

Is Radium-226 Hazardous?

Yes. Radium is about one million times more active than uranium. Historically, radium was found to cause serious health impacts when taken internally, where it can deposit in bone. In large quantities, radium can also be an external hazard, capable of severely damaging skin.

In the early 20th century, small quantities of radium were used in the painting of watches and clocks to make their dials glow in the dark. Painted dials present a low external hazard. However, large quantities of radium – meant to ensure that all cancer cells would be killed -- were often put in sealed sources for external medical radiation therapy.

The four sealed radium sources found in the West Chester construction waste are **five times larger** than today's medical sources, which is why DEP is concerned about the health of anyone who may have handled them.

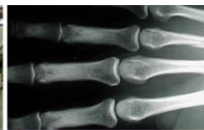


If you have any information about where this material came from or if you have had contact with the box and its radium-226 contents, please let us know! Direct your confidential comments and questions to:

DAVID ALLARD
717-787-2480



Office of Radiation Protection



Information Needed: PUBLIC HEALTH ISSUE

On Jan. 19, 2012, a load of construction debris set off radiation alarms at Waste Management Inc.'s (WMI) Norristown, PA, transfer station. WMI detained the truck and deployed a health physicist to recover the radioactive material, identified as approximately **1 curie of radium-226**. Department of Environmental Protection (DEP) health physicists worked with WMI to properly evaluate and store the radium.

The radium-226 was contained in four capsules inside a small lead safe marked "Radium Chemical Co., Inc." The safe and some very old equipment were stored inside a larger, locking metal box, which had been pried open.

The contents of the box appear to have been medical devices used as long ago as the 1920s. The box had been placed in a dumpster being used by construction workers at the Hershey's Mill retirement community in West Chester, PA.

Although the capsules contained in the radium safe are currently being stored at a licensed facility and present no danger to the public, it is important to learn more about **where and for how long** this safe and its radioactive contents were kept prior to Jan. 19, 2012.

See below: (L) 3"x3" lead safe; (R) outer metal box without safe

