

HEALTH, SAFETY AND ENVIRONMENTAL NEWSLETTER



SPOTLIGHT ON...

Construction Dust

- **SILICA DUST:** created when working on silica-containing materials like concrete, mortar and sandstone (AKA Respirable Crystalline Silica or RCS), especially when cutting, drilling and grinding.
- **NON-SILICA DUST:** created when working on materials containing very little or no silica. The most common include gypsum (eg in plasterboard), limestone, marble and dolomite. This dust is also mixed with silica dust when cutting things like bricks.
- **WOOD DUST:** created when working on softwood, hardwood and wood-based products like MDF and plywood.

Breathing in these dusts damages your lungs and airways. The main dust related diseases affecting construction workers are:

- Lung Cancer
- Silicosis
- Chronic Obstructive Pulmonary Disorder (COPD)
- Asthma

Some lung diseases can come on quite quickly, but many can take years, because regularly breathing even small amounts of dust adds up over time and damages the lungs and airways. Unfortunately, by the time you notice the damage is often done and is more difficult to treat.

HSE research estimates silica may be responsible for the deaths of over 500 construction workers each year and that around 4,000 people die every year from work-related COPD.

Face Fit Testing

- If face masks are not worn correctly they will not protect you!
- Face fit tests check the fit of the mask and how well it seals.
- If you are not clean-shaven, your mask will be ineffective for work and for the face fit test. Inform your employer if you have an unavoidable reason for not being clean-shaven at work.
- Testing must be carried out by a competent person and a certificate produced.
- A test is required for each make of mask you use and is valid for up to 5 years unless your facial features change significantly.
- If you use a mask and haven't been tested, tell your Supervisor.

Know Your Limits

To protect your lungs, there are legal limits on the amount of these dusts that you can breathe (called Workplace Exposure Limit or WEL).



As an example, this image shows the maximum amount of **silica** you can breathe when averaged over a normal working day, **after** the correct controls have been used compared to a penny.

What can YOU do?

Limit amount of dust you may make before starting work. For example you could:

- Use the right size of building materials so less cutting or preparation is needed.
- Use a less powerful tool – eg block splitter instead of cut-off saw.
- Use a different method of work altogether – e.g. use a excavator mounted breaker instead of hand held.

Where the above isn't practical/possible, **always try to stop the dust getting into the air.**

- **Use water CORRECTLY** to damp down dust clouds. This means enough water all the time the work is being done. **Don't** just wet an area of ground before cutting.
- **Use vacuum extraction** – specially designed tools can be fitted with an industrial vacuum unit to suck dust away as it is created and store it until emptied.
- **Wear face masks** – when using cut-off saw, grinder or wall chaser on material containing silica, you must **also** wear a face mask (FFP3 min). Replace it at least daily.
- Get **Face Fit Tested** for each type of mask you use.
- Wear synthetic fabrics as these won't keep retain dust.
- Stay away from and up-wind of any dust clouds on site. Report it to your Site Manager.
- Open air working is not sufficient to reduce the risk.
- Short-term/quick tasks can still expose you to harm over days, weeks, months, years.

Safe Use of Stihl Saws/Disc Cutters/Floor Saws



- Wear safety footwear, hard hat, high-vis, eye protection, ear protection, gloves and dust mask (minimum FFP3). Those close-by must also wear the same PPE.
- Check equipment for signs of leaks, wear and damage before starting work. Ensure blade is attached securely and is correct blade for the material to be cut.
- Report any problems or faults to Supervisor – don't carry on working regardless.
- Area to be cut must be free of debris and dust suppression kit must be used.
- Never cross hands when operating. Follow manufacturer's guidance at all times.
- Do not use for more than 1 hour at any one time – rotate workers throughout day.
- Refuel in open area away from cutting site with dry powder fire extinguisher nearby.
- After operation, always secure against unauthorised use.