

Concrete drilling: control silica dust

Talk 05 of 52 | Week 5 | Health

Leader: adapt this talk to today's electrical work and site procedures. See the educational-use and liability notice on page 2.

START THE CONVERSATION

Drilling and cutting concrete can create respirable silica dust. Visible dust is a warning, but the absence of a visible cloud does not establish that exposure is controlled.

KEY TALKING POINTS

1. Review the employer's exposure-control plan before drilling, cutting, or grinding. The controls must match the tool and task.
2. Use specified water delivery or dust collection correctly. Check hoses, shrouds, filters, and water supply before work; stop if the control fails.
3. Keep nearby workers out of the dust exposure area and use the prescribed cleanup method. Avoid dry sweeping or compressed-air cleaning where prohibited by the silica standard.
4. When respiratory protection is required, follow the employer's respiratory-protection program, including applicable medical evaluation, fit testing, and training. A face covering is not a substitute.
5. Electrical job example: dozens of anchors are needed for conduit supports in a concrete ceiling. Discuss the complete sequence, including drilling, moving between locations, and collecting waste. Plan the dust controls before unpacking the drill, and coordinate with anyone working below or beside the operation.
6. Identify who checks the control equipment and where replacement components are available. A full container, damaged hose, or unavailable water supply can interrupt the approved method. Make the response clear: pause the dust-producing work and report the problem rather than finishing the remaining holes without the controls.
7. Ask how the work area will be handed back to the next trade. Assign cleanup to a named person using the approved method, and include tools and equipment affected by the task. Record questions about unfamiliar substrates or changed drilling methods for the supervisor instead of assuming yesterday's plan still applies.

ASK THE CREW

1. Which dust-control setup applies to today's task?
2. What will we do if extraction or water stops?

BEFORE WORK STARTS

Ask the supervisor to confirm the task-specific controls and cleanup method before work.

OSHA SOURCES / FURTHER READING

OSHA: Construction silica guidance

Attendance & action record

Concrete drilling: control silica dust

Date: _____ Leader: _____

Company / jobsite: _____

Site hazards and controls discussed:

Follow-up action / responsible person / due date:

EDUCATIONAL USE & LIABILITY NOTICE

Educational use and limitation of liability: Electrical Helps provides this material as general information, as is, without warranties of accuracy, completeness, or fitness for a particular task. It is not engineering, legal, or site-specific safety advice and is not OSHA-issued or approved training. Employers and users remain responsible for hazard assessment, qualified supervision, required training, safe work procedures, and compliance with applicable requirements and manufacturer instructions. Do not perform work beyond your training or authorization. To the fullest extent permitted by applicable law, Electrical Helps and its owners and contributors disclaim liability for injury, death, property damage, or other loss arising from use of or reliance on this material. Nothing here excludes liability that cannot lawfully be excluded, including liability for gross negligence or willful misconduct where prohibited, or waives statutory rights or employer duties. Attendance signatures acknowledge participation and receipt of this notice, not competency, certification, or a contractual release of claims.

Participant name	Signature / acknowledgment

Signatures record attendance and receipt of the notice above only. No attendance data is collected by the website. Keep the completed record according to your organization's procedures.