



New Hampshire Department of Health and Human Services
December 22, 2009

Frequently Asked Questions about Diabetes and the 2009 H1N1 Flu

Individuals with diabetes are at high risk for serious complications from the H1N1 flu. If you have diabetes – and you develop flu-like symptoms – contact your health care provider or seek medical care immediately.

Should people with diabetes be especially concerned about the 2009 H1N1 Flu?

Yes. People with diabetes who get either H1N1 or seasonal influenza may experience more severe symptoms and more complications than people without diabetes or other high-risk factors. People with diabetes are six times more likely to be hospitalized with seasonal influenza complications and almost three times more likely to die. During flu epidemics, deaths among people with diabetes increase 5-15%. Serious complications from the flu, which can require hospitalization, may include pneumonia, bronchitis, ear and sinus infections, dehydration, or even death. Just as people with diabetes are more susceptible to the flu, they are also at high risk of developing pneumonia. Each year, 10,000 - 30,000 deaths among people with diabetes are associated with influenza and pneumonia.

Why do people with diabetes have a greater risk of serious complications?

When people with diabetes come down with the flu, their symptoms may be much more severe than normal, which can lead to further complications. Influenza may also interfere with blood glucose management. Being sick by itself can raise your blood glucose. Moreover, illness can prevent you from eating properly, which further affects blood glucose. In addition, diabetes can make the immune system more vulnerable to severe cases of the flu. Complications of flu include worsening of chronic medical conditions such as diabetes and other metabolic conditions. People with diabetes may already have abnormal immune functions, which can lead to increased risk of complications from influenza infection.

How can serious complications from H1N1 in people with diabetes be prevented?

The flu vaccine is the most effective intervention for reducing the impact of influenza. Studies have shown that seasonal influenza vaccination is associated with a 72% reduction in hospitalizations and death in persons with diabetes who are 18 to 64 years of age. The H1N1 vaccine is the most effective way to protect yourself from being infected with the H1N1 virus, and thus prevent complications. In addition, the flu is highly contagious, so immunizing your family not only keeps them healthy; it decreases your chances of catching the flu from your loved ones.

Should people with diabetes receive the H1N1 vaccine?

Yes, everyone with diabetes who is aged 6 months to 64 years should get the 2009 H1N1 flu shot. They should not get the nasal spray flu vaccine. In addition, close household contacts and out-of-home caregivers of anyone with diabetes should also receive the H1N1 vaccine to help

protect the person with diabetes against infection. Contact your healthcare provider for details on the availability of the H1N1 vaccine. Call the New Hampshire H1N1 Public Inquiry Line by dialing 211 or visit www.nh.gov for information on public vaccine clinics being held near you.

Should people with diabetes also receive the seasonal flu vaccine?

Yes, getting a regular flu vaccine is part of an overall diabetes management plan. Everyone who has diabetes and is at least 6 months of age or older should get the seasonal flu shot every year to protect against the seasonal flu. The 2009-10 seasonal flu shot is not effective against the 2009 H1N1 flu virus. Children aged 6 months through 8 years who have never had a seasonal flu shot may need two doses the first time. Children who have had a seasonal flu shot in the past only need one shot. Contact your healthcare provider for details on the availability of the seasonal flu vaccine. In addition, talk to your health care provider about a pneumonia (pneumococcal) shot, which is one of the complications of the flu.

Should people with diabetes get the nasal spray or the flu shot?

There are two types of flu vaccine – the “nasal spray” and the “flu shot.” People with diabetes should get the “flu shot,” which is an inactivated vaccine (containing fragments of killed influenza virus) that is given with a needle, usually in the arm. The other type of flu vaccine is the nasal spray flu vaccine (sometimes called LAIV for “live attenuated influenza vaccine”). People with diabetes **should not** get the nasal spray (the inhaled “FluMist[®]”) vaccine. This vaccine is made with live, weakened flu viruses that do not cause the flu. LAIV (FluMist[®]) is otherwise generally approved for use in healthy people 2–49 years of age.

Will the seasonal flu vaccine also protect against the 2009 H1N1 flu?

No. The 2009 seasonal flu vaccine will not protect against the 2009 H1N1 flu. Similarly, the 2009 H1N1 influenza vaccine will not protect against seasonal influenza.

Can the seasonal influenza vaccine and the 2009 H1N1 influenza vaccine be given at the same time?

The seasonal flu and the 2009 H1N1 vaccines may be administered on the same day but given at different sites (e.g., one shot in the left arm and the other shot in the right arm). People with diabetes and others at increased risk of complications of influenza are encouraged to get both vaccines as soon as they are available. A pneumonia (pneumococcal) vaccine should also be part of a diabetes management plan. Check with your health care provider.

Is the 2009 H1N1 influenza vaccine safe for people with diabetes?

The seasonal flu shot (injection) has been shown to be safe and is recommended for people with diabetes. The 2009 H1N1 influenza vaccine is made using the same processes and facilities by the same companies to the same standards as the seasonal influenza vaccines, which have a very good safety track record. The CDC and FDA closely monitor the safety of seasonal influenza and other vaccines licensed for use in the United States in cooperation with state and local health departments, healthcare providers, and other partners.

What are the possible side effects of the 2009 H1N1 influenza vaccine?

The side effects from 2009 H1N1 influenza vaccine have been similar to those from seasonal flu vaccines. The most common side effects following vaccination are 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.

Are there people who should *not* get the H1N1 flu vaccine?

Yes, the following people should *not* receive either the H1N1 vaccine or the seasonal flu vaccine:

- People with egg allergies,
- Anyone who has a history of Guillain-Barré syndrome,
- Anyone who has had a severe reaction to an influenza vaccine in the past, and
- Children younger than 6 months (because there is no approved vaccine for them).

What should I do if I get sick with flu-like symptoms?

Flu symptoms include fever, cough, sore throat, body aches, headaches, chills, fatigue, and sometimes, diarrhea and vomiting. If you have diabetes and you get sick with flu-like symptoms, call your doctor immediately. Stay home from work or school and limit contact with others to keep from infecting them.

- Be sure to continue taking your diabetes pills or insulin. Don't stop taking them even if you can't eat. Your health care provider may even advise you to take more insulin during sickness.
- Test your blood glucose every four hours, and keep track of the results.
- Drink extra (calorie-free) liquids, and try to eat as you normally would. If you can't, try to have soft foods and liquids containing the equivalent amount of carbohydrates that you usually consume.
- Weigh yourself every day. Losing weight without trying is a sign of high blood glucose.
- Check your temperature every morning and evening. A fever may be a sign of infection.
- **Call your health care provider or go to an emergency room if any of the following happen to you:**
 - You feel too sick to eat normally and are unable to keep down food for more than 6 hours.
 - You're having severe diarrhea.
 - You lose 5 pounds or more.
 - Your temperature is over 101 degrees F.
 - Your blood glucose is lower than 60 mg/dL or remains over 300 mg/dL.
 - You have moderate or large amounts of ketones in your urine.
 - You're having trouble breathing.
 - You feel sleepy or can't think clearly.

Is there medicine to treat the H1N1 flu?

Yes. Several antiviral drugs that are prescription medicines fight the flu virus by stopping it from growing in your body. Antivirals can be given to people who are sick with the flu to help reduce symptoms, speed up recovery, and prevent complications. If you get sick, antiviral drugs will

not make the flu go away, but they can make your illness milder and make you feel better faster. They may also prevent serious flu complications. People with diabetes who have a suspected or confirmed 2009 H1N1 infection should contact their health care provider immediately.

What steps should I take to prepare for the annual flu season?

To stay healthy, individuals with diabetes need to work with their doctor to create a Diabetes Management Plan that includes steps for daily management as well as sick day guidelines. This plan should be shared with the patient's family, physician, and school nurse (if applicable). During a flu outbreak, if you have diabetes you should:

- Get a written record of your diabetes and the treatment you are receiving. Keep this information with you at all times.
- Prepare a typed or printed list of all medications you usually take and the times of day they are taken. Also include necessary medical supplies or equipment such as syringes, strips and lancets.
- Keep the name, phone number, and office address of your doctor or health care provider with you at all times.
- If you are using medications for diabetes, continue taking those medications even if you become sick with the flu, unless your doctor or health care provider says otherwise.
- Inform family members or close friends that you have diabetes or other medical conditions.

What else can I do to prevent influenza?

To protect against both the seasonal flu and the H1N1 virus, there are a number of daily actions that individuals with diabetes and members of their family can take to help reduce the chance of spreading any respiratory viruses and to help prevent infection:

- Cover your nose and mouth with a tissue when you cough or sneeze, or sneeze into your sleeve. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and warm water, especially after coughing or sneezing and before eating. Alcohol-based gel hand cleaners are also good to use.
- Avoid touching your eyes, nose, and mouth. Germs spread this way.
- Avoid sharing eating utensils.
- Try to avoid close contact with sick people. If you have diabetes and you live or have close contact with someone who has the flu, talk with your healthcare provider.
- Have a plan to care for sick family members.
- Stock up on household, health, and emergency supplies, such as water, Tylenol®, and non-perishable foods. (Do not give aspirin to children or teenagers who have the flu. This can cause a rare but serious illness called Reye's syndrome.)

For more information visit the New Hampshire H1N1 website at www.nh.gov, the Centers for Disease Control website at www.cdc.gov, or the U.S. Department of Health and Human Services website at www.flu.gov. Or call the New Hampshire H1N1 Public Inquiry Line by dialing 211, or 1-866-444-4211.