



# New Hampshire Health Alert Network

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**TO:** Infection Control Practitioners, Infectious Disease Specialists, Physicians, Nurses, NHHA, Hospital Emergency Departments, Community Health Centers, Community Mental Health Centers, Influenza Sentinels, NH Schools, Manchester Health Department, Nashua Health Department, Public Health Network Coordinators, EMS, DPHS Outbreak Team, DPHS Investigation Team, DPHS Management Team, Laboratory Response Network, Long-Term Care Facilities, Post-Secondary Schools, Dialysis and Transplant Clinics, Correctional Facilities, Occupational Health Providers

**FROM:** Jodie A. Dionne-Odom, MD, Deputy State Epidemiologist, NH Division of Public Health Services

**SUBJECT:** H1N1 Influenza Clinical Guidance – Updated

### **New Hampshire Department of Health and Human Services (NH DHHS) Clinical Guidance on 2009 H1N1 Influenza (H1N1)**

**This document replaces the 05/19/09 Clinical Guidance for Providers.**

**Key changes include:**

- Updated Antiviral Recommendations
- H1N1 Vaccine Guidance
- Updated Algorithms for Patient Triage and H1N1 Testing
- New Algorithm for Exposed and Ill Healthcare Workers

The CDC and NH DHHS have tracked H1N1 influenza since March 2009 to better understand its epidemiology within the US and NH. Currently H1N1 is behaving much like seasonal influenza in terms of severity of illness with the significant difference that H1N1 is more likely than seasonal influenza to cause serious disease in children and young adults. Since the first case in New Hampshire was identified in April, community spread of H1N1 influenza within the state has been ongoing and was documented throughout the summer in camp settings and provider offices.

NH DHHS provides this guidance to assist with clinical decision making in the setting of H1N1, but clinicians should continue to apply sound clinical judgment to the approach of each

individual patient. These recommendations are subject to change as new data becomes available.

This H1N1 Clinical Guidance is organized as follows:

- A) Clinical presentation (page 2)
- B) Testing (page 3)
- C) Antiviral treatment and chemoprophylaxis (page 3)
- D) Vaccination (page 7)
- E) Infection control (page 9)
- F) New algorithms for triage (p12), testing (p13), vaccination (p8) and healthcare worker management (p 14-15)

#### **A) Clinical Presentation**

**See algorithm A for a suggested approach to triage calls to the clinic or emergency room.**

Most people with H1N1 infection have fever, chills, upper respiratory symptoms (cough, sore throat, runny nose), headaches, muscle/joint aches and fatigue. Some people, especially children, may develop vomiting and diarrhea. Most patients with H1N1 meet the definition of influenza like illness (ILI), defined as fever (100°F [37.8°C] or higher) with cough and/or sore throat.

Severe illness is primarily a viral pneumonia that rapidly progresses to acute respiratory distress syndrome (ARDS), often requiring intubation and critical care monitoring. LDH (lactate dehydrogenase) and CK (creatinine kinase) levels are often elevated (>1000) as well and lymphopenia may be present. The subsequent development of multisystem organ failure in these patients is associated with high mortality. Pathologic evaluation of adults with severe illness due to H1N1 have not shown bacterial superinfection of the lungs, but one CDC report of pediatric mortality (36 deaths) did show common bacterial superinfection (mostly staphylococcus aureus). Of note, although younger persons are more likely to acquire H1N1 and more likely to develop severe illness, adults above 65 who do acquire the disease appear to have a high likelihood of developing influenza-related complications. High-risk patients (listed in section C) with even minimal respiratory symptoms have the potential to become severely ill with H1N1 quickly.

**Warning symptoms that warrant immediate evaluation in adults include:**

- Significant shortness of breath
- Persistent high fevers
- Significant chest or abdominal pain
- Lightheadedness
- Disorientation or confusion
- Respiratory distress that recurs after the patient had been feeling better

**Warning symptoms that warrant immediate evaluation in children include:**

- Difficulty breathing
- Cyanosis
- Inability to tolerate liquids

- Severe vomiting
- Lethargy or extreme irritability

## B) Testing

### See Algorithm B for Testing Guidelines

Several tests are available to help with H1N1 diagnosis, including rapid diagnostic tests (RDTs), immunofluorescence, viral culture and RT-PCR. RDTs are not adequately sensitive to exclude H1N1, and have imperfect specificity, so NH DHHS does not recommend their use. **A negative RDT does not rule out H1N1 infection.**

RT-PCR testing is currently only available through the NH DHHS PHL, and is recommended only for the following groups:

- Hospitalized patients
- Healthcare workers with ILI with direct patient contact during their infectious period
- Individuals in an outbreak investigation (in consultation with NH DHHS)

### To conduct RT-PCR testing for H1N1 influenza:

- Collect one nasopharyngeal specimen via swab, aspirate or wash as soon as possible after illness onset.
- Collection should be by trained personnel using droplet precautions
- Place the sample in viral transport media and store and transport at 4° C.

To acquire viral testing kits, contact the NH Public Health Laboratories office at 1 (800) 852-3345, extension 4661 or (603) 271-4661.

## C) Antiviral Treatment and Chemoprophylaxis

### Treatment Recommendations

Treatment is recommended **within 48 hours of symptom onset** with oseltamivir (oral) or zanamivir (inhaled) for persons with probable or confirmed H1N1 who are at high risk of influenza-related complications influenza, including:

1. Hospitalized patients
2. Children younger than 5 years old (highest risk <2 years old)
3. Adults 65 and older
4. Pregnant women
5. Residents of nursing homes and other chronic care facilities
6. Children and adults with chronic medical conditions, immunosuppression or receiving long term aspirin therapy.

Chronic medical conditions warranting consideration of antiviral therapy include asthma, heart disease (other than hypertension), renal, liver, hematologic, neuromuscular and metabolic disorders (including diabetes mellitus.) Obesity may present an additional risk factor and studies designed to explore this association are ongoing.

Persons who are not at high risk for influenza-related complications or do not have severe influenza requiring hospitalization generally do not require antiviral medications for

treatment. However, any suspected influenza patient presenting with warning symptoms (see section A above) or signs of lower respiratory tract illness should promptly receive empiric antiviral therapy. Providers should not wait for laboratory confirmation if clinical suspicion is high. Clinical judgment is important in making treatment decisions for all patients presenting with influenza like illness.

### **Treatment in Adults**

- Oseltamivir 75 mg orally twice daily for five days
- Zanamivir 10mg inhaled twice daily for five days

### **Treatment in Children**

- Oral oseltamivir (weight based twice daily dosing) for five days

Oseltamivir is FDA-approved for ages 1-18 years but has issued an Emergency Use Authorization (EUA) status for infants less than one year old based on limited safety data and higher rates of H1N1 morbidity and mortality in infants.

- Inhaled zanamivir 10 mg twice daily for five days (approved for children ages 7-18 with no history of asthma)

Side effects of oseltamivir include nausea and vomiting as well as a few postmarketing neuropsychiatric effects in children reported in 2006. Side effects with zanamivir include bronchospasm with inhalation, so the drug should not be given to persons with a history of asthma. Please see package insert for a complete listing of side effects for these two medications.

Treatment dosing schedules for adults and children can be found in table 1 at the following address: <http://www.cdc.gov/h1n1flu/recommendations.htm>

### **Treatment in Pregnancy**

Pregnant women are at high risk for influenza-related complications and should receive antiviral treatment. 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; however, the available risk benefit ratio with recent reports of more likely acquisition, severe influenza illness and even mortality in pregnant women infected with H1N1 has shifted the balance toward recommending therapy. Due to its systemic activity, oseltamivir is preferred for treatment of pregnant women. Recommendations for use of antivirals for pregnant women may change as additional data becomes available.

### **Additional practices to reduce delays in treatment:**

- Provider offices can inform patients at high risk for influenza-related complications of the signs and symptoms of influenza and the need for early treatment after onset of symptoms.
- Provider offices can ensure rapid access to telephone consultation and clinical evaluation for these patients as well as patients who report severe illness.
- Providers can consider empiric treatment of patients at high risk for influenza-related complications based on telephone contact if hospitalization is not indicated and if this will substantially reduce delay before treatment is initiated.

- In select circumstances, providers might also choose to provide select patients at high risk for influenza-related complications with prescriptions that can be filled at the onset of symptoms after telephone consultation with the provider.

### **Chemoprophylaxis (pre-exposure or post-exposure)**

Patients with H1N1 are infectious for a short period prior to onset of symptoms and duration of viral shedding can last for days. For planning purposes, most experts have assumed that the **infectious period for H1N1 lasts from one day prior to onset of symptoms through 24 hours after fever stops** (without the use of antipyretics.)

Chemoprophylaxis should be considered for persons who meet BOTH of the following categories:

- Close contact with a H1N1 case (confirmed, probable or suspected) **during** the infectious period

### **AND**

- At high risk of influenza-related complications or working in a field with risk of transmission to patients at high risk for influenza-related complications (e.g., healthcare workers, public health workers and first responders.)

Chemoprophylaxis should **not** be routinely prescribed for healthy persons with potential exposures in large group settings. If warranted, chemoprophylaxis should be started within 48 hours of the exposure.

### **Chemoprophylaxis in Adults**

- Oseltamivir 75 mg orally once daily for ten days
- Zanamivir 10 mg inhaled once daily for ten days.

The ten-day treatment duration begins after the last known exposure with the H1N1 case (confirmed, probable or suspected). One alternative to post-exposure chemoprophylaxis for a person who is neither at high risk for influenza-related complications nor is a healthcare worker is to counsel the patient to watch for symptoms of influenza that would then prompt a course of antiviral therapy if the person became ill and met criteria for treatment. Individuals receiving antiviral therapy need to continue hand and respiratory hygiene practices due to the continued viral shedding that may occur even with therapy.

Certain persons with ongoing occupational risk for H1N1 exposure (e.g., healthcare workers) who are also at high risk for influenza-related complications should be protected by infection control practices in their work setting when exposure occurs.

**See Algorithm D on Healthcare Worker Management as well as the section below on infection control.**

### **Chemoprophylaxis in Children**

Children younger than five years old or with medical conditions should receive post exposure chemoprophylaxis if they are within a 48-hour window of close contact with an H1N1 case.

### **Recommended Antiviral Regimen**

- Oseltamivir has weight-based once daily oral dosing (ages 1-18)

- For infants less than 1 year old, age-based oseltamivir can be used under the EUA. Chemoprophylaxis is generally not recommended for infants younger than 3 months old
- Zanamivir dosing is 10 mg inhaled once daily (approved for children 5 years or older who do not have a history of asthma)
- Duration of antiviral chemoprophylaxis is 10 days after the last known exposure to an ill confirmed case of H1N1 influenza virus infection.

See Table 1 for adult and pediatric treatment and chemoprophylaxis dosing at:  
<http://www.cdc.gov/h1n1flu/recommendations.htm>

### **Chemoprophylaxis in Pregnant Women**

Pregnant women who are close contacts with suspected, probable or confirmed cases of H1N1 influenza should receive antiviral chemoprophylaxis. In those without contraindications, zanamivir may be preferable because of its limited systemic absorption.

### **Antiviral Use for Control of H1N1 Outbreaks in Closed or Semi-closed Settings**

Residents of closed or semi-closed settings with ILI without alternate diagnosis should be treated with oseltamivir or zanamivir. In most circumstances where an outbreak of ILI is suspected, residents of the setting without ILI should be considered for chemoprophylaxis with either oseltamivir or zanamivir as early as possible to reduce the spread of the H1N1. Chemoprophylaxis should be administered for a minimum of 2 weeks. If surveillance indicates that new cases continue to occur, chemoprophylaxis should be continued until approximately 7 days after illness onset in the last patient.

In addition to antiviral medications, other outbreak-control measures include:

- Appropriate infection control
- Establishing cohorts of patients with confirmed or suspected influenza
- Restricting staff movement between wards or buildings
- Restricting contact between ill staff or visitors and patients
- Active surveillance for new cases.

Medical directors of long-term care facilities should review and update their plans for outbreak control of influenza. Additional guidance for infection control measures in long-term care facilities can be found at: <http://www.cdc.gov/flu/professionals/infectioncontrol/institutions.htm>

For more information about influenza outbreaks in other closed or semi-closed settings (e.g., correctional facilities, or other settings in which persons live in close proximity facilities see: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5707a1.htm> and <http://www.idsociety.org/content.aspx?id=9202#flu>

### **Pre-exposure Chemoprophylaxis**

- Pre-exposure chemoprophylaxis may be appropriate only in very limited circumstances and in consultation with local medical and/or public health authorities.
- Pre-exposure chemoprophylaxis should be given during the potential exposure period and continued for 10 days after the last known exposure to an ill confirmed case of H1N1 influenza virus infection.

CDC advice on use of antivirals (updated 9/8/09) is available at  
<http://www.cdc.gov/h1n1flu/recommendations.htm>

### **H1N1 Antiviral Resistance**

Resistance testing of 1277 H1N1 isolates by the CDC has shown 100% resistance to the adamantanes (amantadine and rimantadine) and 99.4 % sensitivity to the neuraminidase inhibitor, oseltamivir. As of September 4<sup>th</sup>, there have been 9 reported cases of H1N1 oseltamivir resistance in the US. Some cases occurred in persons receiving prophylactic oseltamivir following an exposure. Another CDC report from a North Carolina camp documented person-to-person transmission of an H1N1 strain with oseltamivir resistance in July. Both campers were receiving chemoprophylaxis at the time.

These reports drive the recommendation to use antivirals appropriately to avoid enabling emergence of neuraminidase resistant strains. Healthy persons with community exposure to H1N1 should not be given prophylactic antivirals. Inhaled zanamivir has retained 100% activity in susceptibility testing performed to this point.

#### **D) Vaccination**

On September 15, 2009, the FDA approved the H1N1 vaccines produced by CSL Limited, MedImmune LLC, Novartis Vaccines and Diagnostics Limited, and Sanofi Pasteur Inc. All firms manufacture the H1N1 vaccines using the same processes as seasonal influenza vaccines, which has a long track record of safety. Studies in 3000 adults and children of two candidate vaccines are ongoing across the country and will inform further recommendations once analysis is complete. One newly published article suggests that a single dose of vaccine provides good immunity to adults age 18-64. Updates to these recommendations will be posted as new data is made available.

##### **Criteria for use of inactivated (killed) H1N1 vaccine:**

- Adults can be vaccinated from multidose vials (0.5 mL per dose, 5 doses per vial),
- Infants aged 6-35 months should receive 0.25 mL of inactivated vaccine
- Children from 36 months -18 years should receive 0.5 mL of inactivated vaccine
- Pregnant women should receive 0.5 mL of inactivated vaccine: both infants and pregnant women should receive preservative free vaccine

##### **Criteria for use of live attenuated (LAIV) H1N1 vaccine:**

- Individuals aged 2-49 years
- Not pregnant
- No history of asthma or COPD
- Intact immune system

**The first shipment of H1N1 vaccine for initial target groups is expected around 10/5/09.** New Hampshire DHHS will receive the first shipments of H1N1 vaccine from a central distribution site, with subsequent shipments each week. Vaccine distribution will be managed by the NH Immunization Program (NHIP) and will be provided only to medical providers and clinics that have registered with the NHIP in advance. (250 sites have registered to date, including many hospitals that have taken responsibility for providing vaccine to their local affiliated clinics.)

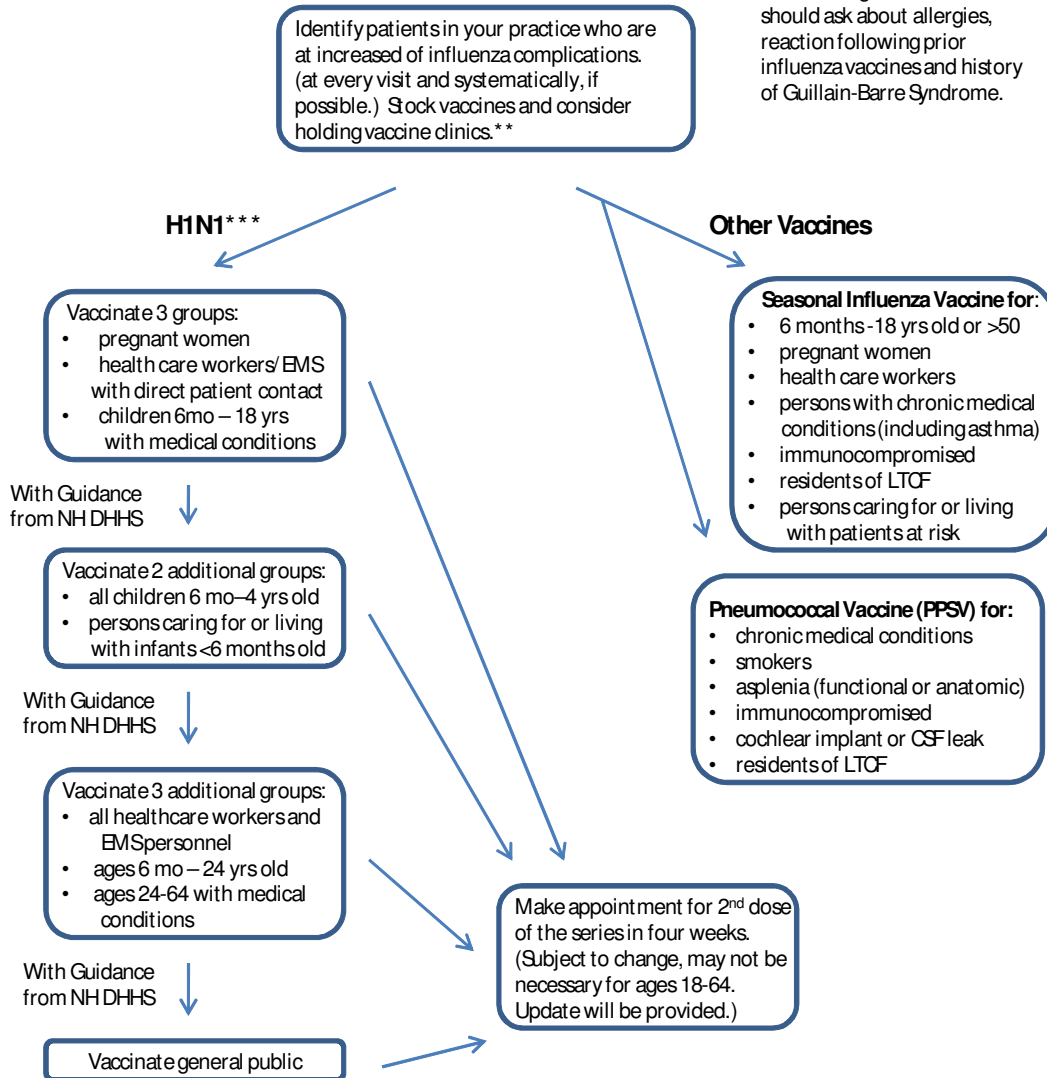
The eventual goal is to have sufficient H1N1 vaccine for all residents of New Hampshire. Vaccination is not mandatory for any individual or group. Given the limited vaccine stock at the beginning of the influenza season, certain groups at higher risk of influenza infection and influenza-related complications have been prioritized to be "first in line". This allocation is the result of careful consideration by the New Hampshire Ethics Board and the NH DHHS who have evaluated CDC and DHHS national policies, vaccine availability and type and the epidemiology of influenza in certain risk groups in New Hampshire.

To report any adverse events after H1N1 vaccination (even if there is an uncertain link between the two), the vaccine adverse event reporting system (VAERS) should be used and can be found at [www.vaers.hhs.gov](http://www.vaers.hhs.gov). Reports can be filed securely online or by telephone at 1-800-822-7967.

See the following vaccine algorithm for details:

### NH DHHS Vaccine Algorithm\*

\* Anyone with a life threatening allergy to eggs or to any other substance in the vaccine should not get it. Providers should ask about allergies, reaction following prior influenza vaccines and history of Guillain-Barre Syndrome.



\* Make sure you (or your affiliated hospital) are registered as a vaccine provider with the NH Immunization Program (NHIP).

\*\*\* H1N1 vaccine is expected to be available in early October 2009, with stock continuing to arrive every 2 weeks. Seasonal influenza and pneumococcal vaccines are available now.

EMS= Emergency Medical Services personnel

Report any adverse events following vaccination to the online monitoring system at [www.vaers.hhs.gov](http://www.vaers.hhs.gov)

### E) Infection Control Guidelines

#### The general public

- Consistent use of respiratory hygiene and cough etiquette, including frequent hand hygiene, covering coughs and sneezes, and staying home when sick to keep from spreading illness.

### Patients with ILI staying at home

- Any patient with ILI or confirmed H1N1 who is well enough should stay in voluntary home isolation to decrease transmission to others.
- Patients with probable/confirmed H1N1 influenza should stay at home until at least 24 hours after fever resolves, without the use of antipyretics.
- For more information see [http://www.cdc.gov/h1n1flu/guidance\\_homecare.htm](http://www.cdc.gov/h1n1flu/guidance_homecare.htm)

### Healthcare settings

These guidelines represent the minimum level of infection control precautions. The need for an increased level of infection control is ultimately determined by the healthcare worker and specific patient situation. In summary, the NH DHHS is recommending infection control guidance similar to SHEA, APIC and IDSA:

#### **Infection Control Practices in Healthcare Settings for Patients with Suspected or Confirmed Novel H1N1 Influenza A**

Standard Precautions

Droplet Precautions

Private Room (preferable) or cohort with other infected patients

Hand Hygiene Adherence

Respiratory Hygiene and Cough Etiquette

Early Recognition and Separation of Infected Patients

Restriction of Visitors and Healthcare Personnel with Febrile Respiratory Illnesses

Particulate Respirator during Aerosol-Generating Procedures

All healthcare facilities should have signage at entry points instructing patients and visitors about hospital policies, including the need to notify staff immediately if they have signs and symptoms of ILI. Patients should be given surgical masks and instructed to utilize hand hygiene stations while waiting and being evaluated at the facility. Facilities in communities where H1N1 influenza transmission is occurring should limit points of entry to the facility.

### Outpatients

- Place a surgical mask on symptomatic patients when they arrive, and place them in a separate room with the door closed as soon as possible to limit their time in common waiting areas.
  - 1) Recommended precautions for **close contact** with all suspect, probable, and confirmed cases of H1N1:
    - Standard precautions
    - AND
    - Droplet precautions

2) Recommended precautions for **specimen collection** (includes obtaining nasopharyngeal specimens):

- Standard precautions

AND

- Droplet precautions

3) Recommended precautions for **aerosol generating procedures** (e.g., deep open tracheal suctioning, bronchoscopy, intubation, extubation, and nebulized medication administration):

- Standard precautions

AND

- Fit-tested N95 OR personal air purifying respirator (PAPR)

- Perform in single patient room with door closed OR in airborne infection isolation (All) room, whichever is feasible

- Healthcare personnel entering the room of a patient in isolation should be limited to those performing direct patient care.
- Meticulous hand hygiene should be performed before donning and after removal of PPE.
- Outpatient Hemodialysis Centers: Considerations for this population can be viewed at: [http://www.cdc.gov/h1n1flu/guidance/hemodialysis\\_centers.htm](http://www.cdc.gov/h1n1flu/guidance/hemodialysis_centers.htm)

### Inpatient

- Precautions are the same as those stated above in the outpatient section.
- Patients hospitalized with suspect, probable, or confirmed H1N1 influenza should be placed in a single-patient rooms with the door kept closed.
- Facilities should ensure that plans are in place to communicate information about suspect cases transferred to other departments in the facility or to other facilities.
- The patient should leave the room only when medically necessary, wear a surgical mask when outside of the patient room and should be encouraged to follow hand hygiene and respiratory hygiene practices. Cups and other utensils used by the patient should be washed with soap and water before use by other persons. Routine cleaning and disinfection strategies used during influenza seasons can be applied to the environmental management of H1N1 influenza. More information can be found at [http://www.cdc.gov/ncidod/dhqp/gl\\_envoinfection.html](http://www.cdc.gov/ncidod/dhqp/gl_envoinfection.html)

### Visitors

- Limit visitors to patients in isolation for H1N1 to persons who are necessary for the patient's emotional well-being and care. Schedule and control visits to allow for appropriate screening for ILI before entering the hospital and appropriate instruction on use of personal protective equipment and other precautions while in the patient's room (e.g., hand hygiene, limiting surfaces touched). Visitors should be instructed to limit their movement within the facility and may be offered a gown, gloves, eye protection, and respiratory protection (e.g., surgical mask) and should be instructed by healthcare personnel on their use before entering the patient's room.

### Environmental infection control

- Routine cleaning and disinfection strategies used during influenza seasons can be applied to the environmental management of H1N1 influenza. Management of laundry, utensils and medical waste should also be performed in accordance with procedures followed for seasonal influenza. More information can be found at [http://www.cdc.gov/ncidod/dhqp/gl\\_environmentinfection.html](http://www.cdc.gov/ncidod/dhqp/gl_environmentinfection.html).

### **Monitoring healthcare workers (See Algorithms C + D)**

#### **Management of healthcare workers at increased risk of influenza-related complications**

- Some healthcare workers are at higher risk of complications from H1N1 (e.g., pregnant women)
- Primary efforts in the hospital to protect these workers include H1N1 vaccination and the use of infection control practices to prevent unprotected exposures.
- In settings where vaccination is not possible and unprotected exposures are likely, reassignment of clinical responsibilities may be considered.

#### **Algorithms Attached**

- A) Triage: H1N1 telephone calls to provider office or emergency rooms
- B) Testing: H1N1 testing recommendations for patients in clinic or the emergency room
- C) Healthcare Worker with ILI
- D) Healthcare Worker with unprotected exposure to ILI

#### **Definitions**

A **confirmed case** of H1N1 infection is defined as a person with an ILI with laboratory confirmed novel influenza A (H1N1) virus infection by one or more of the following tests:

1. real-time RT-PCR
2. viral culture

A **probable case** of H1N1 infection is defined as a person with ILI who is

- positive for influenza A, but negative for human H1 and H3 by influenza RT-PCR

**Incubation period** for H1N1 influenza virus infection is 1 to 7 days

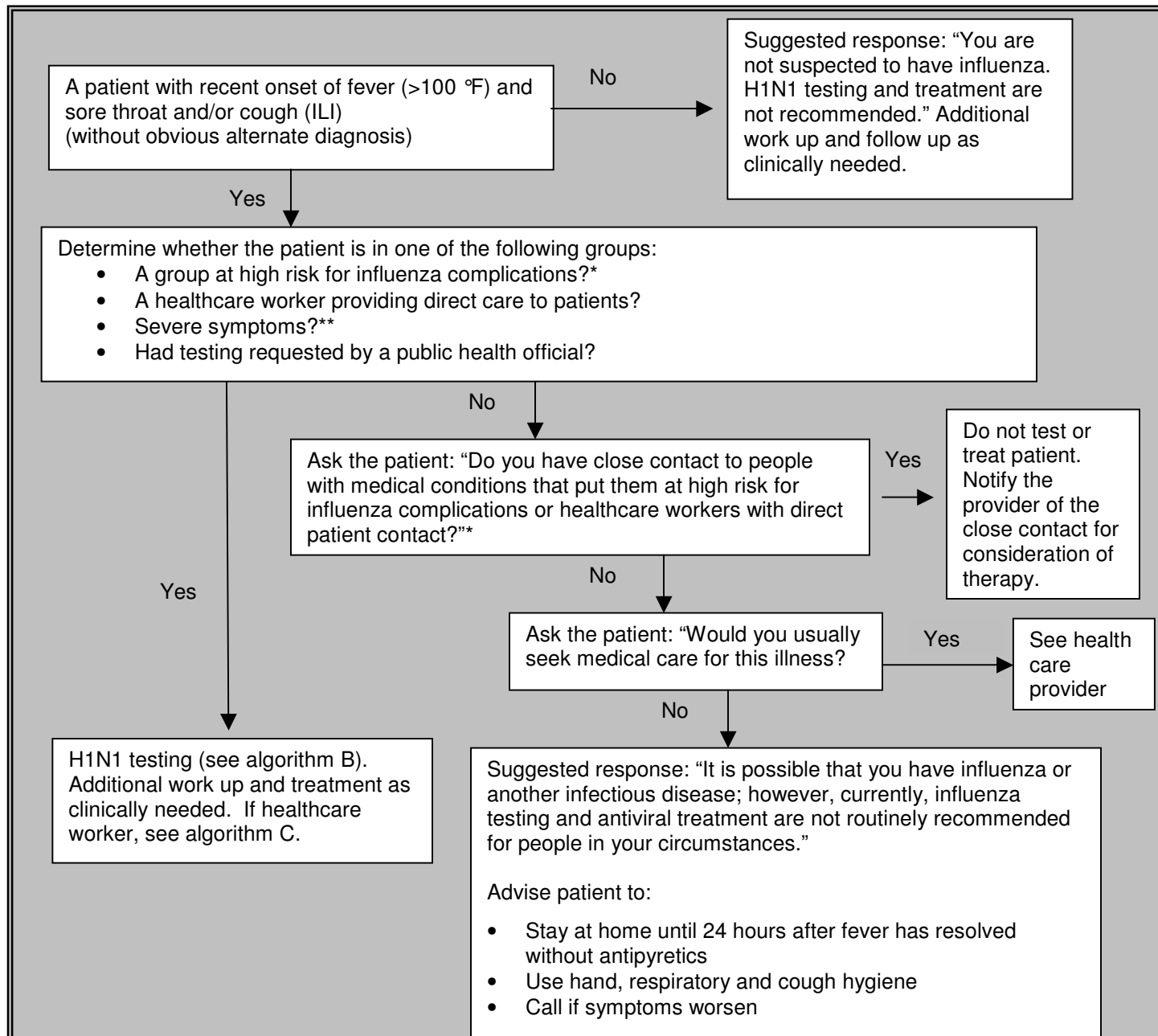
**Infectious period** for H1N1 is defined as 1 day prior to the case's illness onset to 24 hours after fever resolution, without the use of antipyretics. Viral shedding may continue at lower levels after fever has resolved (especially in children.)

**Healthcare Worker** is defined as any person, including employees, students, attending clinicians and volunteers whose activities involve contact with patients in a healthcare or laboratory setting.

**Close contact** is defined as coming into close proximity of the patient during the course of caring for or living with the patient. Although "close" is usually defined with a proximity of 3 feet of the patient, for the purpose of H1N1 infection control, proximity is defined as 6 feet. Close contact typically does not include activities such as walking by an infected person or sitting across from a symptomatic patient in a waiting room or office.

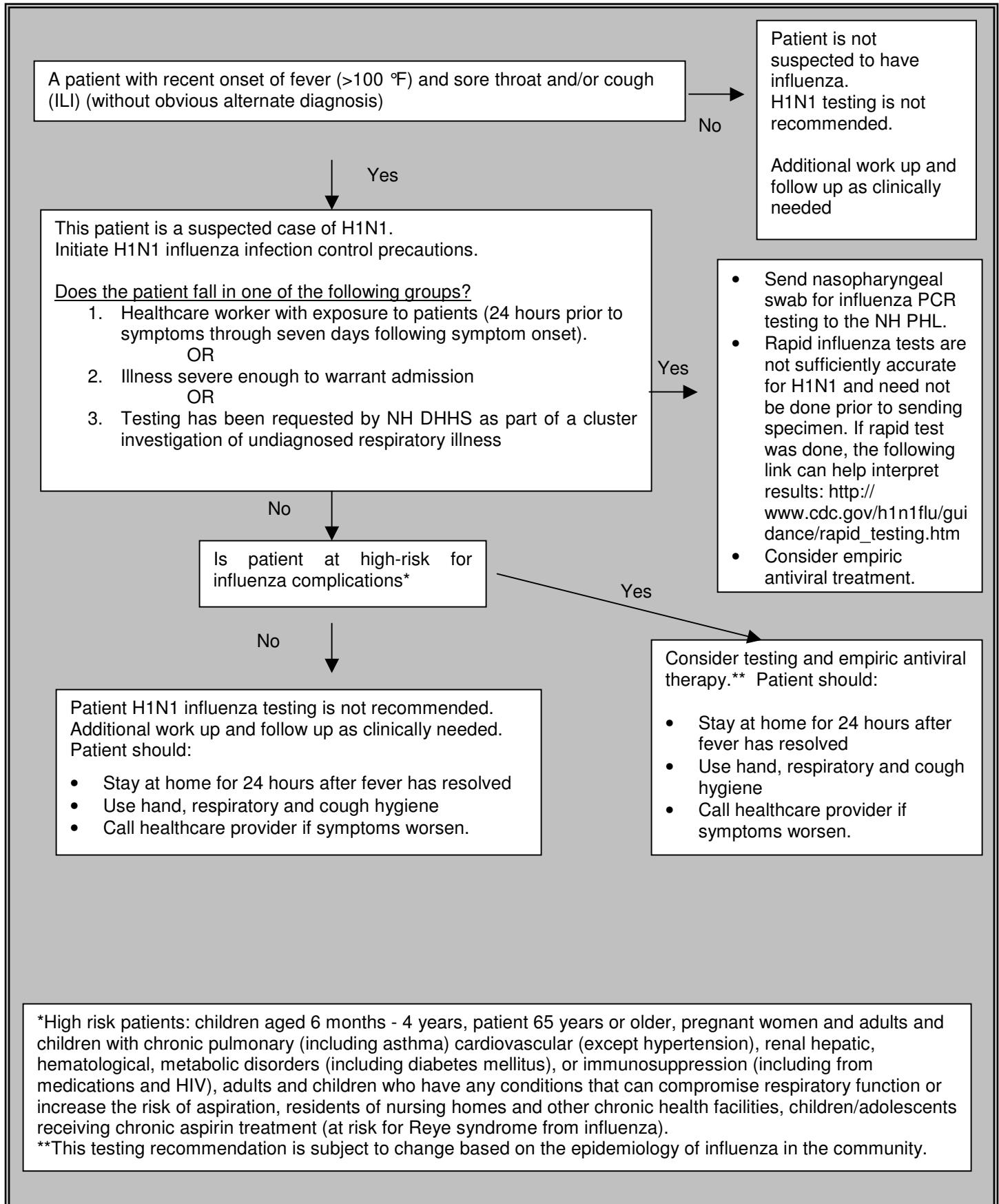
**For questions or comments regarding the contents of this message, please contact NH DHHS Communicable Disease Control and Surveillance Section at 603-271-4496 (after hours 1-800-852-3345 ext. 5300).**

**A) Algorithm for H1N1 Influenza TRIAGE CALLS to EDs and Providers' Offices**  
**New Hampshire Department of Health and Human Services**  
**September 16, 2009**

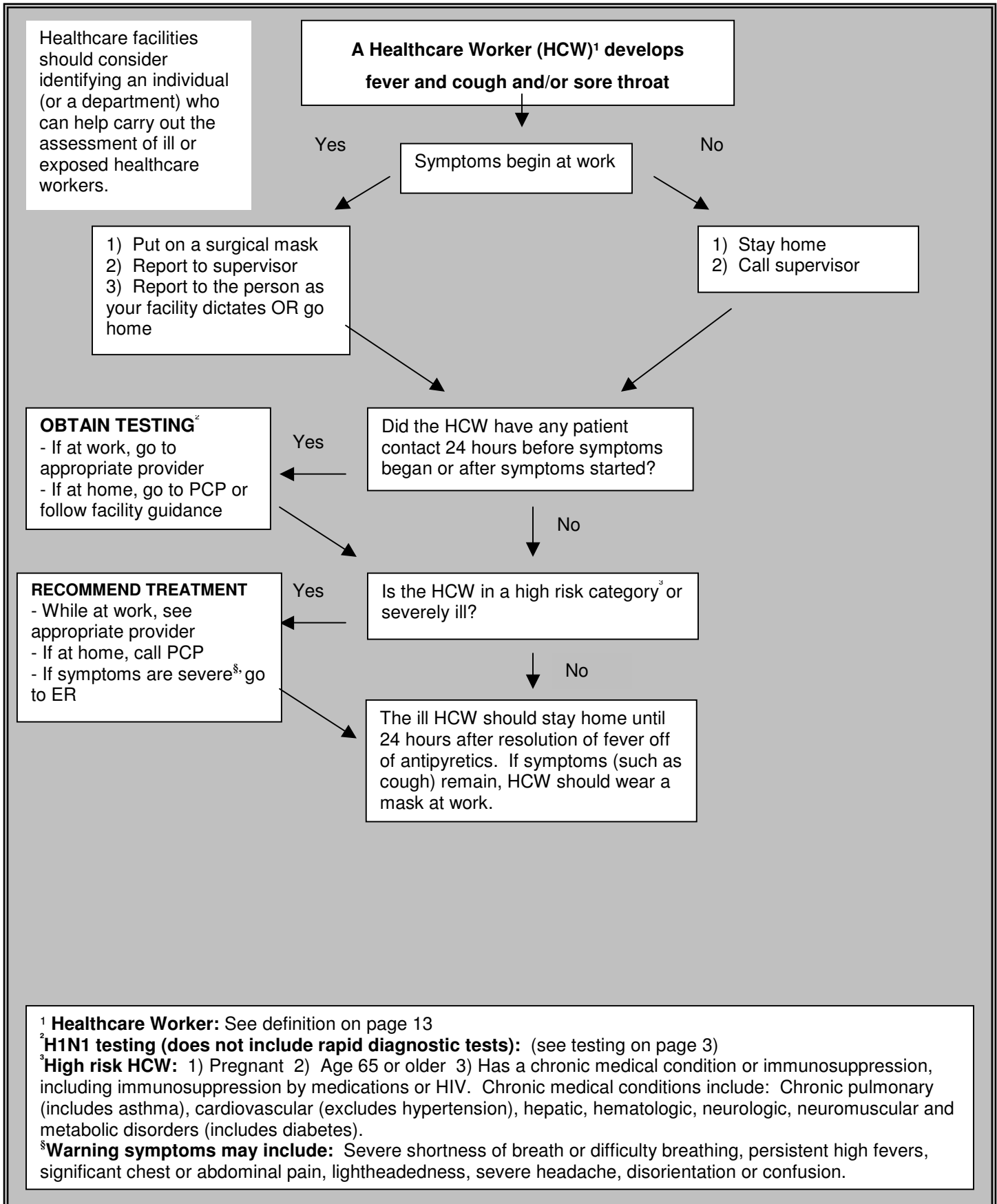


\*High risk patients:  
 - Children aged 6 months- 4 years,  
 - Patient 65 years or older,  
 - Pregnant women  
 - Adults and children with chronic pulmonary (including asthma), cardiovascular (except hypertension), renal hepatic, hematological, metabolic disorders (including diabetes mellitus), or immunosuppression (including from medications and HIV), adults and children who have any conditions that can compromise respiratory function or increase the risk of aspiration, residents of nursing homes and other chronic health facilities, children/adolescents receiving chronic aspirin treatment (at risk for Reye syndrome from influenza).  
 \*\*Difficulty breathing or chest pain; purple or blue discoloration of the lips; vomiting and unable to keep liquids down; signs of dehydration such as dizziness when standing, absence of urination, or in infants, a lack of tears when they cry; has seizures; or is less responsive than normal or confused.

**B) Algorithm for H1N1 Influenza TESTING for a Patient in Clinic/ED**  
**New Hampshire Department of Health and Human Services**  
**September 16, 2009**



**C) Suggested Algorithm for Healthcare Workers Who Develop an Influenza Like Illness**  
New Hampshire Department of Health and Human Services  
September 16, 2009



**D) Suggested Algorithm for Healthcare Workers Who Had an Unprotected Exposure to an Influenza Like Illness**  
New Hampshire Department of Health and Human Services  
September 16, 2009

