



Cyanotoxin Related to the Detroit Lake Algal Bloom: What does it mean for your health?

May 31, 2018

Salem Drinking Water Services recently issued a Health Advisory for vulnerable populations due to detection of cyanotoxins in their drinking water systems. It is safe for most people age 6 and over to drink affected water. This advisory affects groups considered to be vulnerable to the toxin at the current levels.

Based on the current water quality, what populations are considered vulnerable to the toxins in the water?

Vulnerable populations who should take steps to prevent exposure to include:

- Infants, children age 5 and under
- people with compromised immune systems
- people receiving dialysis treatment
- people with pre-existing liver conditions
- pregnant women or nursing mothers
- pets and other sensitive populations

Other healthy individuals may drink the water at this time. If this information changes the advisory will be updated as needed.

What is the current situation?

- Detroit Lake has harmful algal bloom containing cyanobacteria.
- Water from the North Santiam River downstream of the lake is used by several communities for drinking water supplies.
- Small amounts of two cyanobacteria-related toxins have been found in public water supplies in the City of Salem, City of Turner, Suburban East Salem Water District and Orchard Heights Water Association.
- There is a do not drink advisory in place for certain vulnerable populations in the affected communities.

What are cyanobacteria?

- Cyanobacteria, also called blue-green algae, are single-celled organisms that grow in water.
- In warm weather, when nutrients are plentiful, they may grow quickly or “bloom”, sometimes producing toxins.
- Cyanobacteria release multiple toxins. The two toxins that have been detected in this bloom are *Microcystin* and *Cylindrospermopsin*.

How do vulnerable populations prevent exposure to the toxins?

- People who follow the drinking water advisory (<https://www.cityofsalem.net/Pages/drinking-water-advisory.aspx>) and the recreational advisory for Detroit Lake (<http://www.oregon.gov/oha/ERD/Pages/HealthAdvisoryIssuedMay23DetroitLake.aspx>) will avoid further exposure.
- Toxins are not removed by boiling water. Boiling water will not prevent exposure.

What are the possible health effects of exposure to cyanobacteria?

- Signs of possible exposure may include nausea, vomiting, and diarrhea, skin irritation, and allergic responses.
- People exposed to cyanobacterial toxins through dialysis water contamination may experience life-threatening liver damage.
- Some cyanotoxins can injure the nervous system. None of these have been detected in the affected drinking water.

What treatments are available?

- There are no antidotes or cures for toxin exposure.
- Healthcare providers may be able to treat symptoms.
- For most patients, the key is to avoid dehydration or electrolyte problems.
- For those with underlying liver or kidney disease, evaluation might be prudent, along with guidance to ensure people avoid any further exposure.

When should people see a healthcare provider?

- A health care professional may be able to treat your symptoms.
- See a healthcare provider if you have **severe** nausea, vomiting, diarrhea, skin irritations and allergic reactions.