



Cyanotoxin Health Advisory for Vulnerable People Frequently Asked Questions July 2019

What is a health advisory?

An advisory is issued when drinking water sampling results show that cyanotoxins are present at levels that are not safe to drink. Oregon Health Authority Drinking Water Services requires that the water supplier issue a health advisory to notify users not to drink the water until the problem is addressed.

Oregon and the U.S. Environmental Protection Agency (EPA) have established health advisory levels for two cyanotoxins in drinking water: total microcystins and cylindrospermopsin. This is the level at or below which adverse health effects are not expected to occur if consuming water containing cyanotoxins at this concentration for up to 10 days. Depending on the level found, a health advisory can apply to vulnerable people only, or everyone.

Health Advisory Levels		
Cyanotoxin	For Vulnerable People ($\mu\text{g/L}$ or ppb)	For Everyone ($\mu\text{g/L}$ or ppb)
Total Microcystins	0.3	1.6
Cylindrospermopsin	0.7	3

What populations are considered vulnerable to cyanotoxins in water?

Cyanotoxins affect some users more than others. This is partially due to a person's size, and how much water they consume per body weight. For example, when cyanotoxins are present in drinking water, formula-fed babies are vulnerable because they consume a large amount of water for their size. These toxins affect the liver and kidneys, so people with pre-existing liver or kidney conditions are also particularly at risk.

Populations especially vulnerable to cyanotoxins include:

- Infants, particularly those that are formula-fed.
- Children younger than 6.
- People with pre-existing liver conditions.
- People receiving dialysis treatment.
- Pregnant women and nursing mothers.

As a precaution, the elderly and other sensitive populations should consider following these advisory instructions. Pets and livestock may also be at increased risk.

How do vulnerable people avoid exposure to the toxins?

Vulnerable people who follow the drinking water advisory will avoid further exposure.

Pregnant and breast-feeding mothers should not drink tap water but should instead drink bottled water or water from an alternate source.

Mothers who breast-feed their infants should continue to do so if they are drinking bottled or well water.

What about healthy people 6 and older?

For healthy people aged 6 and older, the water is safe to drink, including to use for cooking and to make hot beverages such as coffee or tea. All other uses of water are acceptable.

Does boiling the water make it safe?

No. Boiling water does not remove cyanotoxins, and prolonged boiling might result in slightly higher concentrations of the toxins in the water.

Do camping-style or home water filters or purifiers remove cyanotoxins?

Most camping and home water filters and purifiers will not remove these toxins from drinking water. Only reverse osmosis treatment units, and special carbon treatment units certified to remove microcystins (under NSF P477) are known to be effective. Carefully read the manufacturer's instructions to determine what type of process is used.

What about educational facilities such as schools, day cares, day camps and preschools?

Schools, day cares, day camps and preschools should provide bottled or well drinking water to possibly sensitive groups at their facilities.

As a precaution, items that children may put in their mouths, such as toys and teethingers, should be rinsed with an alternative water source such as bottled water. Tap water may be safely used for cleaning surfaces that children will not put their mouths on.

Is it safe to perform in-home activities, such as showering and washing hands?

Everyone, including vulnerable people, can use tap water for showering, bathing, washing hands, washing dishes, flushing toilets, cleaning and doing laundry.

Vulnerable people should use bottled water for tooth-brushing.

Infants and children younger than 6 should be supervised while bathing and during other tap water-related activities to prevent accidental ingestion of water.

In-home nebulizers or CPAP/BiPAP components should not be washed with tap water; use bottled or water from an alternate source instead.

Can vulnerable people eat vegetables irrigated with tap water and water house plants and gardens with tap water during a health advisory?

Yes. It is safe for vulnerable people to eat vegetables irrigated with tap water during a health advisory. Tap water may also be used for watering house plants and gardens.

What about restaurants, food service, and retail food establishments?

These establishments must follow instructions given by the agencies that license them. During a health advisory, food service providers must use an alternate water source and follow special procedures. Consumers should carefully read any notices provided by the establishment. Vulnerable people should not drink the tap water or consume products containing tap water. As a precaution, the elderly and other sensitive populations should consider following these advisory instructions.

How is well water affected during a drinking water advisory?

Water from wells is typically not affected by advisories involving surface water sources.

What about pools, waterparks and spas?

Pools, waterparks and spas that use water from the public supply are safe to use. Infants and children younger than 6 should be supervised to prevent accidental ingestion of water.

How do cyanotoxins (cylindrospermopsin and microcystins) affect livestock and pets where there is a drinking water advisory?

Both toxins are a risk to livestock and pets. Those with pets and small livestock should consider providing them bottled or water from an alternate source instead. Large livestock are likely to have enough mass that there should not be an issue with them. Contact a veterinarian if animals show signs of illness.

Cyanotoxin Guideline Values (GVs) for Dogs (in µg/L or ppb)

Cyanotoxin	Dog GVs
Microcystin	0.2
Cylindrospermopsin	0.4
Anatoxin-a	0.4
Saxitoxin	0.02

Why is advice for drinking water different from that for recreational water?

Recreational advisories are based on concentrations of cyanotoxins measured in a water body—a reservoir, lake or river. Drinking water advisories are based on concentrations of cyanotoxins measured in the finished water after treatment. Cyanotoxin concentrations are typically much higher on the water body than in finished water. Therefore, health advisory levels are different for recreational use than for drinking water. The amount of water people incidentally swallow while recreating (swimming, water skiing, etc.) is much lower than when people use it as a primary drinking water source.

AFTER A DRINKING WATER ADVISORY HAS LIFTED

Do I need to flush my faucets?

Once a “do-not-drink” notice is lifted, it is important to flush out any contaminated water that may remain in household plumbing if that water could be used by a child younger than 6 or other vulnerable person. At each tap where water may be consumed by a vulnerable person, flush the cold water for a few minutes, until you notice a temperature change. Hot water should never be used for drinking or preparing food.

Do I need to clean my appliances – like refrigerators, ice makers– and water filters?

Contamination can accumulate in water filters and should be cleaned or replaced after an advisory is lifted, particularly if used by a vulnerable individual. Refrigerator water dispensers and ice makers that are connected to your waterline have a filter. For that filter or any other water treatment device used during the advisory, consult your equipment’s owner's manual for cleaning or replacement instructions. Any ice made during the advisory should not be used by vulnerable people or should be discarded.