

# Screening and Surveillance: A Guide to OSHA Standards



U.S. Department of Labor  
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This informational booklet is intended to provide a generic, non-exhaustive overview of a particular standards-related topic. This publication does not itself alter or determine compliance responsibilities, which are set forth in OSHA standards themselves, and the *Occupational Safety and Health Act*. Moreover, because interpretations and enforcement policy may change over time, for additional guidance on OSHA compliance requirements, the reader should consult current administrative interpretations and decisions by the Occupational Safety and Health Review Commission and the courts.

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# Screening and Surveillance: A Guide to OSHA Standards

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U.S. Department of Labor  
Alexis M. Herman, Secretary

Occupational Safety and Health Administration  
Charles N. Jeffress, Assistant Secretary

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The Occupational Safety and Health Administration (OSHA) receives many inquiries about the “medical surveillance” provisions of its standards. This guide is a quick reference to help you locate and implement the screening and surveillance requirements of the OSHA standards in *Title 29 of the Code of Federal Regulations (29 CFR)*.

The guide provides a general overview of OSHA requirements, but is not a legal authority for compliance with them. For full details of specific compliance requirements, please consult the appropriate OSHA standard in the *CFR*. You can access the medical surveillance provisions of the OSHA standards on the Internet at [www.osha.gov](http://www.osha.gov).

**NOTE TO EMPLOYERS:**

Please remember, more than one standard may apply in your workplace. If so, you must meet all the screening and surveillance requirements for all the standards that apply. For further information, contact your Regional OSHA office listed at the end of this publication and on OSHA’s home page on the Internet at [www.osha.gov](http://www.osha.gov).

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**BP** - blood pressure

**BUN** - blood urea nitrogen

**CBC** - complete blood count

**FEF** - forced expiratory flow

**FEV<sub>1</sub>** - forced expiratory volume one second

**FSH** - follicle stimulating hormone

**FVC** - forced vital capacity

**HAZWOPER** - Hazardous Waste Operations and Emergency Response

**HBV** - hepatitis B virus

**LH** - luteinizing hormone

**MDA** - methylenedianiline

**PPE** - personal protective equipment

**PHS** or **USPHS** - United States Public Health Service

**SGOT** - serum glutamic oxalacetic transaminase

**SGPT** - serum glutamic pyruvic transaminase

**ZPP** - zinc protoporphyrin

<i>Standard Requirements</i>	
<b>Acrylonitrile</b> <b>1910.1045(n)/1926.1145/1915.1045*</b>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes—annual <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes
<b>Termination exam</b>	Yes—if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Respiratory, gastrointestinal, <sup>1</sup> thyroid, skin, neurological (peripheral and central)
<b>Work and medical history</b>	Required for all exams <sup>2</sup>
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Fecal occult blood <sup>1</sup>
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Arsenic (Inorganic) 1910.1018(n)/1926.1118/1915.1018*</b>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes
<b>Termination exam</b>	Yes—if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Skin, nasal
<b>Work and medical history</b>	Required for all exams <sup>2</sup> with focus on respiratory symptoms; includes smoking history
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	No



<i>Standard Requirements</i>	
<i>Asbestos (General Industry) 1910.1001(I)</i>	
<b>Pre-placement exam</b>	Yes <sup>1,3</sup>
<b>Periodic exam</b>	Yes—annual <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	Yes—within $\pm$ 30 days of termination
<b>Examination includes special emphasis on these body systems</b>	Respiratory, cardiovascular, gastrointestinal
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; standardized form required; see standard, Appendix D
<b>Chest x-ray</b>	Yes <sup>1</sup> —B reader, board eligible/certified radiologist or physician with expertise in pneumoconioses required; see standard, Appendix E for x-ray interpretation and classification requirements
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician; includes informing employee of increased risk of lung cancer from combined effect of smoking and asbestos exposure
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Asbestos (Construction and Shipyards) 1926.1101(m)/1915.1001</b>	
<b>Pre-placement exam</b>	Yes <sup>1,3</sup>
<b>Periodic exam</b>	Yes — annual <sup>1</sup> or more frequently if determined by physician
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Pulmonary and gastrointestinal
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; special emphasis on pulmonary, cardiovascular, gastrointestinal; standardized form required; see standard, Appendix D
<b>Chest x-ray</b>	Yes <sup>1</sup> — B reader, board eligible/certified radiologist or physician with expertise in pneumoconioses required; see standard, Appendix E for x-ray interpretation and classification requirements
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician; includes informing employee of increased risk of lung cancer from combined effect of smoking and asbestos exposure
<b>Medical removal plan</b>	No

<i>Standard Requirements</i>	
<b><i>Benzene</i></b> <b><i>1910.1028(i)/1926.1128/1915.1028*</i></b>	
<b>Pre-placement exam</b>	Yes <sup>1,3,4</sup>
<b>Periodic exam</b>	Yes—annual <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1,4</sup> —includes urinary phenol test
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Hemopoietic; add cardiopulmonary if respiratory protection used at least 30 days/year, (initially, then every 3 years)
<b>Work and medical history</b>	Required for initial and periodic exams (pre-placement exam requires special history) <sup>2</sup>
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	Initially and every 3 years if respiratory protection used 30 days/year; specific tester requirements
<b>Other required tests</b>	CBC, differential, other specific blood tests; repeated as required; see standard
<b>Evaluation of ability to wear a respirator</b>	Yes—if respirators are used
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	Yes

<b>Standard Requirements</b>	
<b>Bloodborne Pathogens 1910.1030(f)</b>	
<b>Pre-placement exam</b>	No—must offer Hepatitis B (HBV) vaccine unless already immune or vaccine contraindicated
<b>Periodic exam</b>	No
<b>Emergency/exposure examination and tests</b>	Specific post-exposure monitoring for employee and source; HBV vaccine; see standard
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	No
<b>Work and medical history</b>	No
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Yes—post-exposure incident; follow US Public Health Service (USPHS) post-exposure protocols
<b>Evaluation of ability to wear a respirator</b>	No
<b>Additional tests if deemed necessary</b>	Yes—for post-exposure incident; follow USPHS post-exposure protocols
<b>Written medical opinion</b>	Yes—licensed health care professional to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by licensed health care professional; counseling re: HBV vaccine and post-exposure followup; see standard
<b>Medical removal plan</b>	No

<i>Standard Requirements</i>	
<b>1, 3-Butadiene 1910.1051(k)/1926.1151*</b>	
<b>Pre-placement exam</b>	Yes <sup>1,3,4</sup>
<b>Periodic exam</b>	Yes <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1,4</sup> —within 48 hours of exposure
<b>Termination exam</b>	Yes <sup>4</sup> —if 12 months have elapsed since last exam
<b>Examination includes special emphasis on these body systems</b>	Liver, spleen, lymph nodes, and skin
<b>Work and medical history</b>	Required annually and for all examinations <sup>2</sup> ; standardized form or equivalent; includes comprehensive occupational and health history; see standard, Appendices F and C
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	CBC with differential and platelet count, annually; also within 48 hrs after exposure in an emergency situation and repeated monthly for 3 more months
<b>Evaluation of ability to wear a respirator</b>	Yes—if respirators are used
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician or other licensed health care professional to employer and employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician or other licensed health care professional
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Cadmium</b> <b>1910.1027(l)/1926.1127/1915.1027/1928.1027*</b>	
<b>Pre-placement exam</b>	Yes <sup>1,3,4</sup>
<b>Periodic exam</b>	Yes <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1,4</sup>
<b>Termination exam</b>	Yes <sup>3</sup> —see standard for time frame and other specifics
<b>Examination includes special emphasis on these body systems</b>	Respiratory, cardiovascular (BP), urinary, and for males over 40—prostate palpation <sup>1</sup>
<b>Work and medical history</b>	Required for preplacement and periodic exams <sup>2</sup> ; standardized form required
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	Annually, <sup>1</sup> cadmium in urine, beta-2 microglobulin in urine, cadmium in blood, CBC, BUN, serum creatinine, urinalysis; see standard
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician; includes explanation of results, treatment, and diet, and discussion of decisions re: medical removal; see standard for details
<b>Medical removal plan</b>	Yes

<b>Standard Requirements</b>	
<b>Carcinogens (Suspect)</b> <b>1910.1003-1016(g)/1926.1103/1915.1003-1016*</b>	
<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes—annual
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup> —special medical surveillance begins within 24 hours
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Exam includes determination for increased risk (e.g., treatment with steroids or cytotoxic agents, reduced immunological competence, pregnancy or cigarette smoking)
<b>Work and medical history</b>	Required for all examinations; includes family and occupational history, genetic and environmental factors
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	No
<b>Evaluation of ability to wear</b>	Yes—as specified in the respiratory protection standard 1910.134(e), if respirators are used
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer
<b>Employee counseling re: exam results, conditions of increased risk</b>	No
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Coke Oven Emissions 1910.1029(j)</b>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	Yes—if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Skin
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes smoking history and presence and degree of respiratory symptoms
<b>Chest x-ray</b>	Yes
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub>
<b>Other required tests</b>	Weight, urine cytology, urinalysis for sugar, albumin, hematuria
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes—see standard, Appendix B
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician; also, employer must inform employee of possible health consequences if employee refuses any required medical exam
<b>Medical removal plan</b>	No



<i>Standard Requirements</i>	
<i>Compressed Air Environments 1926.803(b)</i>	
<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Not specified
<b>Work and medical history</b>	No
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	No
<b>Additional tests if deemed necessary</b>	No
<b>Written medical opinion</b>	No
<b>Employee counseling re: exam results, conditions of increased risk</b>	No
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Cotton Dust 1910.1043(h)</b>	
<b>Pre-placement exam</b>	Physical exam not specified; other tests required
<b>Periodic exam</b>	Physical exam not specified; other tests required <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Not specified
<b>Work and medical history</b>	Medical history; standardized questionnaire required; see standard, Appendix B-1 <sup>1,2,4</sup>
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub> , FEV <sub>1</sub> /FVC Employees with specific abnormalities are referred to specialists <sup>1,4,5</sup>
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	No
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician re: results of exam and any medical conditions requiring further examination or treatment
<b>Medical removal plan</b>	Yes—for inability to wear a respirator (6 months)

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<i>Standard Requirements</i>	
<b>1,2-Dibromo-3-chloropropane 1910.1044(m)/1926.1144/1915.1044*</b>	
<b>Pre-placement exam</b>	Yes
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes—male reproductive; repeat in 3 months
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Reproductive, genitourinary; see standard for details
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes reproductive history; see standard, Appendix C
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Sperm count, FSH, LH, Total estrogen (females); see standard, Appendix C for guidelines
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Ethylene Oxide 1910.1047(i)/1926.1147*</b>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes—annual <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup>
<b>Termination exam</b>	Yes <sup>1</sup>
<b>Examination includes special emphasis on these body systems</b>	Pulmonary, skin, neurologic, hematologic, reproductive, eyes
<b>Work and medical history</b>	Required for all exams; includes reproductive history and special emphasis on some body systems; see standard
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	CBC, white cell count with differential, hematocrit, hemoglobin, red cell count; if requested by employee, pregnancy testing and fertility testing (female/male) will be added to the exam as deemed appropriate by physician
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	No

<i>Standard Requirements</i>	
<i>Formaldehyde</i> <i>1910.1048(I)/1926.1148/1915.1048*</i>	
<b>Pre-placement exam</b>	Yes <sup>1,4</sup>
<b>Periodic exam</b>	Yes <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on systems these body</b>	Evidence of irritation or sensitization of skin, respiratory system, eyes; shortness of breath
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; questionnaire required; see standard, Appendix D
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	FVC, FEV <sub>1</sub> , FEF should be evaluated if respiratory protection is used
<b>Other required tests</b>	No
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician; includes information on whether medical conditions were caused by past exposures or emergency exposures
<b>Medical removal plan</b>	Yes

<b>Standard Requirements</b>	
<b>HAZWOPER 1910.120(f)/1926.65*</b>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes—annually or at physician's discretion <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup>
<b>Termination exam</b>	Yes—if no exam within 6 months of termination/reassignment
<b>Examination includes special emphasis on these body systems</b>	Determined by physician; see standard, Appendix D, reference 10 for guidelines
<b>Work and medical history</b>	Yes—with emphasis on symptoms related to handling hazardous substances and health hazards, fitness for duty and ability to wear PPE <sup>2</sup>
<b>Chest x-ray</b>	No—unless determined by physician
<b>Pulmonary function test (PFT)</b>	No—unless determined by physician
<b>Other required tests</b>	No—unless determined by physician
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	No

<i>Standard Requirements</i>	
<i>Hazardous Chemicals in Laboratories 1910.1450(g)</i>	
<b>Pre-placement exam</b>	When required by other standards
<b>Periodic exam</b>	When required by other standards
<b>Emergency/exposure examination and tests</b>	Yes <sup>1</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Not specified
<b>Work and medical history</b>	When required by other standards
<b>Chest x-ray</b>	When required by other standards
<b>Pulmonary function test (PFT)</b>	When required by other standards
<b>Other required tests</b>	When required by other standards
<b>Evaluation of ability to wear a respirator</b>	Yes—when required by other standards
<b>Additional tests if deemed necessary</b>	When required by other standards
<b>Written medical opinion</b>	Yes—physician to employer
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Lead 1910.1025(j)/1926.62*</b>	
<b>Pre-placement exam</b>	Yes <sup>1,4</sup> except in construction industries; construction requires initial blood tests only
<b>Periodic exam</b>	Yes <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1,4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Teeth, gums, hematologic, gastrointestinal, renal, cardiovascular (BP), neurological; pulmonary status if respiratory protection used
<b>Work and medical history</b>	Required for all exams <sup>2</sup> ; includes reproductive history, past lead exposure, both work/non-work, and history of specific body systems; see standard
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No—unless deemed necessary by physician
<b>Other required tests</b>	Hemoglobin, hematocrit, ZPP, BUN, serum creatinine, urinalysis with micro, blood-lead levels, peripheral smear morphology, red cell indices <sup>1,5</sup> ; if requested by employee, pregnancy testing and fertility testing (female/male)
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician; includes advising the employee of any medical condition, occupational or non-occupational, requiring further medical examination or treatment
<b>Medical removal plan</b>	Yes



<i>Standard Requirements</i>	
<i>Methylenedianiline 1910.1050(m)</i>	
<b>Pre-placement exam</b>	Yes <sup>1, 3, 4</sup>
<b>Periodic exam</b>	Yes—annual <sup>1, 4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>1, 4</sup>
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Skin, hepatic
<b>Work and medical history</b>	Required for all examinations <sup>2</sup> ; includes past work with MDA and other specific items; see standard
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Liver function tests, urinalysis
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician
<b>Medical removal plan</b>	Yes

<b>Standard Requirements</b>	
<b>Methylene Chloride 1910.1052(j)/1926.1152*</b>	
<b>Pre-placement exam</b>	Yes <sup>1,4</sup>
<b>Periodic exam</b>	Yes <sup>1,4</sup>
<b>Emergency/exposure examination and tests</b>	Yes <sup>4</sup> —see standard for specifics
<b>Termination exam</b>	Yes—if no exam within 6 months of termination
<b>Examination includes special emphasis on these body systems</b>	Lungs, cardiovascular (including BP and pulse), liver, nervous, skin; extent of exam determined by examiner based on employee's health status, work, and medical history
<b>Work and medical history</b>	Required for all exams; example of work and medical history form provided in standard, Appendix B
<b>Chest x-ray</b>	No
<b>Pulmonary function</b>	No—unless deemed necessary by physician or other licensed health care professional
<b>Other required tests</b>	Laboratory surveillance may include tests as determined by examiner including “before and after shift tests”; see standard, Appendix B
<b>Evaluation of ability to wear a respirator</b>	Yes—as specified under the respiratory protection standard 1910.134(e)
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician or other licensed health care professional to employer and employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician or other licensed health care professional
<b>Medical removal plan</b>	Yes

<i>Standard Requirements</i>	
<b>Noise</b> <b>1910.95(g)/1926.52<sup>†</sup></b>	
<b>Pre-placement exam</b>	No physical exam but audiometric testing required
<b>Periodic exam</b>	No physical exam but audiometric testing required
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No physical exam but audiometric testing required
<b>Examination includes special emphasis on these body systems</b>	No
<b>Work and medical history</b>	No
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Initial and annual audiometric testing <sup>1, 4, 5</sup> ; see standard re: specific qualifications for the test administrator
<b>Evaluation of ability to wear a respirator</b>	No
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	No
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—if standard threshold shift or suspected ear pathology
<b>Medical removal plan</b>	No

<b>Standard Requirements</b>	
<b>Respiratory Protection 1910.134(e)/1926.103*</b>	
<b>Pre-placement exam</b>	Evaluation questionnaire or exam; followup exam when required <sup>5</sup>
<b>Periodic exam</b>	Yes—in specific situations <sup>5</sup>
<b>Emergency/exposure examination and tests</b>	No
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Yes <sup>5</sup> —see standard, Appendix C
<b>Work and medical history</b>	Yes <sup>2</sup> —see standard, Appendix C
<b>Chest x-ray</b>	As determined by physician or other licensed health care professional
<b>Pulmonary function test (PFT)</b>	As determined by physician or other licensed health care professional
<b>Other required tests</b>	As determined by physician or other licensed health care professional
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician or other licensed health care professional to employer and employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	Yes—by physician or other licensed health care professional
<b>Medical removal plan</b>	No

## Screening and Surveillance: A Guide to OSHA Standards

<i>Standard Requirements</i>	
<b>Vinyl Chloride</b> <b>1910.1017(k)/1926.1117*</b>	
<b>Pre-placement exam</b>	Yes <sup>1</sup>
<b>Periodic exam</b>	Yes <sup>1</sup>
<b>Emergency/exposure examination and tests</b>	Yes
<b>Termination exam</b>	No
<b>Examination includes special emphasis on these body systems</b>	Special attention to detecting enlargement of the liver, spleen or kidneys, or dysfunction of these organs and abnormalities in skin, connective tissue, and pulmonary system; see standard, Appendix A
<b>Work and medical history</b>	Required for initial and periodic exams <sup>2</sup> ; includes alcohol intake, history of hepatitis, exposure to hepatotoxic agents, blood transfusions, hospitalizations, and work history
<b>Chest x-ray</b>	No
<b>Pulmonary function test (PFT)</b>	No
<b>Other required tests</b>	Blood test for total bilirubin, alkaline phosphatase, SGOT, SGPT and gamma glutamyl transpeptidase
<b>Evaluation of ability to wear a respirator</b>	Yes
<b>Additional tests if deemed necessary</b>	Yes
<b>Written medical opinion</b>	Yes—physician to employer; employer to employee
<b>Employee counseling re: exam results, conditions of increased risk</b>	No
<b>Medical removal plan</b>	Yes

<sup>1</sup> Pre-placement and periodic examinations are dependent upon specific factors cited in the standard such as airborne concentrations of the substance and/or years of exposure, biological indices, age of employee, amount of time exposed per year. In addition, some standards require periodic exams to be conducted at varying time intervals. Refer to standard for complete details.

<sup>2</sup> Standard requires medical and work history focused on special body systems, symptoms, personal habits, and/or specific family, environmental or occupational history. Refer to standard for complete details.

<sup>3</sup> No examination required if previous examination done within specified time frame (e.g., 6 months or 12 months) and provisions of standard met. Refer to standard for details.

<sup>4</sup> Additional physician review: Some standards have provisions for referring employees with abnormalities to a specialist as deemed necessary by examiner. Other standards have provisions for multiple physician review. See specific standard for details.

<sup>5</sup> Standard requires specific protocol. See standard for details.

\*These Maritime and Construction standards are identical to 29 CFR 1910, General Industry standards.

†1926.52 requires an effective and continued hearing conservation program. OSHA has interpreted this to include audiograms when feasible. See letter of interpretation dated August 4, 1992.

**Region I****(CT,\* MA, ME, NH, RI, VT\*)**

JFK Federal Building

Room E-340

Boston, MA 02203

Telephone: (617) 565-9860

**Region II****(NJ, NY,\* PR,\* VI\*)**

201 Varick Street

Room 670

New York, NY 10014

Telephone: (212) 337-2378

**Region III****(DC, DE, MD,\* PA, VA,\* WV)**

The Curtis Center-Suite 740 West

170 S. Independence Mall West

Philadelphia, PA 19106-3309

Telephone: (215) 861-4900

**Region IV****(AL, FL, GA, KY,\* MS, NC,\* SC,\* TN\*)**

Atlanta Federal Center

61 Forsyth Street, SW, Room 6T50

Atlanta, GA 30303

Telephone: (404) 562-2300

**Region V****(IL, IN,\* MI,\* MN,\* OH, WI)**

230 South Dearborn Street

Room 3244

Chicago, IL 60604

Telephone: (312) 353-2220

### **Region VI**

**(AR, LA, NM,\* OK, TX)**

525 Griffin Street

Room 602

Dallas, TX 75202

Telephone: (214) 767-4731

### **Region VII**

**(IA,\* KS, MO, NE)**

City Center Square

1100 Main Street, Suite 800

Kansas City, MO 64105

Telephone: (816) 426-5861

### **Region VIII**

**(CO, MT, ND, SD, UT,\* WY\*)**

1999 Broadway, Suite 1690

Denver, CO 80202-5716

Telephone: (303) 844-1600

### **Region IX**

**(American Samoa, AZ,\* CA,\* Guam,  
HI,\* NV,\* Trust Territories of the Pacific)**

71 Stevenson Street

4th Floor

San Francisco, CA 94105

Telephone: (415) 975-4310

### **Region X**

**(AK,\* ID, OR,\* WA\*)**

1111 Third Avenue

Suite 715

Seattle, WA 98101-3212

Telephone: (206) 553-5930

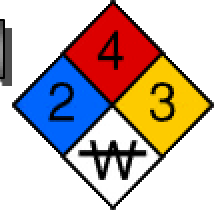
\*These states and territories operate their own OSHA-approved job safety and health programs (Connecticut and New York plans cover public employees only). States with approved programs must have a standard that is identical to, or at least as effective as, the federal standard.



# Attachment B



## CAPITAL AREA FIRE CHIEFS ASSOCIATION



### Hazardous Materials Response Teams

#### To The Health Care Provider:

This person is a firefighter who will be working on one of the Capital Area Hazardous Materials Teams. In accordance with OSHA Standards and guidelines established by the Capital Area Fire Chiefs, this person should have a complete medical examination that contains at a minimum:

- ❑ Medical and Work History with emphasis on symptoms related to the handling of hazardous substances and health hazards;
- ❑ Fitness for duty including the ability to wear personal protective clothing under extreme heat conditions;
- ❑ Evaluation of the ability to wear a respirator;
- ❑ Lab tests to include: CBC, Blood Chemistry, Heavy Metals Screen, Urinalysis and Chest X-ray.
- ❑ Vision, hearing, and pulmonary function testing; and,
- ❑ Any other tests determined to be needed to assess this individual.

As a firefighter, this person is expected to perform a full range of difficult tasks associated with all aspects of firefighting. The individual is expected to perform those tasks while wearing bulky Personal Protective Equipment, (PPE), and Self-Contained Breathing Apparatus, (SCBA).

This person should provide a questionnaire to the physician that has been completed in accordance with CFR 1910.134, Appendix C. This questionnaire is designed to aide in evaluation of fitness to wear a respirator.

Provision of specific medical information should be made to the individual's employer, not to the Capital Area Fire Chiefs. Because of confidentiality, we also ask that "Summary of Findings", (sample attached), be issued that provides a statement to the effect that this person can or should not perform work as a firefighter and/or hazardous materials technician. Any limitations recommended by the physician should also be entered on the letter or form.

Copies of OSHA's Standard 29 CFR 1910.120 and its appendices are available upon request.

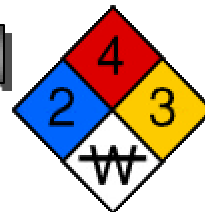
Thank you for your cooperation!

Capital Area Fire Chiefs Association  
Hazardous Materials Advisory Board



# CAPITAL AREA FIRE CHIEFS ASSOCIATION

## Hazardous Materials Response Team



### OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

#### To The Employee:

Can you read? Check one:    Yes    No

You must be allowed to complete this questionnaire during normal working hours, or at a time and place convenient to you. To maintain confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver this questionnaire to the health care professional who will review it.

**Part A. Section 1. (Mandatory)** Every employee who has been selected to use any type of respirator must provide the following information. (Please Print Answers).

1. Today's Date: \_\_\_\_\_.
2. Your Name: \_\_\_\_\_.
3. Your Age ( to the nearest year): \_\_\_\_\_.
4. Sex (Check 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: (\_\_\_\_) \_\_\_\_\_.
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 (Check One):    Yes    No
11. Check the type of respirator you will use (You can check more than one category):  
     N, R, or P disposable respirator (filter-mask, non-cartridge type only).  
  
     Other type, (for example, half- or full-face type, powered-air purifying, supplied-air, self-contained breathing apparatus).
12. Have you worn a respirator (Check One):    Yes    No

If "Yes", What type(s): \_\_\_\_\_

# Attachment C

**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 (Check "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 (fits): 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

# Attachment C

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 have 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
  - f. 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 (fits): 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 box 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

# Attachment C

11. Do you currently have any of the following vision problems?
- a. Wear contact lens: 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, 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 are 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

# Attachment C

- 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 ever been in the military services?    Yes    No

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

8. Have you ever worked on a Haz-Mat 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) (Check "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.

# Attachment C

Examples of 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 Substance: \_\_\_\_\_

Est. Max. Exposure Level: \_\_\_\_\_

Duration of Exposure: \_\_\_\_\_

Name any other toxic substances that you'll be exposed to while using your respirator(s):

# Attachment C

- 
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):

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# Attachment D



U.S. Department of Labor  
Occupational Safety and Health Administration



**Protecting the Safety and Health of America's Workers**

[Text Only]

## Regulations (Standards - 29 CFR)

### Sample authorization letter for the release of employee medical record information to a designated representative (Non-mandatory) - 1910.1020 App A

☛ Regulations (Standards - 29 CFR) - Table of Contents

- **Part Number:** 1910
- **Part Title:** Occupational Safety and Health Standards
- **Subpart:** Z
- **Subpart Title:** Toxic and Hazardous Substances
- **Standard Number:** 1910.1020 App A
- **Title:** Sample authorization letter for the release of employee medical record information to a designated representative (Non-mandatory)

I, \_\_\_\_\_, (full name of worker/patient) hereby authorize \_\_\_\_\_ (individual or organization holding the medical records) to release to \_\_\_\_\_ (individual or organization authorized to receive the medical information), the following medical information from my personal medical records:

(Describe generally the information desired to be released).

I give my permission for this medical information to be used for the following purpose:

but I do not give permission for any other use or re-disclosure of this information.

(Note: Several extra lines are provided below so that you can place additional restrictions on this authorization letter if you want to. You may, however, leave these lines blank. On the other hand, you may want to (1) specify a particular expiration date for this letter (if less than one year); (2) describe medical information to be created in the future that you intend to be covered by this authorization letter; or (3) describe portions of the medical information in your records which you do not intend to be released as a result of this letter.)

Full name of Employee or Legal Representative

Signature of Employee or Legal Representative

Date of Signature