Weekly Safety Meetings
Safety Training for the Construction Industry

Standard Subscription

COMPANY NAME: _____

Volume 40 Issue 20 May 15, 2017

Silica

Silica is a common mineral found in many materials on construction sites, like soil, sand, concrete, brick, block, mortar, and granite. When we cut, chip, grind, drill into, or otherwise break or disturb these materials, crystalline silica particles can become airborne and create health hazards. OSHA has developed a new rule regarding silica which comes into effect this year. The best thing about the new rule is Table 1, which discusses dust and respiratory controls to help keep you healthy.

When they're airborne, tiny particles of silica can be inhaled into your lungs. Once you breathe them in, the particles can cause lung disease, lung cancer, kidney disease, and silicosis. Silicosis can be disabling, and even fatal. When silica dust enters the lungs, it can cause scarring that reduces the lungs' ability to take in oxygen. There is no cure for silicosis. And the damage caused by silicosis can make you more susceptible to other lung illnesses such as tuberculosis. It only takes a small amount of silica dust to create a big health hazard for you. If you are exposed to silica dust regularly, stop smoking. Smoking can further increase damage to your lungs.

OSHA's new construction standard (29 CFR 1926.1153) on silica goes into effect (with a few exceptions) on September 23rd of this year. The new rule reduces the permissible exposure limit (PEL) for respirable silica to 50 micrograms per cubic meter of air, averaged over an 8-hour shift. Table 1 in the new standard lists exposure control methods for common construction tasks. When you use specific dust control methods during specific silica-producing operations, your risk of inhaling silica goes down so much that it becomes unnecessary for the company to monitor or assess your exposure to silica dust. For example, if you are using a stationary masonry saw that has an integrated water delivery system to continuously douse the blade with water, silica dust will not become airborne, and you won't breathe it in.

Sometimes when the work you're doing is creating silica dust, you need respiratory protection even if you're using engineering controls. Table 1 lists the level of protection you'll need, depending on the kind of work and where you're working. In some cases, you may need an N95 or P95 particulate respirator.

So before you use a masonry saw, start removing mortar from a wall, finish drywall, or do any work that involves exposure to crystalline silica, be sure you have reviewed and understand your employer's silica protection program. Know what types of engineering controls and PPE you will need to work safely with silica on your jobsite. Then make sure you use the controls and wear the PPE to protect your lungs. And if you wear a respirator for more than 29 days a year, get checked out by your doctor.

SAFETY REMINDER

Most work that creates silica dust also creates a lot of noise. Protect your hearing with earplugs or ear muffs.

NOTES:

SPECIAL TOPICS /EMPLOYEE SAFETY RECOMMENDATIONS/NOTES:

S.A.F.E. CARDS® PLANNED FOR THIS WEEK:

REVIEWED SDS # SUBJECT:

MEETING DOCUMENTATION:

JOB NAME:

MEETING DATE:

SUPERVISOR:

ATTENDEES:

These instructions do not supersede local, state, or federal regulations.