>• <b>Standard infant formula</b></li> <li>• <b>Store bought oral rehydration solution - Pedialyte, Naturalyte, Infalyte, Rehydralyte</b></li> <li>• <b>Diluted juice (½ juice + ½ water)*</b></li> </ul>
<b>Toddlers</b> <b>1 to 3 years of age</b>	<ul style="list-style-type: none"> <li>• <b>Milk (if not vomiting)</b></li> <li>• <b>Store bought oral rehydration solution Pedialyte, Naturalyte, Infalyte, Rehydralyte</b></li> <li>• <b>Broth or soup</b></li> <li>• <b>Jell-O water (1 package per quart of water)</b></li> <li>• <b>Popsicles (regular or electrolyte)</b></li> <li>• <b>Diluted Gatorade</b></li> <li>• <b>Kool-Aid</b></li> <li>• <b>Juice*</b></li> </ul>
<b>Children over 3 years</b> <b>Teens and adults</b>	<ul style="list-style-type: none"> <li>• <b>Water</b></li> <li>• <b>Broth or soup</b></li> <li>• <b>Jell-O water (1 package per quart of water)</b></li> <li>• <b>Popsicles (regular or electrolyte)</b></li> <li>• <b>Gatorade</b></li> <li>• <b>Kool-Aid</b></li> <li>• <b>Juice</b></li> </ul>

\* Apple, pear and cherry juices are a concentrated source of sorbitol, a type of sugar that draws fluid into the digestive tract and causes diarrhea, making dehydration worse. If your child enjoys fruit juice and is dehydrated and/or having diarrhea, dilute the juice with an equal of water.

### LIQUIDS TO AVOID

Since alcohol and caffeinated drinks (coffee, teas, caffeinated sodas, etc.) can contribute to dehydration, limit the amount a sick adult or child drinks. Offer more acceptable alternatives such as diluted juice, herbal tea, decaffeinated coffee, ginger ale or Sprite.



## **HOMEMADE REHYDRATION SOLUTION**

You can make an inexpensive homemade solution as an alternative for store bought rehydration products or sports drinks like Gatorade or Powerade for adults, teens and children over age 3 years, or a pediatric electrolyte solution specially formulated for babies and toddlers.

Consult your pediatrician before giving either of these homemade rehydration solutions to a baby less than 1 year of age.

### **ORAL REHYDRATION SOLUTION**

#### **INGREDIENTS:**

**4 cups clean water**

**2 tablespoons sugar**

**1 teaspoon salt**

**Mix thoroughly as you heat the solution, but do not boil as this will concentrate the ingredients. Keep the solution refrigerated.**

### **CEREAL-BASED**

### **ORAL REHYDRATION SOLUTION**

#### **INGREDIENTS:**

**2 cups clean water**

**1 cup instant baby rice cereal**

**1 teaspoon salt**

**1 teaspoon sugar**

**Mix thoroughly as you heat the solution, but do not boil as this will concentrate the ingredients. Cool before adding the sugar and salt. Keep the solution refrigerated.**

## HOW TO MONITOR BREATHING



It is important to monitor a patient's breathing, since labored breathing may be a sign of fluid collecting in the lungs, pneumonia, or another pulmonary (lung) complication. While home care during the pandemic will be encouraged, fast or difficult breathing requires professional medical attention.

For adults and older children watch the chest rise and fall. Use a watch or clock and count the number of times the chest rises (or expands) in one minute (60 seconds). Write this number down so you do not forget.

Children and infants use their stomachs to breathe - uncover the child so you can easily see the stomach. Count the number of times the stomach rises (expands). You may want to count for 30 seconds (half a minute) using a watch or clock. If you counted for 30 seconds you need to multiple by 2 (double the number) to get the number of breaths per minute.

Compare the number you counted to the chart below. If your child's breathing rate is the same or over the number in the chart, it is a sign that they are having trouble breathing and you should seek medical attention.

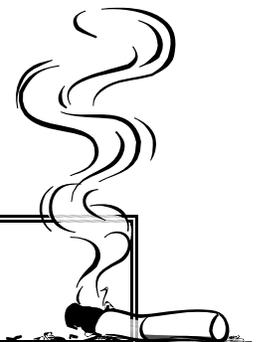
### DEFINITION OF "FAST BREATHING"

Age	Number of Breaths per Minute
Less than 2 months	Over 60 breaths/minute
2-12 months	Over 50 breaths/minute
Over 12 months - 5 years	Over 40 breaths/minute
Over 5 years	Over 30 breaths/minute

In children under 5 years of age, signs of trouble breathing include:

- ◆ Grunting with breathing
- ◆ "Stridor" (whistling, squeaking, or wheezing noise) with breathing
- ◆ Flaring nostrils with each breath
- ◆ Chest rising opposite to the stomach rising ("paroxysmal breathing")

Smoking should not be allowed in the home,  
especially while family and household members are sick.





## WHEN TO CALL FOR MEDICAL ADVICE

Keep a home sick care log for each person that becomes ill (use **SYMPTOM AND CARE LOG FOR “AT HOME CARE”** on page 33). Write down the date, time, level of fever, symptom, medicines given and dosage. Keep an eye on changes in symptoms or new symptoms. Make a new entry at least twice a day or when symptoms change. This information will be very helpful if you need to call your medical provider. ***Do not rush to the hospital or doctor’s office for basic care.***

People with a chronic disease or condition and women who are pregnant should stay in close contact with their medical provider during a pandemic. In addition, a sick person or their caregiver should seek medical advice in the following situations during a pandemic:

- ◆ Infants under three (3) months with a rectal temperature of 100.4 degrees or higher
- ◆ Fever in persons not responding to fever medicines within six (6) hours
- ◆ Fever in persons with conditions that affect their immune system (HIV/AIDS, leukemia, cancer patients on chemotherapy, etc.)
- ◆ Fever lasts more than three (3) days and sick adult or child has difficulty breathing
- ◆ Fever that went away for one (1) or two (2) days and then comes back
- ◆ Fever lasts more than five (5) days
- ◆ Persons with existing medical condition (heart or lung disease, HIV/AIDS, cancer, etc.) and their overall condition is getting worse
- ◆ Shows signs of severe dehydration and/or sick adult or child has stopped taking liquids
- ◆ Shows signs of respiratory problems such as chest pain, difficulty breathing or wheezing
- ◆ Has a cough that produces blood or has a barky, raspy (“croupy”) cough
- ◆ Has seizure(s)

Look for these additional signs and symptoms in children:

- ◆ Signs of respiratory problems such as grunting, nasal flaring and chest wall retractions
- ◆ Severe ear pain or severe muscle pain
- ◆ Change in mental status or irritability
- ◆ Vomiting for more than an hour

**CALL 911** if you cannot reach your medical provider and the sick adult or child has a problem listed above, or if the sick adult or child has any of the following symptoms:

- ◆ Shortness of breath, breathing rapidly at rest, or chest pain with each breath
- ◆ Skin is dusky or bluish in color
- ◆ Very stiff neck
- ◆ Disorientation (“out of it”)
- ◆ Extreme dizziness or weakness - standing is difficult (in a person who was able to walk before the flu)
- ◆ No urination in 12 or more hours
- ◆ Unable to move an arm or leg
- ◆ Has seizure(s)

## **IF SOMEONE HAS A CHRONIC DISEASE or CONDITION**

People with a chronic disease or condition are at a higher risk for medical complications like pneumonia when they get influenza. Chronic diseases and conditions include asthma or other lung diseases, cardiovascular disease, diabetes, kidney failure, severe neuromuscular disease, and immuno-compromising conditions (HIV/AIDS, sickle cell disease, organ transplant) or immuno-compromising drugs or treatments (long term steroids, certain cancer drugs, radiation therapy).

It is important to monitor a sick adult or child with a chronic disease or condition very closely during a pandemic. Ask their health care provider(s) **ahead of time** if there are special precautions they should take during a pandemic. Women who are pregnant should keep in regular contact with their prenatal care provider during a pandemic.

It is currently recommended that people with chronic illnesses should be vaccinated for pneumonia. The pneumococcal polysaccharide vaccine (PPV) protects against 23 types of pneumococcal bacteria. The vaccine is well tolerated by both children and adults. Most healthy adults who get the vaccine develop protection to all or most types of bacteria in the PPV within 2 to 3 weeks of getting the shot.

People with chronic diseases or special needs should pre-register with their local Office of Emergency Management (OEM) and/or their local Health Department.

**REMEMBER:** while medical complications are most common in people with chronic diseases or conditions, they can happen with anyone who is sick with influenza.

## Emergency Preparedness Shopping List

Prepare your home for an influenza pandemic (or any serious emergency) in advance of any real threat. Shopping all at once for emergency supplies can be expensive and time consuming. Reduce stress by budgeting your purchases and avoiding long lines or empty shelves during an emergency.

### FOOD

- (2-3) Gallon drinking water per person
- Sandwich bread (freeze until needed)
- (3) Boxes of energy snacks - granola bars, raisins, nuts
- (5) Cans of ready-to-eat soup and chili
- (4) Boxes of dry cereals and crackers
- Canned or powdered milk, cans of juice
- (4) Cans of fruit, vegetables, fish and meat
- Jars of peanut butter & jelly
- Instant coffee, tea or powdered drinks

### STORAGE

- Boxes of plastic bags - sandwich & garbage
- Plastic wrap and aluminum foil
- Coolers (keep a supply of ice in freezer)
- Assorted plastic containers with lids

### HEALTH & FIRST AID

- (100) Protective face masks labeled N-95
- Boxes of latex (or vinyl) gloves
- Alcohol (60%) based hand sanitizers (wipes or gel) and a disinfectant spray
- Antibiotic & cortisone creams/ointments
- Toothpaste/toothbrushes, soap, shampoo
- First Aid Kit and Health Care books

### MEDICATIONS

- Extra supply of prescription medications
- A paper copy of your prescriptions
- Aspirin, ibuprofen or acetaminophen
- Anti-diarrhea medicine, rehydration fluids
- Thermometer
- Cough syrup, decongestant, antihistamine

### CLEANING SUPPLIES & PAPER GOODS

- Manual can opener, matches, candles
- Disposable utensils, cups, plates
- Multi-packs of paper towels, toilet paper and tissues
- Liquid dish soap, detergent & bleach
- Extra sponges and rags
- Bleach: 1/4 cup of bleach + one gallon of water is an all-purpose disinfectant

### COMMON TOOLS

- Crank operated flashlights, cell phone chargers, radio and lanterns
- Masking, duct and packing tapes
- Utility knife with extra blades, scissors
- Tools (screwdrivers, pliers, hammer)

### SMART SUPPLIES

- Video, digital or disposable camera
- Assorted safety pins, sewing kit items
- Several gallons of water to flush toilets
- Fire extinguisher(s)
- Portable (camping style) stove or grill
- An extra gas grill tank

### SPECIAL ITEMS

- Foods or medical supplies for family members with special needs
- Extra hearing aid batteries
- Spare glasses, contact lenses, solution
- Pet food & water, leash, vaccination papers
- Baby food, formula, diapers, wipes
- Keep important documents in a portable container
- Put aside money to cover a few weeks of finances

- ✓ Create a Family Action Plan. Become familiar with the disaster plans for your children's schools and daycare.
- ✓ Compile a family contact directory (with home, work and cell telephone numbers) with information for important people and services. Establish emergency contacts outside of your immediate family.
- ✓ Make arrangements for family members with special needs.



# KEEP YOUR IMMUNE SYSTEM STRONG!

Everyone's immune system is different. Some people never seem to get infections, while others seem to be sick all the time. While some people are fortunate to have a naturally strong immune system, there are things you can do to help keep your immune system strong:

1

**EAT FOODS THAT BOOST YOUR IMMUNE SYSTEM.** Foods rich in “antioxidants” like vitamins C and E, carotenoids (building blocks of vitamin A), and omega-3 fatty acids boost the immune system’s fighting power. Choose deeply colored produce like peppers, broccoli, carrots, leafy green veggies, tomatoes, and citrus fruits; nuts and seeds; fatty fish like salmon, tuna or sardines; whole grain versions of classic white bread, pasta and rice.

2

**STAY HYDRATED.** Not only does it help flush toxins from the body, but staying well hydrated keeps the mucus membranes in the nose and respiratory system moist and more resistant to germs, and helps thin excess mucus if you do get sick. Thirst is not an indicator of dehydration. Drink plenty of liquid each day: water, juice, milk, or soup - whole fruits and vegetables count too!

3

**EXERCISE.** Regular, moderate exercise, like brisk walking, can boost the immune system’s antibody and T cell responses. Make sure everyone in the family gets at least 30 minutes of moderate exercise on most days of the week. Can’t find 30 minutes? Ten minutes of activity at a time is fine - just make sure those 10 minute sessions add up to a total of 30 minutes by the end of the day.

4

**GET ENOUGH REST.** Chronic lack of sleep affects your whole body, including the immune system. Children need 9-11 hours, adolescents need about 9 hours, and adults need 7-9 hours of sleep a night. Full schedules make it easy to be sleep deprived, so establish a healthy bedtime for everyone in the family.

5

**CONTROL STRESS.** While some situations are a real crisis, it’s the day-to-day events that are often the most overwhelming and stressful. Everyone has daily stress ... the key is how you deal with it!

- ✧ Do a reality check ... and then don’t sweat the small stuff.
- ✧ Set limits and priorities. Be willing to delegate tasks when others offer their help.
- ✧ Take a time out. Take 15 minutes each day for yourself.
- ✧ Create a support system of friends, family, coworkers, community group or religious affiliation.
- ✧ Laugh! Depending on your perspective, many of the most stressful day-to-day events can also be the most comical.

6

**WASH YOUR HANDS ...** after coughing, sneezing or blowing your nose, using the bathroom, touching pets, playing outdoors, when caring for someone who’s sick, and before preparing or eating food. Use plenty of soap and water - remember to lather up for a full 20 seconds. You can also use a hand sanitizer that’s at least 60% alcohol.

**KEEP IMMUNIZATIONS UP-TO-DATE.** Vaccines help your immune system identify a disease's presence - and destroy it - before it has a chance to multiply inside your body and cause illness. Check with your health care provider about an annual flu shot, and whether anyone (children and adults) in your family is due for a "booster" shot for other vaccinations. Ask whether you are a candidate for the pneumonia vaccine.

## ABOUT YOUR IMMUNE SYSTEM ...

The **IMMUNE SYSTEM** is the body's defense against foreign organisms and substances. It is made up of a network of chemicals, cells, tissues, and organs that work together to protect the body. The cells in the immune system have the ability to recognize something as either "self" or "invader," and try to get rid of anything that is an invader.

There are three ways to have immunity against a disease: **INNATE** (immunity you were born with); **ACQUIRED** (you become immune as a result of actually having and recovering from a disease, or receiving a vaccine); or **SHARED** (you aren't immune, but most of the people where you live, work or go to school are immune, usually because of widespread immunization).

**ANTIGENS** (pathogens) are foreign substances that invade the body. When an antigen is detected, several types of cells work together to recognize and respond to it. Some of the cells are **ANTIBODIES**, the body's intelligence system that seeks out the invaders and sends defenses to lock onto them. Others are **T CELLS**, acting like soldiers that destroy the invaders that the antibodies have identified.



**VACCINES** provide immunity by teaching your immune system to recognize, and destroy bacteria and viruses (pathogens) before they can cause the illness. They cannot "give" you the disease since they do not expose you to a true pathogen - some vaccines are weakened forms of a pathogen (measles and chickenpox), a killed pathogen (polio) or just pieces of it (flu and pneumonia). Immunization provides protection without the risk associated with the symptoms and complications of getting the actual disease.

This complex process provides your body with protection called **IMMUNITY**.

# STRESS & MENTAL HEALTH DURING AN EMERGENCY



## Understanding and Coping with Anxiety Related to Public Health Emergencies

In the face of uncertainty about health risks, it is important to keep the extent of the danger in perspective, become informed and prepared for possible emergencies ahead of time.

Keeping yourself informed will help you manage the fear of the unknown about public health risks. Rely on credible sources of information:

- ◆ Centers for Disease Control - [www.cdc.gov](http://www.cdc.gov)
- ◆ NJ Department of Health & Senior Services - [www.state.nj.us/health](http://www.state.nj.us/health)
- ◆ Your local Health Department

Try not to let media reports distress you - they may not be accurate and are usually designed to be alarming. Keeping yourself informed with timely, accurate information can alleviate some of the fear of the unknown.

It doesn't matter if it is a flu pandemic, flood, or tornado ... if your community is experiencing or has been affected by a disastrous situation, you're probably trying to make sense of what happened. These events can create a tremendous amount of stress and anxiety for anyone who is directly or indirectly affected. While everyone reacts in their own way, during an emergency as well as the days and weeks following it, you may begin to have some of these common reactions:

<b>Physical Reactions</b>	<b>Emotional Reactions</b>	<b>Cognitive (thinking) Reactions</b>
◆ Increased stress	◆ Panic	◆ Impaired concentration
◆ Headaches	◆ Disbelief or shock	◆ Difficulty making decisions
◆ Fatigue	◆ Distrust, fear and anxiety about the future	◆ Apathy and emotional numbing
◆ Elevated pulse	◆ Anger or irritability	◆ Problems with work or school
◆ Elevated blood pressure	◆ Sadness or depression	◆ Memory problems
◆ Changes in appetite	◆ Blame	◆ Obsessive thoughts
◆ Unusual aches or pains	◆ Crying easily	◆ Increased use of drugs and/or alcohol
◆ Sleeping poorly	◆ Feeling overwhelmed	◆ Preoccupation with health issues

## STAY CONNECTED

The fear associated with a public health emergency can push people apart. Families and communities that are usually close and connected may respond to fears about contamination and contagious disease by isolating themselves or avoiding social contact. If isolation does become necessary, local public health officials will tell you how to protect yourself and your loved ones. Until then, it is important to stay connected at home, at work and in the community.

Often the best resource for dealing with the emotional aspect of emergencies is found in each other. If you are anxious about a health risk, talk to someone you love or trust. This may be a family member, friend, clergy member or teacher. Don't keep your fears to yourself.

If you notice that a loved one, friend or co-worker's behavior has substantially changed, reach out and ask them how they are doing. Make some time to talk when it is convenient for both of you, and follow up later to see how they are doing. Watching out for each other shows that you care and can be comforting to both of you.

## TIPS FOR COPING

It is "normal" to have difficulty managing your feelings during and after major traumatic events. Unfortunately, not dealing with stress can be harmful to your mental and physical health. Here are some tips for coping:

- ◆ **Talk about it.** Talking with others about the event can relieve stress and help you realize that others share your feelings. Spend time with friends and family. If your family lives outside the area, or you have been asked to practice social isolation for a period of time, stay in touch by phone or email. If you have children, encourage them to share their concerns and feelings about the disaster with you.
- ◆ **Take care of yourself.** Get plenty of rest and exercise, and eat properly. If you smoke or drink coffee, try to limit your intake, since nicotine and caffeine can also add to your stress.
- ◆ **Limit exposure to images of the emergency or disaster.** Watching or reading news about the event over and over again will only increase your stress.
- ◆ **Find time for activities you enjoy.** Read a book, go for a walk, exercise, watch a light or funny movie – or something else you find enjoyable. These healthy activities can help give your mind a "time off" from the disaster.
- ◆ **Take one thing at a time.** For people under stress, an ordinary workload can some-times seem unbearable. Pick one urgent task and work on it. Once you accomplish that task, choose the next one. "Checking off" tasks will give you a sense of accomplishment and make things feel less overwhelming.
- ◆ **Do something positive.** Give blood, prepare "care packages" for people who have lost relatives, their homes or jobs, or volunteer in a community-based relief effort. Helping other people can give you a sense of purpose in a situation that feels "out of control".

- ◆ **Avoid drugs and excessive drinking.** Drugs and alcohol may temporarily seem to reduce stress but in the long run, they often create additional problems that compound the stress you were already feeling.
- ◆ **Ask for help when you need it.** If your feelings of stress, anxiety, fear or anger do not go away, or are so intense that they interfere with your ability to function in daily life, talk with a trusted relative, friend, doctor or spiritual advisor about getting help. Make an appointment with a mental health professional to discuss how you are coping with the recent events. Asking for help is never a sign of weakness.
- ◆ **Respond to a mental health crisis immediately.** If you or someone that you know is having an intense emotional reaction that does not subside over the period of a few days, seek the assistance of a medical or mental health professional.
- ◆ Contact these organizations for 24 hour mental health crisis phone support services and referrals to mental health information and services:



New Jersey Mental Health Cares  
 (866) 202-HELP (4357)  
[www.njmentalhealthcares.org](http://www.njmentalhealthcares.org)

Mental Health America  
 (800) 273-TALK (273-8255)  
[www.mentalhealthamerica.net](http://www.mentalhealthamerica.net)

Somerset County Emergency Mental Health Services, 24 hour crisis services, provided at: Somerset Medical Center (908) 526-4100.

## HELPING CHILDREN DEAL WITH STRESS AND ANXIETY

Like adults, children experience the same feelings of helplessness and lack of control that disaster related stress can bring about. Unlike adults, children have limited life experience to help them place their current situation into perspective.

Each child responds differently to adversity, depending on his or her understanding and maturity. It is easy to understand how a disaster can create a great deal of anxiety in children of all ages since they interpret the situation as a personal danger to themselves and those they care about.

Whatever the child's age or relationship to the circumstances caused by disaster, it's important that you be honest about the consequences for your family. Acknowledge their feelings as real and valid, and encourage him or her to talk about those feelings.

## QUICK TIPS FOR PARENTS



Children sense the anxiety and tension in adults around them. They need comforting and frequent reassurance that they are safe. Be honest and open about the disaster. Encourage children to express their feelings through talking, drawing or playing. Try to maintain your daily routines as much as possible.

## **PRESCHOOL CHILDREN**

Behavior such as bed wetting, thumb sucking, baby talk, or a fear of sleeping alone may intensify in some younger children, or reappear in children who had previously outgrown them. They may complain of very real stomach cramps or headaches, and be reluctant to go to school or child care. These children are not "being bad" ... they're just afraid.

- ◆ Reassure young children that they're safe. Provide extra comfort and contact by discussing their fears at night, telephoning during the day, and with extra physical comforting.
- ◆ Get a better understanding of your child's feelings. Discuss the disaster with them and find out each child's particular fears and concerns. Answer all questions they may ask and provide them loving comfort and care. You can work to structure children's play so that it remains constructive, serving as an outlet for them to express worry, fear or anger.

## **GRADE SCHOOL CHILDREN**

Children this age may ask many questions about the disaster, and it's important that you try to answer them in clear and simple language. If a child is concerned about a parent who is distressed, acknowledge their feelings and offer reassurance that the adults are doing everything they can to keep them safe. Telling children not to worry may just make them worry more.

- ◆ False reassurance does not help this age group. Don't say the disaster will never affect your family - children will know this isn't true. Instead, say "You're safe now and I'll always try to protect you" or "Adults are working very hard to make things safe". Children's fears often get worse around bedtime, so you might want to stay until the child falls asleep to make him/her feel protected.
- ◆ Monitor - and limit - children's media viewing. Images of any disaster or crisis are extremely frightening to children. A good way to do this without calling attention to your own concern is to regularly schedule an activity - story reading, drawing, movies, or letter writing, for example - during news shows.
- ◆ As with younger children, encourage them to express themselves through play or drawing. Allowing them to do so, and then talking about it, gives you the chance to "re-tell" the ending of the game or the story they have expressed in pictures with an emphasis on personal safety.
- ◆ Part of an open and honest discussion of the disaster is the willingness to say "I don't know" to a child's question. Explain to your child that disasters are extremely rare, and they cause feelings that even adults have trouble dealing with ... yet adults will always work very hard to keep children safe and secure.

## **ADOLESCENTS**

Encourage these youth to work out their concerns about the disaster. Adolescents may try to downplay or minimize their worries. Talk about these issues, keeping the lines of communication open and remaining honest about the financial, physical and emotional impact of the disaster on your family. Adolescents may express their fear through acting out or regressing to younger habits.

- ◆ Children with existing emotional problems such as depression may require careful supervision and additional support.
- ◆ Monitor their media exposure to the event and information they receive on the Internet.
- ◆ Adolescents may turn to their friends for support. Encourage them to get together with adult friends and family members and discuss the event to include a different and more balanced perspective.

# SYMPTOM AND CARE LOG FOR “AT HOME” CARE

*(Copy, fill out, and bring log sheets to health care provider visits)*

Name of patient \_\_\_\_\_

Name of health care provider \_\_\_\_\_

Phone number of health care provider \_\_\_\_\_

Date	Time	Observations*	Temperature	Medications

\* Examples include: how the person looks (pale, sweaty or clammy); what the person is doing (sleeping a lot, restless or agitated); fluids or foods taken since the last observation; if the person has been using the bathroom (urinating).



# EMERGENCY CONTACT AND RESOURCE INFORMATION



Somerville-Raritan-Manville Health Department

Phone: (908) 725-2300 Website: www.somervillenj.org

Local Cable Station 22 Local Radio Station WNJT 88.1 FM

## School district

Main Number \_\_\_\_\_

Main Website \_\_\_\_\_

## Mental health agency (\_\_\_\_\_)

Phone \_\_\_\_\_ Website \_\_\_\_\_

Doctor (\_\_\_\_\_) Phone \_\_\_\_\_

Doctor (\_\_\_\_\_) Phone \_\_\_\_\_

## Supermarket (\_\_\_\_\_)

Phone \_\_\_\_\_ Website \_\_\_\_\_

## Pharmacy (\_\_\_\_\_)

Phone \_\_\_\_\_ Website \_\_\_\_\_

# "FILE OF LIFE" MEDICAL INFORMATION SUMMARY

Name \_\_\_\_\_ Sex \_\_\_\_\_ Age \_\_\_\_\_

Social Security # \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Date of Birth \_\_\_\_\_

Physician's Name \_\_\_\_\_ Phone \_\_\_\_\_

Preferred Hospital \_\_\_\_\_

## MEDICAL COVERAGE:

Insurance Name \_\_\_\_\_ Policy # \_\_\_\_\_

Insurance Phone Number \_\_\_\_\_ Medicare # \_\_\_\_\_

## IN CASE OF EMERGENCY NOTIFY:

Name \_\_\_\_\_ Relation \_\_\_\_\_

Address \_\_\_\_\_

Phone # (home) \_\_\_\_\_ Phone # (work) \_\_\_\_\_

## HEALTH INFORMATION:

Blood Type \_\_\_\_\_

I am being treated for the following conditions:

Heart Disease \_\_\_\_\_ High Blood Pressure \_\_\_\_\_ Pacemaker \_\_\_\_\_

Cancer \_\_\_\_\_ Epilepsy \_\_\_\_\_ Asthma \_\_\_\_\_

Diabetes \_\_\_\_\_ Depression \_\_\_\_\_ Glaucoma \_\_\_\_\_

OTHER (specify): \_\_\_\_\_

Any allergies: \_\_\_\_\_ Allergy to medications: \_\_\_\_\_

Current medications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Special information: \_\_\_\_\_

Date completed \_\_\_\_\_