TOOLBOX TALK
NO.51

Working with Lead

Lead can be found in construction workplaces. It is usually used as a specialist material and exists in older buildings (e.g. in paint). Lead can cause serious health problems such as anaemia or kidney disease and research has linked exposure to a small number of occupational cancers.

What you must do?

Identify the tasks where you are going to use lead or create lead dust or fume. Pay particular attention to situations where substantial exposure is expected. This may include:

- Stripping or preparing leaded paint from doors, windows etc. Lead pigments were widely used in paints for homes, schools, offices etc. until the 1960s.
  It was not removed from all commonly used paint until the early 1980s. Therefore, it can be found underneath existing paintwork in older buildings
- blast removal of old leaded paint

Prevent:

Leave in place paintwork that is in good condition and / or covered by non-leaded paint. Only strip back old paint if it is flaking, chipping, giving off dust/ particles or is a risk to children

Control: Even if you reduce some of the risk this way, you may still do other work that might involve exposure to lead.

Control the risk by:

Work Method – limit the amount of dust or fumes you produce. Consider using one or more of the following methods:

- chemical paint stripper
- wet abrasive paper and scraper
- on-tool extraction with an H or M class extraction unit
- infrared equipment or a hot air gun and scraper
- **Respiratory Protective Equipment (RPE)** – wear RPE with an assigned protection factor of 20 (e.g. FFP3 disposable mask or half mask with P3 filter). For longer duration work consider powered RPE with the same protection (e.g. TH2 powered hood / helmet). Make sure any RPE is compatible with other protective equipment. Fit testing is needed for tight fitting masks.
- **Preventing spread** – use additional controls to prevent dust or fume spreading – e.g. plastic sheeting to separate the work and cover surfaces. Remove or protect soft furnishings. Thoroughly wash / clean surfaces and dispose of contaminated waste safely. Pay particular attention to keeping children and pregnant women away from the work area.
- **Clothing –** wear disposable coveralls and use washable or disposable gloves if there is likely to be lead dust contamination. Remove these when leaving the work area. Do not wear them in rest areas and keep them away from personal clothing worn outside of work. Avoid washing contaminated clothing at home.

- **Washing** – washing is an important control. In many cases, standard site welfare facilities will be enough. Workers should ensure they:
    - Wash hands and forearms before eating, drinking, smoking, using the telephone, taking medication etc.
    - avoid hand-mouth contact when in contaminated areas
- **Breaks** – avoid contamination by taking rest and meal breaks away from the work area.

Train: Make sure you have read and understood the guidance

Review

Supervise: Ensure that controls such as work methods, PPE and welfare are effective and used by the workers. Anyone wearing tight fitting RPE needs to be clean shaven and face fit tested.

Maintain: Make sure that there is enough water, plastic sheeting, and clothing etc. and equipment is properly maintained.

Monitor: Appropriate medical surveillance is needed if workers have significant exposure.

What you should know

You can absorb lead into your body when you breathe in lead dust or fume. You can also swallow lead dust and debris for example if you eat, drink, and smoke or bite your nails without washing your hands or face. Any lead you absorb will circulate in your blood. Your body gets rid of a small amount of lead each time you go to the toilet, but some will stay in your body, stored mainly in your bones. It can stay there for many years without making you ill.

If the level of lead in your body gets too high, it can cause symptoms such as headaches, tiredness, and irritability, anaemia or stomach pains. Continued uncontrolled exposure can cause more serious problems like kidney, nerve and brain damage, and even possibly cancer.