

## F. TAKING CARE OF THE INFLUENZA PATIENT AT HOME

More than 440 acute and specialty hospitals exist in Texas. Acute care hospitals, according to most recent data available, provide 2.6 beds per 1,000 people which means that if all beds in all hospitals were dedicated to influenza patients during a Texas-wide outbreak, 59,800 patients could receive hospital-based care at any given time. However, experts estimate that 5 to 10 million Texans will become infected and 200,000 to 400,000 will need hospitalization. It is obvious that there are not enough beds for the severely ill, much less for those without complications. Local communities are considering alternatives to provide care for those who need professional care. Be aware of current options for diagnosis, treatment, and care in your community. Be sure to follow the news in newspapers, on television, or on your battery-powered radio. If you or a family member develops symptoms of influenza, call your doctor immediately if possible. Your doctor's office staff may ask you questions over the phone to help them determine the best thing for you to do. Early in the outbreak, you might be asked to visit the office. Doctors have rapid tests to identify the flu virus, but the tests can't distinguish between avian flu and other influenza A viruses. For that reason, specimens from anyone with a suspected case of bird flu would be sent to a DSHS laboratory for identification. Later in the outbreak your doctor may recommend you go to another location.

Hospital emergency rooms may become inundated with sick patients early in the pandemic. Alternate options may be available such as "fever clinics" where persons with influenza-like illness can be examined and treated without exposing other patients being seen for other reasons, "influenza hospitals" specializing in influenza care, or "alternate treatment centers" set up especially for patients not sick enough to require hospital care. However, most of us will need to care for ourselves and our families at home. If you or a family member have influenza-like symptoms and are visiting your doctor, clinic, free-standing emergency center, hospital emergency room or any other health care provider:

- Immediately upon arrival, tell the reception staff that you think you have the flu.
- You may be asked to wear a mask and/or sit in a separate area to protect others from getting sick.

### **Supplies needed for home care**

- A thermometer appropriate for the age of the child and an adult thermometer.
- Plenty of fluids: water, fruit juice, infant electrolyte replacement drink
- Simple foods that family members like and will eat when sick: broth, chicken noodle soup, macaroni and cheese, jello, etc.

**. Signs and symptoms of influenza**

<b>Symptoms</b>	<b>Cold</b>	<b>Flu</b>
Fever	rare	characteristic, high (102-104 F); lasts 3-4 days
headache	rare	Prominent
general aches, pains	slight	usual; often severe
fatigue, weakness	quite mild	Can last up to 2-3 weeks
extreme exhaustion	never	early and prominent
stuffy nose	common	Sometimes
sneezing	usual	Sometimes
Sore throat	common	Sometimes
chest discomfort, cough	mild to moderate; hacking cough	common; can become severe; may result in pneumonia

**Information to have before you call your doctor**

**Reporting adult symptoms**

- Report specific symptoms (see above) – when they began and how severe.
- Fever – **write down:** the number and when and how it was taken
- Other symptoms not listed above
- Difficulty breathing
- Amount of food and fluid intake
- Sleep pattern change
- Signs and symptoms of potential complications (see 4 below)

**Reporting children’s symptoms**

Determining and reporting symptoms in children can be a challenge because infants and children can’t analyze how they are feeling and tell you. Symptoms that are specific and physical are easy because they are observable or measurable. You need to look for changes in patterns from normal and report those.

- **Fever: write down:** the number and when and how it was taken

- **Mood:** Is the child crying more than usual? Does the child seem tired or listless? Does the child appear to be irritable or over stimulated?
- **Sleep:** Note the time and duration of regular sleep and naps for the last 12 hours or since the onset of illness.
- **Eating:** List all food (solids and liquids) the child has consumed with amounts and times. Note if the child was unable to keep any of these foods down.
- **Urination:** Changes in amount or frequency.
- **Medicines:** Keep Track of an medicines your child is regularly taking or any you have given as a result of this illness. Know the dosage and times given.

### Prescribed Medications

- If available, doctors may prescribe an antiviral medication that may reduce the length and severity of disease and may also prevent complications such as pneumonia. It is important to remember that **antivirals must be started with 48 hours of first sign of symptoms** to have any affect on the illness.
- Antibiotics have no effect on viruses and **will not be prescribed for flu**. They may be prescribed for flu complications such as pneumonia.

### Adult care

Treatment for adults at home

- Stay home and rest, especially while you have a fever.
- Stop smoking and avoid secondhand smoke, which can make cold symptoms worse.
- Drink plenty of fluids like water, hot tea with lemon, and fruit juices. Fluids help loosen mucus. Fluids are also important if you have a fever because fever can dry up your body's fluids, which can lead to dehydration.
- Don't drink alcohol.
- Gargle with warm salt water a few times a day to relieve a sore throat if you have one. Throat sprays or lozenges may also help relieve the pain.
- Use saline (salt water) nose drops to help loosen mucus and moisten the tender skin in your nose if nasal congestion is a problem. You may also take over-the-counter medications. Breathe moist air from a hot shower or from a sink filled with hot water to help clear a stuffy nose.

- If the skin around your nose and lips becomes sore from repeated rubbing with tissues, apply a bit of petroleum jelly to the area. Disposable tissues containing lotion also may help.
- Elevating your head at night with an extra pillow. This may help you rest if coughing keeps you awake.
- Take over-the-counter pain relievers for the aches and pains (see 8 below).
- How about chicken soup or beef bouillon? Mother was right after all. Warm soup may soothe a sore throat, unstuff a clogged nose, hydrate a thirsty body, and soup when you are sick is good TLC which helps psychologically.

### **Adult Complications**

Most people with pandemic influenza have signs and symptoms of conventional influenza. Some also develop life-threatening complications such as viral pneumonia and acute respiratory distress syndrome, which causes the air sacs in your lungs to fill with fluid rather than with air, leading to severe breathing difficulties.

If you are at high risk from complications of the flu, you should consult your health-care provider if you develop flu-like symptoms. Those at high risk for complications include people 65 years or older, people with chronic medical conditions, pregnant women and children under 2 years of age. Your doctor may recommend use of an antiviral medication to help treat the flu.

### **There are some “emergency warning signs” that require urgent medical attention.**

Difficult or painful breathing

Shortness of breath at rest or when doing very little

Wheezing

Coughing up bloody sputum

Pain or pressure in the chest or abdomen

Fever for 3-4 days without improvement or improvement then sudden high fever and return of symptoms

Sudden dizziness

Extreme drowsiness or difficulty waking

Confusion or disorientation

New inability to function, if an independent elder

Severe earache

Severe or persistent vomiting, if an elder

Seek medical care immediately if you or an adult you are caring for is experiencing any of the signs above. Call your doctor first for instructions. If your doctor is unavailable, go to an emergency room.

### **Adult caregivers of children under two years old**

If you get flu-like symptoms including a fever, headache, tiredness, cough, sore throat, runny or stuffy nose, or body aches, and you have another adult available who is not ill, ask that person to care for the child.

If you get flu-like symptoms, take the following precautions for the first 7 days of your illness (beginning the first day you notice symptoms):

Check with your health-care provider. If you have influenza, your doctor may prescribe antiviral medications for you if available.

Try to minimize contact with your child as much as possible. Cover your nose and mouth with a tissue when sneezing or coughing, and put your used tissue in a wastebasket.

Wash your hands or use an alcohol-based hand rub frequently and as soon as possible if you have sneezed or coughed on your hands.

Before engaging in any activity within 3 feet of your child (including feeding, changing, rocking, reading to your child), put on a surgical mask (available in most drugstores) and thoroughly wash and dry your hands. Do not remove your surgical mask until you are done and you have put your child down.

Observe your child closely for symptoms of respiratory illness. If your child develops a fever (100°F or higher under the arm, 101°F orally, or 102°F rectally), respiratory symptoms, or is less responsive than normal, contact your child's doctor.

## **Child Care**

While we are unsure of how any new virus influenza causing a pandemic will affect infants, we know that seasonal influenza illness is more severe in children under five years old. Age-related differences are evident in infants and toddlers. Infants usually develop higher temperatures, and unexplained fever may be the only sign. Central nervous system symptoms may appear in up to 20 per cent of infants/children and may be suggestive of meningitis. Nausea, vomiting, diarrhea and abdominal pain occur in 40-50 per cent, mainly those three years of age and under. Influenza is an important precursor of croup, pneumonia and bronchitis. Otitis media and non-purulent conjunctivitis are more frequent. Myositis (muscle inflammation) is a frequent complication, especially after infection with Influenza B.

### **Children who should visit their pediatrician if flu suspected**

- Age of infant less than 3 months
- Has heart or lung disease or any chronic illness requiring regular medical care
- Has disease or is on treatments causing immunosuppression.
- Takes aspirin regularly for a medical condition.

### **Children's complications**

**Seek medical care immediately if your child is experiencing any of the signs below. Call your doctor first for instructions. If your doctor is unavailable, go to an emergency room.**

- Fast breathing, trouble breathing, or change in breathing patterns
- Bluish skin color
- Not drinking enough fluids
- Not urinating enough
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Loss of interest in most things and listlessness

- Flu-like symptoms improve but then return with fever and worse cough
- Fever with a rash
- “Just doesn’t seem right” and you are concerned

**Emergency signs requiring a trip to the emergency room are when the child:**

- has severe trouble breathing (not caused by nasal congestion).
- has blue lips or hands or sudden pallor, or has cold legs up to their knees.
- has a full or sunken fontanel.
- is limp or unable to move.
- is excessively sleepy to the point of being difficult to arouse or unresponsive.
- shows signs of pain: headache and/or stiff neck, especially if combined with fever and listlessness and their eyes are sensitive to light.
- seems confused.
- has a seizure.

**Influenza treatment for children at home\*\*\***

- Dress a child in lightweight clothing and keep room temperature at 20<sup>0</sup> C.
- Offer fluids/breast feed frequently while child is awake.
- Settle the child or involve them in quiet activities while at home (~five days).
- Elevate head of the bed; infants may be more comfortable in a car seat or baby swing.
- Cool baths/alcohol rubs are NOT recommended.
- Non-prescription medications may be used. NO ASPIRIN OR ASPIRIN-CONTAINING PRODUCTS.
- Use a humidifier (except with asthmatic children).

Clean daily to prevent bacteria and mold growth using hot water with one part bleach to 10 parts water. Scrub the inside with a cloth or bottle brush to get into tight corners. Rinse well with hot water.

**. Over-the-counter non-prescription medications for treating flu symptoms:**

- **Medications advertised to “treat flu” only relieve flu symptoms:** Most contain a combination of medications including an antihistamine to stop a runny nose and sneezing; a decongestant; a cough suppressant; an expectorant to bring up mucus; a fever reducer; and a pain reliever such as acetaminophen, aspirin, or ibuprofen.
- **Do not give medications containing aspirin to children and teenagers.**

If all symptoms are present this choice may be a good one and may save money

If all symptoms are **not** present it is not an appropriate choice.

No good scientific evidence exists that suggests nonprescription “flu remedies” comprised of a combination of medicines, are useful for children younger than 5 years of age.

You may give medications to relieve the symptoms of the flu (**but never give aspirin to children or teenagers who have flu-like symptoms, particularly fever**). See “Treatment of Symptoms” below.

**Treat each symptom separately:**

<b>If you want to do this:</b>	<b>Choose medicine with this description after name:</b>
Unclog a stuffy nose	Nasal decongestant
Quiet a cough	Cough suppressant
Loosen mucus so you can cough it up	Expectorant
Ease fever, headaches, minor aches and pains	Pain Reliever (Analgesic)

**Reducing nasal stuffiness.**

- Decongestants shrink swollen tissues in the space behind the eardrum (middle ear). This may relieve pressure and pain. They can be taken by mouth or in nose drops or sprays. Oral decongestants, such as those containing pseudoephedrine, are probably more effective and provide longer relief than drops or sprays, but they cause more side effects. Sprays and drops provide rapid but temporary relief.

Sprays and drops are less likely to interact with other medications, which can be a problem with oral decongestants.

- Look for a single-ingredient decongestant that contains pseudoephedrine or phenylephrine.
- Do not use medicated nasal sprays or drops more often than directed and not longer than 3 days. Continued use will cause your mucous membranes to swell more than before using the spray (rebound effect).
- Drink extra fluids when taking cold medications.

If you are uncertain about which decongestant to use, ask your pharmacist or health professional for help.

Decongestants can cause problems for people with other health problems such as heart disease, high blood pressure, prostate problems, glaucoma, diabetes, or hyperthyroidism.

Decongestants also may interact with other medications such as some antidepressants and high blood pressure medications.

If nasal drainage is thick, a mucus-thinning drug (mucolytic) such as guaifenesin may help keep it thin and draining.

You also can try a homemade saline solution nasal spray that contains 0.25 teaspoon of salt in 1 cup of water. This will not cause the rebound symptoms that decongestant nasal sprays will

### **. Infants and children**

- Saline nose drops only for infants under 6 months.
- Do not give cold medications or oral decongestants to babies or children unless instructed by your health professional. Nonprescription cold medications have not been proven effective for preschool children.
- Oral decongestants can be used for older children

### **Cough suppression**

- Use cough drops or plain, hard candy for adult and older children.

- Take a nonprescription cough medicine that contains dextromethorphan, which may help you get some sleep for adults. Some products contain a high percentage of alcohol.

### **Infants and children**

- A cough suppressant with dextromethorphan may be given for a dry cough in children older than two years only if cough is interrupting sleep (not for asthmatics or moist cough).

### **Expectorant**

- Taken orally, help loosen mucus and make coughs more productive.
- An expectorant can be purchased separately or in combination with a cough suppressant. Read labels carefully. Guaifenesin is a common expectorant.

### **Infants and children** (MedlinePlus, 2005)

Although there is no specific information comparing use of guaifenesin in children with use in other age groups, this medicine is not expected to cause different side effects or problems in children than it does in adults. However, check with your doctor before using this medicine.

It should not be given to children younger than 2 years of age unless you are directed to do so by your doctor.

**Fever reducer and/or pain reliever:** Remember, these medications may make you more comfortable, but they won't make your symptoms go away any faster and may have serious side effects.

- Aspirin (Excedrin, Bufferin, and others) for **adults only. Never give aspirin to children or teenagers with flu symptoms.** Aspirin may cause stomach pain, bleeding and ulcers.
- Acetaminophen (Tylenol). If taken for a long period of time or in high doses, acetaminophen can be toxic to your liver.
- Ibuprofen (Advil, Motrin, others). Ibuprofen may cause stomach pain, bleeding and ulcers.
- Avoid antihistamines. They are not effective in treating flu symptoms and may thicken nasal drainage.

### **• Infants and children**

- **Do not give aspirin or other “salicylates” to children or teens with flu symptoms.** Salicylates may cause **Reyes Syndrome** and become severely ill or die. Ask the pharmacist or your doctor if you are unsure whether a product contains this.
- Acetaminophen is the preferred fever medication for children and can be given at any age. However, be sure to get syrup formulated for children.
- Ibuprofen is the alternate fever medication for children but **cannot** be given to infants **less than 4 months** of age. Be sure to get syrup formulated for children.

### **General medication recommendations**

- Read labels to make sure you know what the medications contain. Some have a large percentage of alcohol, and others have aspirin or acetaminophen. Be careful about taking more than one medication at a time, because it is easy to double up on some ingredients. For example, many cough medicines also contain a pain reliever such as Tylenol (acetaminophen) to reduce aches and pains caused by coughing. If you don't know this, you could be giving a pain reliever as well.
- Use the dosing device that comes with the medicine to measure the dose. Don't take or give more than the recommended dosage or use the medication for longer than directed.
- Try “regular strength” before “extra strength.”
- Check the expiration date and flush expired medication down the toilet.
- Keep all medications out of the reach of children.
- If you are taking herbs or other forms of **complementary medicines**, notify your doctor. Many have potential side effects or medication interactions.

**Recommendations for travelers\*\*** If you're traveling to any region with bird flu outbreaks, consider these public health recommendations:

- **Avoid domesticated birds.** If possible, avoid rural areas, small farms and especially any close contact with domesticated fowl.
- **Avoid open-air markets.** These can be colorful or dreadful, depending on your tolerance level, but no matter how you see them, they're often breeding grounds for disease.

- **Wash your hands.** One of the simplest ways to prevent infections of all kinds, hand washing is also one of the best. When you're traveling, alcohol-based hand sanitizers, which don't require the use of water, are an excellent choice. They're actually more effective than hand washing in killing bacteria and viruses that cause disease. Commercially prepared hand sanitizers contain ingredients that help prevent skin dryness. In fact, use of these products can result in less skin dryness and irritation than hand washing. Not all hand sanitizers are created equal, however. Some "waterless" hand sanitizers don't contain alcohol. Use only the alcohol-based products.
- **Watch your kids.** Keep a careful eye on young children, who are likely to put their hands in their mouths and who may not wash thoroughly.
- **Steer clear of raw eggs.** Because eggshells are often contaminated with bird droppings, avoid mayonnaise, hollandaise sauce, ice cream, and any other foods containing raw or undercooked eggs.
- **Ask about a flu shot.** Before traveling, ask your doctor about a flu shot. It won't protect you from bird flu, but it may help reduce the risk of simultaneous infection with bird and human flu viruses.