

SCBA Refresher

Time Requirement: 2-3 hours total (depending on number of participants)

Number of Instructors: Minimum of 2, consistent with ratio in Minimum Criteria

Materials

- Participant Guide and worksheets
- Whiteboard or equivalent; markers
- SCBAs

Objectives

When completed, participants will be better able to:

- Identify types of respiratory protection
- Identify components of SCBA
- Identify fit testing requirements for SCBA use
- Identify practices to care for SCBA
- Demonstrate checkout, proper donning and doffing of SCBA

Suggested Instructor Preparation

- **Select this exercise only if everyone is bringing their SCBA to training; can be used in ERR or 8HR.**
- Review Participant Guide and exercises
- Test all web links prior to the session and if any are inoperative please notify your Program Director
- Review the Chemical Protective Clothing (CPC), Respiratory Protection, Work Practices and Decon sections of the HAZWOPER program that these participants have completed
Review OSHA standard 1910.134, Respiratory Protection
- Review OSHA standard 1910.1020, Access to employee exposure and medical records
- Conduct reconnaissance: obtain the respiratory protection program for the company where the training will be conducted and identify the hazards that result in selection of SCBAs. If open enrollment, obtain a generic program for participants to review
- Ensure you are familiar with the SCBAs that will be used
- Obtain a facepiece that you can use to illustrate positive-pressure user check
- Copy Worksheets for each exercise (minimum of 4 exercises)
- Prepare agenda and class notes to be included in the program file
- Ensure that you have assembled all the materials needed for the exercise

Minimum Content Requirements

- Discuss uses of SCBAs
- Discuss the need for fit testing and routine user checks
- Discuss the need for rigorous cleaning, storage, inspection, and maintenance procedures
- Note the requirements for the written program
- Medical fitness review for anyone using an SCBA
- Four exercises: Current practices, Identify parts of the SCBA, Monthly checks (optional), Donning/Doffing, Current practices revisited

Questions You May Be Asked

1. Be prepared to discuss the company Respiratory Protection Program. Some participants may not know it exists, or question if it is complete. For open enrollment, general approaches of working through union or company health and safety officers to obtain a copy should be discussed.

2. Participants may question whether various procedures are adequate ('I just keep the facepiece in the bottom of my locker'). For contract programs, reconnaissance will provide you with information about the written procedures, but these may not be implemented.

3. "What do I do when my employer tells me there is no budget to get new equipment, but the facepiece no longer fits me?" Be prepared to facilitate a discussion on strategies to improve the company respirator program through discussions with employee or management representatives. Emphasize that the law requires that employers provide adequate protection from respiratory hazards.

4. "What about facial hair? My employer has a 'no beard' policy, and I don't like it."

Emphasize that facial hair prevents a good fit, resulting in exposure to toxic substances. OSHA clearly states that you cannot have anything interfere where the mask contacts the face. Fit tests are not allowed when a beard is present.

5. "I have not been fit tested in a few years. Does that mean I cannot respond?" From your knowledge of the company program, it could be that the participant was fit tested but does not remember. Facilitate a discussion of who to contact.

Presentation of the Session

This session can be presented as follows:

Review the objectives

Respiratory Protection/Types of Respirators

This section is a very brief review. Draw attention to the focus of this exercise: SCBAs.

Exercise – Current Practices for your SCBA

Distribute the Worksheet 'Current practices' and have participants complete it.

Ask: How many of you were fit tested in the past year?

Ask: Why do you need to use an SCBA?

Have participants keep this worksheet and return to it following the review at the end of the session.

SCBAs

Ask: When can SCBA be used according to standard practice?

Ask: How do SCBAs work? Demonstrate the parts of an SCBA using one brought by a participant. Explain the purpose of each component.

Exercise – Identify all the parts of your SCBA

Describe the exercise and distribute the worksheet. Sign off only after each participant/group has correctly identified all parts. You may set a time limit, to simulate the need to check out a unit rapidly in a response.

Respirator Fit

Review the importance of proper fit, to ensure that the air is filtered before it is inhaled. For SCBA, the fit helps ensure that there is not leakage around the facepiece, contaminating clean air coming from the bottle.

Follow up on the previous question regarding when participants were fit tested, and
Ask: Describe how you were fit tested?

Illustrate the difference between the figures in the handout for qualitative and quantitative fit testing.

Ask: What tasks did you do during the fit testing?

Ask: Do you know the protection factor from your fit test?

Ask: On the Current Practices worksheet, did you check 'yes' for a User Check?

Illustrate the positive-pressure check using a facepiece you have brought. Illustrate negative pressure check using your mask, or the illustration in the handout. Note that some participants may not have hands large enough to cover the inlets.

Cleaning, Storage, Inspection and Maintenance

In a contract program, you should know the written program for this topic; however, it may not be followed as written.

Ask: How many of you answered 'yes' to 'wash the facepiece' on the Current Practices worksheet?

Ask: How many of you answered 'done by others' to wash the facepiece' on the Current Practices worksheet?

Review cleaning procedures.

Ask: Who answered 'yes' to both parts of question 4 about respirator storage on the Current Practices worksheet?

Review the requirement.

Ask: Who has been trained to inspect your face piece before and after each use or at least monthly?

Review the importance and OSHA requirements.

Ask: Who do you tell when something needs to be fixed on your facepiece?

Underscore that repair must be made by qualified persons. If participants are responsible for the monthly check of the SCBAs, you may want to include a separate performance measure for this responsibility. It should be tailored to the company program, if consistent with 29CFR1910.134.

Exercise – Monthly Checks

If participants are responsible for the monthly checks, complete this exercise. Distribute the checklists and identify the completeness of the required review.

Review any inconsistencies with the employer SOP.

Minimum Requirements for a Respiratory Protection Program

Refer everyone to the page showing the points that must be included in the written program. Be prepared to facilitate a discussion of the importance of each item.

Medical Fitness to Wear a Respirator

Facilitate a discussion of the stresses of wearing a respirator (heat, weight of SCBA, extra effort to breathe) to show why medical fitness is important to safety.

Emergency Procedures

Using the company Respirator program and SOPs as guidance, facilitate a discussion of actions to be taken if there is an SCBA failure, such as an air hose leak. If training has not been provided regarding this type of emergency, facilitate a discussion regarding foreseeable equipment failures what should be done. Generally, any problem during use will involve alerting and exiting the hot zone.

Exercise – Donning and Doffing an SCBA

Distribute the Worksheet and have each participant complete.

Observe the don/doff procedures and make constructive comments as needed before signing off as to proficiency. Two facilitators may be helpful to ensure proficiency is achieved before signing the worksheet. For some items on the worksheet, the company may have a checklist (example: after use); if so, incorporate that into the after-donning activities.

Welcome questions and facilitate a discussion of issues that arose during the exercise.

Exercise – Current practices for your SCBA revisited

Review the completed worksheet on current practices and identify any area where your SCBA work practices will change, based on this exercise.

List report back items on a writing surface viewable by all.

Facilitate a discussion on approaches to improve SCBA practices and procedures, as needed.

- Ask local fire department to discuss options for response with employer.
- Discuss with team members and employer the hazards (liability) of incomplete procedures
- Access the OSHA e-tool for respiratory protection program/practices.

<https://www.osha.gov/etools/respiratory-protection>

Summary

Review the objectives

Ask: Based on this exercise, what takeaways do you have as you go back to work?

List them on a writing surface viewable by all.

Answer any remaining questions

Follow up

Make this exercise better:

Forward suggestions to your Program Director

Are there other 'Questions you may be asked' that should be included?

Organize the listing of 'takeaways' and forward to your program director. These are very important impacts to report to NIEHS.

Name: _____

Respiratory Protection Performance Checklist
Current Practices for use of your SCBA

1. What brand and size of facepiece do you use? Brand _____ Size _____

2. Important dates:

When were you last fit-tested? Month ____ Year _____

When were you last medically cleared to use an SCBA? Month ____ Year _____

3. Circle the word below that describes how often you use the SCBA.

Daily Weekly Monthly less than monthly

Approximate date last used: ____/____/____

4. When not in use, is your respirator facepiece stored

a. in a clean location?----- Yes No

b. in a plastic bag or other container to prevent contamination? ----- Yes No

5. The last time you used your SCBA, did you

a. check the facepiece straps prior to donning? ----- Yes No

b. inspect the facepiece for cracks or color changes?----- Yes No

c. inspect the valve flaps for crack or wear? ----- Yes No

d. conduct a user check for fit? ----- Yes No

e. control breathing (in through nose, out through mouth, breathe deeply)?----- Yes No

f. monitor remaining air supply? ----- Yes No

g. maintain contact with a buddy/others? ----- Yes No

h. wash the facepiece?----- Yes No done by others

i. dry the facepiece thoroughly before storing? ----- Yes No done by others

j. inspect the facepiece before re-stowing?----- Yes No done by others

k. alert the health and safety rep to deficiencies? ----- Yes No None found

Date _____ Instructor's Signature _____

Group or Name: _____

Respiratory Protection Performance Checklist
Identify all the parts of the SCBA assembly

Identify each of the following parts of the SCBA and enter √ or NA.

AIR CYLINDER	√ or NA
Cylinder air gauge	
Cylinder wheel valve	
Hydrostatic test date(s)	
Specification plate	
Production date	
HARNESS ASSEMBLY	√ or NA
Air cylinder coupling	
O-ring	
High pressure hose	
1 st stage regulator	
Low pressure hose lines	
2 nd stage regulator	
Air saver switch	
Purge/by-pass valve	
Mask connection location	
P.A.S.S. device (do not activate)	
Shoulder air gauge	
Quick fill/buddy breathe	
Shoulder and belt straps/connectors	
Chest straps	
FACE PIECE	√ or NA
Lens	
Head harness and straps	
Face seal	
Speaking diaphragm/voice amplifier	
Exhalation valve	
Nose cup	
Heads up display (HUD)	
Eye glass attachment	

Date _____ Instructor's Signature: _____

Group or Name: _____

Respiratory Protection Performance Checklist - Monthly Checks

Enter √ for each of the items below that are done as part of the monthly check; if not done, put NA.

IS EVERYTHING THERE?	√ or NA
Facepiece assembly	
Regulator and hoses	
Air bottle and valve	
Harness and back frame	
P.A.S.S.	
Escape bottle	
IS CONDITION READY FOR USE?	√ or NA
Examined for cracks/discoloration/change in shape	
Face piece	
Nose cup	
Lens	
Exhalation valve	
Examined for damage/wear	
Regulator	
HUD	
Air bottle(s)	
Hoses	
Valves	
Back frame	
Back frame harness	
Batteries charged	
CHECKS	√ or NA
Purge Valve	
Air valve	
Audible air leaks	
Purge valve	
NOTIFICATION	√ or NA
Deficient items tagged	
Notification of tagging made to SCBA administrator	

Date _____ Instructor's Signature: _____

Group or Name: _____

**Respiratory Protection Performance Checklist
Donning and Doffing an SCBA**

1. I performed the following check-out procedures prior to donning:

- a. Head straps attachments are not loose----- Yes No
- b. Head harness shows no cracks or other defect----- Yes No
- c. Head straps are stretchy----- Yes No
- d. Head straps can be adjusted----- Yes No
- e. Exhalation valve flaps are flexible----- Yes No
- f. Exhalation valve flaps are not discolored----- Yes No
- g. P.A.S.S. or escape bottle----- Yes No

2. After donning, I performed the following

- a. Adjusted head harness----- Yes No
- b. Tightened chin straps----- Yes No
- c. Tightened forehead straps ----- Yes No
- d. Conducted user fit check ----- Yes No
- e. Adjusted chest straps----- Yes No
- f. Adjusted waist straps ----- Yes No

3. After doffing, I did the following

- a. Loosened all straps----- Yes No
- b. Followed company policy for inspection----- Yes No
- c. Followed company policy for cleaning----- Yes No
- d. Followed company policy for after-use checkout----- Yes No
- e. Followed company policy for any identified damage/defect----- Yes No

Date _____ Instructor's Signature: _____