

Crystalline Silica

The following information edited from USDOL PowerPoint "OSHA's New National Emphasis Program: Crystalline Silica" (2008)

Where Are There Workplace Exposures to Crystalline Silica?

- Solid dust particles generated from silica-containing materials by
 - Handling
 - Grinding
 - Blasting
 - Drilling
 - Crushing
- High historical exposures
 - Sandblasting
 - Mining (*regulated by MSHA*)
 - Tunneling
 - Granite cutting
 - Sand-casting foundry operations



Silica, Crystalline

What Are Some Possible Ways to Reduce Exposure?

- Substitute materials that have no crystalline silica
- Locate employees as far as possible from dust-generation source
- Isolate employees OR the source
 - Control rooms
 - Enclosures
 - Barriers
- Use local exhaust ventilation (LEV systems)
- Use tools with dust-collecting systems
- Use wet methods
 - Cutting
 - Chipping
 - Drilling
 - Sawing
 - Grinding
- Clean surfaces with HEPA vacuums or wet sweeping—*no compressed air!*
- And if other methods are not sufficient—

Use Proper Respiratory Protection

Resources

North Carolina Department of Labor (NCDOL):

Silica Fact Sheet

[http://www.nclabor.com/osha/etta/A to Z Topics/Silica.pdf](http://www.nclabor.com/osha/etta/A%20to%20Z%20Topics/Silica.pdf)

United States Department of Labor (USDOL):

Safety & Health Topics – Silica, Crystalline

<http://www.osha.gov/SLTC/silicacrystalline/index.html>

National Institute for Occupational Safety & Health (NIOSH):

Workplace Safety & Health Topics – Silica

<http://www.cdc.gov/niosh/topics/silica>

If you have questions, please contact ASU Occupational Safety & Health: 828-262-4008.

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