

# Safety Tip: Asbestos & Museum Collections

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Recently a history curator was doing research on the 37th “Buckeye” Division in WWI and the helmets they wore during combat. The 37th Division helmets are the famous “doughboy” or “Brodie” helmets worn by both British and American soldiers during the First World War. While researching, it was discovered that these helmets have an interior disc of asbestos under the lining. This launched a larger conversation by curatorial staff about the unexpected places asbestos and other collections hazards can be found.

First used commercially in the United States in 1880 and known as a “miracle mineral,” asbestos has been used in goods around the world for hundreds of years. It was well known for its durability and fire retardant properties, and it is still used in some products today for those same reasons.

Asbestos was predominantly used in the manufacture of commercial goods from 1940 to 1975 in everything from ceiling tiles to fire retardant suits. Due to the widespread commercial use of the mineral, asbestos is often found in museum collections. While there are some common artifacts that you can expect to contain asbestos such as military ships and certain automotive parts, there are others that might be surprising.

The WWI doughboy helmets aren’t the only example of collections with asbestos that might surprise you. Gas masks of “any vintage”, particularly those from WWII, contain asbestos in their filter systems. In fact, the EPA estimates that over 3,000 kinds of historical objects contain asbestos and very few provide any label or warning.

If damaged or disturbed, asbestos can pose serious risks to your health. As asbestos breaks down, it can exist in filaments that are 1,200 times thinner than the size of a human hair and can be easily dispersed through handling or wind. These filaments can be inhaled or swallowed, and remain dormant in the body for up to 50 years. Secondary exposure, or exposure by being near someone who handled asbestos without proper safety precautions is also a risk. Fibers can remain on skin, clothes, and in the air for long periods of time after handling or exposure. Risks to your health from asbestos are also cumulative, with each subsequent exposure increasing a person’s risk for asbestos related illness.

Health risks posed by asbestos include: cancer of the esophagus, larynx, lungs, oral cavity, stomach, colon and kidneys, breathing problems, allergic reactions, COPD, pulmonary fibrosis and pericardial calcification.

If you must handle collections with asbestos, it is important to take the proper precautions. This includes wearing protective clothing, gloves, and wearing a breathing mask with a HEPA filter. Only a professional should attempt asbestos mitigation, or removing asbestos from an object. Objects that cannot have asbestos removed should be separated from other collections, enclosed, labeled and disturbed as little as possible. These



*Hidden asbestos may be lurking in your collections items. Photo courtesy of the Ohio History Connection.*

precautions and techniques prescribed by the will be used by collections staff to continue to preserve military helmets and gas masks that contain asbestos as they are prepared for storage and exhibit. However, our collections storage is not the only place that Ohio History Connection staff might encounter these helmets or gas masks.

A study in the UK by the Imperial War Museum found that a number of schools and museums were allowing children to touch these items or even try them on. These kinds of hands-on kits and education collections are common at museums and historical institutions in the U.S. as well. With the ongoing WWI Centennial events throughout the state, it is important to be aware that these objects contain asbestos so that precautions can be taken by staff. It is also an opportunity to educate other institutions and individuals who might be unaware of these sometimes surprising locations of asbestos in their collections. ■

## MORE INFORMATION

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