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Beyond the news and controversy

Keeping you safe from Asbestos

The last few years have brought extensive amounts of news coverage about all things Asbestos; schools being shut down, offices being cleared and stories of home renovations gone awry. But beyond the news stories and fear, do you truly understand how Asbestos can affect your health, how to spot it and what you can do to stay safe?

We do.

That's why we've spent decades keeping you informed on potential risks and improving respiratory protection products that help keep your lungs out of harm's way. Whether you work in the construction industry, handle insulation products, install roofs and tiles, manipulate clutch pads or are taking on ambitious home renovations, Asbestos could pose a serious threat for your lungs and overall health. Here's an overview of what you need to know about Asbestos to stay safe.

Magnification of Asbestos

What is Asbestos?

Asbestos is an umbrella term for a group of fibrous silicate minerals found abundantly in nature. In the past, it was widely used in commercial applications and construction because its length and strength make it very heat resistant, great at insulating surfaces and easy to weave within other materials and products.

There are two main types of Asbestos, serpentine and amphiobole. Serpentine fibres are long, flexible, and curved, which makes them popular in manufacturing. Amphiobole fibres are straight and stiff, and that makes them brittle and more liable to break. It's precisely when these bundles of fibres break that your lungs become at risk.

How could it affect me?

Repeated and long-term exposure to Asbestos has been directly linked to lung cancer, mesothelioma and other pulmonary issues. Amongst the most common is Asbestosis, a chronic lung disease that creates scar tissue in the lower part of the lungs, diminishes lung flexibility and makes it increasingly hard to breathe. Common initial symptoms of Asbestosis include difficulty breathing, what's called a "cackle" sound upon breathing in, finger clubbing and a bluish skin colouration. Asbestos exposure at high concentrations can also lead to an enlargement of the heart due to the increased resistance of blood flow through the lungs.

In evaluating all of these risks, there are five main elements to be considered:

- The level and length of exposure
- Time elapsed since exposure
- Age at which you were exposed
- Smoking habits
- Type and size of Asbestos fibre

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When am I at risk?

You're likely to inhale Asbestos any time the fibres are cracked or disturbed. This is a particular risk with friable Asbestos, Asbestos that is crumbly or loose in composition, because it becomes airborne more easily. Given its heat-resistant and insulating properties, you're more likely to come in contact with Asbestos fibres when handling roofing materials, floor tiles, insulation materials, heating systems, electric and sound insulation products, automobile friction materials such as clutch pads, and many more.

Although Asbestos has been banned in 39 countries since 1983, Canada still produced and used it heavily until then, so working in any structure that was built before the mid-80s puts you at higher risk. The federal and provincial government has set up strict safety and exposure guidelines to manage the perils posed by airborne Asbestos, but given how widespread this fibre is, we strongly recommend wearing protective gear any time you work with traditional materials or older buildings.

What can I do to protect myself?

Know where to look

Asbestos looks fairly unique and can sometimes be spotted with the naked eye. Look for white, fibrous material around air conditioning systems, under carpets and ceilings, in closet linings, on roof boards, around pipes and in any insulation boards or materials.

Get the equipment you need

Given the popularity and pervasive presence of Asbestos, it's particularly important to have the right protective gear within reach at all times. At the very least, a NIOSH-approved respirator featuring a particulate filter should be worn any time there's potential risk for exposure.

For higher exposure levels, 3M has a full line of products ranging from lightweight disposable respirators to full-face respirators and heavy-duty powered respiratory equipment. All of our products are equipped with advanced electrostatic media technology to let you breathe comfortably while keeping dangerous fibres and particles away from your lungs.

You can always get in touch with one of our respiratory experts for personalized guidance on protective gear and risk avoidance. We can help you mitigate exposure risks so you can focus on what truly matters to you: your work, your health and your family.

Did you know?

Approximately 650,000 Canadians are regularly exposed to Asbestos in their workplace. Among the most at risk are those working in specialty trades, construction or automotive repair and maintenance. Here's a list of a few of the jobs that are routinely in contact with this dangerous fibre.

ASBESTOS Exposure in **CANADA** → **650,000** Workers (Est.)

Four Largest Exposure Groups By Industry	Number Exposed
Construction	**316,000**
Auto Repair & Maintenance	**181,000**
Carpentry	**163,000**
Plumbing	**68,000**

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