JIT
Just-in-Time Education
HOME CARE for the Influenza Patient
JIT education is one of the special applications of the *Think Zebra* program. When a major event happens, or is about to happen, around the world, this *Just-in Time* material is presented to reduce fear and save lives by providing the best possible knowledge.

This model of JIT education develops a program describing the method for caring for someone infected with and recovering from influenza: distributes it through e-mail, and the web; and updates the material on a regular basis.
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 only, “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
It is obvious that there will not be enough beds for the severely ill, much less for those without complications. Your local community is 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 radio. If it becomes necessary for you to care for yourself or someone else in your home, this instructional program will provide some information concerning the subjects listed above.
Flu Kit for Home Care

- A thermometer appropriate for the age of the child, and an adult thermometer*
- 4 boxes of soft tissues
- 14 cans or boxes of soup (think of a soup that may taste good to you when you are ill)
- 14 cans of ginger ale or Seven-up
- 14 bottles of a sports drink of your choice
- 4 large (64 oz) juice bottles of choice
- Plenty of water! (bottled or from the tap)
- 2 boxes of saltine crackers
- 14 servings of jello (boxed or pre-made)
- 14 servings of pudding (boxed or pre-made)
- 2 packages of popsicles (100% juice)

Preparing a Flu Kit in advance is wise because once you have the flu, you will likely feel terrible for approximately two weeks. During that time, you will not want to drive to the grocery store and shop! However, it will be critical that you stay hydrated with beverages and nourished while you are ill. If you have a good appetite while you are ill, eat and drink any healthy foods you are hungry for. Most people do not feel like eating or drinking much while suffering from the flu. The foods and beverages listed in the Flu Kit are examples of foods that are more tolerable while experiencing the flu. As you begin to recover from the flu, your appetite will increase. Again, eat and drink whatever healthy foods you can tolerate.
Is It a Cold or the Flu?

**Symptoms**

<table>
<thead>
<tr>
<th>Cold</th>
<th>Flu</th>
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<tbody>
<tr>
<td>Fever</td>
<td>Rare, High (102-104°F); lasts 3-4 days</td>
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<tr>
<td>Headache</td>
<td>Rare, Usual</td>
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<tr>
<td>General Aches, Pains</td>
<td>Slight, Usual; often severe</td>
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<tr>
<td>Fatigue, Weakness</td>
<td>Mild, Can last up to 2-3 weeks</td>
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<tr>
<td>Extreme Exhaustion</td>
<td>Never, Early and prominent</td>
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<tr>
<td>Stuffy nose</td>
<td>Common, Sometimes</td>
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<tr>
<td>Sneezing</td>
<td>Usual, Sometimes</td>
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<tr>
<td>Sore Throat</td>
<td>Common, Sometimes</td>
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<tr>
<td>Chest Discomfort</td>
<td>Mild/moderate, Can become severe</td>
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<tr>
<td>Cough</td>
<td>Hacking cough, Dry cough</td>
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**Complications**

| Sinus congestion or Earache | Bronchitis, pneumonia can be life-threatening |

**Prevention**

| None | Annual vaccination; antiviral medicines – see your doctor |

**Treatment**

| Temporary relief of symptoms | Antiviral medicines – see your doctor |
Definition of a Fever

• Rectal temperature above 100.4°F (38.0°C).

• Oral temperature above 99.5°F (37.5°C).

• Axillary (armpit) temperature above 99.0°F (37.2°C).

• Pacifier temperature above 100°F (37.8°C). New digital electronic ones are accurate.

• Ear (tympanic) temperature above 100.4°F (if in rectal mode) or above 99.5°F (if in oral mode). (Note: Not reliable for less than 6 months old.)

• Temporal artery (TA) temperature above 100.4 F (38.0 C) (Note: more reliable than tympanic thermometers, but not to be used for children under 6 months old)
Where to Take the Temperature

Age older than 4 or 5 years old:
Take the temperature orally (by mouth) or by ear thermometer.

• Age less than 4 or 5 years old:
A rectal or electronic pacifier temperature is preferred.
An axillary (armpit) temperature is adequate for screening if it is taken correctly. An ear thermometer can be used after 6 months old.

• Age less than 3 months old (90 days old):
An armpit temperature is preferred for reasons of safety and is adequate for screening. If the armpit temperature is above 99°F (37.2°C), check it with a rectal temperature.

The reason you need to take a rectal temperature for young infants is, if they have a true fever, they need to be evaluated immediately.

Temperatures measured rectally are the most accurate. Temperatures measured orally, by electronic pacifier, or by ear canal are also accurate if done properly. Temperatures measured in the armpit are the least accurate, but they are better than no measurement.
How to Take a Rectal Temperature

•Have your child lie stomach down on your lap.
•Put some petroleum jelly on the end of the thermometer and on the opening of the anus.
•Slide the thermometer gently into the opening of the anus for about 1-inch. If your child is less than 6 months old, put it in only about ¼ to ½ inch (inserting until the silver tip disappears is about ½ inch).
•Hold your child still and leave the thermometer in 2 minutes with a glass thermometer (about 20 seconds with a digital electronic thermometer).
•Your child has a fever if the rectal temperature is above 100.4°F (38°C). Your child needs to be evaluated by a physician immediately.

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How to Take an Armpit Temperature

• Put the tip of the thermometer in an armpit. Make sure the armpit is dry

• Close the armpit by holding the elbow against the chest for 4 or 5 minutes

• Your child has a fever if the armpit temperature is above 99.0°F (37.2°C)

• If you have any doubt, take your child's temperature rectally

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How to Take an Oral Temperature

• Be sure your child has not had a cold or hot drink in the last 30 minutes.

• Put the tip of the thermometer under one side of the tongue and toward the back. It's important to put it in the right place.

• Have your child hold the thermometer in place with his lips and fingers (not teeth) for 3 minutes with a glass thermometer (about 30 seconds with a digital electronic thermometer). Keep the lips sealed.

• Your child has a fever if the temperature is above 99.5°F (37.5°C)

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How to Take a Digital Electronic Pacifier Temperature

• Have your child suck on the pacifier until it reaches a steady state, and you hear a beep.

• This usually takes 3 to 4 minutes.

• Your child has a fever if the pacifier temperature is above 100°F (37.8°C)

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How to Take an Ear Temperature

• This thermometer reads the infrared heat waves released by the eardrum.

• An accurate temperature depends on pulling the ear backward to straighten the ear canal (back and up if over 1 year old).

• Aim the tip of the ear probe midway between the opposite eye and earlobe.

• The biggest advantage of this thermometer is that it measures temperatures in less than 2 seconds. It also does not require cooperation by the child and does not cause any discomfort.

• Limitation: if your child has been outdoors on a cold day, he needs to be inside for 15 minutes before taking the temperature. Earwax, ear infections and ear tubes, however, do not interfere with accurate readings.

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Information to Have Before You Call the Doctor

- **Adult Symptoms**
  - Report specific symptoms (from page 6), 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 page 16)

- **Child Symptoms**
  - 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 any medicine your child is regularly taking or any you may have given as a result of this illness. Know the dosage and times given.

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.
• 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.

• Antibiotics have no effect on viruses and will not be prescribed for flu. They may be prescribed for flu complications such as pneumonia.

• It is important to remember that antivirals must be started with 48 hours of the first sign of symptoms to have any affect on the illness.
Caring for an Adult

• 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 20 through 23).

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

“Emergency warning signs” requiring 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 wakening
- Confusion or disorientation
- New inability to function, if an independent elder
- Severe earache
- Severe or persistent vomiting, if an elder

If you, or an adult you are caring for, are experiencing any of these signs, call your doctor immediately for instructions. If your doctor is unavailable, go to an emergency room.

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

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.
Children with any of the following conditions should visit their pediatrician if flu is suspected:

- Age of an infant is less than 3 months
- Has heart or lung disease
- Chronic illness requiring regular medical care
- On treatments causing immunosuppression
- Takes aspirin regularly for a medical condition
- Has an existing disease

While we are unsure of how a new influenza virus causing a pandemic will affect infants, we know that seasonal influenza illness is more severe in children under five years of age. **Infants** usually develop higher temperatures, and unexplained fever may be the only sign. Nausea, vomiting, diarrhea and abdominal pain occur in 40-50%, mainly those three years of age and under.

Children Complications:

- Fast breathing, trouble breathing, change in breathing patterns
- Bluish skin color
- Not drinking enough fluids
- Not urinating enough
- Not waking up or not interacting
- Being irritable
- Not wanting to be held
- Loss of interest in most things
- Flu-like symptoms re-occur and worsen
- Fever with a rash
- “Just doesn’t seem right”

*If you, or a child you are caring for, are experiencing any of these signs, call your doctor immediately for instructions. If your doctor is unavailable, go to an emergency room.*
Emergency Signs requiring a trip to the emergency room are:

• Severe trouble breathing (not caused by nasal congestion)
• Blue lips or hands or sudden pallor
• Cold legs up to the knees
• Full or sunken fontanel (soft spot in the skull)
• Limp or unable to move
• 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 eyes are sensitive to light
• Appears confused
• Has a seizure

Home Care Treatments for Children:

• Dress in lightweight clothing and keep room temperature at 20°C
• Offer fluids/breast feed frequently while child is awake
• Settle child or involve in quiet activities
• Elevate head of 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.

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General 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.

Check the expiration date and flush expired medication down the toilet.

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.

Keep all medications out of the reach of children.

Try
“Regular strength”
Before
“Extra Strength”

If you are taking herbs or other forms of complementary medicines, notify your doctor. Many have potential side effects or medication interactions.
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. TREAT EACH SYMPTOM SEPARATELY (see pages 22-25)!

DO NOT give medications containing aspirin to children and teenagers!
Nasal Stuffiness

Adults
- 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.
- 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 ¼ teaspoon of salt in 1 cup of water.

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.
Over-The-Counter (OTC) Medications

Treat Each Symptom Separately

Quiet a Cough

Adults

- Use cough drops or plain, hard candy for adults 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: Loosen Mucus
So You Can Cough It Up

Adults
- 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. Guiafenesin is a common expectorant.

Infants and Children
- 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.
Over-The-Counter (OTC) Medications

Treat Each Symptom Separately

Ease Fever, Headaches, Minor Aches and Pains

Adults
- 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 “salicilates” to children or teens with flu symptoms. Salicilates may cause Reyes Syndrome and children may become severely ill or die. Ask the pharmacist or your doctor if you are unsure whether a product contains this ingredient.
- 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.

Remember, these medications may make you more comfortable, but they will not make your symptoms go away any faster and may have serious side effects.
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 are 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.

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 will not protect you from bird flu, but it may help reduce the risk of simultaneous infection with bird and human flu viruses.

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.

When you are traveling, alcohol-based hand sanitizers, which don’t require the use of water, are an excellent choice. These hand sanitizers are 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.
Contact Us

This Just-in-Time education program is a product of the Florida Department of Health in Collier County Health Education Network. Suggestions, comments and requests for information are welcome by contacting us using one of the following formats:

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