



Understanding Asbestos: *Implications for the Individual and the Community Development Practitioner*

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EXECUTIVE SUMMARY

Asbestos is all around us. It is in our homes, our schools, and naturally occurs in our water and soil. We ingest it in some way almost every day. There is a fear associated with it; and rightly so. It can be a dangerous product, but it should be understood that asbestos can also be a very useful product.

Does asbestos really deserve a bad rap? The following article will serve as a primer on asbestos, providing a brief history of its use and subsequent ban, its types and dangers, and its implications for both the individual homeowner, and the community development practitioner.

It is impossible to determine whether or not a material contains asbestos through visual inspection. The only way to know for sure is to take a sample of the material and have it tested by a qualified laboratory. Sampling should only be conducted by a qualified asbestos inspector. Asbestos, if intact and currently not releasing fibers into the air, poses no immediate risk to health. Even short term, intermittent exposure may result in minimal to nonexistent health risks.

Asbestos can be a wonderful material. If handled and applied properly, with the appropriate safety precautions followed, the insulating and fireproofing qualities of asbestos can literally last forever. However, before demolishing the structure or conducting rehabilitation work on pre-1978 homes that may disturb asbestos-containing materials, the homeowner or housing programs manager should secure a reputable firm to inspect and assess the suspect materials. Remember, removal should only be conducted by a qualified firm.



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Asbestos: The Myths and the Realities

Asbestos is all around us. It is in our homes, our schools, and naturally occurs in our water and soil. We ingest it in some way almost every day. There is a fear associated with it; and rightly so. It can be a dangerous product, but it should be understood that asbestos can also be a very useful product.

Does asbestos really deserve a bad rap? The following article will serve as a primer on asbestos, providing a brief history of its use and subsequent ban, its types and dangers, and its implications for both the individual homeowner, and the responsibilities of the housing program manager or community development practitioner. Let's explore further.

Asbestos is a naturally occurring mineral found in several parts of the world. It was used by the ancient Romans and Greeks after the discovery of its heat resistant properties. Mined in South America, Canada, and the United States, asbestos was mainly used to insulate the boilers in steam locomotives in the 1930s, and was not widely used until the 1940s. Historically, over 200,000 schools and almost one million government and commercial buildings in the U.S. contain asbestos for insulation and fireproofing.

Asbestos has a combination of qualities that make it distinct from any other material and it is essentially indestructible. Asbestos does not decompose; it is resistant to heat, water, and all chemicals; and it is a poor conductor of electricity. The microscopic fibers vary in size and are very strong. When mixed with other materials, it creates a strong and insulating, fireproof covering.

So why all the hype about asbestos?

The Bad News

Simply, asbestos is dangerous when mishandled, including several potentially fatal diseases that result from the inhalation of asbestos fibers including mesothelioma, asbestosis, interstitial fibrosis, pneumoconiosis, and lung cancer. The chance of developing these diseases nearly doubles if you happen to be a smoker. The worst aspect of these diseases is that it typically takes 30 years or more for the symptoms to manifest themselves. By then, it is usually too late.

The dangers of asbestos began to surface and resulting lawsuits began as early as the late 1940s. And, more victims continue to step forward, even today, to claim compensation for exposure as a result of the mishandling of asbestos-containing materials.

The United States Environmental Protection Agency (EPA) proposed a ban of certain asbestos containing materials in 1986 and a total ban within ten years. Over a period of time after that, both opponents and proponents of asbestos use came together to agree upon a ban on the development of new uses for asbestos, as well as a reintroduction of asbestos in industries where it had already been replaced by “safer” products. There is evidence now, that exposure to asbestos must reach relatively high levels over an extended period of time before there is any real danger of developing an asbestos-related disease.

Different Forms of Asbestos

Asbestos cannot be put into one single category, such as lead, radon, or carbon monoxide. It occurs in a few different forms and the health affects vary greatly, from minimal to severe, depending on exposure. Crocidolite and amosite asbestos are the most dangerous forms. The fibers of these types of asbestos tend to adhere to lung tissue. The long term effects of crocidolite and amosite are disease, and, quite often, death. As such, these forms of asbestos have been banned since 1977.

However, some may still exist in older homes. Chrysotile asbestos, which is a much less toxic form, is the most commonly occurring form in the United States, comprising about 92% of total asbestos in use. This form does not adhere to lung tissue nearly as well as its counterparts. Furthermore, low level, intermittent exposure is not considered to be an immediate risk to health. The United States Occupational Safety and Health Administration (OSHA) as well as the EPA both agree that asbestos does not pose an immediate threat to health unless the fibers become airborne.

Home Improvement Projects

So you and your partner have decided to renovate your home. If your home was built after 1978, it is very likely that the home is asbestos free. But what do we do if our home is 50 years old or more? There are materials being used in certain ways that we could deem asbestos-containing, given past history. However, it is impossible to determine whether or not a material contains asbestos through visual inspection. The only way to know for sure is to take a sample of the material and have it tested by a qualified laboratory. Sampling should only be conducted by a qualified asbestos inspector.

The Test Results Were Positive. I Have Asbestos In My Home. What Now?

As stated earlier, asbestos, if intact and currently not releasing fibers into the air, poses no immediate risk to health. Even short term, intermittent exposure may result in minimal to nonexistent health risks. The common consensus is, if asbestos is not releasing fibers and is intact, leave it in place and do not disturb. If the asbestos is determined to be friable [easily crumbled or broken] and is currently releasing dangerous fibers into the air, the recommendation is abatement [permanent removal of the hazard].

Can I Safely and Legally Remove the Asbestos Myself?

The answer, simply, is NO! There is a plethora of Federal and State regulations that prohibit the removal of asbestos by anyone other than a qualified firm. In fact, the removal of asbestos containing materials (ACMs) by anyone other than a qualified firm can lead to costly clean ups, Federal investigations, fines, and even incarceration.

Responsibilities of the Housing Programs Manager

We have touched briefly on issues regarding the existence and removal of asbestos for the average do-it-yourself homeowner; but what about rehabilitating homes through housing rehabilitation or neighborhood stabilization programs? The housing programs manager must first determine the year the home was built. This is important, because, as with lead, asbestos was banned 1978 by the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Further, the Consumer Products Safety Commission banned ACM patching compounds (spackling, tape, etc.) and asbestos embers (fireplace, etc.) in 1977. However, certain products that contain asbestos can still be found today.

Once the year of construction of the home has been determined, the scope of work must be reviewed. If demolition is planned for the structure, an asbestos inspection will almost always be required. Regardless of the existence of asbestos, the EPA must be notified of all demolition activities. If the scope of work includes removal or disturbance of possible ACMs, a qualified asbestos inspector must be commissioned to conduct an inspection of these materials.

The inspection report should include the name of the inspector, license number, address and name of the homeowner, current condition of the ACMs, as well as the housing program for which the inspection is conducted. The laboratory results should be included in the report and clearly identified as positive or negative for asbestos. The housing programs manager must retain an original copy of all environmental reports and secure in the property file.

The floor adhesive and the ceiling tiles tested positive for asbestos in our NSP3 home. What now?

The next step for the housing programs manager is to disseminate a request for qualifications (RFQ) for asbestos abatement work to qualified contractors in the area. The RFQ should contain questions regarding length of time in business, license numbers, number of employees to handle the job, and references, among other items. A price quote should also be attached, but the price should not be the only deciding factor in awarding the bid.

Upon award of the bid to the selected contractor, a pre-construction meeting might also be necessary. The housing programs manager should ensure the asbestos abatement contractor is clear about the scope of work and what is expected of the abatement firm.

Once abatement work is complete, the housing programs manager or program inspector must conduct a visual inspection to ensure the components that should be removed have been removed.

Conclusion

Asbestos can be a wonderful material. If handled and applied properly, with the appropriate safety precautions followed, the insulating and fireproofing qualities of asbestos can literally last forever. However, before demolishing the structure or conducting rehabilitation work on pre-1978 homes that may disturb ACMs, the homeowner or housing programs manager should secure a reputable firm to inspect and assess the suspect materials. Remember, removal should only be conducted by a qualified firm.

Whether your jurisdiction needs lead or asbestos abatement services, or training for your staff on such services, WFN Consulting can help. Let us show you how.

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