

# Facts About Arsenic

Arsenic is a natural element found in the earth. It can also come from human activities, like factories and fuel burning. Arsenic does not break down and can stay in soil, water and air for a long time. Some types of arsenic can be harmful to human health.

The California Environmental Protection Agency sets the safe amount of arsenic in home soil at 0.11 milligrams for every kilogram of dirt. However, most soil in Southern California naturally has much more than that. In many areas of the state, natural levels range from 4 to 25 milligrams, with an average of 12 milligrams. This happens because arsenic has broken down from rocks into soil over many years. If you find levels higher than these natural amounts, it is usually because of pollution caused by people.

Communities of color and low-income areas are more likely to be exposed to arsenic because they are often located near:

- Freeways and heavy traffic
- Factories, warehouses, and rail yards
- Older buildings and industrial sites
- Vacant lots with contaminated soil

These conditions are a result of environmental injustice, where some communities face more pollution than others. Addressing the environmental inequities requires community input, policy change, and investment in cleaner environments.

**How People Are Exposed to Arsenic:** In urban areas, people most often come in contact with arsenic through:

## Air

Breathing polluted air or dust from burning fuels from cars, trucks, power plants, dust stirred up by traffic, wind or construction.



Factories involved in activities like smelting, wood preservation, and glass manufacturing can release arsenic into the air, exposing nearby community members to elevated levels of arsenic.

## Ground Water

Drinking water with arsenic from sources like private wells or older neighborhoods with older plumbing systems are more likely to have higher arsenic levels. Pesticides in ground water are another source of potential exposure.



## Soil

Soil near old industrial or construction sites might contain arsenic from past activities.



Eating foods grown in contaminated soil or from plants irrigated with contaminated water can also be a source of exposure if swallowed when contaminated food is eaten or inhaled as dust particles.

## Cigarette Smoke

Smoking cigarettes can contribute to exposure because they may contain small amounts of arsenic.



## Health Effects of Arsenic: Arsenic can affect health over time.

### Short-Term

- Stomach pain
- Vomiting or diarrhea

### Long-term

- Skin color changes (hyperpigmentation, hypopigmentation) or sores
- Numbness or tingling in hands and feet
- Heart and lung problems
- Higher risk to some cancers

## Who Is Most Vulnerable to Exposure?



Children's bodies are growing fast. They eat, drink and breathe more, and they put their hands in their mouths after touching soil or dust. Exposure to arsenic can harm their development and health.



Pregnant people are at higher risk to arsenic exposure because of the changes happening during pregnancy. Arsenic can cross the placenta and affect the developing fetus.



Workers in construction, mining, smelting, manufacturing and wood treatment are at higher risk of arsenic exposure.

## How to Reduce Exposure

- Wash hands after being outdoors
- Wash fruit and vegetables well before eating
- Change clothes before or after going home after work
- Keep shoes outside to avoid bringing in dust
- Cover bare soil with mulch, plants, or ground cover
- Use water filters that remove arsenic, if needed
- Check your annual drinking water quality report
- Avoid burning old, treated wood

**Community Action Matters:** Protecting health is not just an individual responsibility. Communities can:

- Advocate for clean air and soil at an [AB 617 Community Protection Meeting](#)
- Support policies that reduce pollution
- Learn about testing of soil and water

**MORE INFORMATION:** [https://www.atsdr.cdc.gov/environmental-medicine/hcp/clinicianbriefarsenic/index.html?utm\\_source=chatgpt.com](https://www.atsdr.cdc.gov/environmental-medicine/hcp/clinicianbriefarsenic/index.html?utm_source=chatgpt.com)