

FAQ for Clinicians Regarding 2009 Influenza A (H1N1)



Updated Nov. 9, 2009

Infection Control

UPDATED What type of infection control measures are recommended for hospitalized patients?

The interim guidance on infection control measures to prevent transmission of 2009 H1N1 influenza in healthcare facilities has been revised. The revision includes a comprehensive infection control strategy which is comprised of a hierarchy of engineering and administrative controls and the appropriate use of personal protective equipment.

- Vaccinate the workforce with seasonal and 2009 H1N1 vaccines
- Keep sick workers at home
- Enforce respiratory hygiene and cough etiquette
- Enhance hand hygiene compliance
- Establish facility access control and triage procedures
- Control patient placement and transport
- Apply isolation precautions

Hospitalized patients should be isolated in individual rooms and the door closed whenever possible. If a single room is not available other options such as cohorting may be considered. Before placement and during transport the patient should be asked to wear a surgical mask (if tolerated). For high-risk procedures such as open suctioning, bronchoscopy or intubation/extubation, the use of a negative pressure room may be considered. Guidelines for obstetric <http://cdc.gov/h1n1flu/guidance/obstetric.htm> and outpatient hemodialysis settings http://cdc.gov/h1n1flu/guidance/hemodialysis_centers.htm are also available on CDC's web site. Any other facility specific procedures should be followed.

NEW How long to hospitalized patients need to be isolated?

Isolation precautions for patients who have influenza symptoms should be continued for the 7 days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer, while a patient is in a healthcare facility. A patient need not be kept hospitalized for the purposes of isolation and may be discharged based on clinical judgment. Currently there is no recommendation to end isolation earlier for patients on oseltamivir or zanamavir. They should be encouraged to continue good hand hygiene, cough etiquette and to follow any guidelines regarding return to work or school.

What type of personal protective equipment (PPE) is recommended for health care personnel (HCP)?

CDC recommends that health-care personnel who are in close contact with patients with suspected or confirmed 2009 H1N1 influenza should use Standard Precautions http://www.cdc.gov/ncidod/dhqp/gl_isolation_standard.html and respiratory protection including gloves, and fit-tested N-95 masks. Close contact is defined as working within 6 feet of a patient or entering a small closed airspace with a patient with suspected or confirmed 2009 H1N1 influenza. Gowns and eye protection should be used for any activity that might generate splashes of respiratory secretions or other infectious materials. Please see CDC's web page at http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm for more information.

Which health care workers need to use PPE?

For the purposes of this guidance, healthcare personnel are defined as all persons whose occupational activities involve contact with patients or contaminated material in a healthcare, home healthcare, or clinical laboratory setting. Healthcare personnel are engaged in a range of occupations, many of which include patient contact even though they do not involve direct provision of patient care, such as dietary and housekeeping services. This guidance applies to healthcare personnel working in the following settings: acute care hospitals, nursing homes, skilled nursing facilities, physician's offices, urgent care centers, outpatient clinics, and home healthcare agencies. It also includes those working in clinical settings within non-healthcare institutions, such as school nurses or personnel staffing clinics in correctional facilities. The term "healthcare personnel" includes not only employees of the organization or agency, but also contractors, clinicians, volunteers, students, trainees, clergy, and others who may come in contact with patients. Please see the CDC web page at http://cdc.gov/h1n1flu/guidelines_infection_control.htm for more information

How long should health care workers be asked to stay home if they have flu-like symptoms?

Most health care workers may return to work 24 hours after fever has subsided without antipyretic medications. If returning to work in areas where severely immunocompromised patients are provided care, consider temporary reassignment or exclusion from work for 7 days from symptom onset or until the resolution of symptoms, whichever is longer. Healthcare personnel recovering from a respiratory illness may return to work with immunocompromised patients sooner if absence of 2009 H1N1 viral RNA in respiratory secretions is documented by rRT-PCR. Currently there is no recommendation to end isolation earlier for healthcare personnel on oseltamivir or zanamavir.

What is the recommended time that someone with influenza-like illness or 2009 H1N1 influenza stays home from work or school?

CDC recommends that those who are ill with symptoms of influenza-like illness (ILI) stay home from work or school until 24 hours after the fever has subsided without antipyretic medications. They should be encouraged to continue good hand hygiene, cough etiquette and to follow any guidelines regarding return to work or school.

Must family members of those who are diagnosed with ILI or 2009 H1N1 influenza stay home from work or school?

Family or household member of patients diagnosed with ILI or 2009 H1N1 influenza may continue to attend school or work. They should stay vigilant for flu symptoms.

Lab Testing and Reporting Cases

Who should be tested for influenza?

Due to capacity limitations, the Michigan Department of Community Health, Bureau of Laboratories (MDCH BOL) will not be conducting influenza testing (RT-PCR) for every suspect 2009 H1N1 influenza case within Michigan. Similar to traditional influenza seasons, influenza testing at BOL during 2009–2010 will focus on outbreak investigations and public health-directed case investigations. Testing at MDCH BOL will be limited to the following criteria:

- Outbreaks
- Patients with unusual presentations of flu (i.e., encephalopathy)
- Pregnant women with severe ILI
- Hospitalized patients particularly in the ICU with severe ILI
- Influenza-related deaths in both children and adults
- Influenza Sentinel Providers

You will need to fill out a MDCH Test Request Form found at <http://www.michigan.gov/mdchlab>. **Please include the reason for testing.** Pre-approval of specimens is not required at this time, but please include “reason for testing” on the request form. Depending on the volume of specimens received at BOL for influenza testing, a pre-approval process may be instituted. Check www.michigan.gov/flu for current status of any approval process.

What are the recommendations for sample collection and submission for rRT-PCR?

MDCH BOL recommends using any of the following for specimen collection.

- Nasopharyngeal (NP) swab in viral transfer media (VTM) or phosphate buffer solution (PBS)
- Nasal swab in VTM or PBS
- Dual NP/oropharyngeal swabs in VTM or PBS
- Nasal aspirates
- Viral isolates

Where do I send samples for diagnostic testing of patients who do not fit the above influenza specimen testing criteria?

Several laboratories within Michigan are now performing 2009 novel influenza A (H1N1) PCR diagnostic testing. Please refer to the MDCH BOL website at <http://www.michigan.gov/mdchlab> for a list of laboratories that perform 2009 novel influenza A (H1N1) PCR diagnostic testing.

Do I need to report cases of influenza?

Yes, effective September 1, 2009, report ALL laboratory-confirmed influenza-associated hospitalizations and deaths, including both those due to seasonal influenza strains and 2009 H1N1 influenza as soon as possible, to your local health department <http://www.malph.org/page.cfm/18/>. Laboratory confirmation includes rapid influenza tests, RT-PCR, DFA, IFA, or culture.

Does a negative rapid influenza test rule out influenza?

A negative result does not exclude influenza virus infection. A diagnosis of influenza should be considered based on a patient’s clinical presentation and empiric antiviral treatment should be considered, if indicated. The sensitivity of this assay has been shown to range between [10-70%*] for the detection 2009 H1N1 influenza virus and between [20-100%*] for seasonal influenza viruses. Please see the CDC web page http://www.cdc.gov/h1n1flu/guidance/rapid_testing.htm for more information.

Antivirals

Who should be treated with antiviral medications during the 2009–2010 influenza seasons and which antiviral(s) should be used?

According to the CDC, the vast majority of influenza viruses currently circulating in the U.S. and worldwide are the 2009 H1N1 influenza strain. This virus is resistant to both Amantadine and Rimantadine, but is sensitive to both neuraminidases, oseltamivir and zanamivir. CDC recommends that high-risk individuals or those hospitalized with severe symptoms of ILI be treated with either oseltamivir or zanamivir. Persons who are not at higher risk for complications or who do not have severe influenza requiring hospitalization generally do not require antiviral medications for treatment. As the type of strains and resistance of the virus may change throughout the season, we urge you to refer periodically to both the CDC <http://www.cdc.gov/h1n1flu/recommendations.htm>, and MDCH’s website at <http://www.michigan.gov/flu/>.

Should I wait for lab test results before initiating treatment for influenza?

When treatment of influenza is indicated in a patient with suspected influenza, health care providers should initiate empiric antiviral treatment as soon as possible. Waiting for laboratory confirmation of influenza to begin treatment with antiviral drugs is not necessary. Patients with a negative rapid influenza diagnostic test should be considered for treatment if clinically indicated because a negative rapid influenza test result does not rule out influenza virus infection. The sensitivity of rapid influenza diagnostic tests for 2009 H1N1 virus can range from 10% to 70%, indicating that false negative results occur frequently.

Who should get prophylaxis?

High-risk individuals who have had close contact with a suspected or confirmed case of 2009 H1N1 influenza should be considered for prophylaxis with oseltamivir or zanamivir. Health care personnel with a recognized unprotected exposure to Health care personnel may be considered for post-exposure prophylaxis. Health care personnel, who have occupational exposures, can be counseled about the early signs and symptoms of influenza, and advised to immediately contact their health care provider for evaluation and possible early treatment if clinical signs or symptoms develop. For more information please check the CDC website at <http://cdc.gov/h1n1flu/recommendations.htm>.

What are the recommended doses for treatment and prophylaxis?

Please see the following table for recommended doses for treatment and prophylaxis for adults and children. For renal dosing, refer to <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e717a1.htm>.

Antiviral medication dosing recommendations for 2009 H1N1 influenza treatment or chemoprophylaxis

Agent, group		Treatment (5 days)	Chemoprophylaxis (10 days)
Oseltamivir			
Adults		75-mg capsule twice per day	75-mg capsule once per day
Children ≥ 12 months	15 kg or less	60 mg per day divided into 2 doses	30 mg once per day
	16–23 kg	90 mg per day divided into 2 doses	45 mg once per day
	24–40 kg	120 mg per day divided into 2 doses	60 mg once per day
	>40 kg	150 mg per day divided into 2 doses	75 mg once per day
Zanamivir			
Adults		Two 5-mg inhalations (10 mg total) twice per day	Two 5-mg inhalations (10 mg total) once per day
Children		Two 5-mg inhalations(10 mg total) twice per day (age, 7 years or older)	Two 5-mg inhalations (10 mg total) once per day (age, 5 years or older)

Note: Table was extracted from product information for Tamiflu® and Relenza®.

Should children <1 year of age be treated or given prophylaxis with antiviral medications?

Yes, the CDC recommendations for antiviral treatment or chemoprophylaxis dosing for infants <12 months of age are displayed below.

Dosing recommendations for antiviral treatment or chemoprophylaxis for children <1 year of age

Age of child	Recommended treatment dose for 5 days	Recommended prophylaxis dose for 10 days
<3 months	12 mg twice daily	Not recommended unless situation judged critical, due to limited data on use in this age group
3–5 months	20 mg twice daily	20 mg once daily
6–11 months	25 mg twice daily	25 mg once daily

Note: Table was extracted from product information for Tamiflu® and Relenza®.

When dispensing oral suspension Tamiflu for children younger than 1 year of age, the included oral dosing dispenser in the Tamiflu package should always be removed. Pharmacists and health care providers should provide an oral syringe that is capable of accurately measuring the prescribed milliliter (mL) dose, and counsel the caregiver how to administer the prescribed dose. Some experts recommend weight-based dosing for infants <12 months of age. Please see <http://cdc.gov/h1n1flu/recommendations.htm> for more information. For pediatric dosing, Oseltamivir can be compounded by a pharmacist. Because of the lack of safety and dosing data on children <12 months of age, the FDA has issued an Emergency Use Authorization (<http://www.fda.gov/downloads/Drugs/DrugSafety/InformationbyDrugClass/UCM153547.pdf>). Clinicians are advised to monitor patients for adverse events.

What are my options for prescribing if the liquid formulation is unavailable?

There are two options for most children and adult who cannot swallow capsules. Most retail pharmacies can compound Oseltamivir into a 15mg/mL suspension. Please go to the CDC website at <http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm188629.htm> for more information. Parents or guardians may also open and mix the contents of 30mg or 45mg capsules with thick sweetened liquids. Please go to the CDC website at http://www.cdc.gov/H1N1flu/antivirals/mixing_tamiflu_qa.htm for more information.

Should pregnant women be treated or given prophylaxis with antiviral medications?

Oseltamivir and zanamivir are "pregnancy category C" medications, indicating that no clinical studies have been conducted to assess the safety of these medications for pregnant women. Because pregnant women are considered to be at high-risk for complications, treatment should be started as early as possible and should not be postponed waiting for laboratory confirmation. Due to the changing immune, cardiac and respiratory physiology women up to 2 weeks post-partum period are also considered to be at increased risk. Post-exposure prophylaxis for pregnant women may be considered. For more information, please go to http://www.cdc.gov/h1n1flu/pregnancy/antiviral_messages.htm.

Should women who are breast-feeding be treated or given prophylaxis with antiviral medications?

Breastfeeding should be protected and supported at all times because of the protection from respiratory infection that breast milk provides to the infant. The mother with influenza-like-illness should be encouraged and assisted to express her milk. During this time, the infant should be fed the mother's

expressed milk by another person who is well. Treatment or chemoprophylaxis with antiviral medications is not a contraindication to breastfeeding. For other information related to infant feeding, please see <http://www.cdc.gov/h1n1flu/breastfeeding.htm>

NEW Are there any Intravenous antiviral medications alternative for critically ill patients?

Yes the CDC and FDA have made peramivir available by Emergency Use Authorization (EUA). Please go to CDC's website at http://www.cdc.gov/h1n1flu/EUA/pdf/peramivir_qa.pdf for more information. Intravenous zanamivir is available for compassionate use from its manufacturer via an emergency request to the FDA.

NEW Which patients should be considered for intravenous antiviral therapy?

Peramivir IV is authorized only for the following patients who are admitted to a hospital and under the care or consultation of a licensed clinician (skilled in the diagnosis and management of patients with potentially life-threatening illness and the ability to recognize and manage medication-related adverse events):

Adult patients, for whom therapy with an IV agent is clinically appropriate, based upon one or more of the following reasons:

1. 1. patient not responding to either oral or inhaled antiviral therapy, or
2. 2. drug delivery by a route other than IV (e.g. enteral oseltamivir or inhaled zanamivir) is not expected to be dependable or is not feasible, or
3. 3. the clinician judges IV therapy is appropriate due to other circumstances.

Pediatric patients for whom an IV agent is clinically appropriate because:

1. 1. patient not responding to either oral or inhaled antiviral therapy, or
2. 2. drug delivery by a route other than IV (e.g. enteral oseltamivir or inhaled zanamivir) is not expected to be dependable or is not feasible.

Vaccines

When should we start seasonal flu vaccinations for healthcare workers and the general population?

The federal Advisory Committee on Immunization Practices (ACIP) recommendations posted on August 28, 2009 state, "All persons currently recommended for seasonal influenza vaccine, including those aged ≥65 years, should receive the seasonal vaccine as soon as it is available (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5810a1.htm>)."

What type of vaccine for 2009 H1N1 influenza will be available?

Influenza A (H1N1) 2009 monovalent vaccine is being produced by four different manufacturers, and will be available as an inactivated injection (multi-dose or single dose) or as a live attenuated nasal spray.

Is the influenza A (H1N1) 2009 monovalent vaccine safe?

Yes, the 2009 H1N1 influenza is a strain change from the seasonal influenza. The influenza A (H1N1) 2009 monovalent vaccine is produced using the same well-established process used in manufacturing seasonal influenza vaccines. The influenza A (H1N1) 2009 monovalent vaccine has undergone rigorous clinical trials at several sites across the United States and has been FDA approved. The safety of this vaccine, and all other vaccines, is under constant monitoring. Any adverse effects associated with the vaccine should be reported immediately through the VAERS monitoring system at www.cdc.gov/vaccinesafety/vaers/.

NEW Do any of the influenza A (H1N1) 2009 monovalent vaccines contain adjuvants?

No, as with the seasonal influenza none of the influenza A (H1N1) 2009 monovalent vaccines manufactured for the United States contain adjuvants. Please go to CDC's website for more information at <http://www.cdc.gov/vaccinesafety/updates/adjuvants.htm>.

NEW Do any of the influenza A (H1N1) 2009 monovalent vaccines contain thimerosal or other preservatives?

Yes, as with seasonal influenza vaccine multi-dose vials of the influenza A (H1N1) 2009 monovalent vaccine will contain thimerosal, a preservative. Single-dose preparations of the inactivated vaccine as well as the live attenuated vaccine do not contain thimerosal or any other preservative. For more information about specific vaccine preparations please go to the CDC website at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5839a3.htm>.

How do clinics become vaccine providers?

To assure accurate vaccine tracking, patient recall, and adverse event monitoring, all providers are required to use the Michigan Care Improvement Registry (MCIR) to track and document vaccine administration and dispensing. Providers will need to complete the MCIR provider user/usage agreement form by going to <http://www.mcir.org/providercontent.html>. To become an influenza A (H1N1) 2009 monovalent vaccine provider, clinics will also need to fill out a Provider Agreement Enrollment form which can be found in the H1N1 2009 Provider Toolkit at <http://www.michigan.gov/flu/>. This form will need to be submitted to the clinic's local health department <http://www.malph.org/page.cfm/18/>.

Can a private clinic bill or charge for the influenza A (H1N1) 2009 monovalent vaccine?

Private clinics cannot charge or bill for the vaccine itself or for any supplies used in the administration of the influenza A (H1N1) 2009 monovalent vaccine. Private clinics may bill a third-party payer or charge the patient an administration fee or co-pay for administration of the vaccine. The administration fee charged to the patient cannot exceed the regional Medicare vaccine administration fee. Additional information can be found under Program Information in the H1N1 2009 Provider Toolkit. Go to www.michigan.gov/h1n1flu, and then click on *Clinicians*.

What liability coverage exists for healthcare professionals that participate in vaccination efforts?

Specific immunity from tort liability is provided through the Public Readiness and Emergency Preparedness (PREP) Act for the administration of medical countermeasures. Please see the US Department of Health and Human Services web page for frequently asked questions regarding the PREP act at: <http://www.hhs.gov/disasters/emergency/manmadedisasters/bioterrorism/medication-vaccine-ga.html>, or in the H1N1 2009 Provider Toolkit at www.michigan.gov/flu.

NEW If I am not a provider of the influenza A (H1N1) 2009 monovalent vaccine, where can I direct my patients to get the vaccine?

You can go to the Michigan Department of Community Health 2009 H1N1 web site at www.michigan.gov/h1n1flu and click on the link, "Click here for information on where to get flu vaccines." In addition, you can contact your local health department <http://www.malph.org/page.cfm/18/> or check the Flu Shot locator at www.flu.gov.

Who should get the influenza A (H1N1) 2009 monovalent vaccine?

ACIP recommends vaccinating as many as possible, with an initial focus on groups at higher risk for complications from 2009 H1N1 influenza. As supply increases, vaccinations can be expanded to include larger population. Please allow for flexibility because vaccine availability and demand for vaccination will vary. ACIP recommends that the following groups be targeted to receive the vaccination as early as possible:

- pregnant women
- persons who live with or provide care for infants aged <6 months (e.g., parents, siblings, and daycare providers)
- health-care and emergency medical services personnel
- persons aged 6 months–24 years
- persons aged 25–64 years who have medical conditions that put them at higher risk for influenza-related complications

Once providers meet the demand for vaccine among persons in these initial target groups, vaccination is recommended for all persons 25 through 64 years of age. Current studies indicate that the risk for infection among persons age 65 or older is less than the risk for younger age groups. However, once vaccine demand among younger age groups has been met, programs and providers should offer vaccination to people 65 or older.

How many doses of influenza A (H1N1) 2009 vaccine will someone need?

Anyone 10 years of age and older will only need 1 dose. Children 9 years of age and under will need 2 doses of vaccine even if they have had seasonal flu vaccine in the past. This is different from the seasonal influenza guidelines which recommend that children 8 years of age and under get 2 doses of seasonal flu vaccine if this is the first year they are getting a flu vaccine. This means that some children will need for 4 doses of flu vaccine (two seasonal doses and two 2009 H1N1 influenza doses). Two doses of either the seasonal influenza or the influenza A (H1N1) 2009 monovalent vaccine must be separated by at least 28 days.

Who is eligible to get the nasal spray forms of the influenza A (H1N1) 2009 and/or seasonal flu vaccines?

Healthy persons between the ages of 2 and 49 years of age are eligible to get the nasal influenza vaccine. Those that have underlying medical problems, pregnant women or children who have a history of asthma or wheezing should not get the nasal influenza vaccines. Household & close contacts of persons who are severely immunosuppressed requiring a protective environment should be vaccinated with injectable flu vaccine or if receiving nasal 2009 H1N1 vaccine, they should refrain from contact with these persons for 7 days.

Which health care personnel should get the nasal spray form of the influenza A (H1N1) 2009 and/or seasonal flu vaccine?

Only health care workers who are performing direct patient of individuals who are severely immunosuppressed that they need a protective environment (i.e. bone marrow transplant) should **not** get the live attenuated influenza vaccine (LAIV) or should be excluded from caring for such patients until 7 days after they get LAIV. All other health care personnel under the age of 49 years, who are otherwise healthy and not pregnant, are eligible to get LAIV. Health Care Personnel who are pregnant or have chronic medical conditions, other than severe immunosuppression, can administer nasal 2009 H1N1 vaccine or seasonal flu vaccine.

Can 2009 H1N1 vaccine be administered at the same visit as other vaccines?

Inactivated 2009 H1N1 vaccine can be administered at the same visit as any other vaccine, including pneumococcal polysaccharide vaccine. Live 2009 H1N1 vaccine can be administered at the same visit as any other live or inactivated vaccine EXCEPT seasonal live attenuated influenza vaccine.

Should vaccines for seasonal influenza and 2009 H1N1 influenza be given at the same visit?

Both seasonal and 2009 H1N1 vaccines are available as inactivated and live attenuated (LAIV) formulations. The simultaneous and sequential administration of seasonal and 2009 H1N1 inactivated vaccines is currently being studied. However, existing recommendations are that two inactivated vaccines can be administered at any time before, after, or at the same visit as each other (General Recommendations on Immunization, MMWR 2006;55[RR-15]). Existing recommendations also state that an inactivated and live vaccine may be administered at any time before, after or at the same visit as each other. Consequently, providers can administer seasonal and 2009 H1N1 inactivated vaccines, seasonal inactivated vaccine and 2009 H1N1 LAIV, or seasonal LAIV and inactivated 2009 H1N1 at the same visit, or at any time before or after each other. Live attenuated seasonal and live 2009 H1N1 vaccines should NOT be administered at the same visit until further studies are done. If a person is eligible and prefers the LAIV formulation of seasonal and 2009 H1N1 vaccine, these vaccines should be separated by a minimum of four weeks.

Who is included as part of the target group of health-care providers?

Health-care personnel (HCP) include those who have the potential for exposure to patients or contaminated materials/surfaces. HCP might include (but are not limited to) physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, and contractual staff not employed by the health-care facility. HCP in the target group also include those working in acute-care hospitals, nursing homes, skilled nursing facilities, physicians' offices, urgent care centers, outpatient clinics, and persons who provide home health care and emergency medical services. Those staff who are not involved in direct patient care (i.e., housekeeping personnel, clerks) but who have the potential for exposure to infectious agents that can be transmitted to or from HCP should be considered as part of this target group. It is anticipated that frontline HCP and those with the greatest risk for exposure would be the first to get the vaccine (MMWR 58 (RR-10), Aug 28, 2009).

Should patients on antivirals get a vaccine for seasonal flu or 2009 H1N1 influenza?

Administration of trivalent inactivated seasonal influenza vaccine (TIV) or influenza A (H1N1) 2009 monovalent vaccine and influenza antivirals during the same medical visit is acceptable. The effect on safety and effectiveness of LAIV co-administration with influenza antiviral medications has not been studied. However, because influenza antivirals reduce replication of influenza viruses, LAIV should not be administered until 48 hours after cessation of influenza antiviral therapy, and influenza antiviral medications should not be administered for 2 weeks after receipt of LAIV. Persons receiving antivirals within the period 2 days before to 14 days after vaccination with LAIV should be revaccinated at a later date. (This language was taken from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e717a1.htm>.)

Should patients who have received either the seasonal influenza vaccine or influenza A (H1N1) 2009 monovalent vaccine be treated or given prophylaxis with antiviral medications?

Although these vaccines are expected to be highly effective, no vaccine is 100% efficacious. Therefore, a history of receipt of 2009 H1N1 or seasonal influenza vaccine does not rule out influenza infection. Early empiric treatment should be initiated for vaccinated persons with suspected influenza infection when indicated (e.g. persons requiring hospitalization, with severe infection, or at higher risk for influenza-related complications). Vaccination with 2009 H1N1 influenza vaccine is not expected to provide

protection against infection with seasonal influenza A or B viruses. Similarly, vaccination with seasonal influenza vaccine is not expected to prevent infection with 2009 H1N1 influenza virus.

Do people who were diagnosed with flu still need to get vaccinated?

Unless an individual was diagnosed as a PCR confirmed case of 2009 H1N1 influenza by MDCH BOL, then that individual should be immunized with influenza A (H1N1) 2009 monovalent vaccine. Please see the CDC web site at http://www.cdc.gov/h1n1flu/vaccination/clinicians_ga.htm for more information.

Can a person who has received LAIV test positive on a rapid influenza diagnostic test?

The live attenuated influenza vaccine viruses in LAIV (seasonal vaccine and 2009 H1N1 monovalent vaccine) can cause a positive result on a rapid influenza diagnostic test. The tests are designed to detect influenza viruses and cannot differentiate between live attenuated and wild-type influenza viruses. A positive test in a person who recently (in the previous 7 days) received LAIV and who also has an influenza-like illness could be caused by either LAIV or wild-type influenza virus.