

Naturally occurring asbestos (NOA) are fibrous minerals found in certain rocks or soil as a result of natural geological processes. NOA does not refer to commercially processed, asbestos-containing material, such as insulation and fire protection in buildings or automobile brake linings, or asbestos mining and processing operations. Natural weathering and routine human activities may disturb NOA-bearing rock or soil and release mineral fibers into the air, which poses a greater risk for humans to breathe it in.

WHERE IS NOA FOUND?

In Pennsylvania, NOA is present in only a few specific geological formations and rocks and can be in rock that is deep in the ground or near the surface. Not all of these specific rocks contain NOA; they only have the potential to contain it. You can find more information on the occurrences of asbestiform minerals and fibrous amphiboles from the United States Geological Survey (USGS) reports on NOA available at <https://mrdata.usgs.gov/asbestos>.



HOW CAN I BE EXPOSED TO NOA?

Environmental exposure to NOA can occur in communities near geological formations that contain NOA, but the risk for exposure is highly dependent on climate, weather patterns and activity, and type of regional geology. You might be exposed to NOA through routine activities that can crush NOA-containing rock or disturb dust in soils that contain NOA fibers, such as working in your yard or garden, digging or shoveling dirt, riding bicycles or driving vehicles on unpaved surfaces, and running and hiking on unpaved surfaces.

HOW CAN NOA MAKE ME SICK?

If NOA is disturbed and asbestos fibers are released into the air and surrounding environment, it can pose a health hazard due to the potential risks associated with breathing in the fibers. Most inhaled fibers are removed from your lungs by being carried away to the stomach or coughed up. However, fibers that are deposited in the deepest parts of the lung are removed more slowly and can stay in place for many years or never be removed from the body. If NOA is not disturbed and fibers are not released into the air, then it does not pose a health risk. Though health risks associated with exposure to NOA (not asbestos used commercially) are not yet fully understood, we know all forms of asbestos are carcinogenic and may lead to adverse health effects, including asbestos-related disease.

Being exposed to NOA does not mean you will develop health problems, and most people don't show any signs or symptoms of asbestos-related disease for 10 to 20 years or more after exposure. Visiting a health provider is necessary to determine whether you are at risk for developing health problems from NOA exposure.

HOW CAN I REDUCE EXPOSURE TO NOA AT HOME?

If you live in an area where NOA has been disturbed and is likely to become airborne, you can limit exposure by taking the following steps:

- Walk, run, hike, and bike only on paved trails.
- Play only in outdoor areas with a ground covering such as wood chips, mulch, or sand.
- Drive slowly over unpaved roads.
- Pave over unpaved walkways, driveways, or roads that may have NOA-containing rock or soil.
- Cover NOA-containing rock or soil in gardens and yards with asbestos-free soil or landscape covering, and pre-wet garden areas before digging in soil.
- Keep windows and doors closed on windy days.
- Use doormats and remove shoes before entering your home, and keep pets from carrying dust or dirt on their fur or feet inside.
- Use a wet mop on non-carpeted floors and a wet rag instead of a duster to dust.
- Wash rugs regularly and vacuum carpet often using a vacuum with a high-efficiency particulate air (HEPA) filter.

If you have any questions, contact us at env.health.concern@pa.gov.