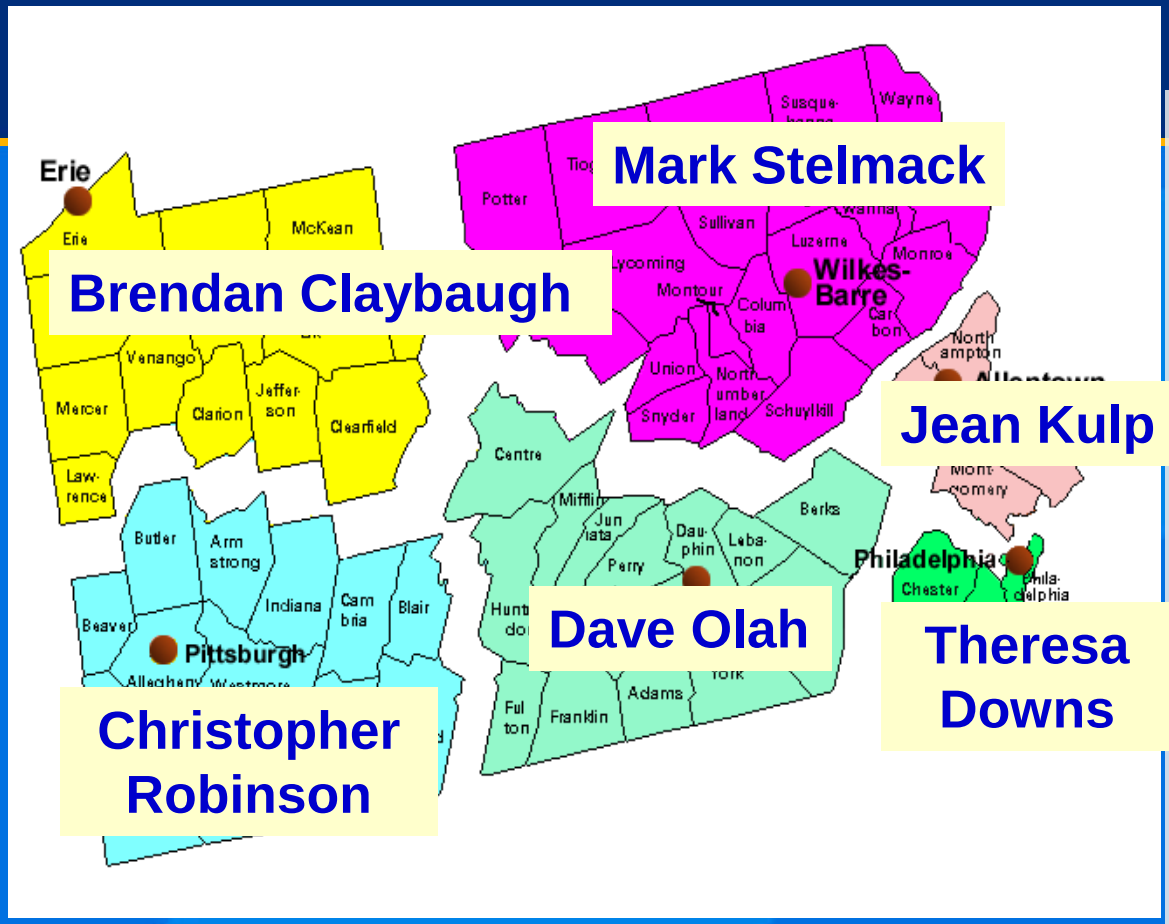
OSHA Silica Rule

November 16, 2016

11:00 to 12:00

Dale Glacken,
Compliance Assistance Specialist
Harrisburg Area Office

Pennsylvania OSHA Area Offices



Main OSHA Number:
1-800-321-OSHA,
1-800-321-6742

Allentown Area Office
(267) 429-7542
Erie Area Office
(814) 874-5150
Harrisburg Area Office
(717) 782-3902
Philadelphia Area Office
(215) 597-4955
Pittsburgh Area Office
(412) 395-4903
Wilkes-Barre Area Office
(570) 826-6538

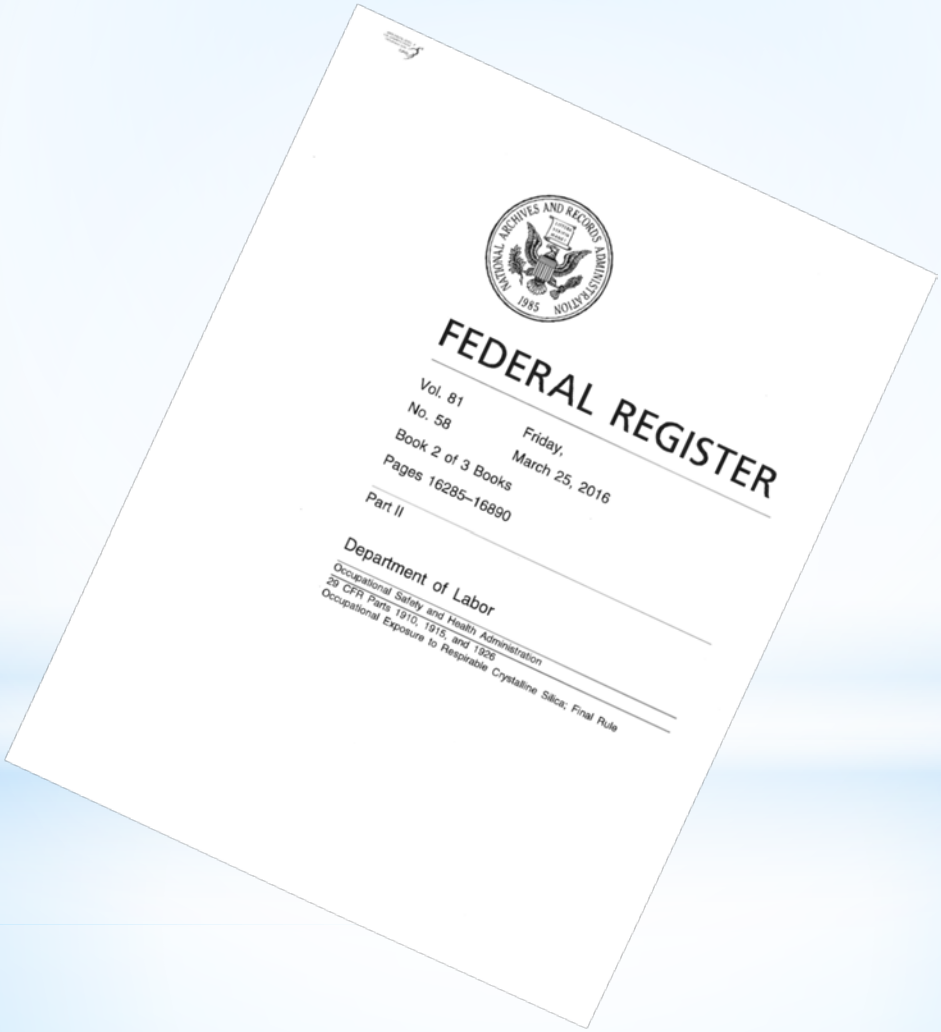
Silica: Regulatory Update

March 25, 2016

CAS Material Developed & Distributed

This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics ***[or hazards]***, it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at www.osha.gov.

Final Rule Published on March 25, 2016



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Reasons for the Rule

- Current permissible exposure limits (PELs) are formulas that many find hard to understand
- Construction/shipyard PELs are obsolete particle count limits
- General industry formula PEL is about equal to 100 µg/m^3; construction/shipyard formulas are about 250 µg/m^3

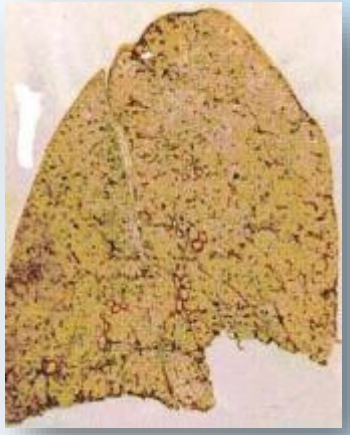
Most Important Reason for the Rule

- Current PELs do not adequately protect workers
- Extensive epidemiologic evidence that lung cancer and silicosis occur at exposure levels below 100 $\mu g/m^3$

Exposure and Health Risks

Exposure to respirable crystalline silica has been linked to:

- Silicosis;
- Lung cancer;
- Chronic Obstructive Pulmonary Disease (COPD); and
- Kidney disease
- Immune system effects



Healthy Lung

Silicotic Lung

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What are the hazards of crystalline silica?

- Fatalities and disabling illnesses
- Classified as a human lung carcinogen.
- An inhalation hazard. The respirable silica dust enters the lungs and causes the formation of scar tissue, thus reducing the lungs' ability to take in oxygen.
- There is no cure for silicosis.
- Silicosis affects lung function, it makes one more susceptible to lung infections like **tuberculosis.**
- In addition, smoking causes lung damage and adds to the damage caused by breathing silica dust.

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What are the Symptoms of Silicosis?

What are the symptoms of silicosis?

- Silicosis is classified into three types: chronic/classic, accelerated, and acute.

Chronic/classic silicosis,

- The most common, occurs after 15–20 years of moderate to low exposures to respirable crystalline silica.
- Symptoms associated with chronic silicosis may or may not be obvious; therefore, workers need to have a chest x-ray to determine if there is lung damage.
- As the disease progresses, the worker may experience shortness of breath upon exercising and have clinical signs of poor oxygen/carbon dioxide exchange.
- In the later stages, the worker may experience fatigue, extreme shortness of breath, chest pain, or respiratory failure.

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What are the Symptoms of Silicosis?

Accelerated silicosis

- Can occur after 5–10 years of high exposures to respirable crystalline silica.
- Symptoms include severe shortness of breath, weakness, and weight loss.
- The onset of symptoms takes longer than in acute silicosis.

Acute silicosis

- Occurs after a few months or as long as 2 years following exposures to extremely high concentrations of respirable crystalline silica.
- Symptoms of acute silicosis include severe disabling shortness of breath, weakness, and weight loss, which often leads to death.

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What Are the Symptoms of Lung Cancer?

In its early stages, lung cancer normally has no symptoms. When symptoms start to appear, they are usually caused by blocked breathing passages or the spread of cancer further into the lung, surrounding structures, other parts of the body.

Lung cancer symptoms may include:

- Chronic, hacking, raspy coughing, sometimes with blood-streaked mucus
- Recurring respiratory infections, including bronchitis or pneumonia
- Increasing shortness of breath, wheezing, persistent chest pain
- Hoarseness
- Swelling of the neck and face
- Pain and weakness in the shoulder, arm, or hand
- Fatigue, weakness, loss of weight and appetite, intermittent fever, severe headaches, and body pain
- Difficulty swallowing

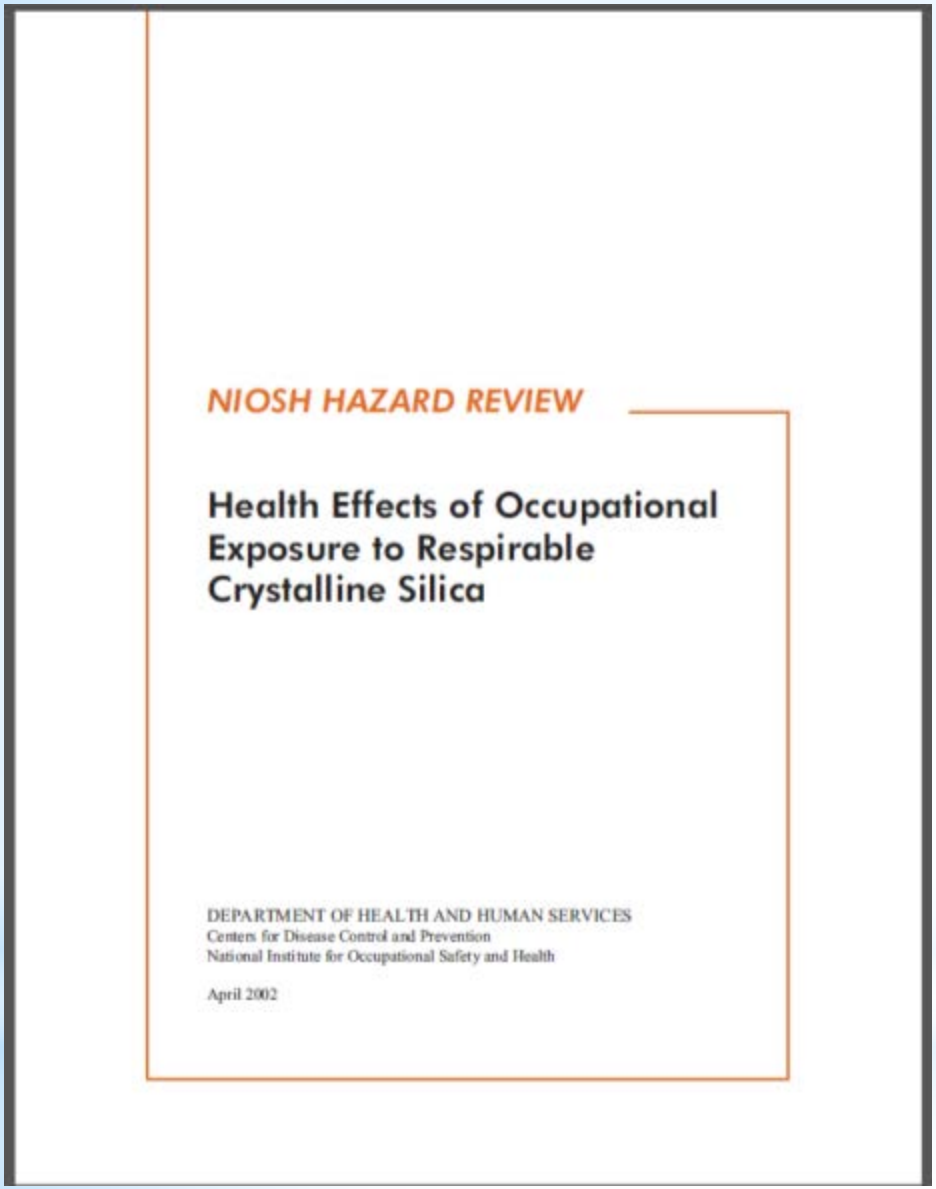
Chronic Obstructive Pulmonary Disease (COPD)

- COPD describes chronic airflow limitation that is usually irreversible.
- COPD includes four interrelated disease processes: chronic bronchitis, emphysema, (asthma), and peripheral airways disease.
- Cigarette smoking is a major cause of COPD, but community air pollution and occupational exposure to dust, particularly among smokers, also contribute to COPD.

Chronic Obstructive Pulmonary Disease (COPD)

Symptoms:

- You have a cough that won't go away.
- You often cough up mucus.
- You are often short of breath, especially when you exercise.
- You may feel tightness in your chest.



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http://www.cdc.gov/niosh/docs/2002-129/pdfs/2002-129.pdf

Health Benefits

OSHA estimates that once the effects of the rule are fully realized, it will prevent:

- More than 600 deaths per year
  - Lung cancer: 124
  - Silicosis and other non-cancer lung diseases: 325
  - End-stage kidney disease: 193
- More than 900 new silicosis cases per year

Scope of Coverage

- Three forms of silica: quartz, cristobalite and tridymite
- Exposures from chipping, cutting, sawing, drilling, grinding, sanding, and crushing of concrete, brick, block, rock, and stone products (such as in construction operations)
- Exposures from using sand products (such as glass manufacturing, foundries, and sand blasting)

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Industries and Operations with Exposures

- Construction
- Glass manufacturing
- Pottery products
- Structural clay products
- Concrete products
- Foundries
- Dental laboratories
- Paintings and coatings
- Jewelry production
- Refractory products
- Asphalt products
- Landscaping
- Ready-mix concrete
- Cut stone and stone products
- Abrasive blasting in:
  - Maritime work
  - Construction
  - General industry
- Refractory furnace installation and repair
- Railroads
- Hydraulic fracturing for gas and oil

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Workers and Industries Affected

- 2.3 million workers:
  - Construction: 2 million
  - GI/Maritime: 300,000
- 676,000 establishments
  - Construction: 600,000
  - GI/Maritime: 76,000

Respirable Crystalline Silica Rule

- Two standards:
  - One for general industry and maritime
  - One for construction
- Similar to other OSHA health standards and ASTM consensus standards

General Industry/Maritime Standard: §1910.1053 Respirable crystalline silica

a) Scope
b) Definitions
c) Permissible exposure limit (PEL)
d) Exposure assessment
e) Regulated areas
f) Methods of compliance
    1) Engineering and work practice controls
    2) Written exposure control plan
g) Respiratory protection
h) Housekeeping
i) Medical surveillance
j) Communication of silica hazards
k) Recordkeeping
l) Dates

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Construction: §1926.1153 Respirable crystalline silica.

a) Scope
b) Definitions
c) Specified exposure control methods

OR

d) Alternative exposure control methods
   1) PEL
   2) Exposure Assessment
   3) Methods of Compliance
e) Respiratory protection
f) Housekeeping
g) Written exposure control plan
h) Medical surveillance
i) Communication of silica hazards
j) Recordkeeping
k) Dates

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Construction - Scope

- All occupational exposures to respirable crystalline silica are covered, unless employee exposure will remain below 25 µg/m^3 as an 8-hr TWA under any foreseeable conditions.

Permissible Exposure Limit (PEL)

- PEL = 50 µg/m^3 as an 8-Hour TWA
- Action Level = 25 µg/m^3 as an 8-Hour TWA

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Exposure Assessment

- Required if exposures are or may reasonably be expected to be at or above action level of 25 µg/m^3
- Exposures assessments can be done following:
  - The performance option
  - The scheduled monitoring option

Performance Option

- Exposures assessed using any combination of air monitoring data or objective data sufficient to accurately characterize employee exposure to respirable crystalline silica

Objective Data

- Includes air monitoring data from industry-wide surveys or calculations based on the composition of a substance.
- It demonstrates employee exposure associated with a particular product or material or a specific process, task, or activity.
- Must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of material, control methods, work practices, and environmental conditions in the employer's current operations.

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Examples of Using Objective Data to Conduct Exposure Assessments under the Performance Option

1. **Industry-wide surveys** of typical tasks or operations, which include well-documented procedures for measuring exposures and methods for controlling dust, could be used by employers to characterize employee exposures where employees perform tasks consistent with those described in the survey.
2. Employers can use **direct-reading instruments** to measure real-time levels of respirable dust in the air. If the employer has information on the percentage of respirable crystalline silica in that dust (for example, from the analysis of a bulk sample or information from a safety data sheet), he or she can then calculate the level of respirable crystalline silica in air.
3. **Historical data**, which are monitoring results collected at any time before the effective date of the standard, could be used to assess employee exposures if the employer can show that the **data were collected during work operations and conditions that are consistent with the processes, types of material, control methods, work practices, and environmental conditions in the employer's current operations.**

Scheduled Monitoring Option

- Prescribes a schedule for performing initial and periodic personal monitoring
- If monitoring indicates:
  - Initial below the AL: no additional monitoring
  - Most recent at or above the AL: repeat within 6 months
  - Most recent above the PEL: repeat within 3 months
  - Reassessment: When two consecutive non-initial results, taken 7 or more days apart, are below the AL, monitoring can be discontinued
  - Reassess if circumstances change

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Construction - Employee Notification

- **1926.1153(d)(2)(vi)(A)**
- Within **five** working days after completing an exposure assessment in accordance with paragraph (d)(2) of this section, the employer shall individually notify each affected employee in writing of the results of that assessment or post the results in an appropriate location accessible to all affected employees.

Appendix A – Methods of Sample Analysis

- Employers must ensure that samples are analyzed by a laboratory that follows the procedures in Appendix A
- Appendix A specifies methods of sample analysis
  - Allows for use of OSHA, NIOSH, or MSHA methods
  - Analysis must be conducted by accredited laboratories that follow specified quality control procedures

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Methods of Compliance – Hierarchy of Controls

- Employers can use any engineering or work practice controls to limit exposures to the PEL
- Respirators permitted where PEL cannot be achieved with engineering and work practice controls

Engineering Controls

Grinding stone
without engineering controls

Polishing stone using water to control the dust

Engineering Controls

Grinding without engineering controls

Grinding using a vacuum dust collector

Engineering Controls (cont.)

Jackhammer use without engineering controls

Jackhammer use with water spray to control dust

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Controls

Best if controlled at the source.

- Wet cutting: Other considerations: freezing temperature, electrical safety
- Vacuum Dust Collection (VDC) (not as effective as wet cutting)
- Ventilation Booths
- Fans (not good by themselves, but supplement other control methods.
- Establish work rules and training to share expectations.

Construction - Written Exposure Control Plan

- The plan must describe:
  - Tasks involving exposure to respirable crystalline silica
  - Engineering controls, work practices, and respiratory protection for each task
  - Housekeeping measures used to limit exposure
  - **Construction: Procedures used to restrict access, when necessary to limit exposures**

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Respiratory Protection

- Must comply with 29 CFR 1910.134
- Respirators required for exposures above the PEL:
  - While installing or implementing controls or work practices
  - For tasks where controls or work practices are not feasible
  - When feasible controls cannot reduce exposures to the PEL
  - While in a regulated area (General Industry/Maritime)

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Housekeeping

- When it can contribute to exposure, employers must not allow:
  - Dry sweeping or brushing
  - Use of compressed air for cleaning surfaces or clothing, unless it is used with ventilation to capture the dust
- Those methods can be used if no other methods like HEPA vacuums, wet sweeping, or use of ventilation with compressed air are feasible

Construction - Medical Surveillance

- Employers must offer medical examinations to workers:
  - Who will be required to wear a respirator under the standard for 30 or more days a year.
- Employers must offer examinations every three years to workers who continue to be exposed above the trigger
- Exam includes medical and work history, physical exam, chest X-ray, and pulmonary function test (TB test on initial exam only)

Medical Opinion

- Worker receives report with detailed medical findings
- Employer receives an opinion that only describes limitations on respirator use, and if the worker gives written consent, recommendations on:
  - Limitations on exposure to respirable crystalline silica, and/or
  - Examination by a specialist

Communication of Hazards

- Employers required to comply with hazard communication standard (HCS) (29 CFR 1910.1200)
- Address: Cancer, lung effects, immune system effects, and kidney effects as part of HCS
- Train workers on: health hazards, specific tasks resulting in exposure, workplace protections, standard, and medical surveillance.
- Construction: Identify the Competent Person

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Under the Hazard Communication Standard

Employers must:

- Inform employees about the **general requirements** of HCS, as well as where and how they can view the written hazard communication program, lists of hazardous chemicals, and SDSs.
- Train employees on **how the presence or release of hazardous chemicals in the work area is detected**; in the case of respirable crystalline silica, this could include methods the employer uses to measure exposures, such as air sampling or objective data. If employers are using Table 1, they can train employees to recognize that an increase in visible dust is a sign that a control may not be working properly.
- Train employees on the **details of the workplace-specific hazard communication progra**m developed by the employer, such as container labels, the workplace labeling system, SDSs (including the order in which the information is presented), and how employees can get and use hazard information.

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Training Topics

Employees can demonstrate knowledge and understanding of at least:

1. Health hazards associated with respirable crystalline silica exposure.
2. Specific workplace tasks that could expose employees to respirable crystalline silica.
3. Specific measures the employer is implementing to protect employees. Specific for each task that each employee performs.
   a. The full and proper use of the controls on those tools; and
   b. Signs that controls may not be functioning properly.

   Laborers who do not operate equipment but are engaged in a task by helping the tool operator would only need to demonstrate knowledge and understanding of:
   a. The general types of controls used in the workplace,
   b. Work practices they perform as part of helping the tool operator,
4. The contents of the respirable crystalline silica standard.
5. The identity of the competent person designated by the employer.
6. The purpose and a description of the medical surveillance program required under the standard

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Recordkeeping

- Must maintain records per 29 CFR 1910.1020 for:
  - Air monitoring data
  - Objective data
  - Medical records

Construction - Compliance Dates

- Employers must comply with all requirements (except methods of sample analysis) by June 23, 2017
- Compliance with methods of sample analysis required by June 23, 2018

Construction - Specified Exposure Control Methods

- Table 1 in the construction standard matches 18 tasks with effective dust control methods and, in some cases, respirator requirements.
- Employers that fully and properly implement controls on Table 1 do not have to:
  - Comply with the PEL
  - Conduct exposure assessments for employees engaged in those tasks

Construction - Example of Table 1

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum APF	
		≤ 4 hr/shift	> 4 hr/shift
Hand-held power saw (any blade diameter)	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturers' instruction to minimize dust - When used outdoors - When used indoors or in an enclosed area	None APF 10	APF 10 APF 10

Example of Table 1 Entry

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum APF	
		≤ 4 hr/shift	> 4 hr/shift
Stationary masonry saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None

Example of Table 1 Entry

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum APF	
		≤ 4 hr/shift	> 4 hr/shift
Vehicle-mounted drilling rigs for rock and concrete	Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector. OR Operate from within an enclosed cab and use water for dust suppression on drill bit.	None None	None None

Example of Table 1 Entry

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours /shift	> 4 hours /shift
(xi) Handheld grinders for mortar removal (i.e., tuckpointing)	Use grinder equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	APF 10	APF 25

TABLE 1 – ASSIGNED PROTECTION FACTORS[5]

Respirator Type[1, 2]	Quarter Mask	Half Mask	Full Face	Helmet/Hood	Loose-Fitting
Air Purifying	5	[3]10	50	----------	----------
PAPR	---------- --	50	1,000	[4]25/1,000	25
SAR ▪ Demand ▪ Continuous Flow ▪ Pressure Demand/ other (+) pressure	---------- -- ---------- -- ---------- --	10 50 50	50 1,000 1,000	---------- [4]25/1,000 ----------	---------- -- 25 ---------- --
SCBA ▪ Demand ▪ Pressure Demand/ other (+) pressure	---------- -- ---------- --	10 ---------- --	50 10,000	50 10,000	---------- ---------- ----

NOTES TO TABLE 1 – ASSIGNED PROTECTION FACTORS[5]

- [1]May use respirators assigned for higher concentrations in lower concentrations or when required use is independent of concentration.
- [2]These APF's are only effective when employer has a continuing, effective respirator program per 1910.134.
- [3]This APF category includes filtering facepieces and elastomeric facepieces.
- [4]Must have manufacturer test evidence to support an APF of 1,000 or else these respirators receive an APF of 25.
- [5]These APFs do not apply to escape-only respirators. Escape respirators must conform to 1910.134(d)(2)(ii) or OSHA's substance specific standards, if used with those substances.
- {1910.134(d)(3)(i)(A)}

Construction - List of Table 1 Entries

- Stationary masonry saws
- Handheld power saws
- Handheld power saws for fiber cement board
- Walk-behind saws
- Drivable saws
- Rig-mounted core saws or drills
- Handheld and stand-mounted drills
- Dowel drilling rigs for concrete
- Vehicle-mounted drilling rigs for rock and concrete
- Jackhammers and handheld powered chipping tools
- Handheld grinders for mortar removal (tuckpointing)
- Handheld grinders for other than mortar removal
- Walk-behind milling machines and floor grinders
- Small drivable milling machines
- Large drivable milling machines
- Crushing machines
- Heavy equipment and utility vehicles to abrade or fracture silica materials
- Heavy equipment and utility vehicles for grading and excavating

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Fully and Properly Implementing Controls Specified on Table 1

- Presence of controls is not sufficient.
- Employers are required to ensure that:
  - Controls are present and maintained
  - Employees understand the proper use of those controls and use them accordingly

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Employees Engaged in Table 1 Tasks

- Employees are "engaged in the task" when operating the listed equipment, assisting with the task, or have some responsibility for the completion of the task
- Employees are not "engaged in the task" if they are only in the vicinity of a task

Respiratory Protection Requirements on Table 1

- Respirators required where exposures above the PEL are likely to persist despite full and proper implementation of the specified engineering and work practice controls
- Where respirators required, must be used by all employees engaged in the task for entire duration of the task
- Provisions specify how to determine when respirators are required for an employee engaged in more than one task

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Construction - Competent Person

- Construction employers must designate a competent person to implement the written exposure control plan
- *Competent person* is an individual capable of identifying existing and foreseeable respirable crystalline silica hazards, who has authorization to take prompt corrective measures
- Makes frequent and regular inspection of job sites, materials, and equipment

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Construction - Compliance Dates

- Employers must comply with all requirements (except methods of sample analysis) by June 23, 2017
- Compliance with methods of sample analysis required by June 23, 2018

Guidance and Outreach

- Silica Rulemaking Webpage: www.osha.gov/silica
  - Fact sheets
  - FAQs
  - Video
  - Small Entity Compliance Guide
- Appendix B – Medical Surveillance Guidelines
- Coming soon after publication:
  - PowerPoint template
  - Directive

UNITED STATES DEPARTMENT OF LABOR

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HOME / SILICA

OSHA's Final Rule to Protect Workers from Exposure to Respirable Crystalline Silica

Rule requires engineering controls to keep workers from breathing silica dust

The Occupational Safety and Health Administration (OSHA) has issued a final rule to curb lung cancer, silicosis, chronic obstructive pulmonary disease and kidney disease in America's workers by limiting their exposure to respirable crystalline silica. The rule is comprised of two standards, one for Construction and one for General Industry and Maritime.

OSHA estimates that the rule will save over 600 lives and prevent more than 900 new cases of silicosis each year, once its effects are fully realized. The Final Rule is projected to provide net benefits of about $7.7 billion, annually.

About 2.3 million workers are exposed to respirable crystalline silica in their workplaces, including 2 million construction workers who drill, cut, crush, or gri
operations such as brick m
been protecting workers fr

http://www.osha.gov/silica/index.html

About the Rule

- Read the Final Rule
- Regulatory Text for Construction Standard, with Table 1*
  - Sampling Methods (Appendix A)*
  - Medical Surveillance (Appendix B)*
- Regulatory Text for General Industry/Maritime Standard*
  - Sampling Methods (Appendix A)*
  - Medical Surveillance (Appendix B)*
- Overview of the Rule*
- Fact Sheet on Construction*
- Fact Sheet on General Industry/Maritime*
- Frequently Asked Questions*

Stay Informed

Register for Silica Rule Updates by Email
Submit a Question by Email

Video

https://www.osha.gov/Publications/OSHA3902.pdf

Work Safely with Silica

A ONE-STOP SOURCE OF INFORMATION ON
HOW TO PREVENT A SILICA HAZARD AND PROTECT WORKERS

About • Know the Hazard • Regulations & Requirements • What's New • Create A Plan

Search GO

Know the Hazard

Workers may be exposed to dangerous levels of silica dust when cutting, drilling, grinding, or otherwise disturbing materials that contain silica. These materials and tasks are common on construction jobs. Breathing that dust can lead to serious, often fatal illnesses. This section contains information that workers – and contractors – need to know to recognize the hazard, understand the risk factors, and work safely with silica.

Control the Dust

There are ways **contractors** can reduce the dust and reduce the hazard. This easy to use planning tool takes you step-by-step through conducting a **job hazard analysis for silica**, selecting appropriate controls, and creating a job-specific plan to eliminate or reduce silica hazards. You can save as a pdf, print and/or email your plan.

CREATE-A-PLAN

Training & Other Resources

Find silica-related handouts, fact sheets, videos, toolbox talks and other resources for workers and contractors.

What's Working

Contractors, workers, manufacturers, and researchers are on the lookout for the best ways to control silica dust. Learn what is happening in the field and share what you are doing.

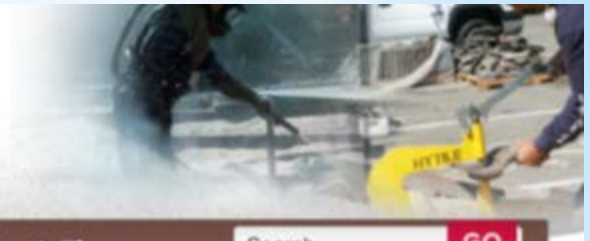
Ask a Question

Get answers to commonly asked questions about silica and ask one of your own.

http://www.silica-safe.org/

Work Safely with Silica

A ONE-STOP SOURCE OF INFORMATION ON
HOW TO PREVENT A SILICA HAZARD AND PROTECT WORKERS



What's Working

Controlling Silica Dust – Learning from Each Other

Videos

Tuckpointing Shroud *(approximately 1 minute); Tools of the Trade* -- Demonstration of the Dust Director Shroud attached to a Metabo grinder "that allows masons to remove mortar without creating choking clouds of dust."

Silica Control in Construction.wmv *(approximately 4 minutes); Georgia Tech's Safety and Health Consultation Program* - A brief introduction to common methods to reduce employee exposure to silica dust on a construction site.

Practical Solutions for Controlling Silica Dust: Using a Right-Angle Saw; *(2 videos – running time approximately 30 seconds each); State of New Jersey Department of Health* -- Exposure monitoring of a worker using a right-angle saw for overhead sawing of concrete without a dust control and with a vacuum dust control system.

Drywall Dust Engineering Control *(running time approximately 7 minutes); CPWR* -- Shows the use of a vacuum control to reduce dusts produced during drywall work using real-time monitoring.

Practical Solutions for Controlling Silica Dust: Using a Jackhammer; *(2 videos – running time approximately 4 minutes each); State of New Jersey Department of Health* -- Exposure monitoring of a worker using a jackhammer without a dust control and with a water-spray dust control system.

Engineering Controls for Silica in Construction: Jackhammer; *(2 videos running time approximately 10 seconds each); NIOSH* – Shows a worker using a jackhammer to break concrete without a dust control and with a water spray dust control attachment.

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Show

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http://www.silica-safe.org/whats-working/controlling-silica-dust-learning-from-each-other

Work Safely with Silica

A ONE-STOP SOURCE OF INFORMATION ON
HOW TO PREVENT A SILICA HAZARD AND PROTECT WORKERS

Create-A-Plan to Control the Dust

You do not need to register to use the planning tool, however, registering will allow you to **confidentially** save, retrieve, edit, rename or delete saved plans. Only you have access to your saved plans.

REGISTER

Returning users login below.

Email Password

LOGIN

Forgot your password?

CLEAR THE PLAN

Step 1. Will you generate dust containing silica on the job?

How does the Create-A-Plan tool work?

The materials listed below contain silica. Select all of the materials you plan to use. As you select a material a list of dust generating tasks will appear. Please select the task(s) that you will perform with the material.

- ☐ Asphalt
- ☐ Brick
- ☐ Cement
- ☐ Concrete
- ☐ Concrete Block
- ☐ Drywall
- ☐ Fiber Cement products
- ☐ Grout
- ☐ Gunite/Shotcrete
- ☐ Mortar
- ☐ Paints containing silica
- ☐ Plaster
- ☐ Refractory Mortar/Castables
- ☐ Refractory Units
- ☐ Rock
- ☐ Roof Tile (concrete)
- ☐ Sand
- ☐ Soil (fill dirt, top soil, soil w/ fly ash added)
- ☐ Stone (including: granite, limestone, quartzite, sandstone, shale, slate, cultured, etc.)
- ☐ Stucco/EIFS
- ☐ Terrazzo
- ☐ Tile (clay and ceramic)
- ☐ Material Other

CONTINUE

If you will not be using one of the materials listed above or another silica-containing material,
You Don't Need a Silica Control Plan.
If you are not sure if a material contains silica, there are several ways you can find out... learn more.

OSHA's Respiratory Protection Standard 29 CFR 1910.134 and 1926.103

Hazard Communication

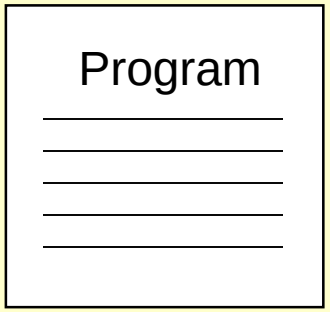
(HCS-2012)

1910.1200 and 1926.59

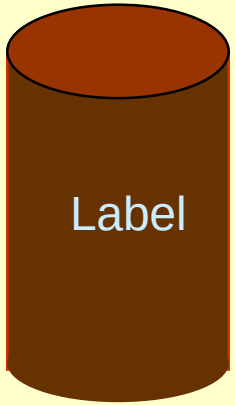
Purpose of OSHA's Hazard Communication (HCS-2012) Standard

To ensure that employers and employees know about work hazards and how to protect themselves so that the incidence of illnesses and injuries due to hazardous chemicals is reduced.

Hazard Communication Program

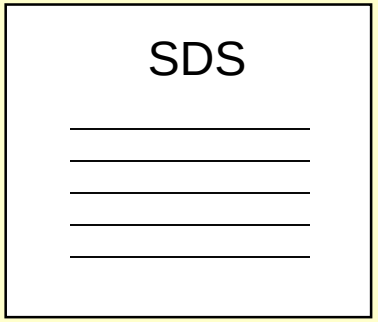


Container Labeling



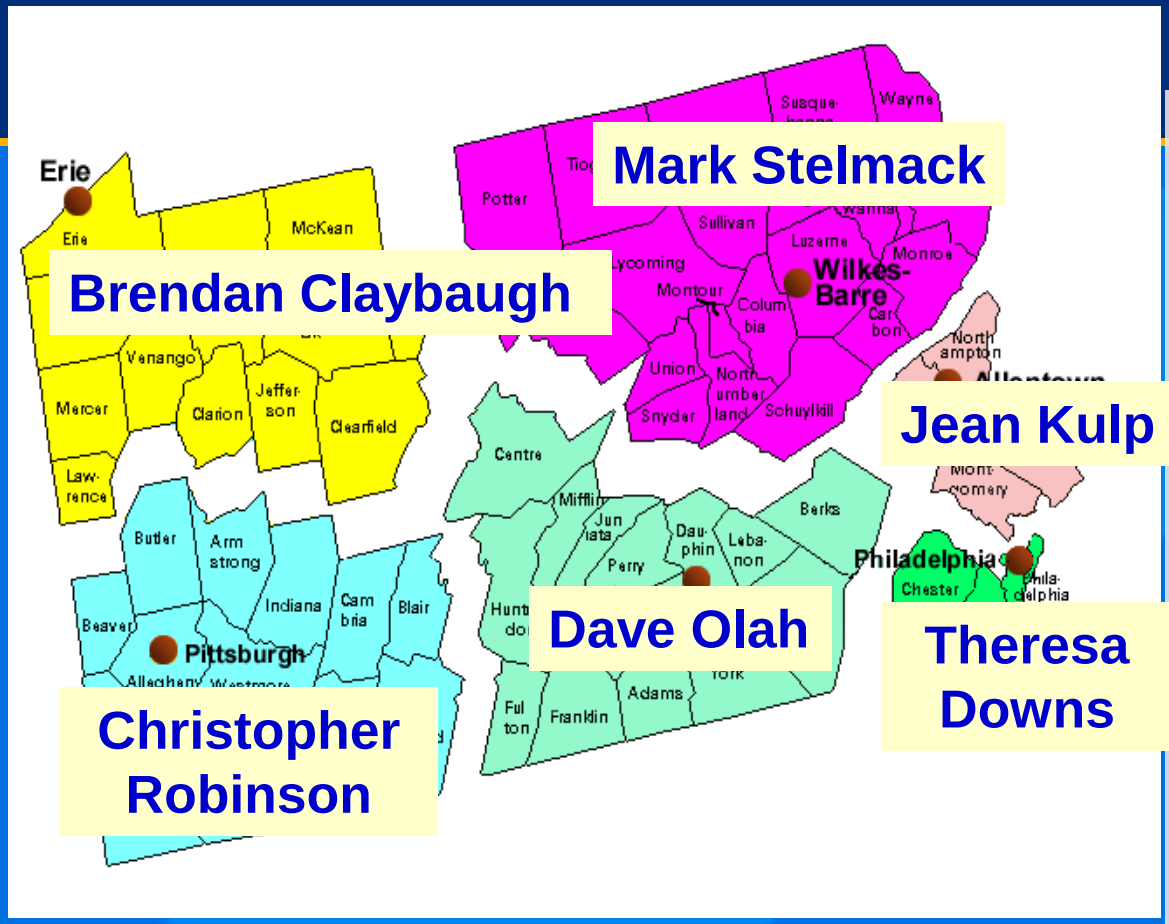
Safety Data Sheet +

Chemical List



EMPLOYEE TRAINING

Pennsylvania OSHA Area Offices



Main OSHA Number:
1-800-321-OSHA,
1-800-321-6742

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(267) 429-7542
Erie Area Office
(814) 874-5150
Harrisburg Area Office
(717) 782-3902
Philadelphia Area Office
(215) 597-4955
Pittsburgh Area Office
(412) 395-4903
Wilkes-Barre Area Office
(570) 826-6538

Area Offices

- Charleston West Virginia Prentice Cline
- Wilmington Delaware Erin Patterson
- Baltimore Maryland/DC Nadira Janack

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Additional Assistance

Harrisburg Area Office

Duty Officer Hours
8:00 am - 4:30 pm

(717) 782-3902

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Questions?


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