Asbestos informative speech essay sample

Health & Medicine, Disease



Introduction

I. Attention Getter:

Asbestos is everywhere, in homes, schools, office buildings, even in our cars. Alan Caldwell, Program Manager with Satori Group, estimates that 60-80% of all buildings still contain asbestos. Perhaps even the building we are sitting in right now. II. Thesis Statement: After listening to my speech, the audience will be aware of what asbestos is, where and why it was used, and the dangers of asbestos exposure.. III. Preview of Main Points:

 First, I will describe what asbestos is, and how it is produced 2. Second, I will examine why is was used so heavily and common uses of asbestos. 3.
Third, I will discuss health effects of asbestos exposure.

BODY

I. So, what is asbestos anyway?

A. According to OSHA, Asbestos is a name derived from the Greek word, ' Asbes' said to mean ' inextinguishable', meaning it will not burn B. People are surprised to learn that asbestos is actually a naturally occurring mineral which is mined. C. The properties of asbestos are long, thin microscopic fibers D. You can not see or smell asbestos, and lab testing is the only way to determine if something contains asbestos. E. There are 6 types of asbestos, chrysotile and amosite are the most common according to the EPA. F. Asbestos. net states that currently Russia leads the world in production with approx 1 mil tons a year, with China and Canada produce about half that. G. There is actually a town in Quebec called asbestos. H. While the US no longer mines asbestos, Libby Montana suffered a huge tragedy that helped regulate asbestos in the United States in 1990. I. WR Grace operated a mine in Libby that produced vermiculite, which was used mainly as home insulation. While vermiculite it self is not asbestos, the ground it was mined from was heavily contaminated with a form of asbestos called tremolite. The EPA conducted air monitoring, and found that the entire city of Libby, as well as surrounding communities were contaminated with airborne asbestos. As a result, more than 400 people have died, half the town is sick, and WR Grace was forced to declare bankruptcy with 250000 cases pending. The EPA has called Libby Montana it's biggest superfund cleanup site.

Transition: Now that we know what asbestos is, and how it was produced, lets take a look at why anyone ever thought it would be a great idea to use it in almost 5000 fairly common products.

II. Simply stated, asbestos was awesome.

1. For one thing it was cheap to produce. And because it is fire retardant and has high strength properties, it was commonly used in construction. 2. While asbestos gained popularity in the US around WWII, asbestos can be dated back almost 5 millenia. a. Perhaps the earliest user is said to be Emperor Charlamagne. He was said to have had a tablecloth made from the substance. He'd host dinner parties, with people eating and drinking off the tablecloth. Then, at the end of the evening, when the table was cleared, he would pick up the cloth and throw it into the fire. When it failed to burn his guests were amazed. It was said that he used it to convince some of his

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guests that he had supernatural powers. b. Other cultures made clothes from asbestos. They were considered practical because all it took to clean them was a fire. Marco Polo was shown these fire-proof garments and told that they were made from the wool of a salamander. He was less easily convinced than Charlemagne's guests, and eventually was told it was from a mineral that came from the mountains, according to asbestos. com 3.

In more recent times, as asbestos became more popular, it was used in thousands of products. a. While heavily regulated in the US today, asbestos is still being used in the automotive industry. Because of its low cost, high strength and resistance to heat and friction, it was, and still is a great option for gaskets, brake shoes and brake pads. Think about that the next time a semi locks his brakes and they start to smoke. b. Other common uses, states the EPA, include carpet and vinyl floor tiles, sheetrock and it's joint compound, pipe insulation, cement board, spray on fireproofing, home insulation, " popcorn" ceilings, roofing shingles, fireproof blankets, siding and various adhesives. c. Asbestos was even found in the suits firefighters wore, hair dryers, paper mache, crayons and gas mask filters.

Transition: Lets think about all the items asbestos was used in for a moment. Insulation? Popcorn ceilings? Carpet and vinyl tiles? If we took a walk, around this building for instance, do you think we could find some of these things mentioned? And why should we care?

III. Asbestos exposure can lead to serious lung and other diseases 1.Remember, it is estimated that 60-80% of buildings still contain asbestos.With that being said, if asbestos is undisturbed it is relatively safe. If it does

become airborne, what we in the industry call " friable", which means you can crumble it with hand pressure, and the fibers are inhaled or otherwise ingested, terminal lung diseases are a very real possibility. 2. Exposure to asbestos fibers causes three main types of lung disease. Mesothelioma, or meso, caused when asbestos fibers, even just one, gets embedded in the lining of your lungs. Asbestosis, which is similar to meso, but is dose dependent, meaning the more fibers you inhale, the worse the disease is. Finally there is lung cancer. If you are a smoker and are exposed to asbestos, you are 80 times more likely to develop lung cancer. 3. The latency period, or the time it takes the disease to develop, can be 10-20 years after initial exposure. In the case of Libby, MO, people are still being diagnosed to this day according to the EPA. 4. Other asbestos related illnesses include asbestos warts, stomach, esophagus and anal cancer

according to webMD.

Transition: While asbestos exposure can be deadly, it can be removed safely if done by certified professionals.

Conclusion

Today we have examined

- A. Review of Main Points:
- 1. What asbestos is, and how it is produced
- 2. Why it was used so heavily and common uses of asbestos.
- 3. And the health effects of asbestos exposure.

II. Final Statement: Asbestos is a huge problem, and the EPA estimates that it could take 100s of years to completely remove all the asbestos in the US. In fact, the tunnels under our nations capitol are so heavily contaminated with asbestos that a group of 10 workers, calling themselves " Tunnel Rats" brought the hazardous conditions to the legislature as early as 1999. Nothing was done to protect their safety. Finally filing a " whistleblower complaint" in 2006", they accused their employer " The Architect of the Capitol" of, among other things, " purposely misleading the workers about the dangerous levels of asbestos in the tunnels, said to be 30 to 40 times the legal limit". To date, 7 of the 10 " tunnel rats" have been diagnosed with asbestosis. Think about the dangers of asbestos exposure the next time you start that home improvement project... Thank you.