

North Carolina Division of Public Health Respiratory Protection Guidance

October 2009

Transmission of seasonal influenza is generally recognized to occur from exposure to respiratory droplets. Loose fitting surgical masks are effective at reducing spread of such infectious droplets. While the use of tight fitting respirators (such as a disposable N95) is generally not recommended for exposure to seasonal flu, the additional protection they can provide is being recommended by the CDC for occupational exposure to 2009 H1N1 Influenza.

The purpose of this document is to provide guidance to employers and workers engaged in the occupational setting where the use of N95 respirators to control exposure to 2009 Novel H1N1 Flu may reasonably be anticipated. It is intended to assist employers with protecting employees to the greatest extent possible and in making a good faith effort to comply with OSHA Respiratory Protection Standard (29 CFR 1910.134). This document is not intended to serve as a comprehensive OSHA compliance guide. Hiring a professional consultant specializing in Industrial Hygiene and Occupational Health may be the best way to ensure worker safety and compliance with applicable OSHA standards. Searching the American Industrial Hygiene Association membership directory is one way to find such resources: <https://webportal.aiha.org/Custom/ConsultantsSearch.aspx>

It is important for employers to understand that use of N95 respirators in the occupational setting is regulated by OSHA (Department of Labor, North Carolina), and requires employees who use respirators be included in a Respiratory Protection Program that includes the following elements: **Program Administrator, Medical Evaluation, Training, Fit Testing, Written Respiratory Protection Plan.**

Resources for addressing these program elements are outlined below:

1. Program Administrator

Each employer or agency should identify a Program Administrator. This individual will coordinate the respiratory protection program and ensure documentation of the written respiratory protection plan. They should ensure a system is in place for maintaining records of: medical evaluations, training and fit test results for each employee. A link to a program administrator training video is provided below. Although it is geared to respiratory protection programs for occupational exposure to tuberculosis, similar practices may be used for H1N1: <http://www.cdc.gov/niosh/docs/video/tb.html>

2. Medical Evaluation

A medical evaluation questionnaire must be provided to each employee before they wear a respirator in the occupational setting. The following are elements of this requirement:

- Identify a physician or other licensed health care professional (PLHCP) to review the completed medical questionnaire. The reviewer may be a physician or nurse practitioner associated with the agency, but NOT a direct supervisor of the employee to be fit tested. This is to avoid *conflict of interest in providing an objective review* of the employee's medical status.
- The medical evaluation questionnaire should be considered a confidential medical record and shared only between the employee and PLHCP.
- A follow up medical examination shall be provided by the PLHCP (does not have to be the reviewer) to all employees who answer positively to any questions on the questionnaire.
- The PLHCP will determine if the employee is medically cleared to use a respirator, and consequently should be familiar with relative and absolute contraindications for respirator use.

The following is a link to questions that should be included in the medical evaluation questionnaire. Note that **the initial section and all questions in Part A must be included.** Questions in Part B may be included at the discretion of the PLHCP:

<http://www.epi.state.nc.us/epi/gcdc/pdf/MedicalEvaluationEnglish.pdf> (English) and

North Carolina Division of Public Health Respiratory Protection Guidance

October 2009

<http://www.epi.state.nc.us/epi/gcdc/pdf/MedicalEvaluationEspanol.pdf> (Spanish). The PHLCP will then make a determination and fill out the medical approval form:

<http://www.epi.state.nc.us/epi/gcdc/pdf/MedicalApprovalForm.pdf>.

3. Training

Appropriate training should be provided to all employees before they wear a respirator in the occupational setting. While occupational exposure to tuberculosis may be referenced in many online trainings for respiratory protection in the healthcare setting, the same recommendations for proper use of N95s are applicable to most airborne transmissible diseases. See the following links as training resources: Choose “Program 1” from the following link: <http://www.cdc.gov/niosh/docs/video/tb.html>

In addition to training on proper use of N95 respirators, employees should understand the hazards associated with potential exposure to 2009 H1N1 Influenza.

4. Fit Testing

Once employees are medically cleared and trained, they should be properly fit tested with the model and size NIOSH approved respirator they have selected. The purpose of the fit test is to ensure a proper seal of the respirator to the wearer’s face. The easiest way to accomplish this is to use an approved qualitative fit testing procedure. While technically anyone can administer the fit test procedure, it is very important for this individual to understand the importance of performing it correctly, according to approved procedures. These procedures (such as the saccharin fit test procedure) can be found in Appendix A of 1910.134 at the following link:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9780

A qualitative fit testing kit will be required to perform this procedure. Fit testing kits can be found online from numerous suppliers by running an online search using the terms “qualitative fit testing kit”. Instructions should be included with the fit test kit. The following link provides a demonstration of qualitative fit testing: <http://www.youtube.com/watch?v=MHTsIqskmPU>

The employer shall not permit respirators with tight-fitting face pieces to be worn by employees who have facial hair that comes between the sealing surface of the face piece and the face.

5. Written Respiratory Protection Plan

A written plan outlining elements of the employer’s respiratory protection program should be developed and accessible to all employees. **It is important the plan accurately reflect the policies and procedures of the agency it is written for.** A written plan *template* developed for agencies using disposable N95 respirators in the health care setting is available at the following link:

<http://www.epi.state.nc.us/epi/gcdc/otherdocs/N95WrittenPlanTemplate.doc>