COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

Uranium

- Legal Limit (Maximum Contaminant Level):[a] SWB: 20 pCi/L
- Public Health Goal (PHG):[b] 0.43 pCi/L

Common sources of the contaminant in the Central Valley and Central Coast[a,b,c]

Uranium is naturally occurring in some rocks and soil. Uranium can also enter the environment in the production and use of phosphate fertilizers, or from mining and industrial processing activities.

Possible health impacts [a, b ,c]

- Liver, bone, and kidney damage
- Cancer

These health impacts could occur from long-term exposure in adults or short-term exposures during infancy to early childhood.

Sensitive populations [b, e]

Children, specifically bottle-fed infants to age 2, and pregnant women may be at higher risk for possible health impacts. Individuals with compromised kidney function may also be at higher risk.

Pathways of exposure from household water use[b, e]

For the general population, the primary pathway of exposure to uranium through water is the consumption of drinking water or food and beverages prepared with tap water that is contaminated with uranium.

Tips for reducing exposure at home

Completely avoiding exposure to contaminated water may not be feasible. However, limiting or minimizing exposure could reduce the overall risk of health impacts. The State of California does not certify any home filtration system to remove uranium. Therefore, we recommend the following:

- Use bottled water for drinking, cooking, making ice cubes, and brushing teeth.

Uranium References

a. The SWB MCL is stated in a unit called a "Curie," which is a measurement of radioactivity (named after Marie Curie, who developed the theory of radiation). The federal EPA MCL is shown as a unit of mass, however the same mass of Uranium may vary in its radioactivity, depending on the isotope of Uranium present. For more information see: SWB (2017), "Groundwater Information Sheet, Radionucleotides," available at https://www.waterboards.ca.gov/gama/docs/coc_radionuclides.pdf (last visited Feb. 2022)

b. OEHHA (2001), "Public Health Goal for Uranium in Drinking Water," available at https://oehha.ca.gov/media/downloads/water/chemicals/phg/uranium801.pdf (last visited Feb, 2022).

c. WHO (2005) "Uranium in Drinking Water," available at http://www.who.int/water_sanitation_health/dwq/chemicals/uranium290605.pdf (last visited Feb. 2022).

d. ATSDR (2013), "Public Health Statement, Uranium," available at https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=438&toxid=77 (last visited Dec. 2021)

e. ATSDR (2013), "Toxicological Profile for Uranium, Health Effects," available at **https://www.ncbi.nlm.nih.gov/books/NBK158802/** (last visited Dec. 2021)