

Silver (Ag)

What is Silver?

Silver is a naturally occurring element. It is found in the environment combined with other elements such as sulfur, chlorine, and nitrogen. Silver is often found as a by-product during the retrieval of copper, lead, zinc, and gold ores.

Silver may be released into the air and water through natural processes such as the weathering of rocks. Human activities such as processing of ores, cement manufacturer, and the burning of fossil fuel may release silver into the air.

Rain may also wash silver out of soil into the groundwater.

Does Silver have any additional names?

No

What are the known health effects?

Exposure to high levels of silver for a long period of time may result in a discoloration of the skin and other body tissues. Lower-level exposure may also cause silver to be deposited in the skin and other parts of the body; however, this is not known to be harmful.

How does exposure occur?

Exposure to silver may occur by breathing low levels in the air, swallowing it in food or drinking water, carrying out activities such as jewelry-making, soldering, and photography, or using anti-smoking lozenges or other medicines containing silver.

Is this contaminant regulated?

Silver is a secondary contaminant by USEPA, which is a non-enforceable guideline for aesthetics. The recommended upper limit is 0.10 ppm; water supplied by the MLTMUA system has not reported any detections of Silver.

How can I reduce exposure?

Silver in drinking water can be removed at point of use by reverse osmosis and distillation.

Additional information regarding Silver, including the information referenced, can be found at:

<https://www.atsdr.cdc.gov/toxfaqs/tfacts146.pdf>

<https://www.wqa.org/Portals/0/Technical/Technical%20Fact%20Sheets/Silver.pdf>