Should 2009 H1N1 vaccine be held for specific patients?

No. With widespread influenza activity in Indiana it is imperative that 2009 H1N1 vaccine be promptly administered to the priority populations. Offices receiving the 2009 H1N1 vaccine are encouraged to be proactive in their management of the vaccine by holding special clinics, integrating the 2009 H1N1 vaccination into usual care, and providing walk-in immunizations. The 2009 H1N1 vaccine will continue to be shipped as it is produced, therefore doses of vaccine should not be held for specific patients. It is expected that there will eventually be enough 2009 H1N1 flu vaccine for anyone who chooses to get vaccinated.

If you have vaccine, please communicate this to your patients.

Should patients over 65 years of age get the H1N1 vaccine?

People 65 and older are not in a target group recommended to get the earliest doses of 2009 H1N1 vaccine. This is because people age 65 and older are least likely to get sick with the 2009 H1N1 virus. Because we have limited amounts of vaccine available, the current supply is recommended for those who are most likely to get infected. The U.S. government has purchased 250 million doses of 2009 H1N1 vaccine, so anyone who wants to get the vaccine will have the opportunity to do so later. While people 65 and older are not included in the groups recommended to get the earliest doses of vaccine, they can get the 2009 H1N1 influenza vaccine as soon as the high risk and younger groups have had the opportunity to be vaccinated.

Who can be vaccinated with the 2009 H1N1 nasal-spray flu vaccine (LAIV)?

The 2009 H1N1 nasal spray vaccine is recommended for use in healthy people 2 years through 49 years of age who are not pregnant.

Who should not be vaccinated with the 2009 H1N1 nasal-spray flu vaccine LAIV?

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.

**Can dentists in Indiana administer the vaccine to office staff?**

No. Current Indiana Code does not permit dentists to order or administer vaccines to patients or staff.

**If a patient has a family member at home who is sick with 2009 H1N1 flu, should they go to work or school?**

Persons who are well but who have an ill family member at home with 2009 H1N1 flu can go to work or school as usual. These employees should monitor their health every day, and take everyday precautions including covering their coughs and sneezes and washing their hands often with soap and water, especially after they cough or sneeze.

**Can the nasal-spray flu vaccine be given at the same time as other vaccines?**

The nasal spray flu vaccine can be given at the same time or around the same time as an inactivated (killed) vaccine. The nasal spray flu vaccine can be given at the same time as any other live vaccine except for the seasonal nasal spray flu vaccine. The ACIP General Recommendations on live attenuated vaccines indicates that 28 days (4 weeks) is the recommended minimum interval between two live vaccines not administered on the same day. (The seasonal nasal spray vaccine and the 2009 H1N1 nasal spray vaccine should not be given at the same time.)

**Can patients who are receiving cancer treatment get the 2009 H1N1 inactivated vaccine?**

Yes. People with certain medical conditions including cancer who develop influenza - seasonal flu or 2009 H1N1 flu - are at increased risk for serious complications and are more likely to be hospitalized. The list below includes the groups of people more likely to get flu-related complications if they get sick from influenza.
- Children younger than 5, but especially children younger than 2 years old
- Adults 65 years of age and older
- Pregnant women

People who have medical conditions including:
- Asthma
- Neurological and neurodevelopmental conditions [including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability (mental retardation), moderate to severe developmental delay, muscular dystrophy, or spinal cord injury].
- Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
- Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
- Blood disorders (such as sickle cell disease)
- Endocrine disorders (such as diabetes mellitus)
- Kidney disorders
- Liver disorders
- Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
- Weakened immune system due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids)

**Does Tamiflu make you immune to the H1N1 virus?**

No. Oseltamivir (TAMIFLU) is a neuraminidase inhibitors that affects the release of viral particles, thereby reducing the amount of virus in the body. It can be used to treat or prevent influenza. Chemoprophylaxis lowers but does not eliminate the risk of influenza and that protection stops when the medication course is stopped. It does not provide any immunity for the flu.

**Are pharmacists included in the initial target populations to receive vaccine?**

Health Care personnel (HCP) are in the priority group to receive the 2009 H1N1 vaccine. HCP include all persons working in health-care settings who have the potential for exposure to patients with influenza, infectious materials, including body substances, contaminated medical supplies and equipment, or contaminated environmental surfaces.

**Who should receive antiviral chemoprophylaxis?**

The CDC recommends an emphasis on early recognition of illness and treatment as an alternative to chemoprophylaxis after a suspected exposure. Persons with risk
factors for influenza complications who are household or close contacts of confirmed or suspected cases, and healthcare personnel who have occupational exposures, can be counseled about the early signs and symptoms of influenza, and advised to immediately contact their healthcare provider for evaluation and early treatment when indicated if clinical signs or symptoms develop.

Post exposure antiviral chemoprophylaxis with either oseltamivir or zanamivir can be considered for the following:

- Persons who are at higher risk for complications of influenza and are a close contact of a person with confirmed, probable, or suspected 2009 H1N1 or seasonal influenza during that person's infectious period.
- Post exposure antiviral chemoprophylaxis can be considered for pregnant women who are close contacts of persons with suspected or laboratory confirmed novel influenza A (H1N1) virus infection.
- Healthcare personnel, public health workers, or first responders who have had a recognized, unprotected close contact exposure to a person with confirmed, probable, or suspected 2009 H1N1 or seasonal influenza during that person's infectious period.
- Antiviral agents should not be used for post exposure chemoprophylaxis in healthy children or adults based on potential exposures in the community, school, camp or other settings.
- Chemoprophylaxis generally is not recommended if more than 48 hours have elapsed since the last contact with an infectious person.
- Chemoprophylaxis is not indicated when contact occurred before or after, but not during, the ill person's infectious period.

Information regarding the use of antiviral drugs sent by Indiana Health Alert Network (IHAN) last week:

Although use of influenza antiviral drugs in the United States has increased during the 2009-2010 flu season, not all people recommended for antiviral treatment are getting treated. Listed below are important facts to consider when deciding whether a patient needs to be treated with antiviral medication.

It is critical to remember that it is not too late to treat, even if symptoms began more than 48 hours ago. Although antiviral treatment is most effective when begun within 48 hours of influenza illness onset, studies have shown that hospitalized patients still benefit when treatment with oseltamivir is started more than 48 hours after illness onset. Outpatients, particularly those with risk factors for severe illness who are not improving, might also benefit from treatment initiated more than 48 hours after illness onset.
Recommendations for Clinicians:

Many 2009 H1N1 patients can benefit from antiviral treatment, and all hospitalized patients with suspected or confirmed 2009 H1N1 should receive antiviral treatment with a neuraminidase inhibitor -- either oseltamivir or zanamivir -- as early as possible after illness onset. Moderately ill patients, especially those with risk factors for severe illness, and those who appear to be getting worse, can also benefit from treatment with neuraminidase inhibitors. A full listing of risk factors for severe influenza is available at: http://www.cdc.gov/h1n1flu/highrisk.htm.

Although antiviral medications are recommended for treatment of 2009 H1N1 in patients with risk factors for severe disease, some people without risk factors may also benefit from antivirals. To date, 40% of children and 20% of adults hospitalized with complications of 2009 H1N1 did not have risk factors. Clinical judgment is always an essential part of treatment decisions.

When treatment of persons with suspected 2009 H1N1 influenza is indicated, it should be started empirically. If a decision is made to test for influenza, treatment should not be delayed while waiting for laboratory confirmation. The earlier antiviral treatment is given, the more effective it is for the patient. Also, rapid influenza tests often can give false negative results. If you suspect flu and feel antiviral treatment is warranted, treat even if the results of a rapid test are negative. Obtaining more accurate testing results can take more than one day, so treatment should not be delayed while waiting for these test results. For more information on influenza testing, please see: http://www.cdc.gov/h1n1flu/guidance/diagnostic_tests.htm.

Although commercially produced pediatricoseltamivir suspension is in short supply, there are ample supplies of children’s oseltamivir capsules, which can be mixed with syrup at home. In addition, pharmacies can compound adult oseltamivir capsules into a suspension for treatment of ill infants and children. Additional information on compounding can be found at: http://www.cdc.gov/H1N1flu/pharmacist/.

For More Information
Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season: http://www.cdc.gov/H1N1flu/recommendations.htm

Questions & Answers:
Antiviral Drugs, 2009-2010 Flu Season: http://www.cdc.gov/h1n1flu/antiviral.htm

Influenza Diagnostic Testing:
http://www.cdc.gov/h1n1flu/diagnostic_testing_clinicians_qa.htm

Updated Interim Recommendations for Obstetric Health Care Providers Related to Use of Antiviral Medications in the Treatment and Prevention of Influenza for the
2009-2010 Season:
http://www.cdc.gov/H1N1flu/pregnancy/antiviral_messages.htm

Antiviral Drugs: Summary of Side Effects:
http://www.cdc.gov/flu/protect/antiviral/sideeffects.htm

General information for the public on antiviral drugs is available in '2009 H1N1 and Seasonal Flu: What You Should Know About Flu Antiviral Drugs' at http://www.cdc.gov/H1N1flu/antivirals/geninfo.htm.

Downloadable brochures and informational flyers, including one on antiviral drugs, are available at http://www.cdc.gov/h1n1flu/flyers.htm.

For the FDA page on antiviral influenza drugs:

For additional information, you can also call CDC’s toll-free hotline, 800-CDC-INF0 (800-232-4636) TTY: (888) 232-6348, which is available 24 hours a day, every day.