Asbestos Exposure Safety Talks



Safety Talk

WHAT'S AT STAKE?

Asbestos is a naturally occurring mineral, which was long valued for its strength and heat resistance, making it the material of choice for insulation and fireproofing, until a few decades ago.

To make buildings safer and stronger, builders and engineers added it to the cement underfoot, the ceiling tiles overhead and many other construction materials. It found numerous applications in manufacturing and in the military as well.

Exposure studies reveal a lot about the health effects of asbestos including who may be at risk of developing an asbestos-related disease. These exposure studies focus on specific types of asbestos work. They uncovered how much exposure translates into cases of disease among the workers.

For example, insulators are among the most studied population of asbestos workers because exposure levels were high in this field of work.

Studying asbestos insulators tells us a lot about what can happen when a person is exposed to high levels of asbestos for years.

- A 1990 study published in Annals of the New York Academy of Sciences reported on insulation workers with 20 years of experience. More than 80 percent developed asbestosis and 40 percent died of asbestos-related diseases.

Some exposure studies have evaluated the risk of disease among people who live in a contaminated area. For example, studies have been conducted on Libby, Montana. The town is home to an asbestos-contaminated vermiculite mine that closed in 1990.

- A 2013 study by the National Institute of Environmental Health Sciences found 18 to 20 percent of adult residents in Libby have asbestos-related disease.

WHAT'S THE DANGER?

- Asbestos still kills around 5000 workers each year, this is more than the number of people killed on the road.
- Around 20 tradesmen die each week as a result of past exposure

- However, asbestos is not just a problem of the past. It can be present today in any building built or refurbished before the year 2000.

When materials that contain asbestos are disturbed or damaged, fibres are released into the air. When these fibres are inhaled they can cause serious diseases. These diseases will not affect you immediately; they often take a long time to develop, but once diagnosed, it is often too late to do anything. This is why it is important that you protect yourself now.

Asbestos can cause the following fatal and serious diseases:

Mesothelioma

Mesothelioma is a cancer which affects the lining of the lungs (pleura) and the lining surrounding the lower digestive tract (peritoneum). It is almost exclusively related to asbestos exposure and by the time it is diagnosed, it is almost always fatal.

Asbestos-related lung cancer

Asbestos-related lung cancer is the same as (looks the same as) lung cancer caused by smoking and other causes. It is estimated that there is around one lung cancer for every mesothelioma death.

Asbestosis

Asbestosis is a serious scarring condition of the lung that normally occurs after heavy exposure to asbestos over many years. This condition can cause progressive shortness of breath, and in severe cases can be fatal.

Pleural thickening

Pleural thickening is generally a problem that happens after heavy asbestos exposure. The lining of the lung (pleura) thickens and swells. If this gets worse, the lung itself can be squeezed, and can cause shortness of breath and discomfort in the chest.

HOW TO PROTECT YOURSELF

Educate yourself about the risks of asbestos exposure in your line of work, and then make sure your employer has policies and procedures in place to evaluate jobsites and prevent exposure.

It is a requirement that all employees who perform work that could disturb asbestos be able to identify potential asbestos containing material, the health risks associated with exposure, and the necessary precautions to be taken when working around asbestos. Our training course is designed for constructors, employers, supervisors and workers involved in building maintenance, repair, or alteration.

4 easy ways to keep yourself safe while working near asbestos

1. **Think asbestos**

- Has the site been checked for asbestos?
- Know the materials you are working with – is there a chance they might contain asbestos e.g.
- Roof panels, soundproof panels, heat resistant materials?

- Stop work if you think there might be asbestos present in the material you are working with and report it to the site manager.

2. **Levels of protection**

- You’re at a low risk of asbestos exposure if you are working alongside but not disturbing asbestos sheets or products. In this case.
- No protection is needed but you should be made aware that asbestos is present.
- Your employer should have an exposure minimization plan in place.
- You’re at a moderate risk of exposure if you’re using power tools to cut asbestos product or removing asbestos products that risk breaking. In these situations:
- PPE and a respirator are needed, with dust extraction measures at the site.
- Warning signs must be posted around the area to warn of exposure risk.
- Protective polythene sheeting should be put down.
- Wet methods of sweeping, mopping, or vacuuming dust must be used.
- All asbestos containing material must be disposed of dust per regulatory requirements.
- Asbestos abatement workers have a high level of exposure risk and additional levels of protection and training are required.

3. **Clothing and handling considerations are important because asbestos fibers can leave the site on clothing and footwear and be breathed in by family or the public.**

- Protective clothing must include the head and feet, such as lace-free footwear or boot covers.
- A coverall designed to prevent asbestos fibers from getting in with a snug fit to the neck, wrists and ankles should be used.
- PPE should be disposable if possible.
- If not:
- PPE should ONLY be removed on site.
- Washing must only be done in laundries specifically set up for handling asbestos-contaminated clothing.

4. **Breathe clean air.**

- DO NOT USE single use, or disposable respirators during work with asbestos.
- Air purifying masks that filter asbestos fibers out of the air may be suitable in some cases. Remember to change and dispose of filters per manufacturer’s instructions.
- In many cases a full-face air supplying respirator is required to provide maximum protection.

The first step in protecting yourself is to understand where asbestos can be found. Such as, floor tiles, fire doors, pipe and boiler wrap, cementing compounds used in plumbing, older shingles and siding, brake linings and clutch pedals.

The next step is to know what operations will cause asbestos fibers to break apart, crumble, or otherwise become airborne. This is when you are in danger of breathing the fibers in. Drilling, grinding, buffing, cutting, sawing, and striking, all have the potential to release asbestos fibers from asbestos-containing materials.

The final step in protecting yourself? If you suspect the presence of asbestos, report it immediately to your supervisor. Only a qualified, licensed contractor should identify, handle, remove, and dispose of asbestos containing material. Isolate the area in the meantime to prevent others from possible exposure.

FINAL WORD

It is imperative that our industries undertake the right engineering and administrative control to identify asbestos laden substances and materials in our society.