  **Silica**

 **What is Silica?**

#### **Did you know?**

Over 500 construction workers are believed to diefrom exposure to silica dust every year.

Silica is a natural mineral found in rocks, sand and clay. It is contained in many products used in construction such as bricks, concrete, mortar and sandstone. When cutting, drilling & grinding materials which contain silica, it is broken down into very fine dust (Respirable Crystalline Silica or RCS) which cannot be seen with the naked eye.

**How can Silica Dust Harm me?**

RCS particles travel into the deepest part of the lungs where they can build up in the air spaces in the lungs and lead to lung damage. By breathing in RCS you could develop:

* **Silicosis** makes breathing more difficult, results in a chronic cough and increases the risk of lung infections
* **Chronic obstructive Pulmonary Disease (COPD)** is a group of lung diseases including bronchitis & emphysema, result in severe breathlessness, prolonged coughing & chronic disability. Smoking can make it worse
* **Lung cancer.** If you already have silicosis, the risk of contracting lung cancer is greater.

**How much silica dust do I need to breathe in to cause harm?**

**How long does it take to develop these diseases?**

Advanced silicosis can come on quickly but most take a long time to develop. Dust builds up gradually over time and by the time the effects are noticed, the damage has often already been done. It could lead to permanent disability and early death.

**Two simple ways to reduce the amount of dust produced:**  **Don’t:**

* Dry sweep – use vacuum or wet cleaning
* Use compressed air for removing dust from surfaces clothing

**What can I do to protect myself?**

* always follow the Method Statement
* have a face fit test if you are required to wear a tight fitting mask,
* stay clean shaven as this will ensure that your mask seals well to your face
* know the correct way to use, clean, store and maintain your mask
* check your mask yourself before every use
* understand how to use and maintain the tools you use, particularly if fitted with on-tool extraction
* wash your hands before eating, drinking, or smoking

**Only a very small amount**.

The largest amount you should be breathing in a day *(after all control measures have been put in place)* is shown here

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**Tool Box Talk Guidance**

**What qons**