

Atrazine and drinking water

What is atrazine and where does it come from?

Atrazine is used on a wide variety of agricultural crops as an herbicide to control broadleaf and grassy weeds.^{1,2} It can enter drinking water supplies through run off from agricultural fields where it has been applied.¹

How can atrazine affect my health?

Atrazine is a health hazard. Children and the elderly are particularly susceptible to the health effects of atrazine. Consuming water with high levels of atrazine over a long time can cause health effects such as:

- Cardiovascular system problems¹
- Reproductive problems³

When does atrazine in drinking water become a health concern?

Atrazine is measured in parts per billion (ppb). The federal government has established the safe drinking water standard (also called maximum contaminant level) for atrazine as 3 ppb.¹

What can I still use my water for if it is contaminated with atrazine?

Water for drinking, beverage-making or food preparation can be obtained from a known safe source and used on a temporary basis. Other uses of water pose much less hazard, but are not entirely safe if atrazine levels are significantly above the drinking water limit.

Can I wash my food with atrazine-contaminated water?

If atrazine levels in your water are above 3 ppb, you should use bottled water or water from a safe source to wash, prepare and cook your food.

Can I irrigate or water my garden with atrazine-contaminated water?

Atrazine can be taken up by plants² and can accumulate in soils,³ therefore water above 3 ppb should not be used for irrigating or watering. Because atrazine is an herbicide, using atrazine-contaminated water to irrigate plants could slow or stop their growth.

What about bathing and showering?

A small amount of atrazine may enter the body through the skin, so bathing, swimming and showering with atrazine is not recommended.³

What about washing dishes, utensils and food preparation areas?

Only a very small amount of water clings to smooth surfaces, such as dishes. Water contaminated with atrazine can be safely used to wash and sanitize dishes, tables and eating utensils.

What about general cleaning and laundry?

Very little water remains on washed surfaces and in laundered fabrics. Water contaminated with atrazine can be safely used for general cleaning and washing of clothing, bedding and linens.

What about my pets?

Animals should not drink water with atrazine levels above 3 ppb.

Learning about atrazine levels in your drinking water

For people on public water systems:

Public drinking water providers must monitor for atrazine and ensure levels remain below the drinking water standard of 3 ppb. Public water system monitoring results are available on the Oregon Drinking Water Services [Data Online](#) website. If your water comes from a community water system (you pay a water bill) your drinking water provider must provide a [Consumer Confidence Report](#) to its customers every year. This report contains the most recent atrazine test results if detected. Contact your drinking water provider to request a copy of the most recent consumer confidence report.

For private well owners:

If your drinking water comes from your own well, you will have to find an accredited laboratory that does water testing for private property owners. These labs can provide information and instructions for getting your well water tested. For a list of accredited laboratories for drinking water in Oregon, refer to the following [link](#).

Removing atrazine from drinking water

Don't boil the water!

There is no evidence that boiling removes atrazine.

For operators of public drinking water systems:

Atrazine can be reduced below 3 ppb in drinking water using granular activated carbon filtration. Work with a professional engineer to determine the best treatment for your system. Not all kinds of treatment are effective, and no single treatment method can remove all contaminants from water. Alternatives to treatment include developing a different water source or connecting to another safe water source in the area. Atrazine contamination can be prevented by avoiding source water that contains agricultural runoff. Treatment has limitations and disadvantages. Before deciding on treatment equipment, contact [Oregon Drinking Water Services](#) for regulatory requirements for public water systems.

Private well treatment options:

Treatment options are available to remove atrazine from well water. The most commonly used is

called granular activated carbon filtration. Options include central treatment (at the well or entry to home) or a point-of-use device (kitchen sink filter).

Check to be sure any treatment system used is certified by a recognized, third-party testing organization that meets strict testing procedures established by the [American National Standards Institute](#) (ANSI) and the [National Sanitation Foundation](#) (NSF) International. Proof of certification should be available through your manufacturer. Alternatively, NSF certification for various treatment units may be verified through NSF, or the [Water Quality Association](#).

Treatment equipment must be carefully maintained to work properly and might not be effective if atrazine levels are very high. It is recommended that treated water be tested at least once a year. Untreated water should be tested at least every three years.

For more information

- Private well owners with health-related questions and concerns about atrazine in their water can call 971-673-0440 or email general.toxicology@state.or.us.
- For questions about treatment options for your domestic well, contact the drinking water specialist at your local or county health department. Here is a list of local and county [health departments](#) in Oregon with their contact information.
- [U.S. Environmental Protection Agency](#) – Basic information about atrazine in drinking water

References

1. USEPA. Basic Information about Atrazine in Drinking Water.2013 <http://water.epa.gov/drink/contaminants/basicinformation/atrazine.cfm>
2. OEHHA. Atrazine 1999. http://oehha.ca.gov/water/phg/pdf/atraz_f.pdf
3. ATSDR. Toxic Substances Portal Atrazine. 2011. www.atsdr.cdc.gov/toxfaqs/TF.asp?id=854&tid=59



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