Purpose

This guideline provides a summary of key components of the WUSTL Respiratory Protection Program.

When is respiratory protection required?

Respiratory Protection may be required when working with biological or chemical hazards. However, respiratory protection should only be used when the hazard cannot be removed through engineering and/or administrative controls.

If you have questions concerning respiratory protection, contact Environmental Health & Safety (EH&S) at 314-362-6816 or you can contact your Department/Division respiratory protection captain. See appendix A for a list of Departments that have Captains.

How do I get a respirator?

There are several steps that need to be done before employees can use a respirator. The following are the steps required by the Occupational Safety and Health Administration (OSHA):

Medical Approval

OSHA requires employees to get medical approval prior to wearing respiratory protection.

For Medical School Employees - WUSM Occupational Health will either approve, seek further information, send the employee to Barnes Care for further testing, or not approve for respiratory use.

Danforth employees will be medically evaluated through Barnes Care. If not approved, the employee will not be allowed to wear a negative pressure respirator.

A medical evaluation is typically an initial one-time requirement unless the respirator wearer has a medical change (asthma, heart condition, etc.) that may affect their ability to wear a respirator.
Fit Testing and Training

An employee that has been medically approved to wear a respirator can be fit tested and trained for to wear a specific respirator. Fit-Testing and training are required annually as long as the employee needs to wear respiratory protection.

If there is a change in how the respirator fits (significant weight gain/loss, facial surgery, etc.), or if there is a lapse in understanding the use of a respirator, then an additional fit test and training is recommended. For any employee using a tight fitting respirator, they must be clean shaven before using the respirator.

Voluntary Use

In the situation where a respirator is not required but desired by the employee, there is an OSHA voluntary use program. For Particulate masks, the employee must review and sign the OSHA Appendix D document. For all other respirators (e.g. half or full masks), the employee must fill out the medical evaluation and be approved by employee health first, and then fill out the Appendix D. The Appendix D document will be supplied by EH&S.

Respirator Types

There are several types of respirators

Particulate Respirators – Typically N-95 (95% efficient at 0.3um) – Protect against aerosol particulates (e.g. TB).

High Efficiency Particulate Air (HEPA) filtered - Powered Air Purifying Respirators (PAPR) – Typically, are worn by individuals that cannot wear an n-95 mask. These are used for particulates and are most often seen in clinical areas. Fit-testing is not required as they are positive pressure, making them necessary for those with Beards. They are much more expensive than N-95’s and less readily available.

Full and Half Face Respirators – These are tight fitting respirators most often used for protection against chemical vapors.

Contact information

For additional information about the Respiratory Protection Program, please contact the below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
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</thead>
<tbody>
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Appendix A – Clinical Respiratory Use

N-95 respiratory protection is required for WUSM clinical faculty and staff that care for patients with known or suspected airborne infectious disease (e.g., tuberculosis) and those that routinely perform aerosol-generating procedures (Intubation, Sputum Induction, Bronchoscopy, CPAP & BiPAP). This is to ensure the health and safety of our clinicians while also complying with Occupational Safety and Health Administration (OSHA) regulations.

The OSHA respiratory protection standard 1910.146 requires the following:
- Medical evaluation
- Annual Respirator Fit-Testing
- Annual training

Those wearing a respirator are required by OSHA to follow these steps.

Medical Approval

A medical evaluation can most easily be done online with the below instructions. Additionally, a hard copy can be attained from environmental Health & Safety or from your Departmental Respiratory Captain (Dept. with captains listed below).

Directions to access the respiratory medical evaluation:

1. “Click” on the link http://n95.wusm.wustl.edu/Pages/Default.aspx You may have to copy/paste into your browser
2. “Enter” WUSTL key password and “hit” OK
3. Fill out the evaluation and “hit” submit button after completion

Fit Testing and Training

Most clinicians will be fit tested and trained for use of an N-95 respirator. Some individuals, like those with a Beard who are unwilling to shave, will have the option of using a Powered Air Purifying Respirator (PAPR). These fit tests/training are required by OSHA on an annual basis for as long as a respirator is needed. All employees will be fit tested and trained on the specific respirator they will be using.

Contact Information

The departments below have employees that are Respiratory Captains. For help with the respiratory program, the employee can contact their captains. Contact your department administrators to find out who your captain is. You can also contact EH&S to find out your Captain. All other departments please contact EH&S.
## Departments with Respiratory Captains

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<tr>
<th>Anesthesiology</th>
<th>Habif Health &amp; Wellness Center</th>
<th>Pediatrics – Hospitalists Medicine</th>
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<tr>
<td>CAM – Gastrointestinal Center</td>
<td>Otolaryngology</td>
<td>Pediatrics – Infectious Disease</td>
</tr>
<tr>
<td>DOM – Hospitalists</td>
<td>Pediatrics – Allergy, Immun, Pulm Med</td>
<td>Pediatrics – Nephrology</td>
</tr>
<tr>
<td>DOM – Medical Oncology</td>
<td>Pediatrics – Critical Care</td>
<td>Pediatrics – Newborn Medicine</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>Pediatrics Hematology / Oncology</td>
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Appendix B – Research & Support Unit Respiratory Use

When protecting employees against a potential airborne hazard (e.g. biological pathogen, chemical vapor, particulate), it is essential to provide engineering and administrative controls as the primary form of protection. However, in some situations, this may not be possible. If you feel a respirator is necessary, contact required by OSHA to follow these steps.

Medical Approval

A medical evaluation can most easily be done online with the below instructions. Additionally, a hard copy can be attained from Environmental Health & Safety.

Directions to access the respiratory medical evaluation:

1. “Click” on the link [http://n95.wusm.wustl.edu/Pages/Default.aspx](http://n95.wusm.wustl.edu/Pages/Default.aspx) You may have to copy/paste into your browser
2. “Enter” WUSTL key password and “hit” OK
3. Fill out the evaluation and “hit” submit button after completion

Fit Testing and Training

Researchers and support staff will be fit tested and trained for the appropriate respirator depending on the hazard they are exposed to. This will likely be an N-95 or Powered Air Purifying Respirator (PAPR) for airborne particulate, or a half mask for Chemical hazards. In some situations, researchers and support staff may need protection from both in which case a half face respirator or PAPR may be necessary.

All employees using a tight fitting respirator (any non-PAPR) needs to be clean anytime the respirator is worn (including the fit-test). Employee’s having a day or more of facial hair growth will not be able to wear a tight fitting respirator.

All employees will be fit tested and trained in the respirator (Type, Make, Model, Size) they will be using.

Contact Information

Respirator users in both Research and Support functions can contact EH&S for all respiratory questions and concerns.