



Orange County Emergency Services

Standard Operating Guidelines

**SOG Name: Respiratory Protection Policy**  
**SOG Number: GEN-029**  
**Submitted By: Elizabeth Gregory**  
**Approved By: James Groves**  
**Date Effective: October 30, 2014, Revised (original date 12/1/2010)**

**I. OBJECTIVE**

1. During the performance of assigned duties; Emergency Services personnel are at risk for occupational exposure to contagious airborne diseases such as tuberculosis and SARS. The purpose of this policy is to provide guidelines that will minimize the risk and consequences associated with exposure to communicable and airborne diseases. This policy applies to duties of Emergency Services personnel when airborne diseases are suspected, as well as procedures for fit testing and medical surveillance.

2. It is the intent of the Orange County Emergency Services to provide all personnel with the proper training, information and protective equipment to recognize when they may be at increased risk and protect themselves accordingly. While Orange County Emergency Services is committed to providing a safe and healthy work environment for all staff, it is up to each staff member to follow established guidelines and procedures to ensure that these goals are achieved.

**II. SCOPE**

1. This guideline applies to all Orange County Emergency Services personnel.

**III. PROCEDURE**

1. This policy was developed using applicable Center for Disease Control (CDC) and Environmental Protection Agency (EPA) guidelines in effect at the same time of development and is designed to comply with the Occupational Safety and Health's (OSHA) respiratory protection program, 29 CFR 1910.134.

2. These guidelines will be reviewed on an annual basis and input from field personnel is encouraged.

### 3. APPLICABLE PERSONNEL

- a. Every department subject to this standard must designate a Respiratory Protection Officer who will oversee the program for the department head, who is ultimately responsible for complying with the standard. This designation must be made in writing and will become part of this plan.
  
- b. This policy will apply to all Orange County Emergency Services personnel and affiliated agencies, including, but not limited to:
  - Employees (Full & Part Time)
  - Reserve Personnel
  - Riders and Observers
  - Rescue Squads
  - Volunteers
  - Paid and Combination Departments
  
- c. It is the responsibility of the employer or sponsor agency to ensure personnel are familiar with this policy and the potential risk of working with Emergency Service operations. The employer or sponsor agency should assume responsibility for all infectious disease control requirements for their personnel, including such items as: TB Skin tests, and post exposure follow-up care.

### IV. EDUCATION AND TRAINING

- a. This procedure shall be provided and reviewed with every new employee during his or her orientation prior to job assignment. Annual in-service training will be provided to all personnel.
- b. The training will include at a minimum the following topics:
  - Description of regulatory standard (29CFR 1910.134) and how a copy of this standard can be made available for review
  - An explanation of the epidemiology, symptoms, modes of transmission and prevention of contagious airborne diseases such as tuberculosis and SARS.
  - A review of the respiratory protection plan. A copy will be issued to all personnel.
  - Work practices and other controls designed to prevent or reduce exposure. This will include the proper selection, use, limitations and basis for selection of respirators.
  - Proper inspection procedures for respirators, including donning and checking the fit of the respirator.
  - An opportunity to wear the respirator during a classroom session and be fit tested.
  - Information on maintenance, cleaning, sanitizing and storage of respirators.
  - Information on the TB skin test.
  - Procedures for reporting exposures and post exposure medical follow-up.

- Information on evaluation and management programs, including therapy for employees found to be positive and exhibiting symptoms following an exposure.
  - An opportunity for interactive questions and answers with the person conducting the training.
- c. After the employee's initial instruction on the proper use, fit and care of the respirator a record of the issue will be made.

## **V. PERSONAL HEALTH MAINTENANCE**

- a. Personal Medical Records
- A personal health record shall be established for each employee. This medical record will be maintained by the training coordinator or department head and will include the following minimum information.
    - a. Name and social security number
    - b. Result of TB skin test.
    - c. Results form and post exposure medical follow-up and testing.
  - This record will be maintained for the duration of employment plus 30 years. All medical records will be considered confidential and will be made available only to the subject employee, anyone with written consent of the employee, the infection control officer or their designee in their absence, OSHA and the medical review officer conducting post exposure procedures or examinations. This record is not available to any other person, including supervisory and administrative personnel.
- b. Physical examination
- After employment but prior to assignment of job duties, all new employees shall be given:
    - Medical history questionnaire
    - TB skin test
    - Fit testing in accordance with 29 CFR 1910.134 for the use of high efficiency particulate air respirators.
- c. Any employee that has been exposed to tuberculosis during the calendar year will undergo appropriate follow-up procedures. These procedures include but are not limited to:
- Reporting the exposure to the immediate supervisor
  - Completion of an exposure report
  - Receipt of a PPD skin test if the baseline test has been greater than 3 months
  - Referral to health department for post-exposure evaluation and follow-up any employee that has been exposed to SARS will follow reporting procedures as required for tuberculosis. Testing procedures and follow-up will be defined and approved by the Orange County Emergency Medical Services medical.

## **VI. EMERGENCY MEDICAL OPERATIONS**

- a. This section contains information on work place practices designed to prevent exposure or to minimize the risk of exposure. Though not always convenient, the measures outlined in this section represent the standards of the medical community.
  
- b. The personal protective equipment listed in this section shall be issued to each employee at no charge and shall be stocked in readily accessible locations.
  
- c. Approved respiratory equipment
  - The respirators listed in the program have been selected on the basis of hazards in the work area. This section has been performed as required in ANSI Z8.2-1969, “Practices for Respiratory Protection”.
  - All personnel are required to use the NIOSH approved N-95 respiratory equipment when carrying out job duties that may result in possible exposure to a contagious airborne disease such as tuberculosis or SARS. You should notify your supervisor immediately if the required personal protective equipment is not available or defective. Respirators shall not be worn when conditions prevent a good face seal, which will include (according to OSHA 29 CFR 1910.134 e.5.i.)
  - Gas masks available for protection against a WMD or Gas Attack event and shall be worn in compliance with this policy and according to OSHA 29 CFR 1910.134 e.5.i, The use of the gas mask is for protection of actual or suspected events dealing with such attacks and emergency egress from IDLH atmospheres. Suspected attacks are as follows but not limited to: Noticeable plum clouds, large group of unconscious patients or a call dispatched as such.
  
- d. Indications for usage of respirators.
  - Patients treated and/or transported by emergency medical services with a medical history of a contagious airborne disease such as tuberculosis and SARS, in accordance to CDC guidelines belong to groups at risk for the disease and demonstrate symptoms consistent with a contagious airborne disease should be treated as “suspected cases” until evaluation measures can be implemented.
  - In addition to using a mask, when you transport a patient that you suspect might have TB, you should turn the exhaust fan on in the ambulance and turn the AC so that it pulls outside air in (rather than recirculation).
  - Groups at risk include:
    - Persons with TB infection
    - Persons with HIV infection
    - Close contact with infectious TB patients
    - Persons with medical conditions which increase the risk of TB
    - Foreign-born persons from high risk minorities
      - Example (Asia, Africa, Caribbean and Latin America)

- Low income populations
- Alcoholics and IV drug users
- Residents of long term care facilities (including prisons)
- Populations identified locally as being at risk for TB e.

#### Respiratory Maintenance

- Personnel should inspect their respirators each shift, noting worn or defective parts that do not allow for adequate face-to-face seals or do not provide adequate airflow upon inspiration.

#### e. Respiratory Maintenance

- Personnel should inspect their respirators each shift, noting worn or defective parts that do not allow for adequate face-to-face seals or do not provide adequate airflow upon inspiration.
- Damaged or worn equipment must be replaced immediately

#### f. Storage

- All N-95 respirators will be stored in appropriate fashion.
- The respirators will be stored in patient care compartments located inside of each unit and in bags. Respirators will be stored to avoid any distortion to the face piece.

### **VII. Inspection and Program Evaluation**

- a. Regular inspection and evaluation of the program will be conducted.
- b. Findings from the evaluation will be used to revise and update this policy as necessary.

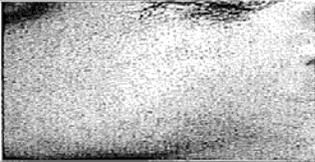
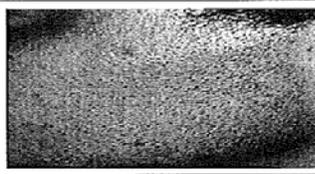
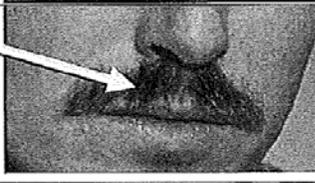
### **VIII. Face Piece Seal Protection**

- a. This section covers face piece seal protection in accordance with OSHA standard 1910.134 (g) (1) (i) — 1910.134 (g) (1) (iii).
  - The employer shall not permit respirators with tight fitting face pieces to be worn by employees who have facial hair that comes between the sealing surface of the face piece and the face.
  - Hairstyles, Headwear, Piercing, including, but not limited to, any types of jewelry, and Cosmetics will not be worn in any way that may directly affect the use and seal of any respirator device used.
  - Orange County Emergency Services utilizes 3M N95 respirators for respiratory protection against airborne infectious contagious diseases. Because these are tight fitting respirators that require fit testing, the chain of command shall be utilized to request a grievance on this policy.
  - A grievance concerning this policy will follow the Orange County Grievance Procedure Article VIII, Section 28-85 through 28-88.
  - If a grievance is approved by the Orange County Grievance procedures, then the employee will not be fit tested and a loose fitting Powered Air Purifying Respirator (PAPR) will be issued to the employee.
  - Due to the extreme cost of the PAPR, each grievance will be considered on a case by case basis and not all grievances are subject to approval.

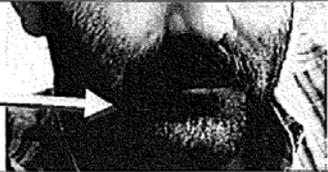
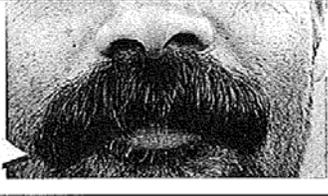
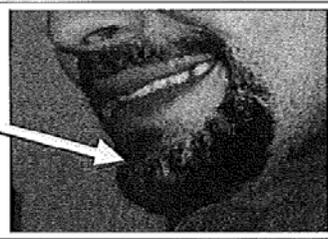
## Attachment 9.1

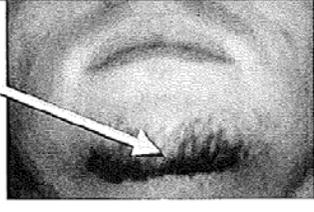
### Examples of Acceptable and Unacceptable Facial Hair

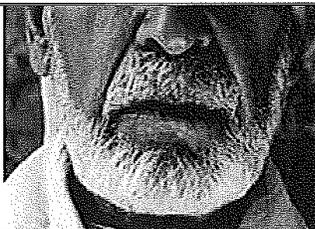
#### Acceptable

Extremely closely shaven hair, ideal for fit testing and seal	
Acceptable level of shaving, will typically provide good seal.	
Half face & Full face: Acceptable for Fit test Reason: Hair is not in the sealing region	
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## Unacceptable

<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: The "five o'clock shadow" would fail this person.</p>	 <p>A close-up photograph of a man's chin and mouth area. The skin is dark, and there is a significant amount of dark hair growth, particularly around the mouth and chin, which is referred to as "five o'clock shadow". A white arrow points from the text in the adjacent cell to the hair on the chin.</p>
<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: Hair from the moustache is acceptable. However the "five o'clock shadow" would fail this person.</p>	 <p>A close-up photograph of a man's mouth and chin area. He has a prominent mustache. There is also dark hair growth on the chin and around the mouth, indicating "five o'clock shadow". A white arrow points from the text in the adjacent cell to the hair on the chin.</p>
<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: Hair from the moustache is not in the sealing region. However the heavy "five o'clock shadow" would fail this person.</p>	 <p>A close-up photograph of a man's chin and mouth area. He has a mustache. There is a very heavy and dark growth of hair on the chin and around the mouth, indicating a severe "five o'clock shadow". A white arrow points from the text in the adjacent cell to the hair on the chin.</p>
<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: Hair is in sealing region under the chin and on the side of the face</p>	 <p>A close-up photograph of a man's chin and mouth area. He has a mustache. There is dark hair growth on the chin and on the side of the face, which is in the sealing region. A white arrow points from the text in the adjacent cell to the hair on the chin.</p>
<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: Hair is in sealing region under the chin</p>	 <p>A close-up photograph of a man's chin and mouth area. He has a mustache. There is dark hair growth on the chin, which is in the sealing region. A white arrow points from the text in the adjacent cell to the hair on the chin.</p>

<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: Hair is in sealing region under the chin and on the cheeks</p>	
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<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: The heavy hair in sealing region under the chin would prevent a good seal.</p>	
<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: Hair would likely block the sealing region or interfere with the valves.</p>	
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<p>Half face &amp; Full face: Unacceptable for Fit test</p> <p>Reason: A beard of this size would preclude any chances of a good seal.</p>	
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