

Main Issues for Construction Workers

- Allergens
- Mold
- Heavy Dust
- Smoke
- Silica Dust
- Viruses

Source: NIH <https://www.ncbi.nlm.nih.gov/books/NBK594245/>

Silicosis: "Silicosis" is a lung disease caused by silica dust, occurs when silicon dioxide particles are inhaled and filtered through the nose. SaniSwab tackles these silicon dioxide particles to mechanically clean and sanitize, preventing inflammation and disease.

Silicosis is a devastating and incurable condition marked by irreversible lung scarring.[4] The fibrosis is progressive, leading to irreversible and often fatal restrictive lung function.[2]

Source: DOZR <https://dozr.com/blog/construction-health-risks>

Aspergillus (MOLD):

Aspergillus is a fungus (mold) that is ubiquitous in soil. During construction, renovation or demolition of buildings. It spreads easily into the air and may cause significant respiratory problems and chronic allergy symptoms to those living nearby.

Source: CDC

<https://www.cdc.gov/copd/index.html#:~:text=Chronic%20obstructive%20pulmonary%20disease%2C%20or.Americans%20who%20have%20this%20disease.>

Overall:

Another long-term health risk for construction workers comes from harmful vapors, gasses, dust, and fumes on the job site. Exposure to these elements can lead to **chronic obstructive pulmonary disease**, which refers to a group of diseases that cause airflow blockage and breathing problems. This also leads to the potential to develop further lung problems and even cancer if not properly mitigated.

Source: CDC

https://www.atsdr.cdc.gov/csem/asbestos/who_is_at_risk.html#:~:text=Currently%2C%20the%20people%20most%20heavily,%5BAmerican%20Thoracic%20Society%202004%5D.

Asbestos (POLLUTANT):

A well-known airborne risk is asbestos, which can often be found in flooring, ceilings, and insulation. Asbestos is the primary cause of mesothelioma, a rare form of cancer, but in combination with other forms of pollution and lifestyle choices (like smoking, which is prevalent in the construction industry) can also cause lung cancer. In the United States, the people most likely to be exposed to asbestos are those in construction.

“Currently, the people most heavily exposed to asbestos in the United States are those in construction trades. This population includes an estimated 1.3 million construction workers as well as workers in building and equipment maintenance [American Thoracic Society 2004]”

Still today: it still by US industry, present in 30 million homes

-manufacturing companies used asbestos in construction materials due to its fibrous strength

Asbestos has also been used in a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings.

Source: <https://dozr.com/blog/construction-health-risks>

ALLERGIES AND ASTHMA

Construction sites promote infestations, such as rats and cockroaches. These animals can shed their skin into the environment. These are known strong triggers of allergies and asthma.

Suffers from chronic nasal congestion, sinusitis and enlarged adenoids, chronic bronchitis, asthma and eye infections because their immune system is desperately trying to fight a lost battle with air pollution.

Source: Duke University

<https://fmch.duke.edu/news/construction-workers-increased-risk-life-threatening-lung-disease-study-finds>

Other material exposure

The researchers discovered that 28.6% of 18,145 participating construction workers developed RSP. Results showed those with RSP were at an increased risk of all-cause death, and death from cardiovascular disease, respiratory disease, and lung cancer.

-Construction dust contains many different types of chemicals, cement dust, heavy metals, synthetic fibers, sawdust

Sick Days:

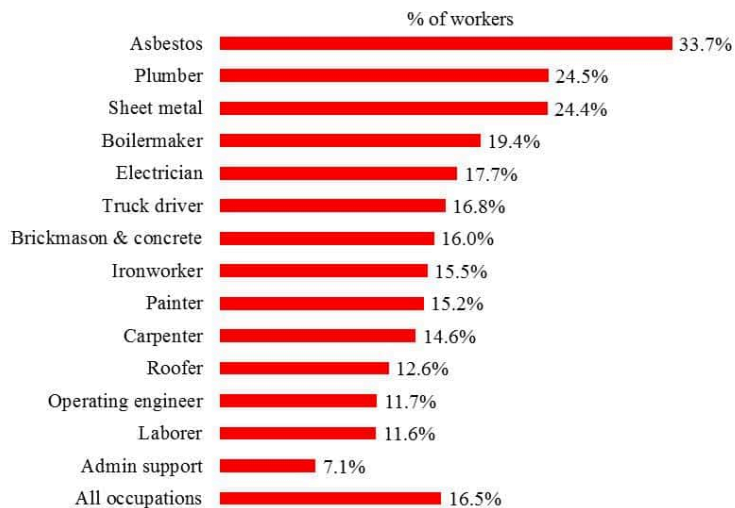
US labor beaureau and statitics claims that "construction and extraction jobs account for 150,000 days off of work due to illness, while restrictive work due to injury or illness is over 50,000 days Source: CPWR (Center for construction research and training)

<https://www.cpwr.com/research/data-center/the-construction-chart-book/chart-book-6th-edition-occupational-diseases-respiratory-diseases-in-the-construction-industry/>

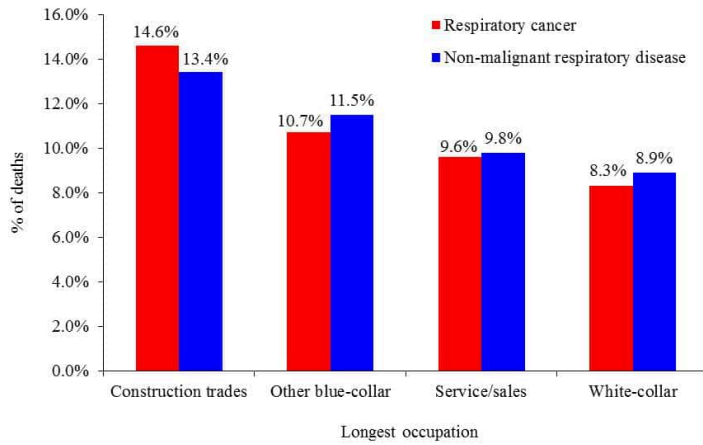
Exposures in construction can also cause or exacerbate asthma. In 2015, the U.S. Bureau of Labor Statistics (BLS) reported about 500 nonfatal work-related "respiratory conditions" among the nation's 6.5 million wage-and-salary construction workers in the private sector.

Graphs:

51a. Prevalence of chest x-ray abnormalities, selected construction occupations, 1996-2016



51d. Cause of death among older workers, by longest occupation, respiratory cancer versus non-malignant respiratory disease, 1992-2011



Comments:

"According to our control study we conducted at our NJ facility, our product helped those with allergies to mold and dust, and has also shown to assist with different types of smokes and pollutants found in industrial environments, through confirmation of our warehouse and production teams who have used it and reported back to us."