IMPORTANT NOTE TO CONSTRUCTION MANAGERS

Before delivering this toolbox talk ensure that:

- You have looked for ways to eliminate or reduce exposure to silica dust.
- You have undertaken a task specific risk assessment that identifies the tools, equipment, working practices and PPE required to adequately protect your workers and those that might be affected by the work
- If your workers are required to wear respiratory protection, make sure your workers have been face fit tested.

Construction Managers Toolkit

Let's Talk: Silica Dust

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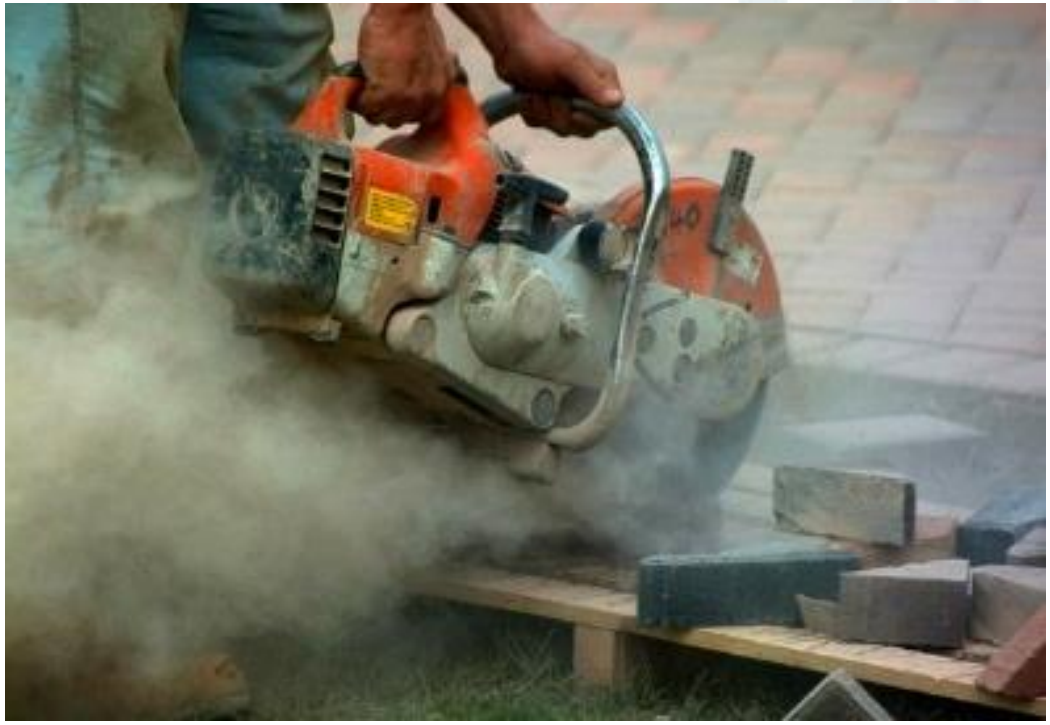
What's the issue with this picture?



Silica dust
Silica is a natural mineral found in many construction materials such as concrete and mortar. The silica is broken into very fine dust (also known as Respirable Crystalline Silica or RCS) during many common tasks such as cutting, drilling and grinding.

Anyone who breathes in these dusts should know the damage they can do to the lungs and airways. The main dust related diseases affecting construction workers are:

Lung cancer

Silicosis

Chronic Obstructive Pulmonary Disorder

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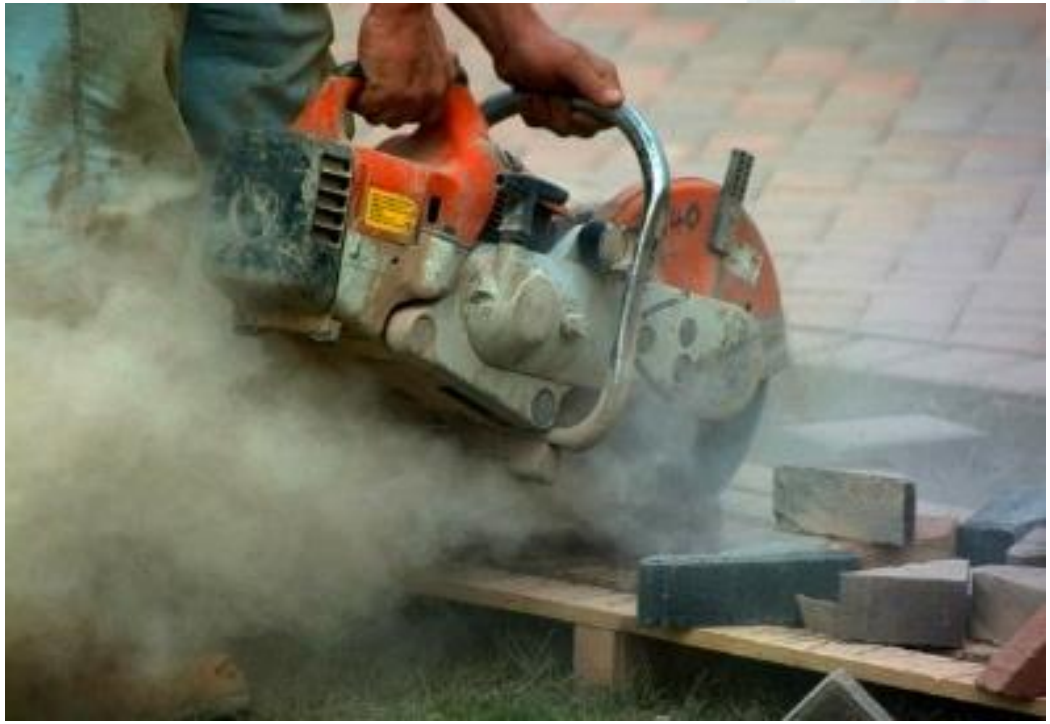
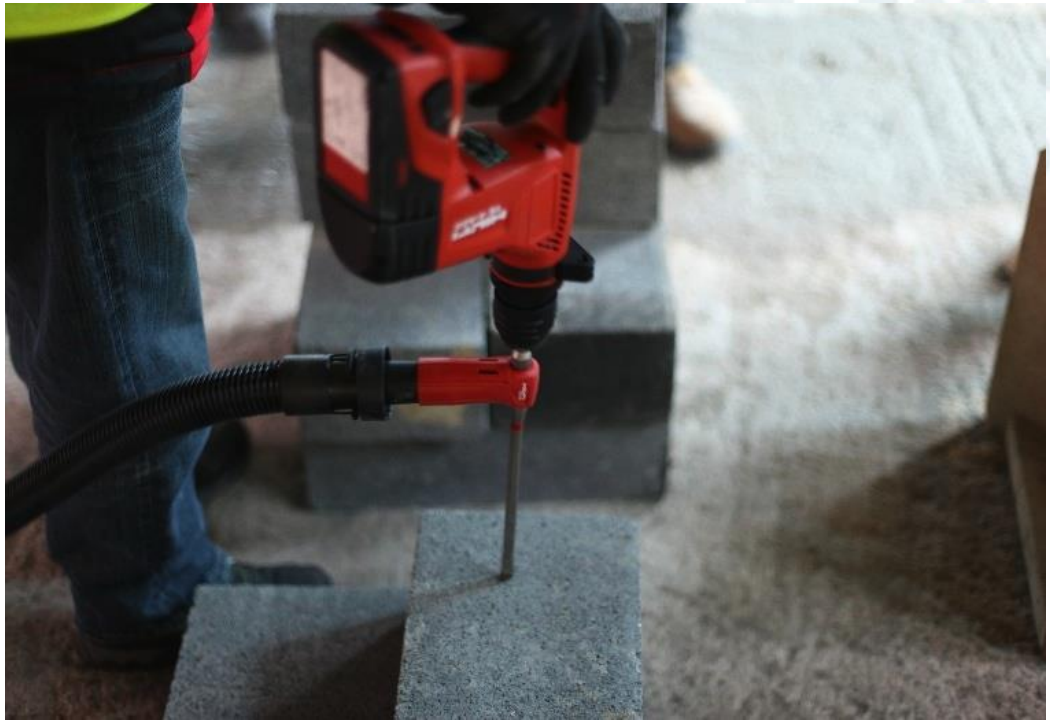


While some of lung disease like acute or accelerated silicosis can come on quite quickly, most take a long time. Often this is over years. They happen because during this time regularly breathing even small amounts of dust adds up and damages the lungs and airways. Unfortunately, by the time you notice the damage is often done and it is more difficult to treat. Construction workers have a high risk of developing these diseases because many common construction tasks can create high dust levels.

Approximately 429,000 Canadians are exposed to silica at work, primarily in the construction sector.

What can we do to protect you?



The most important thing is to stop the dust getting into the air. There are two main ways of doing this which both give very good results and must be followed even if you are outside:

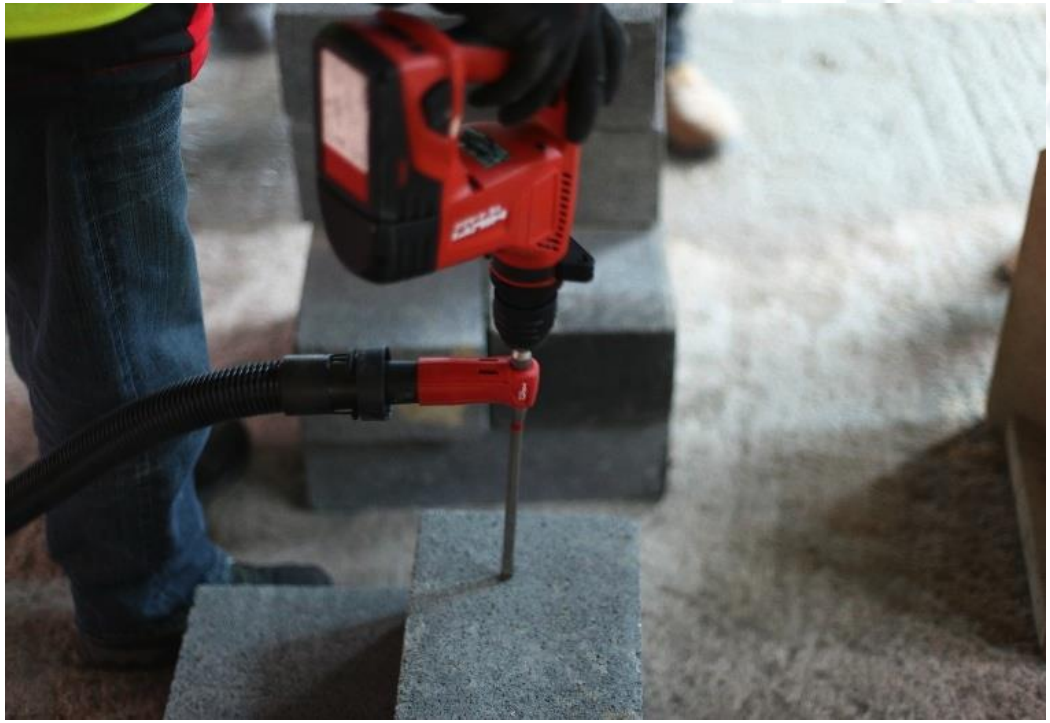
Water

Water damps down dust clouds. However, it needs to be used correctly. This means enough water for the whole time that the work is being done. Just wetting an area of ground before cutting does not work.

Vacuum Extraction

Specially designed tools can be fitted with an industrial vacuum unit that sucks the dust away as it is being created and stores it until emptied. We will make sure that this has the right filter for you.

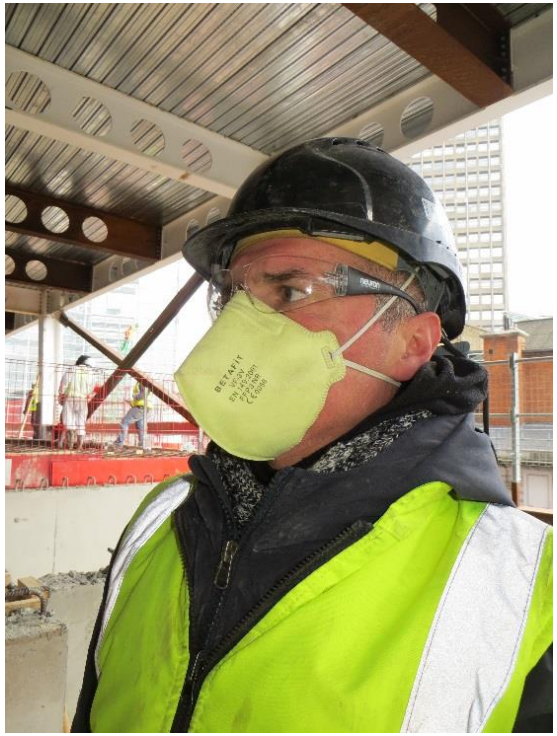
What can we do to protect you?



We will undertake an exposure risk assessment. Please make sure you understand how you need to protect yourself before you start work.

If you need to wear a mask, we will make sure it is suitable for the task and adequately protects you. We will also make sure you have been face fit tested.

What do you need to do?



Follow the instructions we have given to you, please use the vacuum or water as instructed. **Please ask if you don't know.**

Make sure no-one around you will be affected by your dust. Please make sure you have informed other workers if you are unable to do this away from other workers.

Wear the mask correctly, make sure that it fits correctly and is in good condition.

Keep your immediate work area as clean and tidy as possible, never dry sweep, either use a vacuum cleaner or dampen down first, sprinkling a bit of water from a bottle is not enough, make sure the dust is adequately damp first.

Report any damaged or defective equipment to your supervisor.

Report any breathing difficulties, chest pain/tightness to your supervisor.

Silica - a recap

1

Where might you be exposed to silica dust on a construction site?

Examples include – working with concrete, mortar, granite, drilling, cutting, grinding and demolition.

2

What control measures should be used to minimise the risk of exposure?

Use a vacuum or water suppression to stop the dust becoming airborne.

Personal protective equipment (PPE). Check and look after your PPE.

Always dampen down when sweeping work area.

Inform workers that are working around you if you are undertaking dust generating tasks.

3

Do you have everything you need to protect yourselves at work?

Construction Managers Toolkit

Visual Standards: Silica Dust

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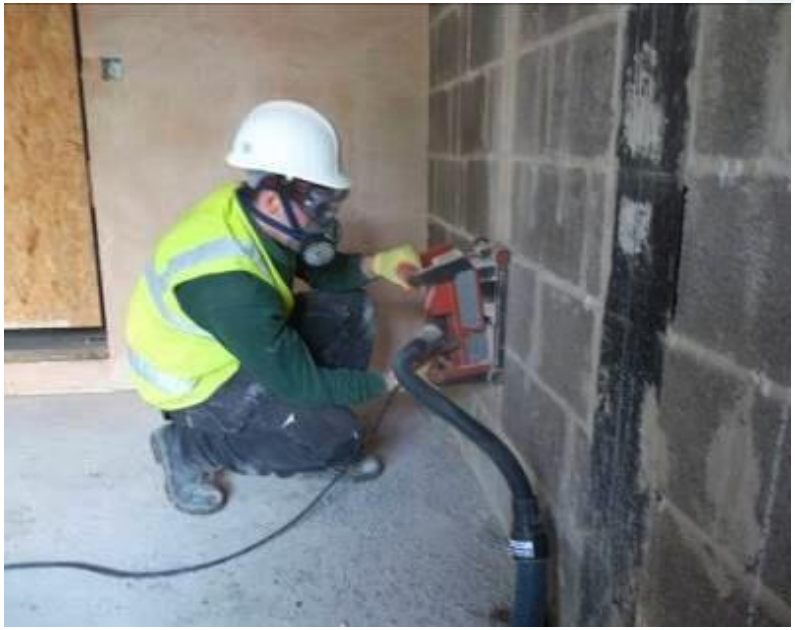
So what does good practice look like?

Visual standards demonstrate *'what good looks like'*.
They are intended to reinforce expectations of health and safety standards.

Visual Standard: **Silica**



Dust extraction systems - What good looks like

- Risk assessment used to determine the correct dust extraction system for the task.
- Operators are trained in using the equipment for the task.
- Extraction units emptied and filters replaced as per manufacturer's guidance.
- Equipment has been maintained regularly and inspected prior to use.
- Trained operators are face fit tested and wearing appropriate RPE for the task.
- Adjacent works are located at a safe distance.

Visual Standard: **Silica**

Water suppression systems - What good looks like

- Risk assessment used to determine the correct water suppression system for the task.
- Operators are trained in using the equipment for the task.
- Adequate flow rate and amount of water provided to effectively dampen down.
- Trained operators are face fit tested and wearing appropriate RPE for the task.
- Adjacent works are located at a safe distance.

Visual Standard: **Silica**

Correctly fitted Respiratory Protective Equipment (RPE) - What good looks like

- Hazardous substances are minimized where possible and RPE is worn as a last resort.
- RPE is suitable for the hazard, wearer, task and environment.
- Workers are face fit tested.
- Workers are clean shaven and mask straps correctly placed.
- Stored appropriately and properly maintained if reusable.

BREATHE FREELY

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www.breathefreely.ca