

Uranium Fact Sheet



Uranium is a weakly radioactive heavy metal that occurs naturally. Rocks, soil, surface and ground water, air, plants, and animals (including humans) all contain varying amounts of uranium. Some geographical regions of the United States, particularly southwestern states such as New Mexico, have concentrated natural deposits of uranium and extensive historic uranium ore mining and milling activities. For these reasons, some areas may have higher than average uranium levels, which may result in increased human exposure. Uranium has many commercial uses, including nuclear weapons and nuclear fuel, X-ray agents, pigments for the ceramic industry, coloring porcelain, enameling, and in production of fluorescent glass. For the general public, ingestion of drinking water and food, especially root vegetables grown in uranium-containing soil are the primary sources of uranium exposure. People may also be exposed in certain jobs, such as those involving the mining and processing of uranium ore. Most of the ingested uranium in drinking water or food leaves the human body, but some may go into the bloodstream and then to the bone and various internal organs such as the liver and kidneys, where it can be stored for many years. In areas with naturally-occurring high levels of uranium, the presence of indoor radon is another potential health concern. Bathing and showering with water that contains radon gas dissolved in it, or living in a home with high levels of radon gas may be a health concern because inhalation of this gas may result in the development of lung cancer.

Uranium is found in:

- Some foods, especially root vegetables such as potatoes, parsnips, turnips, and sweet potatoes grown in soils with high concentrations of uranium.
- Internal organs of livestock raised in areas with high levels of uranium in the rocks, soil, and water.
- Some drinking water sources, especially in areas known to have high levels of uranium in the rocks and soil.
- Certain older ceramic or porcelain glazed cookware and food storage containers.
- Some phosphate fertilizers.
- Water, soil and dust in areas near uranium mining, processing, and manufacturing facilities.

Possible health concerns from excessive exposure to uranium:

- The kidney is the most sensitive organ for uranium toxicity. Some studies have shown small changes in the way kidneys work when people drink water with large amounts of uranium for a long time (usually more than 2-5 years). These changes, however, seem to go away when people stop drinking this water with high-levels of uranium.
- We do not know how common kidney problems related to uranium exposure are among the general population of the state. Furthermore, we cannot determine with available data what level of exposure to uranium would cause these problems to develop.

Possible actions one can take to reduce excessive exposure to uranium:

- Always wash fruits and vegetables, and it is recommended that you peel and discard the outside portion of root vegetables.
- Parents should discourage their children from eating dirt.
- If you work with uranium, take all precautions to avoid bringing uranium-containing dust home on your clothing, skin, hair, or tools.
- Consider testing your home for indoor radon gas.

In areas with known uranium in the soil*:

- If your water comes from a private well, have it tested for uranium. If uranium levels are high consider various treatment/filtration options, or consuming water from a different source. (If your water comes from a public water supply, it will regularly be tested for uranium).

For more information, visit: <http://www.atsdr.cdc.gov/toxprofiles/tp150.pdf> or <http://www.atsdr.cdc.gov/toxguides/toxguide-150.pdf> or <http://www.4csbc.org/pages/uranium.html> or <http://www.cdc.gov/biomonitoring/>

For information about well testing and maintaining a well, visit: <https://nmtracking.org/water>

*To find areas in New Mexico with high levels of uranium in the rocks and soil, visit: https://nmtracking.org/view/pdf/Uranium_and_Human_Health.pdf

For information about indoor radon and radon testing, visit: <https://www.env.nm.gov/nmrcb/radon.html>

For any other questions, please call 1-888-878-8992

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