

Infection Control to Prevent Influenza in Healthcare Settings



With the new influenza season underway, healthcare workers and healthcare facilities need to take steps to determine if their workplace is ready to handle the flu.

Flu spreads from person to person through the air, by large droplets and small airborne particles and by contact with infected surfaces such as telephones and doorknobs.

There are three well-established methods for managing an outbreak of the flu virus:

- 1) Vaccines to prevent catching the flu or to reduce its symptoms;
- 2) Antiviral medications to treat the flu; and
- 3) Implementation of comprehensive infection control procedures to prevent spread of infection such as frequent hand-washing, and ensuring there are enough well-trained environmental service personnel to keep rooms and contaminated surfaces clean and disinfected.

Frequently Asked Questions

Q. Do vaccines really work?

A. There currently are good vaccines available to prevent the spread and/or reduce the severity of seasonal flu symptoms. The 2010–2011 vaccine will protect against three different flu viruses: an H3N2 virus, an influenza B virus and the H1N1 virus that caused so much illness last season. In any given year, the flu vaccine is 40 percent to 90 percent effective in preventing you from getting and transmitting the flu. The Centers for Disease Control and Prevention (CDC) recommends that everyone older than 6 months should get the vaccine.

Q. Is there a treatment for flu?

A. If given at the first signs of the flu, antiviral drugs can be given to reduce the severity of, and the number of days that you have flu symptoms. These antiviral drugs are available by prescription as a pill, liquid or inhaler. Additional information on antiviral medications may be reviewed at: <http://www.cdc.gov/flu/antivirals/whatyoushould.htm>.

Q. Why is infection control so important?

A. Infection control is our best tool for not only controlling the flu, but a host of other healthcare-associated diseases that infect 1.7 million patients each year and cause nearly 100,000 patient deaths.

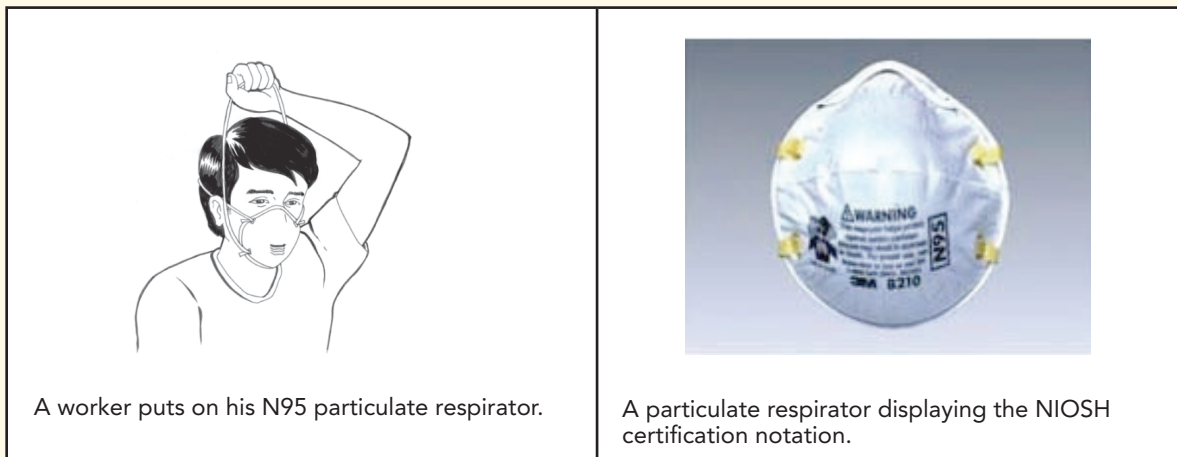
Q. What are CDC's current infection control recommendations against the flu?

A. There are four types of precautions the CDC is recommending: "Standard," "Droplet," "Contact" and "Airborne." The CDC is recommending these precautions for all patient care activities for patients with the flu or undiagnosed influenza-like illnesses (ILIs). These precautions should be maintained for seven days after illness onset or until symptoms have resolved.

The cornerstone of good infection control is making sure that you and your co-workers strictly adhere to good hand hygiene by washing with soap and water or using hand sanitizer immediately after removing gloves and other equipment and after any contact with respiratory secretions. Personnel providing care or collecting clinical specimens from suspected or confirmed cases should wear disposable nonsterile gloves, gowns and eye protection (e.g., goggles).

Q. What is the difference between a respirator and a surgical mask?

A. Respiratory protection (at a minimum, N95 respirators or better) helps you avoid inhaling airborne infection. A respirator helps prevent you from breathing airborne particles because it has filtering materials that are superior to surgical masks. Respirators form a tight seal around the nose, mouth, and chin and are secured by elastic bands on the head, preventing leakage where the respirator touches the face.



Q. Do I need a fitted respirator when caring for flu patients or is a surgical mask enough?

A. The CDC recommends that personnel engaged in any activity that generates aerosols (e.g., collection of clinical specimens, endotracheal intubation, nebulizer treatment, bronchoscopy, and resuscitation involving emergency intubation or cardiac pulmonary resuscitation) with patients with suspected or confirmed influenza should wear a fit-tested disposable N95 respirator or a more protective respirator, such as a PAPR (powered air-purifying respirator). **Remember, surgical or procedure masks do not protect against airborne transmission and should not be used instead of proper respiratory protection.**

In the CDC's latest 2010 guidance for this flu season, the agency is suggesting the use of much less protective surgical masks for routine patient care. However, SEIU agrees with the scientific evidence contained in the Sept. 1, 2009, Institute of Medicine (IOM) report that supports the airborne spread of the flu virus from coughing, sneezing and even breathing flu patients. We, therefore, agree with the IOM in recommending the need for fitted respirators, and not surgical masks, as the lowest form of protection to protect healthcare workers from the airborne spread of the influenza virus.

Based on these more protective recommendations by the IOM, SEIU encourages our local unions to negotiate for this more protective stance; respirators and not leaky surgical masks to protect healthcare workers. With the scientific evidence of the airborne nature of flu transmission accumulating, we believe that it is just a matter of time before the CDC adopts the IOM recommendations that fitted respirators be used for routine flu patient care to replace leaky and less protective surgical masks.

Remember that respirator use should be in the context of a complete respiratory protection program in accordance with Occupational Safety and Health Administration (OSHA) regulations. Information on respiratory protection programs and fit-test procedures may be found at www.osha.gov/SLTC/etools/respiratory. Staff should be medically cleared, currently fit-tested, and trained for respirator use, including: proper fit-testing and use of respirators, safe removal and disposal and medical contraindications to respirator use. A proper fit-test will take at least 15 minutes per person per respirator.

Q. What is considered good hand hygiene?

A. Hand-washing is the foundation of any infection control program. Employers need to create a positive workplace environment that encourages workers to thoroughly clean hands with soap and water, antimicrobial soap and water, or alcohol-based hand-rub products between patient contacts, immediately after removing gloves, and after touching blood, body fluids, secretions, excretions, or contaminated items. Instead of a workplace culture that rewards workers for working faster, employers should support workers who work more safely. This may require the employer to address staff shortages that cause workers to cut corners—and not wash their hands as thoroughly as they should as they rush from one patient to the next.

Q. What other types of Personal Protective Equipment (PPE) are available?

A. PPE includes a range of specialized clothing or equipment that protects against infectious materials. In addition to respirators (not surgical or procedure masks), this can include eye protection, face shields, surgical masks, gowns and gloves. Appropriate PPE should be used during procedures and patient care activities that are likely to generate coughing, splashes or sprays of blood, body fluids, or secretions.

Q. How do other types of PPE help control infection?

A. There are several types of equipment that help protect workers from infection:

- Goggles protect eyes by fitting snugly over and around eyes. Goggles with antifogging features improve clarity. Personal glasses are not a substitute for goggles.
- Face shields protect the face, nose, mouth and eyes. They should cover the forehead and extend below the chin, wrapping around the side of the face.
- Gowns are for use during procedures and patient care activities when contact of clothing/exposed skin with blood/body fluids, secretions and excretions is anticipated.
- Gloves are for use when touching blood, body fluids, secretions, excretions, contaminated items, mucous membranes and nonintact skin. Nonlatex gloves should be made available for workers who are allergic to latex.

Q. What steps should patients take for proper respiratory hygiene/cough etiquette?

A. Patients should wear surgical masks when symptomatic. For the protection of all healthcare workers and their patients, hospitals need strong policies requiring patients who are coughing wear surgical masks. This may require facilities to change the way they interact with patients. It is essential to educate patients about wearing surgical masks to reduce the likelihood of infecting healthcare workers and prevent the spread of infection to other patients. Large posters stating this policy should be placed in the emergency room and in other patient waiting areas. Managers should implement and support a policy that identifies waiting patients who are coughing and enforces the use of these masks.

Symptomatic patients should be required to follow these standard precautions:

- Wear surgical masks when symptomatic—including coughing;
- Use a tissue to cover the mouth and nose when sneezing;
- Dispose of used tissues in no-touch receptacles; and
- Observe hand hygiene after soiling hands with respiratory secretion (for example, after coughing or sneezing into hands).

Q. Are there other steps to reduce the spread of the flu by flu patients?

A. Patients with suspected or confirmed case-status should be placed in a single-patient room with the door kept closed. If available, an airborne infection isolation room (AIIR) with negative pressure air handling with six to 12 air changes per hour can be used. Air can be exhausted directly outside or be recirculated after filtration by a high-efficiency particulate air (HEPA) filter. For suctioning, bronchoscopy or intubation, use a procedure room with negative pressure air handling.

Q. What steps can I take to protect myself against airborne infection?

A. You can be a major player in protecting yourself, your patients, and your co-workers by following the infection control procedures set up by your healthcare facility in accordance with the CDC guidelines.

Also you can:

- 1) Encourage co-workers to also implement these steps. The sooner these steps become a part of your regular routine, the better prepared you'll be when flu patients show up at your facility.
- 2) Each employer should have a pandemic flu plan in place that includes standard precautions against infection. If standard precautions outlined above are not already a part of your workplace operations, educate your co-workers and bring this fact sheet to the attention of your supervisor. Your union representative can work with your management team to ensure that a good infection control policy is

in place, that everyone is trained in prevention control procedures, and that everyone at your facility has as much protection as needed against airborne infection.

Q. How can I get more information about flu and protecting myself, my co-workers and patients from becoming infected?

A. For more details about flu and infection control:

- For up-to-date information on the current flu season, refer to the CDC at <http://www.flu.gov/> ; and
- For the CDC's current Guidelines and Recommendations Prevention Strategies for Seasonal Influenza in Healthcare Settings <http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>.

For additional information about respirators:

- October 2006 Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Healthcare Settings during an Influenza Pandemic at
- Information on N95 respirators and other types of respirators may be found at:<http://www.cdc.gov/niosh/npptl/topics/respirators/factsheets/respfact.html>.

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