

Personal Safety

Real Accidents, Real Stories: Occupational Respiratory Illness

Brought To You by National Marker Company | Mar 14, 2018

It's often the things you can't see that end up hurting you the most. Take, for instance, the dust that pours into the air while you drill into rock. The silica doesn't seem harmful at first, but continuous exposure to it is extremely fatal.

Exactly how deadly is it?

According to the National Institutes of Health, silicosis, a respiratory illness created by exposure to silica, was a contributing cause to 74 million deaths between 1968 and 2002. To put that in context, that's the same number of people living in California, Texas and New Jersey combined.

Respiratory illnesses are so dangerous in the workplace because they aren't as blatant as factory explosions or mechanical accidents. An employee who hasn't worked in a factory in 20 years could drop dead due to a disease they contracted because of a lack of access to safety gear years before. This is why respiratory threats are commonly ignored, and why it's important factories, construction sites and textile mills provide proper training and personal protection equipment to their employees.

Respiratory illnesses from real workplace environments

Factories are rarely held responsible for their blatant disregard for employee respiratory health unless they are caught red-handed. This has led to some of the worst industrial catastrophes, such as the ***Hawk's Tunnel Disaster***, a worksite near Gauley Bridge, West Virginia, that killed an estimated 750 to 2,000 employees, out of a total 5,000 employees, within just a few years. It was a historic event that forever set the standard for employee safety when it came to drilling, mining or any type of work that involved dust. Silica still endangers 2.2 million workers a year, OSHA reported.

Respiratory illnesses derived from occupational hazards often take so long to develop that they don't become the factory's responsibility, but instead the executive staff at the time. This happened in Milan, Italy, according to the BBC. In 2015, ***11 former board members of Pirelli***, a highly respected Italian tire company, were convicted of manslaughter for the 20 deaths of workers that were employed in their factory between 1979 and 1989.

 **"Silica dust endangers 2.2 million workers per year."**

Relatives of the deceased fought hard for the courts to recognize the conditions of the factories at Pirelli directly contributed to their family members' deaths years down the line. All of the deaths were linked to asbestos exposure.

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OSHA recently brought the hammer down after remaining quiet on the matter for many years. According to Slate magazine, OSHA has admitted that their regulations for **470 chemical exposure limits are outdated**, and received a lot of flack for the way they handle these cases. Recently, though, the Lake Compounce Family Theme Park was **fined \$70,000 by OSHA** for gross infractions that included failure to monitor workers' health when handling extremely hazardous chemicals, failure to train employees to work with said chemicals and the inability to provide them with personal protective equipment, or PPE. OSHA may have saved the world from another occupational respiratory disaster.

How to prevent future exposure

As you can see, not only are respiratory illnesses extremely dangerous, but they can often strike employees without them realizing, or stick with them for years to come. This is why it's crucial that project and shift managers ensure employee safety by providing adequate training and PPE for employees. Many cases fail to pop up immediately, so some organizations begin to have the impression that it isn't as deadly as it's cracked up to be – without realizing that they could be directly contributing to their employees' deaths years down the line.

OSHA recommends taking the following precautions:

- Always make sure respirators are available when dealing with any type of dust, chemicals or gases.
- Train employees properly on identifying and reporting dangerous hazards.
- Post safety signs warning of concentrated areas with asbestos, lead or silica.

Ultimately it's up to the employer to ensure a safe environment for employees to work in. Just because you can't always see the threat doesn't mean it isn't there. Respiratory illness is one of the deadliest workplace injuries because so often the diseases aren't curable, just manageable. Keep life expectancy and worker morale up by taking all of the proper safety precautions.

Previously featured on ***NMC's Safety Matters Blog.***

For more information on MSC's line of respiratory protection, please visit the ***Safety landing page.***

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