



Respiratory Protection Program

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University of South Florida (USF) Respiratory Protection Program

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University of South Florida (USF) Respiratory Protection Program

1.0 Purpose

USF's goal for managing airborne chemical, physical, and biological contaminants is primarily through the use of

3.0 Responsibilities

For the purposes of this respiratory protection program, **USF's Respiratory Protection Program Administrator** is the EH&S Industrial Hygienist.

A. USF's Respiratory Protection Program Administrator and/or EH&S Staff responsibilities:

- i. Maintain, evaluate,

C. *Respirator User responsibilities:*

- i. No USF employee, volunteer, or student is to use a respirator unless they have been medically cleared, fit tested for the respirator specified for their use, and given training appropriate to the use of that particular respirator.
- ii.

Respirator users require an annual medical evaluation by a physician or other licensed health care professional. OSHA's Respirator Medical Evaluation Questionnaire, Appendix C of OSHA Standard 29 CFR 1910.134, located in **Appendix C** of this document, must be filled out by the respirator user and provided to the licensed health care professional for review. After the initial medical evaluation, the wearer will have medical evaluations at least annually to screen for changes that may affect respirator use. Upon receiving a favorable medical evaluation for initial or continued respirator use, the user may schedule a fit-test with the EH&S department.

- x All medical examinations and questionnaires are to remain confidential between the individual requesting evaluation and the physician or other licensed healthcare professional. EH&S personnel are advised only of the healthcare providers opinion to allow respirator use or not through use of the completed University of South Florida Request for Medical Clearance for Respirator Use form located in Appendix B or equivalent physician or other licensed healthcare professional signed document.

If any of the following conditions have taken place after the initial or follow up annual medical evaluations or fit testing, another medical clearance and fit testing will need to occur before the annual expiration date has been reached:

- i. User has a significant weight change (+/- 10 lbs.) that could affect respirator fit.
- ii. User has any surgery involving the head, chin or jaw, or has a tooth extraction that could affect respirator fit or user's ability to work safely while wearing the respirator.
- iii. A change in dentures or braces.
- iv. Any other physical, medical, or psychological change to the user that may alter the user's ability to work safely while using the respirator.

The department and/or supervisor of the individual(s) that requires the use of a respirator will be responsible for recommending supplemental medical evaluations, and incurring any associated costs for the medical evaluation to be conducted by the physician or other licensed health care professional.

An exception to this medical evaluation requirement exists when EH&S has evaluated use and deemed that a filtering facepiece respirator, such as an N95 or other filtering facepiece (e.g. N99, N100, R95, etc.), is being used on a voluntary basis, specifically, use of a respirator when a respirator is not required for protection of the individual from a respirable hazard. A filtering facepiece respirator is defined by OSHA in 29 CFR 1910.134(b) as "a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium." An employee who voluntarily wears a respirator when a respirator is not required is **not** subject to the medical evaluation, cleaning, maintenance, storage, and training elements of this program. See **Section E** below for additional information on voluntary use and **Appendix D** for the Respirator Voluntary Use Form.

C. Special Cases Regarding Responsibility of Medical Evaluations:

Research laboratories where the source of funding is Department of Defense Research Integrity & Compliance department personnel should be contacted to schedule an evaluation with a physician or other licensed healthcare professional. Research Integrity & Compliance will be responsible for coordinating medical evaluations for laboratory personnel that are required to wear respiratory protection as part of the National Institutes of Health (NIH) and/or Centers for Disease Control (CDC) infection control protocols.

USF Health Medical Students, Residents, Fellows needing N95 medical clearance A physician or other licensed healthcare professional in/or designated by USF Health will provide the required medical review and clearance. An EH&S process, task, or worksite evaluation will not be necessary, as the need

for use is based upon infectious disease protocols. Training and recordkeeping responsibilities will also reside with the USF Health or the individual departments therein.

D. NIOSH Certification:

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. All replacement filters, cartridges, and canisters must be labeled with the appropriate NIOSH certified labeling. An exception to the use of a NIOSH certified and approved respirator may be granted due to limited availability of respirator supplies or when emergency use authorization has been granted by the Centers for Disease Control (CDC), NIOSH, or the United States Food & Drug Administration (FDA).

E. Voluntary Respirator Use:

The Respiratory Protection Program and EH&S recognize that a person may feel the need to wear a respirator even though the workplace or task assessment has not identified airborne respiratory hazards requiring the need for respirator use. Voluntary respirator use will have limits and conditions of use. There is no option for voluntary use of any type of respirator other than the filtering facepiece (e.g., N95, N-99, N-100, R-95, P-100, etc.) type, and costs and provision of the respirator desired will be incumbent on the user. A filtering facepiece is defined as a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium.

USF's Respiratory Protection Program Administrator or designated EH&S personnel must authorize voluntary respirator use. Approval will be made on a case-by-case basis. The voluntary respirator user of a filtering facepiece will be asked to read and sign the "Voluntary Use" form in **Appendix D**, a copy will be provided to the user, and a copy will be kept on file in the EH&S office. If a respirator, other than a filtering facepiece, is desired for use by an individual when not required, then the individual will be subject to the full scope of requirements of this written respiratory protection program.

F. Fit Testing:

Respirator fit testing will be conducted by USF EH&S staff using an OSHA approved qualitative fit test protocol per Appendix A of OSHA Standard 29 CFR 1910.134. The Respirator Qualitative Fit Test Record located in **Appendix A**, or a similar modified version, will be used by EH&S. Fit testing is required to identify proper respirator design and fit. The qualitative fit-test confirms the adequacy of the respirator seal by relying on the individual's response to the test agent while the user is following a required set of body movement protocols that represent typical postures used in the work environment. It is the responsibility of the department or supervisor to provide the proper make, model, and size of the respirator as determined by EH&S through the fit testing protocols. Substitution of a respirator for a make, model, or size that an individual was not fit-tested with is not allowed. When supplies of filtering facepiece respirators are abundant, these types of respirators are single use disposable PPE and should not be reused. At certain times and under certain conditions, reuse and/or decontamination of filtering facepiece respirators may be allowed to ensure continued availability. Contact EH&S for guidance regarding this allowance.

In some cases, a Quantitative Fit Test by EH&S personnel may be deemed necessary. Respirator fit testing for types of respirators other than filtering facepiece respirators and for use in any environments considered potentially oxygen deficient and IDLH require quantitative fit testing. Quantitative fit testing assesses the mask seal of a tight-fitting respirator by measuring the actual amount of leakage past the seal through a battery of body movements. Quantitative fit test protocols are also described in Appendix A of OSHA 29 CFR 1910.134.

Individuals with certain types or lengths of facial hair will be required to shave before they can be fit tested, as facial hair can interfere with the ability to get a good seal and/or can prohibit proper valve functioning. In the case of N95 fit testing, if the individual cannot be fitted for a respirator due to facial

hair or other reasons, then a loose-fitting, powered air purifying respirator (PAPR) can be purchased and provided by the department for the individual's use. Loose-fitting PAPRs are not considered to be a tight-fitting type respirator and therefore do not require fit testing.

G. Air Quality (Applies to Supplied Air Respirator (SAR) types):

USF does not routinely use SCBA or airline respirators. However, if considered and approved in advance by USF's EH&S department, the following general guidelines, at a minimum, should be followed:

1. Any department using SARs shall maintain a minimum air supply of one fully charged replacement cylinder for each SAR unit.
 2. All compressed breathing air used in SAR types (airline and SCBA respirators) shall meet the requirements for Grade D breathing air per the American National Standards Institute (ANSI) Compressed Gas Association Commodity Specification of Air, G-7.1-1989.
- x In the case that SAR(s) are utilized by a department's employee(s), more specific guidelines pertaining to the particular process utilizing SARs will be developed and implemented.

H. Cleaning and Storage:

Respirators that are not single use, disposable filtering facepieces should be cleaned and stored after use in accordance with the manufacturer's instructions or per OSHA Standard 29 CFR 1910.134, Appendix B-2 titled "Respirator Cleaning Procedures". Respirators should be stored in a clean, sealable plastic bag or similar storage device provided by th

USF's Respiratory Protection Program Administrator should be contacted with any questions regarding the determination of serviceable life or change out schedules of filters, cartridges, or canisters.

J. Training:

All respirator users need to be trained in respirator selection, proper fit, use, limitations, maintenance, storage, and cleaning. Individualized training specific to the respirator that is being assigned must be completed prior to or at the time of fit testing by EH&S. Procedures requiring respirator use will be evaluated on a case-by-case basis to determine if additional workspace or site specific training is also needed.

Respirator users will be retrained annually or as needed, if they change departments, or need to utilize a different respirator. The Respiratory Protection Program Administrator or designated EH&S personnel will document training and fit test information noting the make, model, and size of the respirator for which each employee has been trained and fit tested.

Respirator training will cover the following topics:

- x USF's Respiratory Protection Program
- x The OSHA Respiratory Protection Standard
- x Respirator requiring airborne contaminant hazards encountered at USF and their health effects
- x Proper selection and use of respirators
- x Limitations of respirators
- x Demonstration/practice of respirator donning and user seal checks
- x Respirator failure and emergency procedures
- x Fit testing process
- x Change-out schedules
- x Proper maintenance and storage of respirators
- x Inspection of respirators for defects, cracks, and/or tears
- x Any conditions limiting the effective use of respirators

5.0 Program Evaluation

USF's Respiratory Protection Program Administrator will be responsible for evaluating this respiratory protection program and making any changes deemed necessary. Periodic evaluations of areas using respiratory protection will also be conducted to ensure this respiratory protection program is being implemented.

6.0 Documentation and Recordkeeping

A written copy of this respiratory protection program will be kept on file in USF's Respiratory Protection Program Administrator's office and will be made available to any employees, volunteers, and students for review. A copy of the respiratory protection program will be available on the USF EH&S website.

Electronic copies of training, fit test records, and voluntary use forms will be retained by the EH&S department. Respirator Medical Questionnaire information and physician's or other licensed healthcare professional's findings will be kept with the evaluating entity and will remain confidential. The university will only retain the physician's or other licensed healthcare professional's recommendation regarding each employee's ability to wear a respirator.

Appendix A

Respirator Qualitative Fit Test Record

Respirator Fit Test Record

Today's Date: _____

Next Fit Test Due Date: _____

A. Respirator Wearer Information

| | |
|---------------------|--------------------------|
| Name: | |
| Job Title: | |
| Department/College: | PI/Supervisor:(optional) |
| User Signature: | |

Campus Location: _____

B. Respirator Type

| Manufacturer/Model | Type | Size |
|---|------|------|
| | | |
| | | |
| Check here to assign loose fitting Powered Air Purifying Respirator (PAPR): | | |

Type of Filters/Cartridges

APPENDIX B

Request for Medical Clearance for Respirator Use

UNIVERSITY OF SOUTH FLORIDA
REQUEST FOR MEDICAL CLEARANCE FOR RESPIRATOR USE

Name: _____ EID#: _____ Date of Birth: _____

Position(Title): _____ Supervisor: _____

Department: _____ Campus: _____

Work Phone: _____

Check Type(s) of Respirator(s) to be used:

___ N, R, or P disposable respirator (filter-mask, ~~cartridge~~ cartridge type only)

___ Half-mask air purifying respirator (non-powered) ___ Full-facepiece air purifying respirator (non-powered)

___ Other respirator specify type: _____

Check Level of Work Effort While Wearing Respirator:

___ Light ___ Medium ___ Heavy

Check Extent of Respirator Use:

Daily. Tw 12.946 0 T(r7727(m)172 Tc -.2284 Tw -.22840 Td [(3)6.6(eav)-2(3(f aenr4(n 4)-4.4.2()2 Tw 1

APPENDIX C

Respirator Medical Questionnaire

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 circle "yes" or "no").

1. Do you currently smoke tobacco, or have you smoked tobacco in the last 12 months: Yes/No

2. Have you ever had any of the following conditions?

a. Seizures: Yes/No

b. Diabetes (sugar disease): Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a facepiece respirator or a self-contained breathing apparatus (SCBA) or 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 ~~per~~manently): Yes/No

11. Do you currently have any of the following vision problems?

a. Wear contact lenses: Yes/No

b. Wear glasses: Yes/No

c. Color blind: Yes/No

d: Ye

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes/No

If "yes," describe this protective clothing and/or equipment: _____

14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No

15. Will you be working under humid conditions: Yes/No

16. Describe the work you'll be doing while you're using your respirator(s):

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, ~~high~~ threatening gases):

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 well-being of others (for example, rescue, security):

APPENDIX D

Voluntary Use Form

Respirator Voluntary Use Form (Individuals Using Filtering Facepiece Respirators When Not Required)

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is often requested, even when exposures are below the exposure limit, to provide an additional level of comfort for workers, researchers, or students. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the user. Sometimes, individuals may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by regulatory standards. If you elect to wear a filtering facepiece respirator for voluntary use, or if you provide your own respirator, you must take certain precautions to be sure that the respirator itself does not present a hazard.

- 9 You agree to only use a filtering facepiece type of respirator (e.g., N-95) on a voluntary basis. If you need to use a tight-fitting, elastomeric-type of respirator (e.g. half-face, full precaution PAPR, etc.)pirattar.00r

APPENDIX E

OSHA Respiratory Protection Standard

29 CFR 1910.134

OSHA Respiratory Protection Standard

Contact EH&S for a hard copy of the Respiratory Protection Standard, 29 CFR 1910.134, or visit the following link below on the OSHA website:

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>