Silica During Concrete Demolition

TRADE: DEMOLITION & ABATEMENT | **LEADER GUIDE: 8-12 MINUTES** | **USE WHAT FITS TODAY**

LEADER NOTE
Do not read this sheet word-for-word. Pick the sections that match today's task, point to the actual equipment/work area, and get the crew to answer the questions out loud.

WHY THIS MATTERS

Before work starts, use this Silica During Concrete Demolition talk to cover respirable silica from breaking and cutting concrete. Point out the equipment, work zone and controls the crew will rely on today. Health hazards are easy to underestimate because the injury may not happen immediately. Dust, fumes, vapors, fibers and chemicals can build exposure over minutes, hours or years. The crew needs to know what the substance is, how exposure occurs and which controls come before PPE.

A SCENARIO TO DISCUSS
While performing Silica During Concrete Demolition, the HEPA, wet method, ventilation, containment, or other engineering control stops working effectively. PPE is still being worn. What is the correct response before exposure continues?

BEFORE WORK STARTS

- Identify the product/material and review the SDS, survey or task-specific exposure information before disturbance/use.
- Set up the engineering control first: ventilation, wet method, HEPA extraction, containment or another specified control.
- Verify required PPE/respiratory protection, hygiene and cleanup methods before exposure starts.
- Identify tasks that can generate respirable silica before cutting, grinding, drilling or disturbing concrete, masonry or similar materials.
- Use the required engineering controls such as water delivery or HEPA dust collection and verify they are working.

SAFE WORK SEQUENCE / CONTROLS

- Identify tasks that can generate respirable silica before cutting, grinding, drilling or disturbing concrete, masonry or similar materials.
- Use the required engineering controls such as water delivery or HEPA dust collection and verify they are working.
- Keep other workers out of the dust plume and use respiratory protection when required by the exposure-control method.
- Clean using HEPA vacuuming or other approved methods instead of creating a new dust cloud.

COMMON FAILURE POINTS

- Relying on a respirator or gloves while the engineering control is missing or ineffective.
- Disturbing a material before confirming what it is or how exposure is controlled.
- Using dry cleanup or compressed air that puts settled contamination back into the breathing zone.

STOP AND RESET IF...

- The material, contaminant or SDS is unknown, or the planned exposure control does not match the product/task.
- Ventilation, wet methods, HEPA collection, containment or other engineering controls are not working.
- Required respiratory/PPE program conditions cannot be met or a worker develops symptoms.

QUESTIONS THAT SHOULD CHANGE THE JOB

1. What material or contaminant are we actually dealing with, and what SDS, survey, label, or other information confirms it?
2. Which engineering control is doing the real work today: ventilation, wet method, HEPA collection, containment, or substitution?
3. What would tell us that control is not working well enough before someone receives a significant exposure?
4. After higher-level controls are in place, what PPE/respiratory protection is required and what are its limitations?
5. What is the correct response before exposure continues?

MAKE IT REAL ON THE JOB
Show the product/material, exposure-control equipment and cleanup method instead of only naming the PPE.

BEFORE YOU RELEASE THE CREW
Before the crew starts, everyone should be able to explain the hazard, point to the control being used today, and name the condition that would make the work stop.

Reference: 29 CFR 1926.1153 - Respirable Crystalline Silica

LidLog

ATTENDANCE & SIGN-OFF

Silica During Concrete Demolition

Project / Job:		**Date:**	
Talk leader:		**Location:**	

CREW ACKNOWLEDGMENT

By signing, attendees confirm they participated in this toolbox talk and had the opportunity to raise job-specific questions. Signatures do not replace required training, qualifications, permits or certifications.

#	Name	Company / Trade	Signature
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QUESTIONS / CONDITIONS / CORRECTIVE ACTIONS

END-OF-TALK CHECK

[ ] Crew can point to the main hazard.	[ ] Critical control is in place and usable.
[ ] The responsible person/check is clear.	[ ] Stop/re-brief conditions were discussed.