



## H1N1 Frequently Asked Questions – 11/17/09

### **Q. Where can I find detailed information about the CDC guidelines and protection for health care workers?**

*CDC Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel*

[http://www.cdc.gov/h1n1flu/guidelines\\_infection\\_control.htm#A](http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm#A)

*Questions and Answers about CDC's Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel*

[http://www.cdc.gov/h1n1flu/guidance/control\\_measures\\_qa.htm](http://www.cdc.gov/h1n1flu/guidance/control_measures_qa.htm)

*Questions and Answers Regarding Respiratory Protection For Preventing 2009 H1N1 Influenza Among Healthcare Personnel* [http://www.cdc.gov/h1n1flu/guidelines\\_infection\\_control\\_qa.htm](http://www.cdc.gov/h1n1flu/guidelines_infection_control_qa.htm)

*OSHA Frequently Asked Questions on Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers (Occupational Safety & Health Administration)*

[https://www.osha.gov/SLTC/pandemicinfluenza/pandemic\\_health.html](https://www.osha.gov/SLTC/pandemicinfluenza/pandemic_health.html)

### **Q. What is meant by “CDC recommended hierarchy of controls”?**

CDC recommends that facilities use a hierarchy of controls approach to prevent exposure of healthcare personnel and patients and prevent influenza transmission within healthcare settings. These are ranked according to their likely effectiveness in reducing or removing the source of exposure. These steps should be taken in order:

#### 1. Eliminate potential exposures:

- Postpone elective visits and/or procedures if patients have influenza-like illness (ILI)
- Deny entry to ill visitors, keep ill personnel at home
- Minimize outpatient and emergency department visits for patients with mild ILI who do not have risk factors for complications

#### 2. Engineering controls

- Use local exhaust ventilation (e.g. hoods, tents) for aerosol generating procedures, install physical barriers/partitions in triage areas and other public spaces
- Install hands-free soap and water dispensers, and trash containers
- Conduct aerosol-generating procedures in an airborne infection isolation room

#### 3. Administrative controls

- Provide vaccinations for healthcare workforce

- Screen and enforce exclusion of ill staff and visitors
  - Educate patients and visitors on cough etiquette, hand hygiene; provide masks if needed
  - Assign dedicated staff to minimize number of healthcare personnel exposed to those with suspected/confirmed influenza
  - Establish protocols for cleaning frequently touched surfaces throughout the facility (elevator buttons, etc.)
4. Personal protective equipment
- Wear gloves, gown, facemasks, respirators (N95), eye protection, as appropriate
  - Fit-test and utilize N-95s for those in close contact (within 6 feet) with patients with suspected or confirmed 2009 H1N1 influenza
  - Establish prioritization systems for when supplies are short

**Q. What is the CDC respiratory protection recommendation for health care workers caring for patients with H1N1?**

CDC continues to recommend the use of respiratory protection that is at least as protective as a fit-tested disposable N95 respirator for healthcare personnel who are in close contact with patients with suspected or confirmed 2009 H1N1 influenza. *Close contact* is defined as working within 6 feet of the patient or entering into a small enclosed airspace shared with the patient (e.g., average patient room).

**Q. If there is a shortage of N95 respirators, how should the hospital prioritize the use of N95 respirators?**

Hospitals should implement the following steps in this order:

1. Minimize the number of individuals who need to use respiratory protection through the use of engineering and administrative controls
2. Use N95 or higher level of protection (e.g. Powered Air Purifying Respirator-PAPR or elastometric respirators) where feasible
3. If NOT doing a high risk procedure, prioritize use for those personnel at highest risk based on considerations such as:
  - Vaccination status of worker
  - If worker is in a high risk group for complications, (e.g. pregnant)
  - Frequency of close exposure procedures and contact
4. Consider extending use of disposable N95 respirators in special situations for multiple patient encounters utilizing appropriate extended-use procedures

**Q. What constitutes high-risk (aerosol-generating) activities?**

Some procedures are at higher-risk for potential exposures, such as aerosol generating procedures, that could increase inhalation of respiratory droplets. These procedures include, but are not limited

to: bronchoscopy, sputum induction, endotracheal intubation and extubation, open suctioning of airways, cardiopulmonary resuscitation, and autopsies.

**Q. How can healthcare personnel reduce their exposure risk when performing aerosol-generating procedures?**

To reduce exposure risk, healthcare personnel should only perform these procedures on patients with suspected or confirmed influenza when medically necessary and limit the number of healthcare personnel in the room. These procedures may also be conducted in airborne infection isolation rooms, when available. Healthcare personnel should adhere to standard precautions and wear respiratory protection (N95 or higher) when conducting these activities.

**Q. What other respirators can be used to reduce dependence on disposable N95 respirators?**

Other classes of disposable respirators (e.g., N99s, N100s), which are similar in design and shape to N95s, can be considered. Alternatives to disposable respirators, such as powered air purifying respirators (PAPRs), or elastomeric half-mask and full facepiece respirators, can also be considered, especially in settings such as procedure rooms (e.g. bronchoscopy suites) where higher-risk activities such as aerosol-generating procedures are intermittently performed.

**Q. How do I identify an N-95 and make sure it's a NIOSH-approved respirator?**

Respirators are evaluated and certified by NIOSH. NIOSH-approved N-95 respirators are marked with “NIOSH” and “N95” on the respirator.

**Q. How long could an N-95 respirator be used? Should it be used for one patient only, or can it be used for multiple patients?**

Currently, disposable N95 respirators for 2009 H1N1 influenza are recommended only for single use in healthcare settings. Used respirators are considered contaminated and ideally should be discarded after each patient encounter. However, in the event of supply shortages, facilities may need to consider extending the use of each respirator.

**Q. Is extended use over multiple patient encounters an appropriate strategy for extending supplies of respiratory protection?**

Extended use refers to wearing disposable N95 respirators for serial patient encounters, where the respirator has not been removed and re-donned between encounters. This practice may result in a risk of contact transmission by touching a contaminated surface of the respirator and subsequently touching the mucous membranes of the face.

Because extended use across multiple patient encounters is of uncertain safety with respect to infection control, these alternatives should only be considered in the event of significant supply shortages/disruptions.

Extended use would be favored over re-use, because it is expected to involve less touching of the respirator and face. If extended use practices are implemented as a means to extend respirator supplies, measures should be taken to reduce contact transmission, including but not limited to:

- Discarding disposable N95 respirators following use during aerosol generating procedures.
- Discarding disposable N95 respirators if contaminated with blood, respiratory secretions, or other bodily fluids from patients.
- Considering use of a face shield over the disposable N95 respirator to prevent surface contamination.
- Performing hand hygiene before and after touching the respirator.

### **Can respirators be re-used to help extend the existing supply?**

Re-use of disposable N95 respirators, where the respirator is removed and re-donned between patient encounters, can result in a risk of contact transmission by touching a contaminated surface of the respirator and subsequently touching the mucous membranes of the face.

If re-use is chosen as a strategy to increase availability of respiratory protection, the following should be considered to minimize risk of transmission:

- Discard disposable N95 respirators following aerosol-generating procedures.
- Discard disposable N95 respirators contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.
- Disposable respirators must only be used and re-used by a single wearer.
- Do not re-use a disposable respirator that is obviously contaminated, damaged or hard to breathe through.
- Consider use of a face shield over a disposable N95 respirator to prevent surface contamination.
- Store the respirator in a clean, breathable container such as a paper bag between uses.
- Avoid touching the outside of the respirator.
- Wearer should perform hand hygiene with soap and water or an alcohol-based hand sanitizer before and after touching a used respirator.

### **Q. How long should I stay home if I am sick?**

Ill healthcare personnel should stay home from work for at least 24 hours after they no longer have a fever, without the use of fever reducing medicines. If healthcare personnel are returning to work in areas where severely immunocompromised patients are provided care, they should be considered for temporary reassignment or exclusion from work for 7 days from symptom onset or 24 hours after the resolution of symptoms, whichever is longer.