

## If you have a private well,

the Office of Environmental Health recommends that all private wells be tested at least **once per year** for total coliform bacteria, nitrates, total dissolved solids, and pH levels. You may need to test your well for arsenic and other primary metals **every three years**.

### In addition to the schedule above, test your well when:

There are **known problems** with well water in your area.

If you have found a **high radon concentration** in your home (test the air in your home every 7-10 years), consider testing your water for radon.

You have experienced **problems near your well** (flooding, land disturbances, nearby waste disposal sites).

You notice a change in **water quality** (taste, color, odor).

**Independent laboratories can perform private well sampling.** For a list of current laboratories that are certified for testing well-water samples, contact:

**Arizona Office of Licensure and Certification**

Phone: (602) 364-0720  
Email: [envapp@azdhs.gov](mailto:envapp@azdhs.gov)

## Office of Environmental Health

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What you should know about

# ARSENIC

in Arizona groundwater

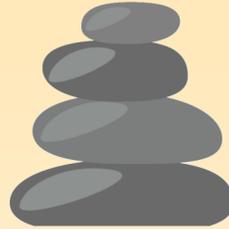


# Arsenic

IS A NATURALLY OCCURRING METAL IN SOILS. EATING FOODS OR DRINKING WATER WITH TOO MUCH ARSENIC CAN CAUSE HEALTH PROBLEMS.

In Arizona, arsenic is present in almost all groundwater supplies. Because **private wells** are the primary source of water for rural residents of Arizona, making sure the water is free of arsenic is important.

The Office of Environmental Health (OEH) recommends testing **all new wells** for arsenic and other primary metals before the water is used for drinking or cooking purposes.



Arsenic can enter the air through rock erosion, mining activity, or forest fire.



Arsenic can get in drinking water (usually from wells) when the water has been filtered through arsenic-rich rock.



In communities where residents cook and drink from the same contaminated well, arsenic intake multiplies.

Arsenic **cannot be removed by boiling** the water before use. In fact, boiling the water may **increase** the concentration of arsenic.

## How can arsenic hurt me and my family?

Arsenic in small amounts, taken over many years, can cause certain cancers. Skin cancer is the most common. At high levels, arsenic can cause poisoning, which may result in acute illness and even death.

## Health Effects of Arsenic Exposure

**Early symptoms:** skin discoloration, skin lesions, nausea, vomiting, diarrhea.

**Increased risk:** kidney disease, heart disease, liver disease, lung cancer, skin cancer, bladder cancer, diabetes, paralysis.

## How can arsenic be removed from the water?

Arsenic can be removed from the water by several methods, but the most common method for household use is by a **reverse osmosis** filtration system.

## How much arsenic is too much arsenic?

The Office of Environmental Health has developed a simple method to determine if the arsenic levels are too high, using a color code.

Units: **ppb** is parts per billion and **mg/L** is milligrams per liter.

**Above 200 ppb or 0.2 mg/L**

This water should **not** be used for drinking or cooking! You should obtain your drinking water from another source immediately, or install and maintain a home treatment device.

**11-200 ppb or 0.011-0.2 mg/L**

This water will increase the risk of long term or chronic health problems. Don't panic! Remember, chronic conditions develop over a long time. Make plans to obtain water from another source or install and maintain treatment.

**Less than 10 ppb or 0.01 mg/L**

It is ok to drink and cook with this water.

Water with **500 ppb of arsenic or less** can be used for bathing, laundry, and brushing teeth. Children should not use water with more than **200 ppb** for brushing their teeth.