

Thorium

What is it:

Thorium is a radioactive metal that is present in low amounts in rocks, soil, water, plants, and animals.

Greater Detail: Thorium isotopes are usually produced as decay products of other radionuclides. Almost all naturally occurring thorium exists in the form of either radioactive isotope thorium-232, thorium-230, and thorium-228.

How is it used:

Thorium is a decay product of other radionuclides and is an unwanted product of nuclear reactions. Thorium is also used to make ceramics, camera lenses, and telescope lenses.

Greater Detail: Radiation from the decay of thorium and its decay products is in the form of alpha and beta particles and gamma radiation. Thorium levels may be higher at industrial facilities.

Thorium Sources

Thorium is present at very low levels almost everywhere in the natural environment. People may be exposed to it in air, food and water. Some amount of thorium in lakes, rivers and oceans is absorbed by fish or seafood that people may eat. Exposure may be higher near industrial facilities that mine, mill or manufacture products with thorium. Inhalation exposure may be a concern due to thorium's decay product, Radon-220 gas.



How do you know you have been exposed:

Thorium can enter the body when it is inhaled or swallowed. Thorium enters the body mainly through inhalation of contaminated dust. If thorium is inhaled into the lungs, some may remain for a long time.



How can you reduce the risk of exposure:

The most important way families can reduce their exposure is to know about the sources of thorium and avoid locations of known radiation.