CIS: Clean, Inspect, and Store

To keep your respirator in good working order is is important to clean, inspect, and store it properly.

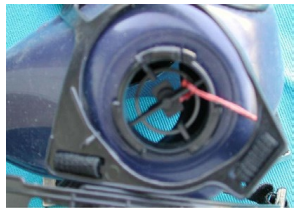
Clean: Generally a mild detergent and a soft bristle brush are suitable to use. Remove and clean filters, cartridges, valve assemblies and any other detachable parts. Rinse in warm water and dry completely before reassembly.

Your respirator should be cleaned/ disinfected as often as necessary when used normally, and after each use for emergency use, fit-testing and/or training.

RINSE THOROUGHLY TO AVOID SKIN IRRITATION!

Inspect: Before putting the respirator back together make sure all parts are dry and in good operating condition. Test the respirator to ensure proper assembly so it is ready to be used next time.

Damaged Valve



Missing Inhalation Valve

Store: When storing a respirator, flex the rubber parts to ensure they are not twisted or bent. Store the entire respirator in a bag. Avoid sunlight, dust, extreme temperatures, moisture, and chemicals.

Fit Testing

A fit test is required annually to ensure your respirator is still protecting you appropriately. EH&S will contact you when it is time for your Fit Test.

Part of your fit test will be a medical questionnaire that is sent to EWU's Occupational Health Provider. If the doctor that reviews your questionnaire has any questions you may be required to go in for a medical evaluation.

The rest of the Fit Test takes place in the EH&S office and will require you to bring in your respirator(s) to check its ability to filter out contaminants while worn by you.

Proper use, maintenance, and care of your respirator will keep you from adverse health effects due to air contaminants in your work-place. If you have any questions, please contact EH&S immediately.

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RESPIRATORY SAFETY

Environmental Health & Safety

EASTERN WASHINGTON UNIVERSITY

Respirators

Respirators are used in the workplace to prevent or reduce occupational exposure to airborne contaminants found in some environments.

Respirator Groups

Respirators can be placed into two groups:

Filtering:

A percentage of the contaminants being inhaled is reduced by passing incoming air through a filter that is designed for the specific contaminant(s) present. *These cannot be used in low oxygen environments or when the contaminant concentration is above the NIOSH Immediately Dangerous to Life or Health (IDLH) level.*

Oxygen Supplying:

Clean air, from a cylinder or an outside source is pumped into the mask.

Assigned Protection Factor (APF)

The APF is the minimum level of air filtration provided by a respirator. It is the level of contaminant outside the respirator divided by the level inside the respirator. When having a respirator Fit Tested it must provide at least as much filtration as the APF to pass.

Maximum Use Concentration (MUC)

All respirators have a maximum acceptable contaminant concentration for safe use, the MUC. The MUC for a contaminant is the APF for the respirator multiplied by the OSHA Permissible Exposure Level (PEL) for the contaminant. *PELs are specific to the contaminant and can be found on the SDS, contact EH&S if you need help locating them.*

Filtering Respirators

There are several different types of filtering respirators used at EWU. They vary in the types and concentrations of contaminants they can protect against.

N95 (dust masks): These disposable filters are frequently used in dusty areas or in healthcare facilities. They have an APF of 5.

Half-Face Respirator: These masks filter through disposable cartridges, making them useful against a wide range of contaminants. They have an APF of 10.

Full-Face Respirator: These use cartridges like the Half-Face but have an APF of 50. They also provide some protection to the eyes of the user.

Powered Air Purifying Respirator (PAPR): These hoods with filtered air blown into them are useful for people who are medically unable to use a Half- or Full-Face respirator and for individuals with facial hair. They have an APF of 25.

Respirator Filters

There are a variety of filters available for respirators designed for specific types of contaminants. Filters are color coded based on the contaminant(s) they work with. Filters are also classified into three groups:

- ⇒ **N series** filters are NOT oil-resistant. They should be changed after each shift in dirty environments.
- ⇒ **R series** filters are oil-resistant. They should be changed after each shift if oil is present in the environment.
- ⇒ **P series** filters are oil-proof. They can be used until they are dirty, damaged, loose their shape, or are difficult to breathe through.

The service life of your filter is the amount of time it will provide adequate protection to the wearer. It is affected by:

- ⇒ Contaminant concentration
- ⇒ Relative humidity and temperature
- ⇒ Usage patterns
- ⇒ Presence of other materials

Fit-Check Before Each Use

Fit checks are used with Half-Face and Full-Face respirators to make sure the mask is properly sealed on the face. When fit-checking, you check the mask with negative and positive pressure.

1. Cover the filters with your hands and breathe in. The mask should collapse slightly and remain tight against your face.

2. Cover the exhalation valve (pictured) and exhale gently. The mask should puff out but remain sealed against your face.

If air leaks from around your face while testing, reposition it and try again. No air should leak around a properly sealed mask.