



# Model Respiratory Protection Program



CALIFORNIA ASSOCIATION OF HEALTH FACILITIES  
JUNE 2009

# CAHF MODEL RESPIRATORY PROTECTION PROGRAM

## TABLE OF CONTENTS

---

|   |    |
|---|----|
| <b>ACKNOWLEDGEMENTS</b> .....   | 1  |
| <b>PREFACE</b> .....  | 2  |
| <b>INTRODUCTION</b> .....   | 4  |
| <b>GETTING STARTED WITH RESPIRATORY PROTECTION: OVERVIEW AND ACTION STEPS</b> ..... | 5  |
| <b>IMPLEMENTING THE MRPP: INSTRUCTIONS FOR USE OF THE MRPP</b> .....                | 7  |
| A Concept of Operations/Concept of Care for SNFs during Pandemic.....               | 9  |
| <b>MODEL RESPIRATORY PROTECTION PROGRAM</b> .....                                   | 11 |
| Policy .....  | 11 |
| Program Administration .....  | 11 |
| Roles and Responsibilities .....  | 12 |
| Respiratory Protection Program Administrator (RPPA) .....                           | 12 |
| Supervisor.....   | 12 |
| Employee.....   | 13 |
| Program Scope and Application .....   | 13 |
| Identifying Work Hazards .....  | 13 |
| Respirator Selection .....  | 14 |
| Respirator Training and Fit Testing.....  | 15 |
| Training.....   | 15 |
| Fit Testing .....   | 15 |
| Medical Evaluation .....  | 16 |
| Proper Respirator Use .....   | 18 |
| General Use .....   | 18 |
| Cleaning and Disinfecting .....   | 18 |
| Respirator Reuse .....  | 19 |
| Respiratory Inspection, Maintenance, and Storage .....                              | 19 |
| Inspection .....  | 19 |
| Repair .....  | 20 |
| Storage .....   | 20 |
| Evaluating and Updating the Program .....   | 20 |
| Appendices .....  | 21 |
| Appendix A: Fit Test Procedure .....  | 21 |
| Appendix B: CAHF Recommendations on Preparing for Pandemic Influenza .....          | 22 |
| Appendix C: Medical Evaluation Questionnaire – Sample .....                         | 23 |
| Appendix D: Request for Medical Evaluation – Sample Memo – Patient Care Staff.....  | 30 |
| Appendix E: Request for Medical Evaluation – Sample Memo – Housekeeping Staff ..... | 30 |
| Appendix F: Fit Test Record – Sample .....  | 30 |
| Appendix G: Related OSHA Guidance for Pandemic Influenza .....                      | 33 |
| Appendix H: References .....  | 36 |
| Appendix I: CAHF Respirator Training/Qualitative Fit Testing Program.....           | 37 |

## ACKNOWLEDGEMENTS

The California Association of Health Facilities gratefully acknowledges the assistance of the following individuals and organizations in the development of this model respiratory protection program:

- California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA)
- 3M Corp
- Grant from the California Department of Public Health, Emergency Preparedness Office

## PREFACE

Long term care providers are not currently mandated by state or federal law to provide a respiratory protection program for their employees. Given this fact, a long term care provider may ask “So why should I start up a respiratory protection program for my employees when I don’t have to?” It is a good question because implementing this kind of program will involve effort and expense, and once implemented, regulations require that the respiratory protection program must be maintained. While setting up this kind of program is not a simple undertaking, in light of the Spring 2009 H1N1 outbreak, it is a very important one to consider, and the California Association of Health Facilities (CAHF) has developed this Model Respiratory Protection Program manual to give long term care providers the information and tools they need to get started in setting up a respiratory protection program for their employees.

The reason that long term care (LTC) providers are not mandated to have an employee respiratory protection program, is that it is assumed that any patient who has an aerosol transmissible disease will not be admitted to a LTC facility, and that if residents contract such an illness, they will be transferred out immediately to an appropriate facility for diagnosis and treatment. This means that typically the risk of exposure to an aerosol transmissible disease in the LTC setting is minimal.

Under normal circumstances, it is reasonable to assume that a resident with an aerosol transmissible disease will be transferred out of the facility very quickly. However, during a pandemic, this could become a highly unrealistic plan. In an influenza pandemic, the transfer of infected LTC residents in a timely manner, if at all, will probably not be feasible due to an overloaded healthcare system, and/or isolation or quarantine orders restricting patient movement. In this situation direct care workers will be unable to avoid close contact with infected residents, and they will need respiratory protection.

Recent experiences with the novel H1N1 influenza indicate that during this kind of disease outbreak, the demand for N95 respirators and related equipment will be intense and supplies may become extremely limited. Additionally, the fit testing and medical clearance requirements that go along with use of N95s can be overwhelming to an employer who is just learning about them for the first time. Without prior preparation, it could be difficult to implement a respiratory protection program in the midst of a pandemic.

For these reasons, the California Association of Health Facilities (CAHF) encourages long term care providers to prepare now for the possibility that they will have to provide a respiratory protection program for their employees. While employers may not want to actually implement the program until a pandemic hits, CAHF encourages providers to take the initial steps to prepare for an event that will require them to medically screen, fit test, train, and equip their workers with N95 respirators. These steps include downloading and reviewing this document, identifying suppliers, training one or two

staff to act as “program administrators”, arranging for medical clearances, and stocking up on the supplies for fit testing. CAHF also recommends that LTC providers stock up with at least a week’s supply (we recommend 4 changes of masks per direct care worker per shift) of N95 respirators so that, if necessary, the program could be implemented immediately while additional supplies are obtained. Why should long term care providers do this now? Because H1N1 Swine influenza has shown us how rapidly a novel virus can spread, and how difficult it can be to obtain necessary supplies once a pandemic has begun.

Jocelyn Montgomery, RN PHN  
Director of Clinical Affairs  
California Association of Health Facilities

## INTRODUCTION

The California Association of Health Facilities (CAHF) Model Respiratory Protection Program (MRPP) is designed for adoption by individual skilled nursing facilities. The MRPP was developed in response to the threat of a respiratory infectious disease emergency such as pandemic influenza. The purpose of the MRPP is to programmatically equip skilled nursing facilities (SNFs) and other long-term care (LTC) facilities to support public health and public welfare during an influenza pandemic or other respiratory disease emergency. By implementing the MRPP, it is hoped that individual facilities will be able to reduce or limit morbidity, mortality, and the spread of disease among staff and patients. This in turn will keep LTC patients out of acute care facilities. Also, those facilities able to implement and sustain a respiratory protection program will be able to further contribute to the public health response during a communicable respiratory disease emergency.

### FOUR STEPS TO A RESPIRATORY PROTECTION PROGRAM

1. Maintain a written program, such as CAHF's Model Respiratory Protection Program, which complies with federal requirements.
2. Medically evaluate each employee that is fit tested using an occupational health provider or an on-line service such as [www.RespExam.com](http://www.RespExam.com).
3. Train and fit test employees to comply with federal requirements.
4. Provide respiratory protection equipment for employees, including N95 respirators.

## GETTING STARTED WITH RESPIRATORY PROTECTION: OVERVIEW AND ACTION STEPS

State and federal regulations mandate that when an employer requires their employees to use respiratory protective equipment, such as N95 respirators to decrease the risk of acquiring an infectious disease, the employer must comply with a series of federal requirements. This section provides an overview of these requirements and how to meet them. While the Model Respiratory Protection Program is intended to be a comprehensive reference document for long term care facilities who are preparing to implement a respiratory protection program, it is not designed to represent an official or legal interpretation of OSHA or CalOSHA regulations. If specific questions arise, the official standards should be relied upon rather than this document.

There are **10 program components** required by OSHA's Respiratory Protection standard (29 CFR 1910.134):

1. Maintain a **written Respiratory Protection Program (RPP)** with worksite specific procedures for fit testing and training. This document constitutes that program, once it has been adopted as formal policy by an institution or facility.
2. **Medically evaluate** each employee before that employee is fit tested. This can be done using the [www.respexam.com](http://www.respexam.com) service or through an employer's occupational health provider.

***Include the following specific elements as part of training/fit testing:***

3. Provide instruction on the **respiratory hazards** to which the workers are potentially exposed during routine and emergency situations as part of the annual training/fit testing of employees. This instruction is contained in the section "Identifying Work Hazards", later in this document, and in Appendix I, CAHF Respirator Training/Qualitative Fit Testing Program.
4. Provide instruction on the **uses and limitations of all respirators** worn in the work area, including teaching employees how to recognize medical signs and symptoms that may limit or prevent the effective use of the respirators.
5. Instruct and demonstrate to employees **how to properly don and adjust any respirators** worn according to the manufacturers' instructions.
6. Allow the employees an opportunity to **practice these procedures**.
7. Provide **user seal check instructions**.

8. Instruct the employees in the **procedures for the maintenance and storage** of the respirators being used.
9. **Fit test each employee to be assigned a respirator.**
10. **Document the successful completion of training and fit testing for all employees** wearing respirators.

**The entire training and fit testing program appears in Appendix I.** It was designed in conjunction with 3M, and using 3M training materials, fit testing kits, and respirators; it will need to be tailored to the appropriate respiratory protection equipment and fit testing equipment.



## IMPLEMENTING THE MRPP: INSTRUCTIONS FOR USE OF THE MRPP

This document contains the complete written administrative respiratory protection program needed for facilities to be compliant with the Cal/OSHA General Industry standard for respiratory protection (8 CCR 5144) and OSHA Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers (OSHA 3328-05, 2007). While not a general purpose infection control program, this MRPP does contain elements of infection control necessary to support respiratory protection and infection control. The MRPP is designed for use in response to an influenza pandemic or other infectious respiratory disease emergencies; it is not a program designed for routine respiratory protection (e.g., for working with patients with active tuberculosis or for working with hazardous materials).

Facilities implementing this MRPP will need to:

- **Formally adopt, as policy, the MRPP.** The MRPP is largely concerned with the use of respirators for personal protection, and respirator use requires a written program. The MRPP contains all elements needed for that written program (except for those fill-in-the-blank fields needed to customize the MRPP to a given facility, such as the name of the program administrator).
- **Designate a program administrator.** This person might be the individual responsible for employee health and vaccination (note that the infection control nurse is probably too busy to take on this program). The program administrator can serve as the administrator for multiple facilities to the extent that they can effectively perform the tasks required.
- **Maintain records of screening and training of staff.** Model forms are included in this MRPP.
- **Establish a medical clearance process.** Create a relationship with an occupational medical department to provide medical evaluation/clearance for those staff that requires such additional screening. Two options are included:
  - Option A is a streamlined approach that was successfully tested as part of CAHF's Respiratory Protection Initiative (RPI), and involves the use of an online medical clearance questionnaire.
  - Option B is designed for facilities with their own existing relationships with occupational health care providers.
- **Screen and train staff in the use of personal protective equipment (PPE).** This screening and training (which includes fit testing of respirators) must occur after a person is hired.

This MRPP is intended to address infectious respiratory hazards, not chemical, radiological, or other hazards.

The adoption of this MRPP is optional. It is not required by regulation, statute, or standards at the present time. The advantage of this program is that it helps those facilities that wish to prepare for a pandemic or other infectious respiratory emergency to do so; it also provides a “just in time” program package in the event of a pandemic.

This MRPP provides a foundation of preparedness for pandemic and related circumstances. However, the exact condition of a given pandemic virus or other organism cannot be known in advance. It may be necessary to modify the MRPP as the case definition, natural history, disease profile, or other characteristics of a specific outbreak become known.

Although not strictly required as part of the MRPP, it is also recommended<sup>1</sup> that facilities engage in occupational medical surveillance activities and priority use of vaccinations and antivirals. Surveillance activities include:

- Maintaining a registry of healthcare workers (including housekeeping staff working in patient care areas) who have provided care for pandemic influenza-infected patients (confirmed or probable cases).
- Maintaining a registry of staff who have recovered from pandemic influenza (confirmed or probable cases).
- Encouraging self-reporting by employees of influenza-like symptoms.
- Monitoring work absenteeism for health reasons, especially in healthcare workers providing direct patient care.
- Screening all healthcare staff providing care to pandemic influenza-infected patients for influenza-like symptoms before each daily shift, so that symptomatic healthcare workers can be evaluated and excluded from duty.
- Evaluation of all employees believed to have had significant clinical exposure to a highly pathogenic influenza strain. Such employees should be counseled about the risk of transmission to others; and monitored for fever, respiratory symptoms, sore throat, rhinorrhea (runny nose), chills, rigors, myalgia, headache, and diarrhea.

Vaccines and antiviral medications may be available to high priority workers such as healthcare facility employees. Facilities should coordinate with their local public health officials to receive priority access to such medication, and should maintain a registry of those staff who have received antivirals or vaccination.

---

<sup>1</sup> OSHA, Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers; 2007.

## **A Concept of Operations/Concept of Care for SNFs during Pandemic**

How should skilled nursing facilities respond to a pandemic or similar disease emergency? The activities outlined above support the following concept of operations/concept of care:

- Engage in community collaborative planning, such that skilled nursing facilities coordinate and plan with the local medical/health pandemic coordinator or other emergency medical planner.
- Keep SNF patients out of acute care hospitals (“holding our own”) by reducing morbidity and infection spread through the use of the MRPP.
- Consider closing facilities to new admissions as an aggressive measure to keep pandemic infection out of the facility as long as possible.
- Cohort (group together) pandemic patients within a facility into specific wards, and consider dedicating separate entrances and passageways for patients and their families.
- Temporarily limit movement within the facility (e.g., serving meals on nursing units instead of in the dining room, canceling social and recreational activities).
- Prevent or delay pandemic virus entry into the facility by controlling visitors:
  - Post visual alerts (in appropriate languages) at the entrance to the facility restricting entry by persons who have been exposed to or have symptoms of pandemic influenza.
  - Enforce visitor restrictions by assigning personnel to verbally and visually screen visitors for respiratory symptoms at points of entry to the facility.
  - Provide signage and instruction on basic respiratory hygiene (e.g., cough etiquette, hand washing, etc.) for visitors entering the facility).
  - Provide a telephone number where persons can call for information on measures used to prevent the introduction of pandemic influenza.
- Prevent or delay pandemic virus entry into the facility by controlling staff assignments:
  - Assign dedicated staff to provide care for pandemic patients, and restrict those staff from working with non-influenza patients.
  - Utilize those staff who have apparently recovered from pandemic influenza to care for pandemic patients.
  - Reduce the risk of infection to staff particularly at risk for complications, such as pregnant women, immunocompromised persons and persons with respiratory diseases, through appropriate education, training, and use of personal protective equipment.

- Closely monitor guidance from local and state public health officials regarding the nature of the pandemic or other infectious disease emergency. Understanding the case definition (i.e., the characterization and description of the disease, its signs and symptoms, etc.) can help facilities better understand and respond to a given threat.
- Implement the MRPP to protect all staff.

## MODEL RESPIRATORY PROTECTION PROGRAM

**Facility Name:** \_\_\_\_\_

### Policy

It is the policy of this company to provide its employees with a safe and healthful work environment. The purpose of this program is to reduce employee exposure to infectious agents in the workplace through the proper use of respirators during an influenza pandemic or other infectious respiratory disease emergency. Respiratory protection is provided at no cost to the employees.

This policy includes the implementation of this respiratory protection program as a means of providing the highest levels of protection to employees during an influenza pandemic, as defined by OSHA.<sup>2</sup> Specific details of this guidance appear in the Appendix.

### Program Administration

The following individual has ultimate total and complete responsibility for the administration of the respiratory protection program:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

This individual has the authority to act on any and all matters relating to the operation and administration of the respiratory protection program. All employees, operating departments, and service departments will cooperate to the fullest extent. This person is referred to as the Respiratory Protection Program Administrator. This person will also be responsible for monitoring the ongoing and changing needs for respiratory protection

---

<sup>2</sup> Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers; OSHA 3328-05, 2007.

## **Roles and Responsibilities:**

### ***Respiratory Protection Program Administrator (RPPA)***

The Respiratory Protection Program Administrator is responsible for administering the respiratory protection program. Duties of the RPPA include:

- Identify work areas, processes, or tasks that require respiratory protection. For this model program, this means identifying patient care areas and other circumstances likely to present a pandemic influenza transmission risk.
- Monitor Cal/OSHA policy and standards for changes and make changes to agency's policy
- Select respiratory protection products.
- Monitor respirator use to ensure that respirators are used in accordance with their certification.
- Distribute and ensure completion of the medical clearance questionnaire (which may be completed online).
- Provide required information to the physician or other licensed health care provider who will do medical evaluations of respirator users
- Ensure that respirator users have received a medical evaluation and are medically qualified to use a respirator
- Evaluate any feedback information or surveys.
- Arrange for and/or conduct training and fit testing.
- Ensure proper storage and maintenance of respiratory protection equipment.
- Annually review the implementation of the program in consultation with employees and their representatives.

### ***Supervisor***

The RPPA may also serve as the supervisor for the respiratory protection program. Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular units. Supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

- Knowing the hazards in the area in which they work.
- Knowing types of respirators that need to be used.
- Ensuring the respirator program and worksite procedures are followed.
- Enforcing/encouraging staff to use required respirators.
- Ensuring employees receive training and medical evaluations.

- Coordinating annual retraining and/or fit testing.
- Notifying the RPA with problems with respirator use, or changes in work processes that would impact airborne contaminant levels.
- Ensure proper storage and maintenance of all respirators.

### **Employee**

It is the responsibility of the employee to have an awareness of the respiratory protection requirements for their work areas (as explained by management). Employees are also responsible for wearing the appropriate respiratory protective equipment according to proper instructions and for maintaining the equipment in a clean and operable condition. Employees should also:

- Participate in all training.
- Maintain equipment.
- Report malfunctions or concerns.

### **Program Scope and Application**

This program applies to all employees who could potentially be exposed to airborne respiratory illnesses during routine work operations in the event of an influenza pandemic or other infectious respiratory disease emergency. Some of the types of work activities required to wear respirators are outlined in the table below:

| <b>WORK PROCESS</b>    | <b>LOCATION</b>  | <b>TYPE OF RESPIRATOR</b> |
|------------------------|--|---------------------------|
| DIRECT PATIENT CARE    | PATIENT CARE AREAS   | N95 – DISPOSABLE PAPR     |
| HOUSEKEEPING, CLEANING | PATIENT CARE AREAS WHERE PANDEMIC/RESPIRATORY PATIENTS HAVE STAYED | N95 – DISPOSABLE PAPR     |

### **Identifying Work Hazards**

The respirators selected will be used for respiratory protection from potentially airborne infectious diseases; they do not provide protection from chemical exposure. Through normal working situations employees may be asked to have contact with patients who could be infected with a potentially airborne infectious agent such as the influenza virus.

## Respirator Selection

Only respirators approved by the National Institute for Occupational Safety and Health (NIOSH) will be selected and used.

Check those in use at this facility:

- N95 respirators are available for patient contact/care.
- A powered air-purifying respirator (PAPR) is available for patient contact/care (if your facility has purchased or obtained one).

A PAPR may be selected for use if:

- The N95 respirator choice(s) does not fit;
- Employee has facial hair or facial deformity that would interfere with mask-to-face seal (facial hair such as a mustache must fit within the seal of the mask);
- The N95 respirator choice(s) are unavailable; or,
- Desired for high-risk aerosol-generating procedures

### **Respiratory Protection Equipment**

#### **Respirators:**

Respirators differ from surgical masks. They are designed specifically to ensure the capture of particles of the size that can be inhaled into the respiratory tract, including the entire range of nasopharyngeal, tracheobronchial and alveolar-sized particles.



#### **N95 Respirators:**

“N95” refers to respirators designed for non-oil based respiratory hazards which have an efficiency of 95% (stopping 95% of particles). The picture at right is a 3M Model 9210 N95 respirator (photos courtesy 3M Corp.)

#### **PAPR (Powered Air Purifying Respirator):**

A respirator that provides cleaned air to the inside of a light-weight hood, purifying the air by means of a battery powered blower which pulls the air through a filter cartridge. PAPRs are worn by people who do not fit test to an N95 respirator, and by anyone with facial hair (which interferes with the seal needed for an N95).





## Respirator Training and Fit Testing

### **Training**

Workers will be trained prior to the use of a respirator, at least annually thereafter, and whenever supplemental training is deemed necessary by the Respiratory Protection Program Administrator, or when conditions in the workplace effecting respirator use change. Training will cover:

- Identifying hazards, potential exposure to these hazards, and health effects of hazards.
- Respirator fit, improper fit, usage, limitations, and capabilities for maintenance, usage, cleaning, and storage.
- Inspecting, donning, removal, seal check and trouble shooting.
- Explaining respirator program (policies, procedures, Cal/OSHA standard, resources).

### **Fit Testing**

After the initial fit test, fit tests must be completed at least annually, or more frequently if there is a change in status of the wearer or if the employer changes model or type of respiratory protection (see below). As of 7/1/04 the Cal/OSHA Respiratory Protection Standard 8 CCR 5144 applies to health care workers. This template will be changed to reflect the most current OSHA regulations as new information becomes available.

The fit testing procedure appears in Appendix A to this program. Fit tests are conducted to determine that the respirator fits the user adequately and that a good seal can be obtained. Respirators that do not seal do not offer adequate protection. Fit testing is required for tight fitting respirators.

Fit tests will be conducted:

1. Prior to being allowed to wear any respirator.
2. If the facility changes respirator product.
3. If the employee changes weight by 10% or more, or if the employee has changes in facial structure or scarring.
4. If the employee reports that a respirator that previously passed a fit-test is not providing an adequate fit
5. If the RPPA, PLHCP or other supervisor notices a change in employee that would require an additional fit-test as Cal/OSHA standards require.

***Fit testing will not be done on employees with facial hair that passes between the respirator seal and the face or interferes with valve function. Such facial hair includes stubble, beards and long sideburns. Optional: if a facility is using PAPRs: If it is determined that an individual cannot obtain an adequate fit with any tight fitting respirator, a loose fitting powered air purifying respirator may be provided instead.***

## ***Medical Evaluation***

Persons assigned to tasks that require respiratory protection during an influenza pandemic or other respiratory disease emergency must be physically and psychologically able to perform the tasks while wearing a respirator.

Employees who are required to wear respirators during an influenza pandemic or infectious respiratory disease emergency must participate in a medical evaluation before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until receiving medical clearance according to the process identified below.

A mandatory medical evaluation questionnaire (specified in Section 5144(c)) **must be used and reviewed by the physician or other licensed healthcare professional (PLHCP)** specified below by the employer, or a medical evaluation with the same content must be provided by a PLHCP. If the PLHCP deems it necessary, the employee will receive an examination. The purpose of the medical evaluation is to determine if the employee is physically and psychologically able to perform the assigned work while wearing the respiratory protective equipment. Medical clearance should occur prior to fit testing.

The medical evaluation may be kept with the PLHCP or with the employee's medical record. It should not be kept in an employee's personnel file.

**DESIGNATE OPTION A OR OPTION B, AND COMPLETE THE APPROPRIATE ENTRIES.**

### **☐ *Option A: On-line Questionnaire***

Medical evaluation will be accomplished using the online questionnaire at [www.respexam.com](http://www.respexam.com). The designated physician or other licensed healthcare professional (PLHCP) is Dr. William Lohman. Those employees that require further screening will be evaluated in person at an occupational medicine clinic or by a provider/PLHCP identified by the employer. (Each employer will need to make arrangements with RespExam.Com.)

Medical reevaluation will occur annually.

**□ Option B: Designate a Physician or Other Licensed Healthcare Professional Currently Affiliated with the Facility/Employer (PLHCP)**

\_\_\_\_\_ (Indicate appropriate provider):  
*occupational health physician, personal physician*) will determine individual medical clearance by a medical questionnaire and/or medical exam. A medical evaluation questionnaire is provided in Appendix C for use by the PLHCP. A standardized memo requesting evaluation is provided in Appendix D.

The medical evaluation procedures are as follows:

- The medical evaluation will be conducted using the questionnaire provided in Appendix C. The Program Administrator will provide a copy of this questionnaire to all employees requiring medical evaluations.
- To the extent feasible, the facility will assist employees who are unable to read the questionnaire by providing the questionnaire in alternate languages. When this is not possible, the employee will be sent directly to the medical practitioner for medical evaluation.
- All affected employees will be given a copy of the medical questionnaire to fill out. Employees will be provided with a stamped envelope addressed to the PLHCP, as well as the number for the PLHCP if the employee wishes to discuss the questionnaire. The employee will complete the questionnaire and submit the questionnaire via mail to the PLHCP. Employees will be permitted to fill out the questionnaire on company time.
- Follow-up medical exams will be granted to employees as required by this program, and/or as deemed necessary by the medical practitioner.
- All employees will be granted the opportunity to speak with the medical practitioner about their medical evaluation, if they so request.

Re-evaluation will be conducted under these circumstances:

- Employee reports physical symptoms that are related to the ability to use a respirator, (e.g., wheezing, shortness of breath, chest pain, etc.)
- It is identified that an employee is having a medical problem during respirator use.
- The healthcare professional performing the evaluation determines an employee needs to be reevaluated.
- A change occurs in the workplace conditions that may result in an increased physiological burden on the employee.

All examinations and questionnaires are to remain confidential between the employee and \_\_\_\_\_ (*occupational health physician, personal physician*). Medical reevaluation will occur every four years, unless a different frequency is specified by the PLHCP.

## **Proper Respirator Use:**

### ***General Use***

Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of the selected model(s). In addition, the respirator shall not be used in a manner for which it is not certified by the National Institute for Occupational Safety and Health (NIOSH) or by its manufacturer.

All employees shall conduct positive and negative pressure user seal checks each time they wear a respirator.

All employees shall leave a potentially contaminated work area to clean (PAPR) or change (N95 - disposable) their respirator if the respirator is impeding their ability to work. This means employees shall leave the contaminated area:

- If increased breathing resistance of the respirator is noted.
- If severe discomfort in wearing the respirator is detected.
- Upon illness of the respirator wearer, including: sensation of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever and chills.
- To wash face to prevent skin irritation.

Additionally, employees will be required to immediately leave the contaminated or infected area:

- Upon malfunction of the respirator such as a reduction in air flow of a PAPR.
- Upon detection of leakage of contaminant into the respirator.
- Breathing through the respirator becomes more difficult.

### ***Cleaning and Disinfecting***

N95 – disposable: Discard after use. Discard if soiled, if breathing becomes more difficult, or if structural integrity is compromised. If patient is under Contact Precautions (e.g., MRSA, VRE, smallpox), discard the respirator after use with that patient.

PAPRs – *[Cleaning and disinfection differ based on brand and manufacturer. Clean according to the manufacturer's instructions. Include those instructions here for the models used in each facility.]*

## ***Respirator Reuse***

Disposable N95 respirators are not designed for reuse. However, concern about potential shortages of N95s during a pandemic has forced consideration of respirator reuse. Studying the issue, and in particular reference to N95s for healthcare worker use during a pandemic, the National Academy of Sciences offers this recommendation:

Despite these findings about the constraints of reuse, the committee makes a recommendation for extending the life of disposable N95 respirators for individual users. This recommendation is consistent with the Centers for Disease Control and Prevention's Interim Domestic Guidance on the Use of Respirators to Prevent Transmission of SARS (CDC, 2003).

*Recommendation 1: Avoiding Contamination Will Allow for Limited Reuse.* If an individual user needs to reuse his or her own disposable N95 respirator, the committee recommends that it be done in the following manner:

- Protect the respirator from external surface contamination when there is a high risk of exposure to influenza (i.e., by placing a medical mask or cleanable faceshield over the respirator so as to prevent surface contamination but not compromise the device's fit).
- Use and store the respirator in such a way that the physical integrity and efficacy of the respirator will not be compromised.
- Practice appropriate hand hygiene before and after removal of the respirator and, if necessary and possible, appropriately disinfect the object used to shield it.

## **Respirator Inspection, Maintenance, and Storage:**

### ***Inspection***

All types of respirators should be inspected prior to use.

#### N95 – disposable:

1. Examine the face piece of the disposable respirator to determine if it has structural integrity. Discard if there are nicks, abrasions, cuts, or creases in seal area or if the filter material is physically damaged or soiled.
2. Check the respirator straps to be sure they are not cut or otherwise damaged.
3. Make sure the metal nose clip is in place and functions properly (if applicable).
4. Disposable respirators are not to be stored after use. They are to be discarded.

### PAPR:

1. Check battery level.
2. Inspect the breathing tube and body of the respirator, including the High Efficiency Particulate Air (HEPA) filter, if visible, for damage.
3. Examine the hood for physical damage (if parts are damaged, contact the Respiratory Protection Program Administrator).
4. Check for airflow prior to use.
5. Follow manufacturer's recommendations on maintenance, including battery recharging.

### ***Repair***

During cleaning and maintenance, respirators that do not pass inspection will be removed from service and will be discarded or repaired. Repair of the respirator must be done with parts designed for the respirator in accordance with the manufacturer's instructions before reuse. No attempt will be made to replace components or make adjustments, modifications or repairs beyond the manufacturer's recommendation.

### ***Storage***

Respirators not discarded after one shift use will be stored in a location where they are protected from sunlight, dust, heat, cold, moisture, and damaging chemicals.

### **Evaluating and Updating the Program**

The Respiratory Protection Program Administrator will complete an annual evaluation of the respiratory protection program. She or he will:

- Evaluate any feedback from employees.
- Review any new hazards, case definitions, or other pandemic influenza guidance from public health agencies, or changes in policy that would require respirator use.
- Make recommendations for any changes needed in the respiratory protection program.

## **APPENDICES**

### **APPENDIX A: Fit Test Procedure**

Fit test procedures should be consistent with the fit testing equipment being used. The CAHF MRPP provides the 3M Qualitative Fit Test Instructions for Use. If equipment other than the 3M FT-10 or FT-30 apparatus is being used, please consult the manufacturer's instructions for fit test procedures.

Fit testing equipment is usually sold in kits, with the ability to purchase individual components of the kit as specific supplies dwindle. Components typically include:

- A harmless chemical, used to allow each respirator's wearer to test the seal of their respirator;
- A means of dispensing or vaporizing a mist of that chemical; and,
- A hood in which the fit test can be performed.

Fit test kits are sold by occupational health and safety companies such as 3M.

## **APPENDIX B: CAHF Recommendations on Preparing for Pandemic Influenza**

With the recent H1N1/swine flu outbreak, and the ever-important need to prepare for a serious pandemic of severe influenza, CAHF recommends long-term care facilities take the following steps:

- Develop a facility specific pandemic influenza plan, utilizing CAHF's Pandemic Influenza Workbook for Long Term Care, available at [www.cahf.org/public/dpp](http://www.cahf.org/public/dpp).
- Procure and stockpile surgical masks for potentially infectious patients and visitors, and N95 respirators for all staff coming in direct contact with patients. Facilities should follow current guidance of a minimum of four N95 respirators per staff person per eight-hour shift.
- Implement, or be prepared to implement a respiratory protection program, as outlined in this document.



## APPENDIX C: Medical Evaluation Questionnaire (Sample)

Note that where possible, answers have been provided for the skilled nursing industry.

### OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

**To the employer:** Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

**To the employee:**

Can you read (check one):     Yes     No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

#### PART A - SECTION 1 (MANDATORY)

The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: \_\_\_\_\_
2. Your name: \_\_\_\_\_
3. Your age (to nearest year): \_\_\_\_\_
4. Sex (check one):             Male             Female
5. Your height:                \_\_\_\_\_ ft.    \_\_\_\_\_ in.
6. Your weight:                \_\_\_\_\_ lbs.
7. Your job title: \_\_\_\_\_
8. A phone number where you can be reached by the healthcare professional who reviews this questionnaire (include the Area Code): \_\_\_\_\_
9. The best time to phone you at this number: \_\_\_\_\_
10. Has your employer told you how to contact the health care professional who will review this questionnaire (check one):             Yes             No
11. Check the type of respirator you will use (you can check more than one category):
  - a.  N, R, or P disposable respirator (filter-mask, non- cartridge type only).  
**N95 for Healthcare**
  - b.  Other type (for example, half- or full-face piece type, powered-air purifying, supplied-air, self-contained breathing apparatus). **Powered air-purifying respirator**
12. Have you worn a respirator (check one):             Yes             No  
If "yes," what type(s): \_\_\_\_\_

**PART A - SECTION 2 (MANDATORY)**

Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please check “Yes” or “No”).

|  |                              |                             |
|--|------------------------------|-----------------------------|
| 1. Do you currently smoke tobacco, or have you smoked tobacco in the last month:                 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Have you ever had any of the following conditions?  |                              |                             |
| a. Seizures (fits):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Diabetes (sugar disease):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Allergic reactions that interfere with your breathing:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Claustrophobia (fear of closed-in places):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Trouble smelling odors:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Have you ever had any of the following pulmonary or lung problems?                            |                              |                             |
| a. Asbestosis:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Asthma:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Chronic bronchitis:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Emphysema:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Pneumonia:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Tuberculosis:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| g. Silicosis:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| h. Pneumothorax (collapsed lung):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| i. Lung cancer:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| j. Broken ribs:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| k. Any chest injuries or surgeries:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| l. Any other lung problem that you’ve been told about:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Do you currently have any of the following symptoms of pulmonary or lung illness?             |                              |                             |
| a. Shortness of breath:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Shortness of breath when walking with other people at an ordinary pace on level ground:       | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Have to stop for breath when walking at your own pace on level ground:                        | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Shortness of breath when washing or dressing yourself:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Shortness of breath that interferes with your job:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| g. Coughing that produces phlegm (thick sputum):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| h. Coughing that wakes you early in the morning:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| i. Coughing that occurs mostly when you are lying down:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| j. Coughing up blood in the last month:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| k. Wheezing:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| l. Wheezing that interferes with your job:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| m. Chest pain when you breathe deeply:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| n. Any other symptoms that you think may be related to lung problems:                            | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**PART A - SECTION 2 (CONTINUED)**

|  |                              |                             |
|--|------------------------------|-----------------------------|
| 5. Have you ever had any of the following cardiovascular or heart problems?  |                              |                             |
| a. Heart attack:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Stroke:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Angina:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Heart failure:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Swelling in your legs or feet (not caused by walking):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Heart arrhythmia (heart beating irregularly):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| g. High blood pressure:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| h. Any other heart problem that you've been told about:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 6. Have you ever had any of the following cardiovascular or heart symptoms?  |                              |                             |
| a. Frequent pain or tightness in your chest:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Pain or tightness in your chest during physical activity:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Pain or tightness in your chest that interferes with your job:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. In the past two years, have you noticed your heart skipping or missing a beat:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Heartburn or indigestion that is not related to eating:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Any other symptoms that you think may be related to heart or circulation problems:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 7. Do you currently take medication for any of the following problems?   |                              |                             |
| a. Breathing or lung problems:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Heart trouble:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Blood pressure:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Seizures (fits):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 8. If you've used a respirator, have you ever had any of the following problems? <i>(If you've never used a respirator, check the following space and go to question 9)</i>  |                              |                             |
| a. Eye irritation:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Skin allergies or rashes:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Anxiety:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. General weakness or fatigue:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Any other problem that interferes with your use of a respirator:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-face piece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary. |                              |                             |
| 10. Have you ever lost vision in either eye (temporarily or permanently):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11. Do you currently have any of the following vision problems?  |                              |                             |
| a. Wear contact lenses:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Wear glasses:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Color blind:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Any other eye or vision problem:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 12. Have you ever had an injury to your ears, including a broken eardrum:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 13. Do you currently have any of the following hearing problems?   |                              |                             |
| a. Difficulty hearing:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Wear a hearing aid:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Any other hearing or ear problem:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**PART A - SECTION 2 (CONTINUED)**

|  |                              |                             |
|--|------------------------------|-----------------------------|
| 14. Have you ever had a back injury:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 15. Do you currently have any of the following musculoskeletal problems?         |                              |                             |
| a. Weakness in any of your arms, hands, legs, or feet:                           | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Back pain:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Difficulty fully moving your arms and legs:                                   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Pain or stiffness when you lean forward or backward at the waist:             | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Difficulty fully moving your head up or down:                                 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Difficulty fully moving your head side to side                                | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| g. Difficulty bending at your knees:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| h. Difficulty squatting to the ground:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| i. Climbing a flight of stairs or a ladder carrying more than 25 lbs:            | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| j. Any other muscle or skeletal problem that interferes with using a respirator: | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**PART B**

Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

|     |  |                              |                             |
|-----|--|------------------------------|-----------------------------|
| 1.  | In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2.  | At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | If "yes," name the chemicals if you know them:   |                              |                             |
|     |  |                              |                             |
| 3.  | Have you ever worked with any of the materials, or under any of the conditions, listed below:  |                              |                             |
|     | a. Asbestos:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | b. Silica (e.g., in sandblasting):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | c. Tungsten/cobalt (e.g., grinding or welding this material):  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | d. Beryllium:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | e. Aluminum:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | f. Coal (for example, mining):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | g. Iron:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | h. Tin:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | i. Dusty environments:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | j. Any other hazardous exposures:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | If "yes," describe these exposures:  |                              |                             |
|     |  |                              |                             |
| 4.  | List any second jobs or side businesses you have:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     |  |                              |                             |
| 5.  | List your previous occupations:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     |  |                              |                             |
| 6.  | List your current and previous hobbies:  |                              |                             |
|     |  |                              |                             |
| 7.  | Have you been in the military services?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | If "yes," were you exposed to biological or chemical agents (either in training or combat):  |                              |                             |
|     |  |                              |                             |
| 8.  | Have you ever worked on a HAZMAT team?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 9.  | Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | If "yes," name the medications if you know them:   |                              |                             |
|     |  |                              |                             |
| 10. | Will you be using any of the following items with your respirator(s)?  |                              |                             |
|     | a. HEPA Filters:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | b. Canisters (for example, gas masks):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|     | c. Cartridges:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**PART B (CONTINUED)**

Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

|   |                              |                             |
|---|------------------------------|-----------------------------|
| 11. How often are you expected to use the respirator(s)? (Check "Yes" or "No" for all answers that apply to you):   |                              |                             |
| a. Escape only (no rescue):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Emergency rescue only:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Less than 5 hours per week:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Less than 2 hours per day:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. 2 to 4 hours per day:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Over 4 hours per day:  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 12. During the period you are using the respirator(s), is your work effort:   |                              |                             |
| a. Light (less than 200 kcal per hour):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If "yes," how long does this period last during the average shift:  | __ hrs.                      | __ mins.                    |
| Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.   |                              |                             |
| b. Moderate (200 to 350 kcal per hour):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If "yes," how long does this period last during the average shift:  | __ hrs.                      | __ mins.                    |
| Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface. |                              |                             |
| c. Heavy (above 350 kcal per hour):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If "yes," how long does this period last during the average shift:  | __ hrs.                      | __ mins.                    |
| Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).   |                              |                             |
| 13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If "yes," describe this protective clothing and/or equipment:   |                              |                             |
| <i>Gloves, occasionally gowns and eye protection as indicated for body fluid splashes.</i>  |                              |                             |
| 14. Will you be working under hot conditions (temperature exceeding 77 deg. F):   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 15. Will you be working under humid conditions:   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 16. Describe the work you'll be doing while you're using your respirator(s):<br><i>Patient care in a skilled nursing facility or long term care facility.</i>   |                              |                             |
| 17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases): <i>Not applicable</i>   |                              |                             |

**PART B (CONTINUED)**

Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

|  |  |
|--|--|
| 18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):  |  |
|  |  |
| Name of the first toxic substance:   |  |
| Estimated maximum exposure level per shift:  |  |
| Duration of exposure per shift:  |  |
|  |  |
| Name of the second toxic substance:  |  |
| Estimated maximum exposure level per shift:  |  |
| Duration of exposure per shift:  |  |
|  |  |
| Name of the third toxic substance:   |  |
| Estimated maximum exposure level per shift:  |  |
| Duration of exposure per shift:  |  |
|  |  |
| The name of any other toxic substances that you'll be exposed to while using your respirator:  |  |
|  |  |
| 19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and safety and well-being of others (for example, rescue, security): <i>Patient care</i> |  |
|  |  |

**APPENDIX D: Request for Medical Evaluation** *(Sample Memo – Patient Care Staff)*

**MEMORANDUM**

To whom it may concern: \_\_\_\_\_  
From: \_\_\_\_\_ *(Respiratory Protection Program Administrator)*  
Date: \_\_\_\_\_

Re: Medical evaluation for respirator use

\_\_\_\_\_ (Employee name), an employee of \_\_\_\_\_ (Facility name) is required to wear a respirator at work during an influenza pandemic or other infectious respiratory disease emergency. The employer requests that you provide this employee with a medical evaluation that meets the requirements outlined in Cal/OHSA Title 8, Section 5144(e).

We have provided you with this portion of the Respirator Standard. Please follow this procedure when you examine this employee.

An OSHA Respirator Medical Evaluation Questionnaire was provided to this employee. A completed questionnaire must be provided to you by the employee.

The following supplemental information is provided to you to assist in your evaluation of this employee's respirator use:

- A. The type and weight of the respirator that will be used: N95-disposable, or powered air-purifying respirator (PAPR) with loose-fitting head covering.
- B. The duration and frequency of the respirator use: routine patient care activities performed at the bedside in a skilled nursing facility.
- C. The expected physical work effort: moderate work effort for up to 30 minutes at a time. This includes turning patients, feeding patients, and other patient care tasks typically performed while standing. Occasional brief heavy work effort (lifting and transferring patients) may also be required.
- D. Additional protective clothing and equipment that may be worn: gown and gloves.
- E. Temperature and humidity extremes experienced during work: none.

We request that you provide a signed statement on letterhead indicating that the employee is medically able to wear a respirator under the conditions described.

Please feel free to contact me if you have any questions.



**APPENDIX E: Request for Medical Evaluation** *(Sample Memo- Housekeeping Staff)*

**MEMORANDUM**

To whom it may concern: \_\_\_\_\_  
From: \_\_\_\_\_ *(Respiratory Protection Program Administrator)*  
Date: \_\_\_\_\_

Re: Medical evaluation for respirator use

\_\_\_\_\_ (Employee name), an employee of \_\_\_\_\_ (Facility name) is required to wear a respirator at work during an influenza pandemic or other infectious respiratory disease emergency. The employer requests that you provide this employee with a medical evaluation that meets the requirements outlined in Cal/OHSA Title 8, Section 5144(e).

We have provided you with this portion of the Respirator Standard. Please follow this procedure when you examine this employee.

An OSHA Respirator Medical Evaluation Questionnaire was provided to this employee. A completed questionnaire must be provided to you by the employee.

The following supplemental information is provided to you to assist in your evaluation of this employee's respirator use:

- A. The type and weight of the respirator that will be used: N95-disposable, or powered air-purifying respirator (PAPR) with loose-fitting head covering.
- B. The duration and frequency of the respirator use: housekeeping activities performed in patient care areas and other areas at a skilled nursing facility.
- C. The expected physical work effort: moderate work effort for up to 30 minutes at a time. This includes cleaning floors and surfaces, typically performed while standing. Occasional brief heavy work effort (lifting and transferring supplies) may also be required.
- D. Additional protective clothing and equipment that may be worn: gloves.
- E. Temperature and humidity extremes experienced during work: none.

We request that you provide a signed statement on letterhead indicating that the employee is medically able to wear a respirator under the conditions described.

Please feel free to contact me if you have any questions.

**APPENDIX F: Fit Test Record (Sample)**

| <b>FIT TEST RECORD</b>  |  |
|---|--|
| Name of respirator user/employee:   |  |
| Test Date:  |  |
| Position Title:   |  |
| Department:   |  |
| Location:   |  |
| Challenge Agent Used:   |  |
| <input type="checkbox"/> Isoamyl Acetate <input type="checkbox"/> Saccharin <input type="checkbox"/> Bitrex   |  |
| Respirator Make:  |  |
| <input type="checkbox"/> Survivair <input type="checkbox"/> North <input type="checkbox"/> MSA <input type="checkbox"/> Racal <input type="checkbox"/> 3M <input type="checkbox"/> Moldex <input type="checkbox"/> Wilson |  |
| Other:  |  |
| <hr/> <hr/> <hr/>   |  |

|                   |  |
|-------------------|--|
| Respirator Model: |  |
| Respirator Size:  |  |

| Additional PPE    |
|-------------------|
| Worn:             |
| <hr/> <hr/> <hr/> |
| Comments:         |
| <hr/> <hr/> <hr/> |

| <b>PASS / FAIL</b> |  |
|--------------------|--|
| Next fit-test due: |  |

## **APPENDIX G: Related OSHA Guidance for Pandemic Influenza**

*The following is an excerpt from OSHA Guidance 3328-05, 2007. It is provided for information purposes only, not to define policy under this MRPP. "HHS" refers to the United States Department of Health and Human Services.*

### **PERSONAL PROTECTIVE EQUIPMENT:**

#### ***Gloves***

HHS recommends the use of gloves made of latex, vinyl, nitrile, or other synthetic materials as appropriate, when there is contact with blood and other bodily fluids, including respiratory secretions.

- There is no need to double-glove.
- Gloves should be removed and discarded after patient care.
- Gloves should not be washed or reused.
- Hand hygiene should be done after glove removal.

Because glove supplies may be limited in the event of pandemic influenza, other barriers such as disposable paper towels should be used when there is limited contact with respiratory secretions, such as handling used facial tissues. Hand hygiene should be practiced consistently in this situation.

#### ***Gowns***

- Healthcare workers should wear an isolation gown when it is anticipated that soiling of clothes or uniform with blood or other bodily fluids, including respiratory secretions, may occur. HHS states that most routine pandemic influenza patient encounters do not necessitate the use of gowns. Examples of when a gown may be needed include procedures such as intubation or when closely holding a pediatric patient.
- Isolation gowns can be disposable and made of synthetic material or reusable and made of washable cloth.
- Gowns should be the appropriate size to fully cover the areas requiring protection.
- After patient care is performed, the gown should be removed and placed in a laundry receptacle or waste container, as appropriate. Hand hygiene should follow.

#### ***Goggles/Face Shields***

The HHS Pandemic Influenza Plan does not recommend the use of goggles or face shields for routine contact with patients with pandemic influenza; however, if sprays or splatters of infectious material are likely, it states that goggles or a face shield should be worn as recommended for standard precautions. For additional information about eye protection for infection control, visit NIOSH's website at <http://www.cdc.gov/niosh/topics/eye/eye-infectious.html>.

If a pandemic influenza patient is coughing, any healthcare worker who needs to be within 3 feet of the infected patient is likely to encounter sprays of infectious material. Eye and face protection should be used in this situation, as well as during the performance of aerosol-generating procedures.

## ***Respiratory Protection for Pandemic Influenza***

While droplet transmission is likely to be the major route of exposure for pandemic influenza, as is the case with seasonal influenza, it may not be the only route. Given the potential severity of health consequences (illness and death) associated with pandemic influenza, a comprehensive pandemic influenza preparedness plan should also address airborne transmission to ensure that healthcare workers are protected against all potential routes of exposure. Establishment of a comprehensive respiratory protection program with all of the elements specified in OSHA's Respiratory Protection standard (29 CFR 1910.134) is needed to achieve the highest levels of protection. Additional information on the Respiratory Protection standard is included in Appendix C in this document.

Healthcare workers are at risk of exposure to airborne infectious agents, including influenza. For some types of airborne infectious agents (such as SARS), healthcare workers are not only at risk for illness but may become a potential source of infection to patients and others. Selection of appropriate respiratory PPE requires an understanding of the airborne infectious agents, their infectious and aerodynamic properties, the operating characteristics of the PPE, and the behaviors and characteristics of the healthcare workers using the PPE. Many different types of respiratory PPE are available to protect healthcare workers, each with a different set of advantages and disadvantages.

There will continue to be uncertainty about the modes of transmission until the actual pandemic influenza strain emerges. It is expected that there will be a worldwide shortage of respirators if and when a pandemic occurs. Employers and employees should not count on obtaining any additional protective equipment not already purchased and stockpiled. Therefore, it is important for healthcare facilities to consider respiratory protection for essential personnel to assure that employees are ready, willing, and able to care for the general population.

### ***Surgical Masks and Respirators***

Although some disposable respirators look similar to surgical masks, it is important that healthcare workers understand the significant functional difference between disposable respirators and surgical masks.

Respirators are designed to reduce an individual's exposure to airborne contaminants, such as particles, gases, or vapors. An air-purifying respirator accomplishes this by filtering the contaminant out of the air before it can be inhaled by the person wearing the respirator. A type of respirator commonly found in health-care workplaces is the filtering facepiece particulate respirator (often referred to as an "N95"). It is designed to protect against particulate hazards. Since airborne biological agents such as bacteria or viruses are particles, they can be filtered by particulate respirators. To assure a consistent level of performance, the respirator's filtering efficiency is tested and certified by NIOSH.

In comparison, surgical masks are not designed to prevent inhalation of airborne contaminants. Their ability to filter small particles varies greatly and cannot be assured to protect healthcare workers against airborne infectious agents. Instead, their underlying purpose is to prevent contamination of a sterile field or work environment by trapping bacteria and respiratory secretions that are expelled by the wearer (i.e., protecting the patient against infection from the healthcare worker). Surgical masks are also used as a physical barrier to protect the healthcare worker from hazards such as splashes of blood or bodily fluids. When both fluid protection (e.g., blood splashes) and respiratory protection are needed, a "surgical N95" respirator can be used. This respirator is approved by FDA and certified by NIOSH.

Another important difference in protecting health-care workers from airborne infectious agents is the way respirators and surgical masks fit the user's face. Respirators are designed to provide a tight seal between the sealing surface of the respirator and the person's face. A proper seal between the user's face and the respirator forces inhaled air to be pulled through the respirator's filter material and not

through gaps between the face and respirator. Surgical masks, however, are not designed to seal tightly against the user's face. During inhalation, potentially contaminated air can pass through gaps between the face and the surgical mask, thus avoiding being pulled through the material of the mask and losing any filtration that it may provide.

When personal protective equipment is necessary to protect against droplet transmission of infectious agents, employees must place a barrier between the source of the droplet (e.g., a sneeze) and their mucosal surfaces. Such protection could include a surgical mask to cover the mouth and nose and safety glasses to cover the eyes. Recent studies show that aerosol penetration through a surgical mask is highly dependent on particle size, mask construction, and breathing flow rate. One study showed that penetration rates for submicron particles could be as high as 80 percent for surgical masks. Even relatively unconventional uses (e.g., the wearing of multiple surgical masks) have been shown to be less protective than NIOSH-certified respirators. For example, research has shown that the use of up to five surgical masks worn by volunteers result in particle reduction of only 63 percent for one mask, 74 percent for two masks, 78 percent for three masks, and 82 percent for five masks, compared with a recommended reduction of at least 95 percent for properly fitted N95 respirators.

Current recommendations for reuse of respirators, which are based on assumptions that there will be respirator shortages, call for allocating four respirators per employee per eight-hour shift. This means reuse of respirators is permitted with pandemic influenza patients. However, respirators should *not* be reused if a patient has a contact-transmitted disease (such as methicillin-resistant staphylococcus aureus, or vancomycin-resistant enterococcus).

## APPENDIX H: References

- *Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Health Care Settings during an Influenza Pandemic*, <http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html>.
- NIOSH Respiratory Protection Program (<http://www.cdc.gov/niosh/topics/respirators/> )
- *Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers*, OSHA 3328-05, 2007
- *Reusability of Facemasks During an Influenza Pandemic: Facing the Flu*, National Academy of Science, 2006.
- US Department of Health and Human Services, 1999, OSHA Technical Manual: Respiratory Protection 29 CFR 1910.134 <http://www.osha.gov/SLTC/etools/respiratory/oshfiles/otherdocs.html>)

## Appendix I: CAHF Respirator Training/Qualitative Fit Testing Program

*This outline contains all of the required teaching elements. The right column represents those points that should be provided to staff as part of training and fit testing.*

### CAHF RESPIRATOR TRAINING/QUALITATIVE FIT TESTING PROGRAM

Developed by the California Association of Health Facilities with support from 3M and CalOSHA

OSHA regulations require employers to train and fit test employees who use respiratory protection during the course of their workday. OSHA requires that each employee must be medically evaluated before the employee is fit tested.

This program was developed for use during an influenza pandemic or other infectious respiratory disease emergency. It is not intended for routine use or to protect employees from hazardous materials.

Using this document:

- The **left column** (program components) is **for your information only**.
- The **right column** (the curriculum) contains **all of the teaching points you need to train and fit test**. It is your curriculum. It also appears separately at the end of this document for easy copying, without the other columns.
- The **middle column** contains **background information and references to other materials** to support your training.

| Program Components per OSHA   | Resources and Program Implementation   | Training/Fit Testing Program: The Curriculum   |
|---|--|--|
| 1. Maintain a written respiratory protection program with worksite specific procedures for fit testing and training.                    | <ul style="list-style-type: none"> <li>▪ See CAHF Model Respiratory Protection Program document.</li> <li>▪ Adopt the program as policy at your facility; designate a program administrator; determine which approach you'll use for medical clearance (see below, and see the Model Respiratory Protection Program).</li> </ul> |  |
| 2. OSHA requires that each employee must be medically evaluated before the employee is fit tested.                                      | <ul style="list-style-type: none"> <li>▪ Employees using respirators must receive medical clearance. This can be done using <a href="http://www.respexam.com">www.respexam.com</a>, or through an employer's occupational health provider.</li> </ul>  |  |
| 3. Provide instruction on the respiratory hazards to which the workers are potentially exposed during routine and emergency situations. |  | <ul style="list-style-type: none"> <li>▪ Employees are being trained in the use of respirators to provide protection from the influenza virus during an emergency known as a pandemic, which represents a communicable disease risk.</li> <li>▪ Correctly wearing an N95 respirator decreases the risk of acquiring influenza and other communicable respiratory diseases.</li> <li>▪ This program is not designed to provide protection for specific hazardous substances.</li> </ul> |

| Program Components per OSHA   | Resources and Program Implementation  | Training/Fit Testing Program: The Curriculum  |
|---|---|---|
| <p>4. Provide instruction on the uses and limitations of all respirators worn in the work area, including informing employees how to recognize medical signs and symptoms that may limit or prevent the effective use of the respirators.</p> | <ul style="list-style-type: none"> <li>▪ The easiest way to review the uses and limitations of the respirator is to <i>read the respirator instructions that come with each respirator package</i>. The NIOSH approval label also provides some of this information.</li> <li>▪ This training assumes that there are no engineering controls to limit the spread of pandemic influenza (such as reverse isolation rooms). Instead, the administrative controls outlined in the CAHF Model Respiratory Protection Program should be reviewed.</li> </ul>               | <ul style="list-style-type: none"> <li>▪ All respirators have use limitations. There is not one all-purpose respirator.</li> <li>▪ Your company selected the respirators for your work environment on which you will be trained: these are N95 respirators designed for healthcare, not for working with hazardous materials, cleaning up bleach spills, or other purposes.</li> <li>▪ Respirators are to be worn when performing patient care duties during an influenza pandemic or other respiratory disease emergency; your supervisor will tell you when these conditions exist.</li> <li>▪ Respirators are to be worn as part of a comprehensive Respiratory Protection Program, which provides additional administrative controls to limit the spread of disease.</li> <li>▪ If you have facial hair, do not use the N95 respirator.</li> <li>▪ If the respirator malfunctions, the employee will exit the contaminated area (that is, the patient's room). Malfunctioning includes a strap breaking or the respirator becoming clogged.</li> <li>▪ If you are feeling light-headed, dizzy, or having difficulty breathing through your respirator, exit the contaminated area and remove the respirator.</li> <li>▪ The effects of improper respirator fit, usage or maintenance can include the respirator failing to protect the employee from the flu virus or other airborne infectious hazards.</li> </ul> |
| <p>5. Instruct and demonstrate to employees how to properly don and adjust any respirators worn according to the manufacturers' instructions.</p>   | <ul style="list-style-type: none"> <li>▪ Written instructions are provided in respirator packaging.</li> <li>▪ Written instructions are also provided in the 3M's "Wear it right" document (available on the Web).</li> <li>▪ Further information can be found at <a href="http://www.cdc.gov/ncidod/sars/respirators.htm">http://www.cdc.gov/ncidod/sars/respirators.htm</a> and <a href="http://www.cdc.gov/niosh/npptl/topics/respirators/factsheets/respsars.html#F">http://www.cdc.gov/niosh/npptl/topics/respirators/factsheets/respsars.html#F</a>.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Demonstrate how to properly don and adjust respirators: <ul style="list-style-type: none"> <li>○ Top strap across the crown of your head.</li> <li>○ Bottom strap across the neck, underneath hair.</li> <li>○ Fit the metal nose clip using both index fingers, not the index finger and thumb.</li> <li>○ Remove the respirator by removing the bottom strap, then the top strap.</li> </ul> </li> <li>▪ Persons who wear surgical masks or respirators should be advised that<sup>3</sup>:</li> <li>▪ Surgical mask or respirator use should not take the place of preventive interventions, such as respiratory etiquette and hand hygiene.</li> <li>▪ To offer protection, surgical masks and respirators must be worn correctly and consistently throughout the time they are used.</li> <li>▪ Wearing a surgical mask or respirator incorrectly, or removing or disposing of it improperly, could allow contamination of the hands or mucous membranes of the wearer or others, possibly resulting in disease</li> </ul>  |

<sup>3</sup> Source: Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Health Care Settings during an Influenza Pandemic, US Department of Health and Human Services, October 2006. See <http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html>



| Program Components per OSHA  | Resources and Program Implementation   | Training/Fit Testing Program: The Curriculum  |
|--|--|---|
|  |  | <p>transmission.</p> <ul style="list-style-type: none"> <li>▪ Proper surgical mask or respirator use and removal includes the following:</li> <li>▪ Prior to putting on a respirator or surgical mask, wash hands thoroughly with soap and water or use an alcohol-based hand sanitizer to reduce the possibility of inadvertent contact between contaminated hands and mucous membranes.</li> <li>▪ If worn in the presence of infectious persons, a respirator or surgical mask may become contaminated with infectious material; therefore, avoid touching the outside of the device to help prevent contamination of hands.</li> <li>▪ Once worn in the presence of a patient with patient with pandemic influenza, the surgical mask or disposable N95 respirator should be removed and appropriately discarded.</li> <li>▪ After the surgical mask or respirator has been removed and discarded, wash hands thoroughly with soap and water, or use an alcohol-based hand sanitizer.</li> </ul>  |
| <p>6. Allow the employees an opportunity to practice these procedures.</p> | <p>The employees must be medically evaluated before donning the respirator and being fit tested. Medical evaluation is discussed in depth in the Model Respiratory Protection Program</p>  | <ul style="list-style-type: none"> <li>▪ Once proper donning and adjustment procedures have been demonstrated, each employee will complete the same procedure as the trainer talks the employee through the directions.</li> </ul>  |
| <p>7. Provide user seal check instructions.</p>                            | <p>These materials also support this training step:</p> <ul style="list-style-type: none"> <li>▪ Check with your manufacturer for video or DVD instructions.</li> <li>▪ Written instructions are provided in most respirator packaging.</li> <li>▪ Written instructions are also provided in the 3M "Wear it right" document.</li> </ul> | <ul style="list-style-type: none"> <li>▪ At this point, all employees should be wearing a respirator. Instruct the employees on how to conduct a user seal check. A user seal check is a method of determining if the respirator has been put on properly and has been fitted properly. A user seal check must be conducted each time the respirator is put on. (User seal checks are sometimes referred to as positive pressure and negative pressure fit checks.)</li> <li>▪ Seal check the respirator by holding your cupped hands in front of the mask: <ul style="list-style-type: none"> <li>○ Inhale, and feel the suction.</li> <li>○ Exhale gently and feel the mask expand.</li> <li>○ If these don't happen, the mask is not tightly sealed.</li> </ul> </li> <li>▪ When the employees have completed the user seal check procedure, the instructor should ask, "Does anyone feel any leakage around the seal of the respirator?" If so, the wearer should review donning instructions, make adjustments to the fit, and perform the user seal check again. If a proper fit cannot be accomplished, the wearer must select another respirator and repeat the user seal check procedure.</li> </ul> |

| Program Components per OSHA  | Resources and Program Implementation  | Training/Fit Testing Program: The Curriculum  |
|--|---|---|
| 8. Fit test each employee to be assigned a respirator.   | <ul style="list-style-type: none"> <li>▪ Do not fit test anyone with facial hair that touches the seal/boundary of the respirator. This includes full beards.</li> <li>▪ Use of the PAPR does not require fit testing because it is a loose-fitting device.</li> <li>▪ Fit testing must be conducted according to the manufacturer's instructions included with the Qualitative Fit Test kit.</li> <li>▪ Fit testing is also covered in the 3M Fit Testing video (on the DVD).</li> <li>▪ Fit testing instruction is also available free, online, at <a href="http://multimedia.mmm.com/mws/mediawebs/erver.dyn?6666660Zjcf6lVs6EVs66S2XACOrrrrQ-">http://multimedia.mmm.com/mws/mediawebs/erver.dyn?6666660Zjcf6lVs6EVs66S2XACOrrrrQ-</a></li> <li>▪ Employees unable to pass the fit test must be provided with an alternate respirator. Note that different respirator models fit differently shaped faces.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Fit test the employees for each type of respirator to be used. Make a note of the model the employee successfully fit tests in, as you will be recording this in your records.</li> </ul>  |
| 9. Instruct the employees in the procedures for the maintenance and storage of the respirators being used. | <ul style="list-style-type: none"> <li>▪ Respirators should be stored in a clean, dry area not exposed to extreme heat or cold.</li> <li>▪ See manufacturer's instructions for PAPRs.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ N95 respirators are disposable and should be thrown away if they are damaged.</li> <li>▪ If storing an N95, store it in a paper bag, not a plastic bag.</li> <li>▪ Do not leave used respirators lying around – it violates OSHA regulations!</li> </ul> |
| 10. Document the successful completion of training and fit testing for all employees wearing respirators.  | <ul style="list-style-type: none"> <li>▪ Record keeping should include when fit testing and respirator medical evaluations were last done.</li> <li>▪ A sample record sheet appears below.</li> </ul>   |   |

## TEACHING AND REFERENCE POINTS: THE 3M AIRMATE PAPR

*These points are intended as reminders and references, and do not take the place of manufacturer's instructions! Note that not all facilities will be using the AirMate or 3M equipment.*

- The PAPR uses a HEPA filter (equivalent to an N100 respirator) and a blower.
- The battery needs to be installed properly, with the metal contact points properly aligned and the battery locking tab clicked into place.
- Test the air flow using the flow tester before donning the PAPR: the flow tester should float with two lines visible at the top of the hose. And don't lose the air flow tester!
- Turn on the blower before donning the hood.
- Once donned, check the air flow in the PAPR by fogging the facepiece – it should quickly clear.
- No fit testing is required with a PAPR.
- Clean the facepiece with soap/water or 2% bleach solution. Clean the breathing tube similarly. Do not immerse the blower assembly or use solvents to clean.
- Managing battery charge is the biggest challenge:
  - When you first receive the device, charge the battery for 12 – 18 hours.
  - Charge the battery at least once every six months.
  - One charge is good for about eight hours of continuous use.
  - Do not leave the batteries connected to the charger for more than 30 days.
- Recommended hood reuse (assuming no contact precautions are in effect): use one hood per caregiver per patient; discard the hood when the patient is discharged. Write the caregiver's name on each hood.



## TRAINING/FIT TESTING PROGRAM: THE CURRICULUM

### Respiratory hazards

- Employees are being trained in the use of respirators to provide protection from the influenza virus during an emergency known as a pandemic, which represents a communicable disease risk.
- Correctly wearing an N95 respirator decreases the risk of acquiring influenza and other communicable respiratory diseases.
- This program is not designed to provide protection for specific hazardous substances.

### Limitations of respirators

- All respirators have use limitations. There is not one all-purpose respirator.
- Your company selected the respirators for your work environment on which you will be trained: these are N95 respirators designed for healthcare, not for working with hazardous materials, cleaning up bleach spills, or other purposes.
- Respirators are to be worn when performing patient care duties during an influenza pandemic or other respiratory disease emergency; your supervisor will tell you when these conditions exist.
- Respirators are to be worn as part of a comprehensive Respiratory Protection Program, which provides additional administrative controls to limit the spread of disease.
- If you have facial hair, do not use the N95 respirator.
- If the respirator malfunctions, the employee will exit the contaminated area (that is, the patient's room). Malfunctioning includes a strap breaking or the respirator becoming clogged.
- If you are feeling light-headed, dizzy, or having difficulty breathing through your respirator, exit the contaminated area and remove the respirator.
- The effects of improper respirator fit, usage or maintenance can include the respirator failing to protect the employee from the flu virus or other airborne infectious hazards.

### Putting the respirator on, taking it off

- Demonstrate how to properly don and adjust respirators:
  - Top strap across the crown of your head.
  - Bottom strap across the neck, underneath hair.
  - Fit the metal nose clip using both index fingers, not the index finger and thumb.
  - Remove the respirator by removing the bottom strap, then the top strap.
- Persons who wear surgical masks or respirators should be advised that<sup>4</sup>:
- Surgical mask or respirator use should not take the place of preventive interventions, such as respiratory etiquette and hand hygiene.
- To offer protection, surgical masks and respirators must be worn correctly and consistently throughout the time they are used.

---

<sup>4</sup> Source: Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Health Care Settings during an Influenza Pandemic, US Department of Health and Human Services, October 2006. See <http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html>

- Wearing a surgical mask or respirator incorrectly, or removing or disposing of it improperly, could allow contamination of the hands or mucous membranes of the wearer or others, possibly resulting in disease transmission.
- Proper surgical mask or respirator use and removal includes the following:
  - Prior to putting on a respirator or surgical mask, wash hands thoroughly with soap and water or use an alcohol-based hand sanitizer to reduce the possibility of inadvertent contact between contaminated hands and mucous membranes.
  - If worn in the presence of infectious persons, a respirator or surgical mask may become contaminated with infectious material; therefore, avoid touching the outside of the device to help prevent contamination of hands.
  - Once worn in the presence of a patient with patient with pandemic influenza, the surgical mask or disposable N95 respirator should be removed and appropriately discarded.
  - After the surgical mask or respirator has been removed and discarded, wash hands thoroughly with soap and water, or use an alcohol-based hand sanitizer.

#### Practice putting the respirator on

- Once proper donning and adjustment procedures have been demonstrated, each employee will complete the same procedure as the trainer talks the employee through the directions.

#### Perform the seal check

- At this point, all employees should be wearing a respirator. Instruct the employees on how to conduct a user seal check. A user seal check is a method of determining if the respirator has been put on properly and has been fitted properly. A user seal check must be conducted each time the respirator is put on. (User seal checks are sometimes referred to as positive pressure and negative pressure fit checks.)
- Seal check the respirator by holding your cupped hands in front of the mask:
  - Inhale, and feel the suction.
  - Exhale gently and feel the mask expand.
  - If these don't happen, the mask is not tightly sealed.
- When the employees have completed the user seal check procedure, the instructor should ask, "Does anyone feel any leakage around the seal of the respirator?" If so, the wearer should review donning instructions, make adjustments to the fit, and perform the user seal check again. If a proper fit cannot be accomplished, the wearer must select another respirator and repeat the user seal check procedure.

#### Fit Testing

Fit test the employees for each type of respirator to be used (e.g., model 8210, 8200, etc.). Make a note of the model the employee successfully fit tests in, as you will be recording this in your records.

- N95 respirators are disposable and should be thrown away if they are damaged.
- If storing an N95, store it in a paper bag, not a plastic bag.
- Do not leave used respirators lying around – it violates OSHA regulations!