



# Asbestos Hazards Due to Flooding

## What is the hazard?

Asbestos was used in more than **3,000** different construction materials and manufactured products. Friable asbestos products may have been installed in homes and businesses as part of new construction or remodeling through the early 1980s. This includes vermiculite insulation. Other non-friable asbestos-containing building materials are still used in building materials today.

When asbestos-containing materials (ACM) are disturbed, the asbestos can break down into very fine fibers. When these fibers are inhaled, they can cause diseases such as lung cancer, mesothelioma and asbestosis. There is no known safe level of asbestos exposure. Because of this health threat, any ACM disturbed must be handled properly, put into containers and disposed of *even if it is damaged due to flooding!* Some buildings are regulated by law to have an asbestos inspection before disturbing any building materials.

## Are all buildings regulated? What about residential homes?

All institutional, commercial, public and industrial structures, installations and buildings are regulated. Residential buildings, including condominiums or individual dwelling units operated as residential cooperatives, with more than four dwelling units are regulated. Single-family residences are usually exempt; however, if a group of residences under the same ownership or project is demolished or renovated as part of a flood project, they may be regulated. Please contact the Department of Health for clarification. Please be aware that

OSHA regulations apply to all workers, even if North Dakota Department of Health asbestos regulations do not. Please consult OSHA if you have employee-related question about asbestos or clarification on OSHA regulations.

## I have a regulated building with flood damage. What do I do first?

An asbestos inspection must first be performed by a North Dakota Department of Health licensed inspection firm. A list of these firms can be found on the department's website at <https://deq.nd.gov/AQ/PDFs/Documents/Asbestos/AsbestosContractors.pdf>

Samples collected for the inspection must be taken by a North Dakota certified asbestos inspector. These samples can have the asbestos identified only by using a microscope. Depending upon what the inspection determines, you may be required to have a North Dakota certified asbestos abatement contractor remove materials from your building even though they have been *damaged due to flooding.*

## My home residence has flood damage, and I am worried about asbestos. What should I do?

Homeowners may legally repair, encapsulate and remove asbestos themselves from single family residences they own and occupy. However, the North Dakota Department of Health recommends that you hire a licensed asbestos abatement contractor to avoid possible contamination. If you are wondering if a material contains asbestos, you may send a sample of the material to a laboratory for analysis or hire a licensed asbestos inspector to have the material analyzed for you.

## Where can I get a list of licensed inspectors and contractors and any necessary forms?

All information can be obtained by calling the North Dakota Department of Health at 701-328-5188 or by visiting the Department website at <https://deq.nd.gov/AQ/asbestos/>

## What if I don't comply with regulated building requirements?

Failure to comply may result in enforcement actions. Both the building owner and the contractor share the responsibility of making sure these requirements are met. In some cases, individuals and companies can be prosecuted criminally.

## My flood-damaged home residence contains ACM and I need to repair it right now. What should I do?

The North Dakota Department of Health recommends that you hire a licensed asbestos abatement contractor. This is for the protection and safety of the occupants of the building. Asbestos abatement contractors employ state-of-the-art techniques to handle the asbestos safely.

If you must repair the damage in the home you own and occupy, please refer to the back of this sheet for recommended work practices by homeowners when disturbing asbestos. These practices can help minimize fiber exposure. Please be aware there is no known safe level of asbestos exposure. If you are not comfortable with these work practices, please contact a North Dakota licensed asbestos abatement contractor. For further assistance, please contact the North Dakota Department of Health.

**Homeowner-Owned and Occupied Single-Family Home Residential Structures Only!**  
**Public and commercial buildings (and some residences) have many additional requirements that these recommendations do not address. The work practices below are recommendations for work performed by the homeowner.**

**If you have any questions about asbestos, contact the North Dakota Department of Health.**

Major repairs should be done only by a professional trained in methods for safely handling asbestos. Before undertaking minor repairs, always wet the asbestos material using a fine mist of water containing a few drops of detergent. Commercial products designed to fill holes and seal damaged areas are available. Small areas of material such as pipe insulation can be covered by wrapping a special fabric, such as rewettable glass cloth, around it. These products are available from stores that specialize in asbestos materials and safety items.

Removal is usually the most expensive method and should be the last option considered in most situations. This is because removal poses the greatest risk of fiber release. However, removal may be required when remodeling or making major changes to your home that will disturb asbestos material. Also, removal may be called for if asbestos material is damaged extensively and cannot be repaired otherwise. Removal is complex and should be done only by a contractor with special training. Improper removal may actually increase the health risks to you and your family.

The following are the minimum precautions that should be taken when handling asbestos.

- Do not disturb any material you think may contain asbestos unless you have to. Removal of the material is usually the last alternative and is best done by a trained asbestos contractor.
- The work area should be sealed off from the rest of the building. Plastic sheeting and duct tape may be used. Take great care not to track asbestos dust into other areas of the building.
- Make sure an approved NIOSH/MSHA respirator is used for protection against asbestos fibers. Also, disposable coveralls, gloves, hats and other protective clothing must be used. Dispose of all of this equipment immediately after using it.
- When working with asbestos-containing material, wet it with a hand sprayer. The sprayer should provide a fine mist, and the material should be thoroughly dampened but not dripping wet. Wet fibers do not float in the air as readily as dry fibers and will be easier to clean up. The addition of a small amount of a low-sudsing dish or laundry detergent will improve the penetration of the water into the material and reduce the amount of water needed.
- If the asbestos material must be drilled or cut, the drilling or cutting should be done outside if possible. Wet the material first.
- If the material must be removed, do not break it into small pieces. While it is easier to remove and handle small pieces, you are more likely to release asbestos fibers if you break the material. Pipe insulation was usually installed in preformed blocks, and it is best to remove these in complete pieces.
- Place any material to be removed in plastic trash bags and dispose of it in the proper landfill. Call the health department for disposal information. Take care not to break the bag; double-bag if necessary.
- After the material is removed, the area should be thoroughly cleaned with wet mops, wet rags or sponges. Repeat the cleaning procedure a second time. Wetting will help to reduce the chance that the fibers get spread around. Again, see that no asbestos material is tracked into other areas. Dispose of the mop heads, rags and sponges in the trash bags with the removed materials. Make sure to completely clean any non-disposable items that may have come into contact with asbestos.
- When the work is to be done by a contractor, you should discuss these guidelines and other steps to minimize asbestos exposure.

### **Vermiculite or Zonolite Insulation**

Vermiculite or “Zonolite” attic insulation was sold to millions of homeowners across the nation, including in North Dakota, and often contains asbestos. Vermiculite is a naturally occurring mineral and the insulation is easy to identify. It’s pebbly and loose and resembles very lightweight gravel or small packing peanuts. It looks like shiny, small pieces of popcorn and is usually light-brown or gold in color. Most other types of insulation are fibrous or woolly. Vermiculite insulation may be poured inside framed walls or cinder (concrete) block walls, as well as spread out between attic rafters or under floors.

Pictures of vermiculite insulation can be found on the EPA’s website at:  
<https://www.epa.gov/asbestos/protect-your-family-asbestos-contaminated-vermiculite-insulation>

For more information about asbestos, please contact:

**North Dakota Department of Health**  
**Division of Air Quality**  
**Asbestos Control Program**  
**918 E. Divide Ave., 2<sup>nd</sup> Floor**  
**Bismarck, ND 58501-1947**  
**Phone: 701-328-5188**  
**Fax: 701-328-5185**  
**Website: <https://deq.nd.gov/AQ/asbestos/>**