

## Respirable Crystalline Silica – How Do We Work Safely?

As the OSHA enforcement date for the new Respirable Crystalline Silica standard (29 CFR 1926.1153) approaches on September 23, 2017, the standard faces pending legal challenges, however, the need to protect the safety and health of workers across the construction industry has not changed.

About two million construction workers are exposed to respirable crystalline silica in over 600,000 workplaces. OSHA estimates that more than 840,000 of these workers are exposed to silica levels that exceed the new permissible exposure limit (PEL). Exposure to respirable crystalline silica can cause silicosis, lung cancer, other respiratory diseases, and kidney disease. Exposure can occur during common construction tasks such as using masonry saws, grinders, drills, jackhammers and handheld powered chipping tools; operating vehicle-mounted drilling rigs; milling; operating crushing machines; and using heavy equipment for demolition or certain other tasks.

Employers covered by the standard are required to:

- Establish and implement a **written exposure control plan** that identifies tasks that involve exposure and methods used to protect workers, including procedures to restrict access to work areas where high exposures may occur.
- Designate a **competent person** to implement the written exposure control plan.
- Restrict **housekeeping** practices that expose workers to silica where feasible alternatives are available.
- Offer **medical exams**—including chest X-rays and lung function

tests—every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.

- **Train workers** on work operations that result in silica exposure and ways to limit exposure.

- **Keep records** of workers' silica exposure and medical exams.

Workers need to:

- Know the hazards associated with respirable crystalline silica dust.
- Follow safe work practices and use all equipment provided to control dust. It won't work if it is not used.
- Participate in training, exposure monitoring, medical screening and surveillance programs.
- Wear disposable protective clothing or washable clothing. Avoid brushing or blowing the dust off, and avoid taking the dust home.
- Avoid eating, drinking, smoking, or applying cosmetics where silica dust



is present, and wash hands and face away from the dusty areas before these activities.

There are a number of resources available to employers, trainers, and workers on how to work safely with silica.

Working to protect workers and prevent silica hazards is the keystone of CPWR – The Center for Construction Research and Training's web resource for respirable crystalline silica, "Work Safely With Silica" ([www.silica-safe.org](http://www.silica-safe.org)) (see screenshot at left) where they outline what workers and contractors need to know to work safely with silica dust including knowing the hazards, regulations and requirements, and a tool for creating a written plan.

The Mechanical Contractors Association of America (MCAA) has developed web resources for understanding and training on the hazards of respirable crystalline silica at [www.mcaa.org](http://www.mcaa.org) including a video, pocket guide, safety bulletin summarizing the regulation, and a guide to silica safety.

For access to all of the MCAA safety resources, email your request with your name, title, phone number, and UA local to Pete Chaney, MCAA Director of Safety at [pchaney@mcaa.org](mailto:pchaney@mcaa.org).

Engineering controls such as dust collection tools and accessories are available from many sources. Here are just a few . . .

Hilti - Dust Control Products and Solutions: [www.hilti.com](http://www.hilti.com)

Milwaukee - Silica Dust Extraction Solutions: [www.milwaukeeetool.com](http://www.milwaukeeetool.com)

Dewalt - Dust Management: [www.dewalt.com](http://www.dewalt.com)