

FLU

KNOW THE FACTS

... TALKING POINTS



Current as of October 13, 2009

Flu is serious and can cause illness in any age-group. Don't be confused about how to prepare for both seasonal influenza (flu) and H1N1 (swine) flu. As our regular flu season arrives this fall, the same basic steps and precautions should be taken to be prepared for any type of flu virus. The single best way to prevent the seasonal flu is to get a flu shot each fall.

As part of Governor Mike Beebe's health initiative and with funding provided by the tobacco tax passed during the recent legislative session and federal funds, the Arkansas Department of Health (ADH), the Arkansas Department of Education (ADE) and local school districts statewide are offering the **seasonal flu shot free to school children and staff in grades K-12, beginning in mid-October.**

The best time to be immunized is between mid-October and mid-November. This allows the body's immunity to peak during the height of the flu season, which is generally December through March. Children eight years and younger (or less than 9 years of age) who have never received a seasonal flu shot before may (because some may only need one) need a second seasonal flu shot for full protection. Parents will need to contact a local ADH health unit or health care provider, see if vaccine is available and take their children in for a second shot 4 weeks after the first shot.

All Arkansans are encouraged to get their seasonal flu shots every year. The ADH will soon be conducting mass vaccination clinics for seasonal flu. The U.S. Food and Drug Administration just announced that it has approved four (4) vaccines against the 2009 H1N1 influenza virus. The vaccines will be distributed nationally after the initial lots become available, which is expected within the next four weeks. That vaccine is expected to be received in Arkansas in October and the Health Department will make those flu shots available at that time. Those most at risk for the H1N1 flu will be the first to be vaccinated. Plans are to have enough H1N1 vaccine available for any person who would like to be vaccinated.

Flu Terms Defined

- **Seasonal (or common) flu** is a respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available.
- **Avian (AI) flu (Bird Flu)** is caused by flu viruses that occur naturally among wild birds. Low pathogenic AI is common in birds and causes few problems. Highly pathogenic flu is deadly to domestic fowl, can be transmitted from birds to humans, and can be deadly to humans. There is virtually no human immunity.
- **Pandemic flu, such as novel influenza A (swine flu)** is a human flu that causes a worldwide outbreak. Because there is little natural immunity (protection), the disease can spread easily from person to person.

Key Facts about Seasonal Flu

- Seasonal flu is a disease that causes mild to severe illness. Each year in the US, there are 25-50 million infections, over 200,000 hospitalizations and 36,000 deaths due to flu.
- Of those hospitalized, 20,000 are children younger than five years old. Over 90% of deaths and about 60 percent of hospitalizations occur in people older than 65.
- Influenza vaccine should be provided to all persons aged 6 months and older who want to reduce the risk for becoming ill with influenza or of transmitting it to others. However, emphasis on providing routine vaccination annually to certain groups at higher risk for influenza infection or complications is advised. **Those most at risk for complications from the flu are:**
 - all children aged 6 months to 4 years;
 - all persons aged 50 years or older;
 - children and teenagers aged 6 months to 18 years who take aspirin daily;
 - pregnant women;
 - adults and children aged 2 years and older with chronic lung (including asthma) or heart disorders;
 - adults and children aged 2 years and older with chronic metabolic diseases (including diabetes), kidney diseases, blood disorders (such as sickle cell anemia), or weakened immune systems, including persons with HIV/AIDS;
 - residents of nursing homes and other long-term care facilities;
- Children younger than 5 years old. However, the risk for severe complications from seasonal influenza is highest among children younger than 2 years old.
- Persons with the following conditions:
 - Chronic pulmonary (including asthma, even if mild), cardiovascular (except hypertension), kidney, liver, blood (including sickle cell disease), neurologic, neuromuscular, or metabolic disorders (including diabetes mellitus);
 - Immunosuppression, including that caused by medications or by HIV;
 - Persons younger than 19 years of age who are receiving long-term aspirin therapy, because of an increased risk for Reye syndrome.

In addition, those that live with or care for individuals that are at high risk for flu-related complications should also be vaccinated and include:

- health-care workers involved in direct, hands-on care to patients and household members and out-of-home caregivers of infants under the age of 6 months;
- household contacts (including children), caregivers of children up to age four and adults aged 50 or older; and,
- household contacts (including children) and caregivers of persons with medical conditions that put them at higher risk for severe complications from flu
- The best way to prevent the seasonal flu is to get a flu shot each year. The shot takes one to two weeks to start working and is 70 to 90 percent effective in preventing the seasonal flu.
- Children under age 9 may need two seasonal flu shots, so be sure to check with a physician. Persons aged 9 years and older will need one seasonal flu shot.
- The flu shot will not give you the flu! The shot is a vaccine that helps protect you against the seasonal flu virus. The seasonal flu shot will not protect you against the new H1N1 influenza A (Swine Flu) virus.

Treatment is most effective when started soon after symptom onset. Therefore **when people with the above conditions develop fever and sore throat or cough, they should immediately seek treatment.**

Key Facts about the Novel (new) H1N1 Influenza A (Swine Flu)

- The novel H1N1 (swine flu) virus is a new flu virus causing illness in people that was first detected in the U.S. in April, 2009. At this time, H1N1 flu also appears to be more contagious than our usual seasonal flu.
 - Illness due to H1N1 flu is milder than what scientists feared at first but the disease is still spreading and officials are certain that Arkansas has more influenza in the state than what is being reported.
 - An increase in cases was anticipated once school resumed. According to the CDC, there are probably a million plus unreported cases in the United States. Most cases of H1N1 flu have occurred in people between the ages of five and 24.
 - Roughly 36,000 Americans die from complications of the seasonal flu each year. As of July 2009, 302 deaths have occurred in the U.S. from H1N1 flu.
 - H1N1 viruses are not spread through food and you cannot get the virus by eating pork. Arkansas no longer reports the number of individual cases of H1N1 flu and will only test pregnant women and hospitalized individuals. Therefore, the majority of the public will not be tested.
 - **These groups are considered most at risk for complications from H1N1 flu or are household contacts or caregivers of high risk groups and will be the first to be vaccinated:**
 - Pregnant women because they are at higher risk of complications and can potentially provide protection to infants who cannot be vaccinated;
 - Household contacts and caregivers for children younger than 6 months of age because younger infants are at higher risk of influenza-related complications and cannot be vaccinated. Vaccination of those in close contact with infants less than 6 months old might help protect infants by “cocooning” them from the virus;
 - Healthcare and emergency medical services personnel because infections among healthcare workers have been reported and this can be a potential source of infection for vulnerable patients. Also, increased absenteeism in this population could reduce healthcare system capacity;
 - All people from 6 months through 24 years of age;
 - Children from 6 months through 18 years of age because we have seen many cases of new H1N1 flu in children and they are in close contact with each other in school and day care settings, which increases the likelihood of disease spread;
 - Young adults 19 through 24 years of age because we have seen many cases of new H1N1 flu in these healthy young adults and they often live, work, and study in close proximity, and they are a frequently mobile population; and,
 - Persons aged 25 through 64 years who have health conditions associated with higher risk of medical complications from flu.
 - All Arkansans should take preventive measures and not become complacent. While the H1N1 flu virus currently is acting like a virus that might be seen during a typical flu season, the concern is how the virus might mutate.
 - There is a possibility that persons may need two shots for H1N1 flu, as the dosage has not been determined at this time.
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2009 H1N1 Vaccine and Pregnant Women

The Centers for Disease Prevention and Control (CDC) recommends that pregnant women receive the 2009 H1N1 influenza vaccine as well as a seasonal influenza vaccine. A pregnant woman who gets any type of flu is at risk for serious complications and hospitalization. Pregnant women who are otherwise healthy have been severely impacted by the 2009 H1N1 influenza virus (formerly called “novel H1N1 flu” or “swine flu”). In comparison to the general population, a greater proportion of pregnant women (four times the general population) infected with the 2009 H1N1 influenza virus have been hospitalized. In addition, severe illness and death has occurred in pregnant women. While hand washing, staying away from ill people, and other steps can help to protect pregnant women from influenza, vaccination is the single best way to protect against the flu.

Of the two types of flu vaccine, pregnant women should get the “flu shot” - an inactivated vaccine (containing fragments of killed influenza virus) that is given with a needle, usually in the arm. The flu shot is approved for use in pregnant women. The other type of flu vaccine - nasal-spray flu vaccine (sometimes called LAIV for “live attenuated influenza vaccine”) - is not currently approved for use in pregnant women. This vaccine is made with live, weakened flu viruses that do not cause the flu). LAIV (FluMist®) is approved for use in healthy* people 2-49 years of age who are not pregnant.

The seasonal flu vaccine is not expected to protect against the 2009 H1N1 flu. Similarly, the 2009 H1N1 influenza vaccine will not protect against seasonal influenza.

The seasonal vaccine should be available earlier than the 2009 H1N1 influenza vaccine. The usual seasonal influenza viruses are still expected to cause illness this fall and winter. Pregnant women and others at increased risk of complications of influenza are encouraged to get their seasonal flu vaccine as soon as it is available.

The 2009 H1N1 vaccines have not been shown to cause harm to a pregnant women or her baby. The seasonal flu shot (injection) is proven as safe and already recommended for pregnant women. The 2009 H1N1 influenza vaccine will be made using the same processes and facilities that are used to make seasonal influenza vaccines.

A number of clinical trials which test 2009 H1N1 influenza vaccine in healthy children and adults are underway. These studies are being conducted by the National Institutes of Allergies and Infectious Diseases (NIAID). Studies of 2009 H1N1 influenza vaccine in pregnant women are expected to begin in September.

There is no evidence that thimerosal (used as a preservative in vaccine packaged in multi-dose vials) is harmful to a pregnant woman or a fetus. However, because some women are concerned about exposure to preservatives during pregnancy, manufacturers will produce preservative-free seasonal and 2009 H1N1 influenza vaccines in single dose syringes for pregnant women and small children. CDC recommends that pregnant women may receive influenza vaccine with or without thimerosal.

The 2009 H1N1 influenza vaccine can be given at any time during pregnancy.

Some people, including pregnant women, may need two doses of H1N1 vaccine. We will know more about the number of doses once data from the clinical trials are available.

The recommended interval between the first and second dose (if two doses are needed) will not be known until clinical trial data are available. It is anticipated that 21-28 days will be needed between the first and second doses.

There is no test that can show whether a person had 2009 H1N1 influenza in the past. Many different infections, including influenza, can cause influenza-like symptoms such as cough, sore throat and fever. In addition, infection with one strain of influenza virus will not provide protection against other strains. People for whom influenza vaccine is recommended should receive the 2009 H1N1 vaccine, even if they had an influenza-like illness previously. It is not necessary to test a person who previously had an influenza-like illness. People for whom the 2009 H1N1 influenza vaccine is recommended should receive it, even if they have had an influenza-like illness previously, unless they can be certain they had 2009 H1N1 influenza based on a laboratory test that can specifically detect 2009 H1N1 viruses. CDC recommends that persons who were tested for 2009 H1N1 influenza discuss this issue with a healthcare provider to see if the test they had was either an RT-PCR or a viral culture that showed 2009 H1N1 influenza. There is no harm in being vaccinated if you had 2009 H1N1 influenza in the past.

The possible side effects from 2009 H1N1 influenza vaccine are expected to be similar to those from seasonal flu vaccines. The most common side effects following vaccination are expected to be mild, such as soreness, redness, tenderness or swelling where the shot was given. Some people might experience headache, muscle aches, fever, nausea and fainting. If these problems occur, they usually begin soon after the shot and may last as long as 1-2 days. Like any medicines, vaccines can cause serious problems like severe allergic reactions. However life-threatening allergic reactions to vaccines are very rare. Some studies done since 1976 have shown a small risk of GBS in persons who received the seasonal influenza vaccine. This risk is estimated to be no more than 1 case of GBS per 1 million persons vaccinated. Since then, flu vaccines have not been clearly linked to GBS. GBS has a number of different causes, and GBS can occur in a person who has never received an influenza vaccine. The potential benefits of influenza vaccination in preventing serious illness, hospitalization, and death substantially outweigh these estimates of risk for vaccine-associated GBS.

Anyone who has a severe (life-threatening) allergy to eggs or to any other substance in the vaccine should not get the vaccine. People should always inform their immunization provider if they have any severe allergies, if they've ever had a severe allergic reaction following flu vaccination, or if they have ever had GBS.

Pregnant women should not receive the live nasal spray influenza vaccine but family and household members and other close contacts of pregnant women (including healthcare personnel) who are 2 through 49 years old, healthy and not pregnant may receive live nasal spray vaccine.

There are no special precautions (such as gloves) necessary if a pregnant healthcare worker administers the live nasal influenza vaccine. Hands should be washed or cleaned with waterless hand sanitizer before and after administering the vaccine or having any direct contact with patients in a health care setting.

2009 H1N1 Vaccine and Healthcare Providers

If healthcare providers want to provide 2009 H1N1 vaccine directly to their patients, they can obtain the vaccine from their local health department. The CDC will be distributing the 2009 H1N1 influenza vaccine to each state. Information to direct providers interested in obtaining vaccine to appropriate public health contracts in their state is available.

Along with the vaccine, supply kits containing needles, syringes, sharps containers and alcohol swabs necessary for vaccination will be distributed to healthcare providers.

The vaccine will be provided free; however, healthcare providers may bill for vaccine administration.

If a pregnant woman delivers before receiving her second dose of vaccine, she should still receive the second dose. In addition to protecting her from infection, infants less than 6 months old will not be able to be vaccinated so it is recommended that everyone who lives with or provides care for infants less than 6 months of age receive both the seasonal influenza vaccine and 2009 H1N1 influenza monovalent vaccine to provide protection for the infant.

One recent study conducted in Bangladesh, assessed the effectiveness of influenza immunization for mothers and their young infants. Inactivated influenza vaccine reduced proven influenza illness by 63% in infants up to 6 months of age. This study confirmed that maternal influenza immunization is a strategy with substantial benefits for both mothers and infants.

Healthcare providers can get information about the 2009 H1N1 vaccine that is continually updated at www.cdc.gov/h1n1flu/vaccination/

2009 H1N1 Nasal Spray Vaccine

There are two types of flu vaccine: the flu shot and the nasal spray vaccine. Both types of vaccine are being made against 2009 H1N1. The nasal spray flu vaccine (sometimes called LAIV for Live Attenuated Influenza Vaccine) is a vaccine made with live, weakened viruses that cannot grow at normal body temperature and is given through a nasal sprayer. This vaccine was approved for seasonal influenza viruses in 2003 and tens of millions of doses of the vaccine have been given in the United States.

The 2009 H1N1 nasal spray vaccine is being made in the same way as the seasonal nasal spray vaccine, but instead of containing three weakened live flu viruses, it only contains weakened 2009 H1N1 virus. (That is why it is called a “monovalent” vaccine.) The recommendations for who can get the 2009 H1N1 nasal spray vaccine are the same as for seasonal nasal spray vaccine. LAIV is recommended for use in healthy* people 2 years to 49 years of age who are not pregnant.

Certain people should not get a nasal spray flu vaccine, including the 2009 H1N1 nasal spray vaccine. This includes:

- People younger than 2 years of age;
- Pregnant women;
- People 50 years of age and older;
- People with a medical condition that places them at higher risk for complications from influenza, including those with chronic heart or lung disease, such as asthma or reactive airways disease; people with medical conditions such as diabetes or kidney failure; or people with illnesses that weaken the immune system, or who take medications that can weaken the immune system;
- Children younger than 5 years old with a history of recurrent wheezing;
- Children or adolescents receiving aspirin therapy;
- People who have had Guillain-Barré syndrome (GBS), a rare disorder of the nervous system, within 6 weeks of getting a flu vaccine,
- People who have a severe allergy to chicken eggs or who are allergic to any of the nasal spray vaccine components.

Breastfeeding is not a contraindication for the nasal spray flu vaccine. Women who are breastfeeding can get the nasal spray vaccine, including 2009 H1N1 vaccine.

The nasal-spray flu vaccine can be given to people with minor illnesses (e.g., diarrhea or mild upper respiratory tract infection with or without fever). However, if nasal congestion is present that might limit delivery of the vaccine to the nasal lining, then delaying of vaccination until the nasal congestion is reduced should be considered.

In clinical studies, transmission of vaccine viruses to close contacts occurred only rarely. The current estimated risk of getting infected with vaccine virus after close contact with a person vaccinated with the nasal-spray flu vaccine is low (0.6%-2.4%). Because the viruses are weakened, infection is unlikely to result in influenza illness symptoms since the vaccine viruses have not been shown change into typical or naturally occurring influenza viruses.

Side effects associated with the nasal-spray flu vaccine

In children, side effects can include runny nose, headache, wheezing, vomiting, muscle aches, and fever. In adults, side effects can include runny nose, headache, sore throat, and cough. Fever is not a common side effect in adults receiving the nasal spray flu vaccine.

Effectiveness of the nasal-spray seasonal flu vaccine

In one large study among children aged 15-85 months, the seasonal nasal-spray flu vaccine reduced the chance of influenza illness by 92% compared with placebo. In a study among adults, the participants were not specifically tested for influenza. However, the study found 19% fewer severe febrile respiratory tract illnesses, 24% fewer respiratory tract illnesses with fever, 23-27% fewer days of illness, 13-28% fewer lost work days, 15-41% fewer health care provider visits, and 43-47% less use of antibiotics compared with placebo. A recent study suggested that seasonal LAIV may not be as effective as seasonal inactivated vaccine in adults, but more data are needed to confirm if one is better than the other. Both vaccines are expected to be effective against 2009 H1N1.

In adults, only one dose of 2009 H1N1 vaccine, including the 2009 H1N1 nasal spray vaccine, is needed for protection.

All children 2 through 9 years of age getting a 2009 H1N1 vaccine will need two doses of 2009 H1N1 vaccine (either the 2009 H1N1 flu shot or the 2009 H1N1 nasal spray vaccine). The first dose should be given as soon as vaccine becomes available. The second dose should be given 28 or more days after the first dose. The first dose “primes” the immune system; the second dose provides immune protection. Children who only get one dose of vaccine when they need two doses may have reduced or no protection. Be sure to follow up to get your child a second dose if they need one. It usually takes about two weeks after the second dose for protection to begin.

The nasal spray flu vaccine can be given at the same time or around the same time as an inactivated (killed) vaccine or any other live vaccine except for the seasonal nasal spray vaccine. (The seasonal nasal spray vaccine and the 2009 H1N1 nasal spray vaccine should not be given at the same time.) The 2009 H1N1 flu shot (inactivated 2009 H1N1 vaccine) can be given at the same visit as any other vaccine, including pneumococcal polysaccharide vaccine.

The seasonal nasal spray vaccine and the 2009 H1N1 nasal spray vaccine should not be given at the same time. This is because the nasal spray vaccines might not be as effective if given together. It is fine to receive the 2009 H1N1 nasal spray at the same time as the seasonal influenza (flu) shot, or the seasonal flu shot at the same time as the 2009 H1N1 nasal spray vaccine.

If a person is taking an influenza antiviral drug (including Tamiflu® or Relenza®, then the nasal spray flu vaccine should not be given until 48 hours after the last dose of the influenza antiviral medication was given. If a person takes antiviral drugs within two weeks of getting the nasal spray flu vaccine, that person should get revaccinated. (The antiviral drugs will have killed the vaccine viruses that are supposed to cause the immune response against those viruses.)

Health care workers who cannot receive the nasal spray vaccine (e.g., pregnant women, older adults, persons with chronic medical conditions) can administer this vaccine to others. The seasonal and the 2009 H1N1 nasal spray flu vaccines do not contain the preservative thimerosal.

The nasal spray flu vaccine will not give you the flu.

Unlike the flu shot, the nasal spray flu vaccine does contain live viruses. However, the viruses are attenuated (weakened) and cannot cause flu illness. The weakened viruses are cold-adapted, which means they are designed to only cause infection at the cooler temperatures found within the nose. The viruses cannot infect the lungs or other areas where warmer temperatures exist. Some children and young adults 2 years to 17 years of age have reported experiencing mild reactions after receiving seasonal nasal spray flu vaccine, including runny nose, nasal congestion or cough, chills, tiredness/weakness, sore throat and headache. Some adults 18 years to 49 years of age have reported runny nose or nasal congestion, cough, chills, tiredness/weakness, sore throat and headache. These side effects are mild and short-lasting, especially when compared to symptoms of influenza infection.

For more information about seasonal and H1N1 vaccine go to <http://www.cdc.gov/vaccines/pubs/vis/default.htm#flu>

* “Healthy” indicates persons who do not have an underlying medical condition that predisposes them to influenza complications.

Things you Need to Know about Flu

- Symptoms of seasonal and H1N1 flu are the same and can lead to complications, including pneumonia or other life-threatening complications.
- **The symptoms in humans include:** fever greater than 100 degrees, body aches, coughing, sore throat, chills, headache and body aches, fatigue, respiratory congestion, and in some cases, diarrhea and vomiting. Anyone experiencing these symptoms should contact their physician or other health care provider.
- Both seasonal and H1N1 flu are highly contagious and are easily spread from person-to-person through coughing or sneezing and by touching a hard surface with the virus on it and then touching your nose or mouth.
- Studies have shown that **people may be contagious from one day before they develop symptoms to up to seven days after they get sick from flu.** Children, especially younger children, might potentially be contagious for longer periods.
- Individuals can shed the virus through respiratory droplets for 5-10 days. The virus is being shed before symptoms start. It takes 1-3 days to develop flu.
- Flu is mainly spread through droplets by coughing, sneezing, etc. It can survive on hard surfaces (such as door knobs) for 24-48 hours, on cloth paper and tissue for 8-12 hours and on hands for five minutes.
- In order to be prepared in case of widespread or pandemic flu or any emergency, have a family plan and put together an emergency supply kit of non-perishable foods, medical and other supplies. For information on planning and a list of recommended supply kit items go to <http://www.flu.gov/plan/individual/checklist.html>

Take Actions to Stay Healthy

- Get a seasonal flu shot each year!
- Stay home if you are sick. You should stay home until you are feeling better and after fever is gone for 24 hours without taking fever reducers. While you are sick, limit contact with others to keep from infecting them.
- Avoid close contact with people who are coughing or otherwise appear ill.
- Avoid touching your eyes, nose and mouth.
- Wash hands frequently with warm, soapy water to lessen the spread of illness.
- When hand washing is not possible, use an alcohol-based hand sanitizer.
- Cover your mouth and nose with tissue when coughing and sneezing, then wash your hands.

Remember the three C's:

Clean - wash your hands often

Cover - cover your cough and sneeze

Contain - stay home if you are sick

Anyone Experiencing Flu-like Symptoms Should Take the Following Precautions:

- People with respiratory illness should stay home from work or school to avoid spreading infections, including flu, to others in the community.
- People experiencing cough, fever and fatigue, possibly along with diarrhea and vomiting, should contact their physician. Drugs may be prescribed that can reduce the severity of illness if taken within 48 hours after symptoms begin.
- Individuals who are 18 years of age or younger who are ill with flu should not take aspirin, but can take ibuprofen or acetaminophen. Follow your doctor's advice.

Warning Signs – When to Seek Urgent Medical Attention In children:

- Fast breathing or trouble breathing
- Bluish skin color
- Not drinking enough fluids
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough
- Fever with a rash

In adults:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting

Taking Care of a Sick Person in the Home

Like seasonal flu, H1N1 flu symptoms in humans can vary in severity from mild to severe. The new H1N1(swine) flu virus can cause a wide range of symptoms, including fever, cough, sore throat, body aches, headache, chills and fatigue. Some people have reported diarrhea and vomiting. Severe disease with pneumonia, respiratory failure and even death is possible with H1N1 flu infection. Certain groups might be more likely to develop a severe illness from H1N1 flu infection, such as pregnant women, children and persons with chronic medical conditions. Sometimes bacterial infections may occur at the same time as or after infection with flu viruses and lead to pneumonias, ear infections or sinus infections. By following these recommendations, the spread of flu can be reduced while caring for sick persons in the home.

How Flu Spreads

The main way that flu viruses are thought to spread is from person to person when droplets from a cough or sneeze of an infected person are propelled through the air and deposited on the mouth or nose of people nearby. Flu viruses may also be spread when a person touches the droplets on another person or an object and then touches their own mouth or nose (or someone else's mouth or nose) before washing their hands.

How to Care for the Sick Person and Protect other Persons in the Home

When providing care to a household member who is sick with flu, the most important ways to protect yourself and others who are not sick are to:

- If possible, the sick person should stay in a room separate from the common areas of the house and use a separate bathroom. The bathroom should be cleaned daily with household disinfectant.
 - The sick person should not care for infants and others who are at high risk for complications from flu and should not have visitors.
 - Preferably, have only one adult in the home take care of the sick person. Persons at increased risk of severe illness from flu, such as pregnant women, should not be the designated caretaker, if possible.
 - Keep extra cough, cold and flu supplies on hand, such as tissues, over-the-counter medications and a digital thermometer.
 - Unless necessary for medical care or other necessities, people who are sick with a flu-like-illness should stay home and keep away from others as much as possible, including avoiding travel, for at least 24 hours after fever is gone except to get medical care or for other necessities. (Fever should be gone without the use of a fever-reducing medicine). This is to keep from making others sick. Children, especially younger children, might potentially be contagious for longer periods.
 - If persons with the flu need to leave the home (for example, for medical care), they should wear a facemask, if available and tolerable, and cover their nose and mouth when coughing or sneezing. Have the sick person wear a facemask – if available and tolerable – if they need to be in a common area of the house near other persons. For more information, go to www.cdc.gov/h1n1flu/masks.htm for recommendations for facemask and respirator use.
 - If you are in a high risk group for complications from flu, you should attempt to avoid close contact (within 6 feet) with household members who are sick with flu. If close contact with a sick individual is unavoidable, consider wearing a facemask or respirator, if available and tolerable. Infants should not be cared for by sick family members.
 - Remind the sick person to cover their coughs, and clean their hands with soap and water or an alcohol-based hand rub often, especially after coughing and/or sneezing.
 - Have everyone in the household clean their hands often, using soap and water or an alcohol-based hand rub. Children may need reminders or help keeping their hands clean.
 - Ask your health care provider if household contacts of the sick person—particularly those contacts who may be pregnant or have chronic health conditions—should take antiviral medications such as Tamiflu or Relenza to prevent the flu.
 - Use paper towels for drying hands after hand washing or dedicate cloth towels to each person in the household. For example, have different colored towels for each person.
 - If possible, consideration should be given to maintaining good ventilation in shared household areas (e.g., keeping windows open in restrooms, kitchen, bathroom, etc.).
 - Be watchful for emergency warning signs that the sick person might need medical attention
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People who are sick at home with H1N1 flu should:

- Check with their health care provider about any special care they might need if they are pregnant or have a health condition such as diabetes, heart disease, asthma or emphysema.
- Check with their health care provider about whether they should take antiviral medications such as Tamiflu or Relenza.
- Keep away from others as much as possible to avoid making others sick. Do not go to work or school while ill.
- Stay home for at least 24 hours after fever is gone, except to seek medical care or for other necessities. (Fever should be gone without the use of a fever-reducing medicine.)
- Get plenty of rest and drink clear fluids (such as water, broth, sports drinks, electrolyte beverages for infants) to keep from being dehydrated
- Cover coughs and sneezes. Clean hands with soap and water or an alcohol-based hand rub often and especially after using tissues and after coughing or sneezing into hands
- Wear a facemask – if available and tolerable – when sharing common spaces with other household members to help prevent spreading the virus to others. This is especially important if other household members are at high risk for complications from flu. For more information on facemasks and respirator use, go to www.cdc.gov/h1n1flu/masks.htm
- Be watchful for emergency warning signs that might indicate you need to seek medical attention.

Get medical care right away if the sick person:

- has difficulty breathing or chest pain
- has purple or blue discoloration of the lips
- is vomiting and unable to keep liquids down
- has signs of dehydration such as dizziness when standing, absence of urination, or in infants, a lack of tears when they cry
- has seizures (for example, uncontrolled convulsions) is less responsive than normal or becomes confused

Medications to Help Lessen Symptoms of the Flu

Always check with your healthcare provider or pharmacist for correct, safe use of medications. Antiviral medications, such as Tamiflu or Renenza, can sometimes help lessen flu symptoms, but require a prescription. Most people do not need these antiviral drugs to fully recover from the flu. However, persons at higher risk for severe flu complications, or those with severe flu illness who require hospitalization, might benefit from these medications. Antiviral medications are available for persons 1 year of age and older. Do not give aspirin (acetylsalicylic acid) to children or teenagers who have the flu; this can cause a rare but serious illness called Reye's syndrome. Check with your health care provider or pharmacist before taking any over-the-counter or prescription medications.

Flu infections can lead to or occur along with bacterial infections. Therefore, some people will also need to take antibiotics. More severe or prolonged illness or illness that seems to get better, but then gets worse again may be an indication that a person has a bacterial infection. Check with your health care provider if you have concerns.

If you are the Caregiver

- Avoid being face-to-face with the sick person.
- When holding small children who are sick, place their chin on your shoulder so that they will not cough in your face.
- Clean your hands with soap and water or use an alcohol-based hand rub after you touch the sick person or handle used tissues, or laundry.
- Talk to your health care provider about taking antiviral medication to prevent the caregiver from getting the flu.
- If you are at high risk of flu associated complications, you should not be the designated caretaker, if possible.
- If you are in a high risk group for complications from flu, you should attempt to avoid close contact (within 6 feet) with household members who are sick with flu. Designate a person who is not at high risk of flu associated complications as the primary caretaker of household members who are sick with flu, if at all possible. If close contact with a sick individual is unavoidable, consider wearing a facemask or respirator, if available and tolerable.
- Monitor yourself and household members for emergency warning signs that indicate medical care is needed. Contact your health care provider if warning symptoms occur.

Household Cleaning, Laundry, and Waste Disposal

- Throw away tissues and other disposable items used by the sick person in the trash. Wash your hands after touching used tissues and similar waste.
- Keep surfaces (especially bedside tables, surfaces in the bathroom, and toys for children) clean by wiping them down with a household disinfectant according to directions on the product label.
- Linens, eating utensils, and dishes belonging to those who are sick do not need to be cleaned separately, but importantly these items should not be shared without washing thoroughly first.
- Wash linens (such as bed sheets and towels) by using household laundry soap and tumble dry on a hot setting. Avoid “hugging” laundry prior to washing it to prevent contaminating yourself. Clean your hands with soap and water or alcohol-based hand rub right after handling dirty laundry.
- Eating utensils should be washed either in a dishwasher or by hand with water and soap.

For more detailed information on the H1N1 and seasonal flu, go to www.healthyarkansas.com or www.cdc.gov

Flu in the Schools

- State and local agencies have the authority to close schools due to seasonal flu or H1N1 flu outbreaks. However, CDC does not advise that schools close unless there is a magnitude of faculty or student absenteeism that interferes with the school's ability to function. The CDC guidance related to H1N1 flu in schools is available at: www.cdc.gov/h1n1flu/k12_dismissal.htm
- These guidelines are based on recent information from epidemiologic investigations that suggest that the risk of severe illness associated with the new H1N1 virus may be equivalent to seasonal flu. Any further changes in severity of disease in the outbreak may lead to further changes in guidance.
- Students, faculty or staff with flu-like illness (fever with a cough or sore throat) should stay home and not attend school or go into the community until they are feeling better and after their fever is gone for 24 hours without taking fever reducers. The exception is to seek medical care.
- Students, faculty and staff who appear to have an flu-like illness at arrival or become ill during the school day should be isolated promptly in a room separate from other students and sent home.
- Parents and guardians should monitor their school-aged children, and faculty and staff should self-monitor every morning for symptoms of flu-like illness.
- Ill students should not attend alternative child care nor congregate in other group settings.
- School administrators should communicate regularly with local public health officials to obtain guidance about reporting of flu-like illnesses in the school.
- Schools can help serve as a focus for educational activities aimed at promoting ways to reduce the spread of flu, including hand hygiene and cough etiquette.
- Students, faculty and staff should stringently follow sanitary measures to reduce the spread of flu, including covering their nose and mouth with a tissue when coughing or sneezing (or coughing or sneezing into their sleeve if a tissue isn't available), frequently washing hands with soap and water, or using hand sanitizer if hand washing with soap and water is not possible.

Child Care and Early Childhood Program Guidance

- On September 4, 2009, CDC released guidance on actions that should be taken now to help decrease the spread of flu among children in early childhood programs and among early childhood program providers. This guidance also includes additional strategies to use if flu conditions become more severe than conditions in spring/summer 2009. The new guidance is designed to decrease the spread of both seasonal flu and 2009 H1N1 flu while limiting the disruption of early childhood programs.
 - With this guidance, a menu of strategies are provided that health officials and early childhood program providers can choose from, based on flu conditions in their area, to keep early childhood facilities open while reducing exposure of children and early childhood program providers to the flu.
 - Early childhood programs refers to any early childhood program setting that involves care for a group of children. This can include center-based and home-based child care programs, Head Start programs, and other early childhood programs.
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- If there is widespread flu illness in your community, discuss the risks of attending gatherings for those at high risk of medical complications from flu. By avoiding gatherings, these individuals may reduce their risk of becoming ill with flu.
- **Provide alternative options and venues for participation whenever possible** for individuals who are ill, home-bound, or have a high risk of flu complications and will not be able to attend gatherings.
- Reduce crowding as much as possible.
- As always:
 - **Encourage people to wash hands often with soap and water.** If soap and water are not available, use an alcohol-based hand rub. If soap and water are not available and alcohol-based products are not allowed, other hand sanitizers that do not contain alcohol may be useful.
 - **Remind people to cover their mouth and nose with a tissue when coughing or sneezing.** It may prevent those around them from getting sick.
 - **Encourage people with flu-like illness to stay home.** The spread of flu may be decreased if people with flu-like illness stay home for at least 24 hours after they are free of fever without the use of fever-reducing medications.

Tips for individuals and groups preparing for travel during this flu season:

Individuals and groups preparing for travel during this flu season (including religious pilgrimages, retreats, holiday celebrations and missionary trips) should **stay informed on the latest news and travel advisories from CDC and the U.S. Department of State.** Find this information at: <http://www.flu.gov/individualfamily/travelers/index.html>. Share this information with community members accordingly. Travelers who wish to minimize the transmission of flu should:

- Follow local health recommendations, including movement restrictions;
- Practice healthy habits to help stop the spread of flu; and
- Follow these recommendations if the traveler becomes ill:
 - Stay home or in a hotel room for at least 24 hours after becoming free of fever without the use of fever-reducing medicines.
 - Seek medical care if the traveler has severe illness or is at high risk of medical complications. Contact the U.S. Embassy or Consulate for help obtaining medical care.
 - Closely monitor the traveler's health after the traveler returns to the United States.

For additional information on meetings and religious gatherings in relation to H1N1 and seasonal flu, go to www.healthyarkansas.com or www.cdc.gov/h1n1flu/guidance/public_gatherings.htm

Steps and Precautions to Reduce the Spread of Flu

- During flu season, there are several important things early childhood program providers can do to reduce the spread of the flu: encourage children and staff to get vaccinated for seasonal and 2009 H1N1 flu according to CDC recommendations; help facilitate good hand washing and covering coughs and sneezes; and separate sick children and staff from others, and send them home as soon as possible.
- Early childhood program providers should develop a plan for responding to a flu outbreak. This includes plans for covering key positions when staff members are home sick, keeping staff and parents informed about the recommended period of time that sick staff and children should stay home; and protecting people at higher risk for flu complications.
- Early childhood program providers should perform a daily health check of children and staff. This health check involves directly observing the child, talking with the child, and talking with his or her parent(s) or guardian.

Signs and Symptoms

- In addition to looking for signs of illness, the early childhood program provider should look for the following: a change in the child's behavior (like crankiness, unusual crying, decreased appetite, and decreased interest in playing); reports of illness in the child or a family member; or reports of a recent visit to a healthcare provider by the child or family member.

Sick Children and Staff should Stay Home

- Sick children and staff should be separated from well people as soon as possible. They should be sent home and stay there (except to seek medical care, if necessary) until at least 24 hours after they no longer have a fever or signs of a fever, without the use of fever-reducing medicines (any medicine that contains ibuprofen or acetaminophen).
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Program Closings

- Early childhood program providers may consider closing the program if a lot of children or staff are absent, a large number of children are being sent home each day because they are sick, if flu transmission is high in the community or for other reasons that make it difficult to keep the early childhood program functioning. Early childhood program providers should work closely with their local and state public health officials when considering this course of action.
- Parents should try to plan for alternate child care in case their usual early childhood program must close.

This is a summary of the childcare guidance issued by the CDC. For the complete guidance, including a toolkit, go to www.cdc.gov/h1n1flu/childcare/guidance.htm or www.flu.gov.

Asthma Information for Patients and Parents of Patients

- Anyone with asthma is at higher risk for flu-related complications, such as pneumonia. Along with everyone else, if you have asthma you should:
 - wash your hands often with soap and water, especially after coughing or sneezing;
 - cover your nose and mouth with a tissue when coughing or sneezing and throw the tissue away. If you do not have a tissue, cough or sneeze into your elbow or shoulder not your bare hands;
 - avoid touching your eyes, nose, or mouth (germs are spread that way); and
 - stay home when you are sick, except to get medical care.
 - If you have asthma, you should follow an updated, written Asthma Action Plan developed with your doctor. Follow this plan for daily treatment and for controlling your asthma symptoms.
 - If your child has asthma, make sure that his or her updated, written Asthma Action Plan is on file at school or at the daycare center. Be sure that the plan and medication(s) are easy to get to when needed.
 - Everyone with asthma who is older than 6 months should get a shot every year to protect against the seasonal flu. Children aged 6 months to 8 years who never have had a seasonal flu shot will need two doses the first time. Children who have had a seasonal flu shot in the past only need one shot. Persons with asthma should not use the inhaled “FluMist®” vaccine.
 - Everyone with asthma who is aged 6 months to 64 years should get the 2009 H1N1 flu shot when it becomes available. The 2009 H1N1 flu shot is not the same as the shot for seasonal flu. If the H1N1 flu vaccine is in short supply, some persons may not be able to get the shot right away.
 - Certain antiviral drugs are prescription medicines that fight the flu virus by stopping it from growing in your body. They make you feel better faster and may prevent serious flu problems. The antiviral drug Tamiflu (also known as oseltamivir) is recommended for treating 2009 H1N1 virus infection and may be prescribed for persons with asthma. Flu treatments work best if they start within two days of when you get flu-like illness.
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- Persons with flu infections might also get bacterial infections. These persons will also need to take antibiotics to fight the bacterial infection. Some signs of bacterial infection are severe or prolonged illness, or illness that seems to get better but then gets worse.
- Do not give aspirin (acetylsalicylic acid) to children or teenagers who have the flu. This can cause a rare but serious illness called Reye's syndrome.

Flu in the Workplace

- Employees who are well but who have a family member sick at home with the flu can go to work as usual. These employees should monitor their health every day, and take everyday precautions including washing their hands often with soap and water, especially after they cough or sneeze. If they become ill, they should notify their supervisor and stay home. Employees who have an underlying medical condition or who are pregnant should contact their health care provider.

How Employers can Protect Employees

- Encourage sick workers to stay home and away from the workplace, and provide flexible leave policies.
- Encourage infection control practices in the workplace by displaying posters that address and remind workers about proper hand washing, respiratory hygiene, and cough etiquette.
- Provide written guidance (email, etc.) on flu appropriate for the language and literacy levels of everyone in the workplace. Employers should work closely with local and state public health officials to ensure they are providing the most appropriate and up-to-date information.
- Provide sufficient facilities for hand washing and alcohol-based (at least 60%) hand sanitizers (or wipes) in common workplace areas such as lobbies, corridors, and restrooms.
- Provide tissues, disinfectants, and disposable towels for employees to clean their work surfaces, as well as appropriate disposal receptacles for use by employees.
- One study showed that flu virus can survive on environmental surfaces and can infect a person for up to 2-8 hours after being deposited on the surface. To reduce the chance of spreading the flu virus, disinfect commonly-touched hard surfaces in the workplace, such as work stations, counter tops, door knobs, and bathroom surfaces by wiping them down with a household disinfectant according to directions on the product label.

How Employees can Reduce the Spread of Flu in the Workplace

- Employees should stay home if they are sick. If they have symptoms of flu-like illness, they should stay home until they are feeling better and fever is gone for 24 hours without taking fever reducers. Following these recommendations will reduce the spread of infection to others.
 - Employees who are well but who have an ill family member at home with the flu can go to work as usual. These employees should monitor their health every day, notify their supervisor and stay home if they become ill. Employees who have an underlying medical condition or who are pregnant should call their health care provider for advice, because they might need to receive flu antiviral drugs to prevent illness.
 - Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
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- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand sanitizers can be used if soap and water are not available.
- Avoid touching your eyes, nose, or mouth. Germs spread this way.
- Avoid close contact with sick people. If an employee suspects that they have been exposed to a sick person with the flu they may continue to go to work as usual. These employees should monitor their health every day and should notify their supervisor and stay home if they become ill.

What to do when an Employee Comes to Work with Flu-like Symptoms

- Place the employee in a room by him- or herself.
- If the employee needs to go into a common area, he or she should cover coughs/sneezes with a tissue or cough into their sleeve.
- Notify the employee's supervisor or employer.
- Send the employee home as soon as possible.
- Call for emergency medical services if the ill person develops any of the emergency warning signs.
- Ensure the ill employee stays home until they are feeling better and fever is gone for 24 hours without taking fever reducers.

What Businesses can do to Anticipate and Respond to the Impact of Flu on Operations

- Identify a workplace coordinator who will be responsible for dealing with flu issues and impact at the workplace, including contacting local health department and health care providers in advance and developing and implementing protocols for response to ill individuals.
 - Determine who will be responsible for responding to ill individuals in the workplace, either through an established health clinic or as a first aid duty.
 - Share your plans with employees and clearly communicate expectations
 - Identify essential employees, essential business functions, and other critical inputs (e.g. raw materials, suppliers, subcontractor services/products, and logistics) required to maintain business operations by location and function should there be disruptions during the flu outbreak.
 - Implement business continuity plans if there is significant absenteeism in the workplace during this outbreak.
 - Review your plan with regard to increases or decreases in demand for your products and/or services during the outbreak (e.g., the need for hygiene supplies).
 - Establish an emergency communications plan. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
 - Develop platforms (e.g., hotlines, dedicated websites) for communicating pandemic influenza A (H1N1) flu status and actions to employees, vendors, suppliers, and customers inside and outside the worksite in a consistent and timely way, including redundancies in the emergency contact system.
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What Businesses can do to Anticipate and Respond to the Impact of Flu on Employees

- Examine policies for leave and employee compensation and review with managers, supervisors, and employees so they are up-to-date on sick leave policies, leave donation, and employee assistance services that are covered under the different employee-sponsored health plans. Leave policies should be flexible and non-punitive.
- Plan for the possibility of unscheduled leave that encourages employees who are sick to stay at home to care for themselves and others who are ill with the flu or children dismissed from school.
- Establish policies for flexible worksite (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), if needed.
- Communicate policies for employee access to, and availability of, health care, mental health, and social services including corporate and community resources.
- **For more information on flu, go to www.healthyarkansas.com or www.cdc.gov.**

What Faith-Based and Community Group Leaders can do to Lessen the Impact of Flu

Many faith-based and community groups hold services or meetings that bring people together. If the flu is causing more severe disease, the Centers for Disease Control and Prevention (CDC) and your local health department may suggest that people avoid close contact with others and avoid attending large gatherings, a practice often called social distancing. These measures are intended to slow the spread of flu. Religious traditions and obligations may make it difficult to implement social distancing measures. However, faith-based and other community groups can do some specific things to help keep their members healthy.

Leaders of religious services or community meetings can take the following steps if there is an outbreak of flu in the community:

- To the extent possible, **make decisions in accordance with your state and local health departments about community gatherings and religious services** during widespread flu illness in your community. People should not be discouraged from gathering unless advised by public health officials.
- **Identify which activities may increase the chance of spreading flu.** Work with your local health department to make decisions about changing or limiting these activities in order to help keep people healthy.
 - People gathering in close proximity may increase the risk of flu transmission.
 - Many religious services and community meetings involve a time of greeting or recognition by shaking hands or hugging. Encourage interaction without physical contact to reduce the spread of flu.
 - Some religious traditions and rituals emphasize eating and drinking from communal dishes and vessels. Flu transmission may be possible in these circumstances. If flu is circulating widely in your community, faith and community leaders may consider adjusting such practices in order to reduce the spread of flu. Check with your local or state health department.