

Respiratory Protection Program

I. PURPOSE

To protect employees from occupational respiratory exposure to potential harmful pathogens, including airborne bacteria and viruses.

II. PROGRAM ELEMENTS

1. Respiratory Use

a. Respiratory protection will be selected based on the characteristics of the hazard and the level of exposure. A qualified individual will conduct an evaluation of workplace hazards and select the appropriate respirator to protect against identified hazard(s).

In a dental office, our identified hazard is airborne bacteria and viruses. When performing procedures that generate aerosol, spray and spatter, personal protection must be chosen that will protect the wearer from disease transmission. According to the CDC, employees should wear at least a surgical mask plus faceshield, preferably, a respirator and faceshield (if they are able to wear a respirator).

All patients are screened for COVID-19 symptoms and other respiratory diseases. If the patient has not been exposed to COVID-19, does not have any symptoms, and the community does not have a high level of community spread, the surgical mask and faceshield combination are adequate for non-aerosol generating procedures. For procedures that generate aerosols, a respirator and face shield combination should be worn (if respirator use is possible).

b. Since monitoring is not available, the risk assessment methodology is used to identify appropriate protection.

2. Approved Respirators

a. Facilities must supply employees with only those respirators approved for intended use. All respirators will have a National Institute for Occupational Safety and Health (NIOSH) Certification, or be certified by the FDA for emergency use.

Exception:

1. If approved respirators are not available because of acute PPE shortages, a respirator that fits well and/or passes a fit test and that research has shown gives protection equal to at least a surgical mask, may be substituted.

b. Air-purifying respirators must consider assigned protection factors (APF) and the maximum use concentration (MUC) during respirator selection to ensure adequate protection.

c. Supplied breathing air must meet minimum breathing air quality according to 29 CFR 1910.134(i). <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>

d. Use of Respirators- An employee who chooses to voluntarily use a respirator must be medically cleared to wear a respirator; and be instructed on how to clean, properly store and maintain the respirator to ensure it does not present a hazard to the wearer.

A copy of 29 CFR 1910.134 Appendix D will be provided to employees who choose to voluntarily wear a respirator. A link to Appendix D is listed here: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppD>

3. Health Surveillance

When required by OSHA, A qualified occupational health professional must initially and at least annually thereafter evaluate employees who are required to wear respirators to determine if the employee is medically capable to use a respirator. The medical evaluation questionnaire contained in Appendix C of 29 CFR 1910.134 will be utilized.

A completed copy of the "HAZARD IDENTIFICATION AND RESPIRATOR NEEDS ASSESSMENT" as contained in this document will be provided to the occupational health care professional performing the medical evaluation.

4. Fit Testing – If the employer requires employees to wear a respirator:

a. A qualified individual must fit test employees who wear positive or negative pressure, tight-fitting respirators (including disposable respirators) using the same make, model, style and size of the respirator to be used.

b. Fit tests must be repeated at least annually or when changes occur in the employee's physical condition affecting proper fit of the respirator (weight loss, addition of facial hair, etc.). Fit testing shall be conducted as required by Appendix A, 29 CFR 1910.134: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppA>

c. Please access easy to understand training and respirator use videos from the people at 3M: <https://www.bing.com/videos/search?q=N95+Respirator+Fit+Test+Video&ru=%2fvideos%2fsearch%3fq%3dN95%2bRespirator%2bFit%2bTest%2bVideo%26FORM%3dVDMHRS&view=detail&mid=831E42F1B0DCF827BCBC831E42F1B0DCF827BCBC&&FORM=VDRVRV>

5. Storage

Respirators must be stored in a manner to protect from the following: damage, contamination, dust, sunlight, temperature extremes, excessive moisture and deformation of the face piece.

6. Inspection

All respirators will be inspected by the user prior to each use. Inspections should include a check of:

- Condition of the various parts including, but not limited to, the facepiece, head straps, cartridges, canisters, or filters.
- All rubber or plastic parts, for pliability and signs of deterioration.
- PAPR connecting tubes or hoses, air flow, and batteries.

When caring for infectious patients, disposable filtering facepiece respirators will be discarded after each use (i.e., patient encounter) UNLESS there is an acute shortage of disposal respirators. The respirator must be discarded when it is no longer in its original working condition, when the respirator can no longer seal to the face, whether that condition results from contamination, structural defects, or wear. Masks and respirators must be changed whenever it becomes hard to breathe through, if damaged, if visibly soiled. Where canisters are used, facilities must have a process in place to ensure cartridges are within their expiration dates and changed within specified time frames.

7. Documentation

Workplace air monitoring records and the medical questionnaire/associated medical exam/fit test records shall be retained for employment plus 30 years. An individual's workplace monitoring records are considered a confidential medical record and will be treated in the same manner as their medical questionnaire/associated medical exam records.

8. Program Evaluation

This plan will be evaluated annually to ensure that all aspects of the program meet the requirements of the OSHA Respiratory Protection standard and that the program is being implemented effectively to protect employees from respiratory hazards.

Program evaluation will include, but is not limited to:

- A review of the written program.
- Making sure all procedures are still applicable and current.
- A review of feedback obtained from employees (to include respirator fit, selection, use, and maintenance issues) that will be collected during the annual training session.

The program will be revised, if necessary, and any revisions will be documented and kept with the written program. Employees will be informed of any changes and will acknowledge the changes.

III. Training

Employees who use respirators will be trained initially and provided refresher training annually on the following respiratory protection topics. Training will be provided by 3M training videos on how to fit and use N95 masks:

<https://www.bing.com/videos/search?q=N95+Respirator+Fit+Test+Video&ru=%2fvideos%2fsearch%3fq%3dN95%2bRespirator%2bFit%2bTest%2bVideo%26FORM%3dVDMHRS&view=detail&mid=831E42F1B0DCF827BCBC831E42F1B0DCF827BCBC&&FORM=VDRVRV>

Training must include:

- Why respirators must be worn,
- Fit testing and the importance of proper fit,
- Limitations and the capabilities of respirators,
- Effective respirator used in emergencies, including what to do in the event a respirator fails,
- How to inspect, don, doff and use respirators,
- How to perform a fit-check as required by 29 CFR 1910.134 Appendix B-1: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB1>
- How to clean a respirator, as required by 29 CFR 1910.134 B-2: <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB2>
- Procedures for maintenance and storage,
- Medical conditions limiting or preventing the effective use of a respirator, and
- Local regulations related to respirators.

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

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: _____

2. Your name: _____

3. Your age (to nearest year): _____

4. Sex (circle one): Male/Female

5. Your height: _____ ft. _____ in.

6. Your weight: _____ lbs.

7. Your job title: _____

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____

9. The best time to phone you at this number: _____

10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No

11. Check the type of respirator you will use (you can check more than one category):

a. _____ N, R, or P disposable respirator – N95 (filter-mask, non-cartridge type only).

b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

12. Have you worn a respirator (circle one): Yes/No

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 month: Yes/No

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

- a. Seizures: Yes/No
- b. Diabetes (sugar disease): Yes/No
- c. Allergic reactions that interfere with your breathing: Yes/No
- d. Claustrophobia (fear of closed-in places): Yes/No
- e. Trouble smelling odors: Yes/No

3. Have you ever had any of the following pulmonary or lung problems?

- a. Asbestosis: Yes/No
- b. Asthma: Yes/No
- c. Chronic bronchitis: Yes/No
- d. Emphysema: Yes/No
- e. Pneumonia: Yes/No
- f. Tuberculosis: Yes/No
- g. Silicosis: Yes/No
- h. Pneumothorax (collapsed lung): Yes/No
- i. Lung cancer: Yes/No
- j. Broken ribs: Yes/No
- k. Any chest injuries or surgeries: Yes/No
- l. Any other lung problem that you've been told about: Yes/No

4. Do you currently have any of the following symptoms of pulmonary or lung illness?

- a. Shortness of breath: Yes/No
- b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
- c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
- d. Have to stop for breath when walking at your own pace on level ground: Yes/No
- e. Shortness of breath when washing or dressing yourself: Yes/No
- f. Shortness of breath that interferes with your job: Yes/No
- g. Coughing that produces phlegm (thick sputum): Yes/No

h. Coughing that wakes you early in the morning: Yes/No

i. Coughing that occurs mostly when you are lying down: Yes/No

j. Coughing up blood in the last month: Yes/No

k. Wheezing: Yes/No

l. Wheezing that interferes with your job: Yes/No

m. Chest pain when you breathe deeply: Yes/No

n. Any other symptoms that you think may be related to lung problems: Yes/No

5. Have you ever had any of the following cardiovascular or heart problems?

a. Heart attack: Yes/No

b. Stroke: Yes/No

c. Angina: Yes/No

d. Heart failure: Yes/No

e. Swelling in your legs or feet (not caused by walking): Yes/No

f. Heart arrhythmia (heart beating irregularly): Yes/No

g. High blood pressure: Yes/No

h. Any other heart problem that you've been told about: Yes/No

6. Have you ever had any of the following cardiovascular or heart symptoms?

a. Frequent pain or tightness in your chest: Yes/No

b. Pain or tightness in your chest during physical activity: Yes/No

c. Pain or tightness in your chest that interferes with your job: Yes/No

d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No

e. Heartburn or indigestion that is not related to eating: Yes/No

d. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you currently take medication for any of the following problems?

a. Breathing or lung problems: Yes/No

b. Heart trouble: Yes/No

c. Blood pressure: Yes/No

d. Seizures: Yes/No

8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

a. Eye irritation: Yes/No

b. Skin allergies or rashes: Yes/No

c. Anxiety: Yes/No

d. General weakness or fatigue: Yes/No

e. Any other problem that interferes with your use of a respirator: 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 full-facepiece respirator or a self-contained breathing apparatus (SCBA)**. For 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 permanently): 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. Any other eye or vision problem: Yes/No

12. Have you ever had an injury to your ears, including a broken ear drum: Yes/No

13. Do you currently have any of the following hearing problems?

a. Difficulty hearing: Yes/No

b. Wear a hearing aid: Yes/No

c. Any other hearing or ear problem: Yes/No

14. Have you ever had a back injury: Yes/No

15. Do you currently have any of the following musculoskeletal problems?

a. Weakness in any of your arms, hands, legs, or feet: Yes/No

b. Back pain: Yes/No

- c. Difficulty fully moving your arms and legs: Yes/No
- d. Pain or stiffness when you lean forward or backward at the waist: Yes/No
- e. Difficulty fully moving your head up or down: Yes/No
- f. Difficulty fully moving your head side to side: Yes/No
- g. Difficulty bending at your knees: Yes/No
- h. Difficulty squatting to the ground: Yes/No
- i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No
- j. Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No

If "yes," name the chemicals if you know them: _____

3. Have you ever worked with any of the materials, or under any of the conditions, listed below:

- a. Asbestos: Yes/No
- b. Silica (e.g., in sandblasting): Yes/No
- c. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No
- d. Beryllium: Yes/No
- e. Aluminum: Yes/No
- f. Coal (for example, mining): Yes/No
- g. Iron: Yes/No
- h. Tin: Yes/No
- i. Dusty environments: Yes/No

j. Any other hazardous exposures: Yes/No

If "yes," describe these exposures: _____

4. List any second jobs or side businesses you have: _____

5. List your previous occupations: _____

6. List your current and previous hobbies: _____

7. Have you been in the military services? Yes/No

If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes/No

8. Have you ever worked on a HAZMAT team? Yes/No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No

If "yes," name the medications if you know them: _____

10. Will you be using any of the following items with your respirator(s)?

a. HEPA Filters: Yes/No

b. Canisters (for example, gas masks): Yes/No

c. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

a. Escape only (no rescue): Yes/No

b. Emergency rescue only: Yes/No

c. Less than 5 hours per week: Yes/No

d. Less than 2 hours per day: Yes/No

e. 2 to 4 hours per day: Yes/No

f. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:

a. Light (less than 200 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.

b. Moderate (200 to 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface. c. Heavy (above 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

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, life-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):

[63 FR 1152, Jan. 8, 1998; 63 FR 20098, April 23, 1998; 76 FR 33607, June 8, 2011; 77 FR 46949, Aug. 7, 2012]

Forms:

- Hazard Identification & Respirator Requirement Assessment
- Respirator Training Objectives Forms
- Employee Respiratory Fit Test Records

HAZARD IDENTIFICATION AND RESPIRATOR REQUIREMENT ASSESSMENT

NOTE: COMPLETE THIS FORM FOR EACH HAZARD IDENTIFIED WHERE RESPIRATORS ARE REQUIRED. PROVIDE A COPY OF THIS FORM TO THE PROFESSIONAL LICENSED HEALTHCARE PROVIDER (PLHCP).

Name of Office: _____ Date: _____

Address: _____

Title/Job Description: Dentist, dental assistant, hygienist, other: _____

Prepared by: _____ Title: _____

PART ONE: TASK ANALYSIS

Describe task: Performing procedures with instruments that generate aerosol, splashes, spray and spatter

Duration and frequency of respirator use: Every day during the workweek

Expected physical work effort: low exertion-sitting or standing while working on patients

Additional protective clothing and equipment to be worn: faceshield, gown or jacket, gloves

Temperature and humidity extremes: none

PART TWO: HAZARD ASSESSMENT

Indicate the type of hazard: Potential for exposure to airborne pathogens

Surgical mask with faceshield are required, respirators may be voluntarily worn if employee chooses

Fit testing recommended, but not required.

PART THREE: RESPIRATOR SELECTED

Indicate respirator type, model and brand:

- Face piece type:**
- Filtering Face piece**
- Supplied air**
- Half face**
- Full face**
- SCBA**
- PAPR**
- Other:** _____

Filter type: (N=Not Oil Resistant)

- N95
- KN95
- N99
- N100

PART FOUR: MAINTENANCE

Maintenance: _____

Disposal of Respirator: Daily Weekly Other: _____

Respiratory Protection Template 02/18

Respirator Training Objectives

General Awareness Training:

Participants will:

- Be able to explain the difference between a mask and a respirator.
- Be able to identify potential workplace respiratory hazards.
- Be able to identify the different types of respirators used within the facility and for which hazards.
- Understand the consequences of improper respirator use, fit and maintenance.
- Understand the importance of medical evaluations prior to using a respirator.
- Understand the limitations of respirators.

Additional Training for Respirator Users

Participants will:

- Understand the importance of respirator fit testing.
- Understands the importance of a secure respirator fit and ensuring there is no facial hair in the respirator sealing area.
- The importance of notifying management in the event of the inability to achieve a secure respirator fit due to respirator malfunction or facial change due to tooth extraction, weight loss or gain, surgery, etc.
- Know how to properly don and doff a respirator.
- Understand how to properly use, care, store, and inspect a respirator.
- Be able to demonstrate a respirator fit check.
- Has been provided information to be able to respond effectively in emergency situations including those where the respirator malfunctions.

Materials Used:

Videos by 3M

Written Respirator Program

EMPLOYEE RESPIRATORY FIT TEST RECORD

COMPLETE FOR EACH INDIVIDUAL WHO IS FITTED FOR A RESPIRATOR.

Medical clearance examinations are required prior to fit testing. Only NIOSH certified respirators are permitted.

Instructor Name: _____ Signature: _____

Employee Name: _____ Employee ID Number: _____

Employee Signature: _____ Fit Test Conducted By: _____

Date: _____

Employee Medically Qualified? Yes No Pending Date of Medical Evaluation: _____

Medical Approval Attached? Yes No

Respirators Fitted: (Define type, size, manufacturer, and model number): _____

Limitations Noted:

Beard Dentures Glasses Contact Lenses Facial Surgery Dental Work No Limitations

Explain (or indicate other limitations not included above): _____

FIT TESTING

Satisfactory Positive Pressure Fit Check Qualitative Fit Test: Pass Fail

Satisfactory Negative Pressure Fit Check Satisfactory Saccharin Mist Test

Quantitative Fit Test: Pass Fail Satisfactory Bitrex Solution Aerosol

Equipment Used: _____ Satisfactory Banana Oil (Isoamyl Acetate)

_____ Satisfactory Irritant Smoke

Copy of results attached: