

Arsenicosis



Distribution

At least 140 million people in 50 countries rely on drinking water sources that contain arsenic at levels above the WHO guideline value of 10 µg/L (WHO, 2017).



Cause

Arsenic is naturally found at high levels in certain water sources (mainly groundwater) in over 50 countries. When people regularly use water with high arsenic concentrations for drinking, irrigating crops, or preparing food, they often develop symptoms of arsenicosis over time.



Symptoms of arsenicosis on a person's hands.
Image credit: Anita Ghosh / REACH (public domain).



Symptoms

Years of exposure lead to lesions, hard patches, and skin discoloration. Symptoms may also include developmental effects, diabetes, pulmonary disease, cardiovascular disease, pregnancy complications, and some types of cancer.



Prevention

- Drink or cook with water that has arsenic concentrations less than the WHO guideline value of 10 µg/L.
- Educate and engage community members to help them understand long-term risks.
- Substitute or dilute high-arsenic water with a safe water source that has a lower arsenic concentration. Or, use a water treatment system designed to remove arsenic.

HOUSEHOLD WATER TREATMENT OPTIONS

Various technologies use methods to remove arsenic. Methods include oxidation, coagulation-precipitation, and adsorption.



Treatment

Some drugs can be used to treat arsenic poisoning, but long-term effects are often irreversible.