

Asbestos in Households and Industry

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History of the use of Asbestos

Asbestos has been used nearly as long as civilization. 2500 B.C. was the first reported use of the material, primarily in the making of textiles. From 2500 B.C. to the 1990's the use of asbestos, and the products that contained it continued to increase. Its strength, weight, and fireproof properties made it out to be the material of the future, until it was discovered to have a heavy hand in contributing to many cancers, most notably, Mesothelioma. From drop ceilings to roof tiles to fake snow, asbestos used to be everywhere. Luckily for us, steps are being taken every year to both stop the production of products containing the mineral, and eradicating it from buildings that already do. (Pira, Donato, Maito, Discalzi 2018)

Household Asbestos Contamination

The 1970's saw the largest boom in the asbestos industry. Popcorn ceilings were a top feature in newly built houses for their noise and weather insulation, and artificial fireplaces were just coming into style. Both of these products largely contained asbestos, and because at the time restrictions were so lax, most people were unaware they contained asbestos (O'Reilly, McLaughlin 2007). Although researchers had linked the material to cancer as far back as 1953, these findings had not yet been publicized. Although companies knew asbestos was present in their products, and that it had been linked to cancer, because it was cheap and effective, they continued to use it with blatant disregard for public health and safety. The asbestos that is likely in your home if built before 1990 is not an issue as it stands, rather when disturbed. Disturbing asbestos, be it from scraping of popcorn ceilings or remodeling old flooring causes dust to be released into the air where you are working. These particles of asbestos are small enough that they can be taken into the lungs where the properties that made asbestos such a versatile product cause issues. The lungs cannot break down the particles, and coat the lungs, leading to cancers, most commonly, Mesothelioma (Mossman 1990)



Unsafe removal of a popcorn ceiling containing asbestos Via Homelight.org

Asbestos in Industry

Those affected most by Asbestosis, the blanket term for cancers caused by asbestos, are factory workers and those in heavy industry. Throughout the 20th century, there were few regulations on the use of personal protective equipment for those in the trades, and with asbestos being such a widely used product during this time, the affects on these workers during the mid 20th century are now coming to light. In a study done back in 1955 on 113 factory workers, all that had been diagnosed with cancer were found to have asbestosis as the leading factor (Doll 1955). OSHA, along with many other government safety organizations around the world have worked to increase both awareness in the workplace, and precautionary measures. However, with the amount of time asbestos was used in building and manufacturing, it will take years to eradicate the risks that workers face from asbestos contaminated building materials (LaDou)



Asbestos Quarry in Russia via BBC

Secondhand Asbestos

Shockingly, those who remodel their older homes and factory workers are not the only ones affected by asbestos. In a study done during the 1970's on hundreds of cadavers in New York City across all ages from six months to 80 years old, nearly 98% of those who had died had at least trace amounts of asbestos in their lungs. It is believed that due to the high levels of manufacturing in New York, asbestos had been gradually released into the air, and breathed in by the millions of residents throughout their lives. (Irving, Nicholson, Langer, 1972)



Newtown Creek Dye Factory via Colorants History

Conclusion

Although the properties of asbestos are admittedly impressive, with its astonishingly lightweight, strength, flexibility, and heat resistance, the dangers associated with its use in construction and household products greatly outweigh its benefits. Steps to eradicate asbestos have been taken since the early 1990's however, progress is not being made quick enough. For the efficient and proper removal of asbestos from our daily lives, there must be increases government funding, along with readily available education for both homeowners, and industry workers, both at risk of coming in contact with the mineral.

Steps Renters Can Take

- Ask Homeowner/Landlord Questions
- Find out what in your home may contain asbestos before making any changes to the home.
- Inquire about the safe removal of asbestos in home prior to renting
- Know your rights as a renter to avoid coming in contact with this dangerous material

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