



STATE OF MARYLAND

DHMH

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Maryland Department of Health and Mental Hygiene  
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Robert L. Ehrlich, Jr., Governor – Michael S. Steele, Lt. Governor – S. Anthony McCann, Secretary

## **DHMH Interim Infection Control Guidelines for the Prevention and Control of Influenza, Influenza-like Illnesses (ILI) in Health Care Facilities During the 2004/2005 Influenza Season**

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**October 2004**

### **Introduction:**

In response to the current shortage of influenza vaccine for the 2004/2005 influenza season, the following draft supplemental infection control guidelines have been developed to help identify and contain an influenza outbreak at Maryland health care facilities. Much of this information has been taken from guidance materials from the Centers for Disease Control and Prevention (CDC). Note that these guidelines will be updated as additional information becomes available.

These guidelines are divided into the following sections:

Section 1: Vaccination Recommendations

Section 2: Infection Control Measures

Section 3: Case and Outbreak Definitions

Section 4: Laboratory Testing

### **Section 1: Vaccination Recommendations**

#### **A. CDC/ACIP Vaccination Recommendations**

- Strive for vaccination of all health-care workers involved in direct patient care as well as high priority patients, if possible, given the number of doses of influenza vaccine available for your facility, in accordance with CDC/ACIP's updated vaccination recommendations which are listed below<sup>1</sup>:

#### **Inactivated influenza vaccine recommendations:**

The following priority groups for vaccination with inactivated influenza vaccine this season are considered to be of equal importance and are:

- Residents of nursing homes and other chronic-care facilities
- People 65 years of age and older
- Healthcare workers who provide direct, hands-on care to patients
- Children ages 6 months to 23 months

- Adults and children 2 years of age and older with chronic lung or heart disorders including heart disease and asthma
- Pregnant women
- Adults and children 2 years of age 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
- Children and teenagers, 6 months to 18 years of age, who take aspirin daily
- Household members and out-of-home caregivers of infants under the age of 6 months (Children under the age of 6 months cannot be vaccinated).

**Intranasally administered, live, attenuated influenza vaccine (FluMist®)**

Intranasally administered, live, attenuated influenza vaccine, if available, should be encouraged for eligible, healthy persons who are aged 5–49 years and are not pregnant including:

- Health-care workers (except those who care for severely immunocompromised patients in special care units)
- Persons caring for children aged <6 months.

Please see the CDC recommendations regarding the live, attenuated vaccination for a list of mitigating factors that makes a person ineligible for the vaccination<sup>2</sup>.

**B. Vaccination Strategies Given the Shortage**

- Examine the number of doses of inactivated influenza vaccine (Aventis Pasteur product) that your facility has on-hand and determine how many patients are in the “high priority category”. Note that for nursing homes that this number will likely equal your patient census.
- Calculate the total number of direct patient care employees at your facility.
- Compare the number of direct patient care employees and the high priority patients to the number of doses of inactivated influenza vaccine available for your facility.
- Strongly consider vaccinating eligible direct patient care employees with the live, attenuated vaccine (FluMist®; MedImmune) if you do not have enough doses of the inactivated vaccine to cover your facility. Please see the CDC recommendations regarding the live, attenuated vaccination for a list of mitigating factors which makes a person ineligible for the vaccination<sup>2</sup>.
- Contact your local health department if additional inactivated vaccine or live, attenuated vaccine doses are needed. Health departments may be able to assist with vaccine procurement, depending on the availability of these vaccines in concert with special needs at particular facilities.
- Vaccinate residents for pneumococcal disease if they are over 65 years of age and have never received a dose or if they had only one dose received more than 5 years ago. Those who have received two doses are not currently recommended for a third dose<sup>3</sup>.

**Section 2: Infection Control Measures**

**A. Respiratory Hygiene/Cough Etiquette<sup>4</sup>**

- Post visual alerts at the entrance and at other key areas within the facility instructing patients, staff and all visitors to inform healthcare personnel of symptoms of a respiratory

infection. See the CDC website for educational materials including posters and brochures that may be used to promote respiratory hygiene at your facility. The web address for these items is: <http://www.cdc.gov/flu/professionals/flugallery/provider.htm>. CDC's "Cover Your Cough" poster is a helpful visual aid that you may choose to post at your facility. An electronic copy of the poster is available at: <http://www.cdc.gov/flu/protect/covercough.htm>. The poster is available in English, Spanish, Vietnamese, Chinese, and Tagalog.

- Encourage persons with the signs and symptoms of a respiratory infection to:
  - Cover their nose/mouth when coughing or sneezing;
  - Use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use;
  - Perform hand hygiene (hand washing with soap and water, alcohol-based hand gel, or antiseptic handwash) after having contact with respiratory secretions and contaminated objects/materials.
- Provide tissues and no-touch receptacles for used tissue disposal in each room and in common areas of the facility.
- Emphasize hand hygiene at your facility. Provide dispensers of alcohol-based hand gel; where sinks are available, ensure that soap and disposable towels are consistently available.
- Advise staff and patients that if they have to sneeze or cough and do not have immediate access to a tissue to use to cover their face, that they should sneeze or cough into their sleeve.

#### **B. Surveillance and Outbreak Control**

- All health care facility staff members should maintain a heightened vigilance for influenza symptoms including cough and fever. Publicize the name and extension of your Infection Control Professional(s) or Hospital Epidemiologist among staff members to assist with reporting information within your facility.
- Wards/Units should inform the Infection Control Professional or Hospital Epidemiologist immediately whenever there is a cluster (three or more cases) of unexplained coughing and fever among patients or staff. This will allow rapid institution of control measures after assessment by the team. Other areas in the hospital should be warned of the problem early so that all staff are vigilant and can give notice of spread of infection to new areas.
- Stop admission of new residents/patients to affected ward or units after one case of lab proven influenza or three or more cases of influenza-like illness have been identified in that area within a 7 day period; the local health department may recommend new admissions to an unaffected ward or unit based on the progression of the outbreak.
- Once closed, any affected ward/unit should remain closed to new admissions until no new associated cases have been identified for at least 72 hours.
- Allow readmissions to the facility, preferably to an unaffected ward or unit.
- ***All outbreaks should be reported as soon as recognized by telephone to the local health department.*** See Section 3 for case and outbreak definitions. Note that these definitions were originally created for long-term care facilities. In other settings, if your facility has the required number of persons with suspected facility-acquired infections (i.e. suspected nosocomial infections), please contact your local health department.

- Monitor the influenza activity level within Maryland. This information is updated on a weekly basis and can be obtained from the CDC website at: <http://www.cdc.gov/flu/weekly/> or by contacting your local health department. Note that new information is posted each Friday during the influenza season.

### **C. Visitor Restrictions**

- Post a visitors sign at the main entrance of the facility discouraging persons with cough and/or fever from visiting patients.
- If an outbreak of influenza, ILI, or pneumonia has been identified at your facility, change the sign at the entrance to reflect that an outbreak of respiratory illness has been detected at the facility and that visitors should enter at their own risk.
- Provide alcohol-based hand cleanser, masks, and tissues at the facility's entrance for visitors.

### **D. Employee Restrictions**

- The purpose of employee restrictions is to minimize further transmission of possible influenza and/or another respiratory illness within the health care facility's unaffected population, including well patients/residents as well as staff members.
- When a case of influenza or ILI is recognized in an employee, including a visiting professional worker, exclude them from work at the facility for a minimum of 3 days after onset of symptoms (note that the Control of Communicable Disease Manual states that the period of communicability for influenza is "probably 3 to 5 days from clinical onset of symptoms<sup>5</sup>"). Depending on staff availability or shortage, determine whether an exclusion period of 3 days or 5 days is the most feasible for any given situation.
- If the facility's staffing options are limited (i.e. if there are no agency nurses available to fill in for an excluded staff nurse), and if an excluded employee is feeling better at 3 days after their onset and does not have a fever, please consult with your local health department to determine whether it may be appropriate to allow this employee to work in an affected unit at your facility.
- If an outbreak of influenza, ILI, or pneumonia has been identified at your facility, cohort employees as much as possible and limit employee visits to affected wings/units of the facility until resolution of the outbreak (i.e. discourage visits of staff who work on an unaffected unit to an affected unit).

### **E. Influenza Antiviral Prophylaxis**

- Develop a policy for antiviral prophylaxis for your facility as soon as possible, and preferably prior to the beginning of influenza activity in Maryland.
- If an outbreak of influenza has been identified at your facility, consider prophylaxis of employees and residents with amantidine or rimantidine (effective against Influenza A only), or a neuraminidase inhibitor such as zanamivir or oseltamivir (effective against both Influenza A and B)<sup>2</sup>. Note that the effectiveness of these antivirals is dependent upon how promptly they are given after exposure to someone who has influenza. Consult with your local health department for information about the influenza activity in your county to assist with your decision about prophylaxis.

## **F. Droplet Precautions**

During the care of a patient with suspected or confirmed influenza, observe droplet precautions:

- Place patient into a private room. If a private room is not available, place them with other patients suspected of having influenza; cohort confirmed influenza patients with other patients confirmed to have influenza.
- Wear a surgical mask upon entering the patient's room or when working within 3 feet of the patient. Remove the mask when leaving the patient's room and dispose of the mask in a waste container.
- If patient movement or transport is necessary, have the patient wear a surgical mask during transport, if possible.

Also continue to practice standard precautions:

- Wear gloves if hand contact with respiratory secretions or potentially contaminated surfaces is expected.
- Wear a gown if soiling of clothes with patient's respiratory secretions is expected.
- Change gloves and gown after each patient encounter and perform hand hygiene.
- Decontaminate hands before and after touching the patient, after touching the patient's environment, or after touching the patient's respiratory secretions, whether or not gloves are worn.
- When hands are visibly soiled or contaminated with respiratory secretions, wash hands with either a non-antimicrobial or an antimicrobial soap and water.
- If hands are not visibly soiled, use an alcohol-based hand rub for routinely decontaminating hands in clinical situations. Alternatively, wash hands with an antimicrobial soap and water.

## **Section 3: Definitions**

Note that these definitions are the same as those listed in the "Guidelines for the Prevention and Control of Upper and Lower Acute Respiratory Illnesses (including Influenza and Pneumonia) in Long Term Care Facilities". A copy of these guidelines can be found at <http://www.edcp.org/guidelines/resp97.html>.

### **A. Case Definitions**

A case of **influenza-like illness (ILI)** or **influenza** is defined as a person with fever of 37.8°C (100°F) or greater orally or 38.3°C (101°F) rectally **PLUS** cough during the influenza season (October 1 through May 31). A person with laboratory confirmed influenza is also considered a case even if the person does not have cough and fever.

A case of **pneumonia** is defined as a person with clinical symptomatology **PLUS** a new X-ray finding of pneumonia that is not felt to be aspiration pneumonia.

## **B. Outbreak Definitions**

An outbreak of **influenza-like illness (ILI)** is defined as three or more clinically defined cases (see above) in a facility within a 7 day period.

An outbreak of **influenza** is one or more laboratory proven case of influenza at a facility, once influenza has been confirmed in the state of Maryland.

An outbreak of **pneumonia** is two or more cases of pneumonia in a ward/unit within a 7 day period.

### **Section 4: Specimen Collection**

- Collect a viral throat culture for influenza testing for any patients who meet the case definition for influenza-like illness and work with your facility's preferred laboratory to conduct this testing for sporadic cases. If an outbreak is identified within your facility, work with your local health department to determine the appropriate number of patients that should be cultured for influenza at the DHMH Laboratory (typically, 3 to 10 patients are tested during the course of an ILI or influenza outbreak). It is neither necessary nor possible to send DHMH specimens to test every patient and/or staff member with ILI symptoms.
- Work with your facility's testing laboratory to ensure that any positive influenza isolates are sent to the DHMH Laboratory for confirmation.
- See the DHMH's "Guidelines for the Prevention and Control of Upper and Lower Acute Respiratory Illnesses (including Influenza and Pneumonia) in Long Term Care Facilities" at <http://www.edcp.org/guidelines/resp97.html> for more information about specimen collection.

### **References**

<sup>1</sup> Centers for Disease Control and Prevention, Guidelines: 2004-05 Flu Vaccine Shortage: Who Should Get Vaccinated, Updated: October 8, 2004. Web Address: <http://www.cdc.gov/flu/protect/0405shortage.htm> .

<sup>2</sup>"Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP)" (MMWR 28 May 2004;53[RR06]:1-40).

<sup>3</sup>Centers for Disease Control and Prevention, Guidelines: Pneumococcal Polysaccharide Vaccine: What you need to know. Updated: July 27, 2003. Web Address: <http://www.cdc.gov/nip/publications/VIS/vis-ppv.pdf> .

<sup>4</sup>Centers for Disease Control and Prevention, Guidelines: Respiratory Hygiene/Cough Etiquette in Healthcare Settings, Updated: December 17, 2003. Web Address: <http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm> .

<sup>5</sup> Chin, J. Control of Communicable Diseases Manual, 17<sup>th</sup> Edition. 2000; p. 270-6.