

EPA Drinking Water Health Advisories for Cyanotoxins

Under the Safe Drinking Water Act, the EPA may publish Health Advisories (HAs) for contaminants that are not subject to any national primary drinking water regulation 42 § 300g-1(b)(1)(F) https://www.law.cornell.edu/uscode/text/42/300g-1. The EPA develops HAs to provide information on the chemical and physical properties, occurrence and exposure, health effects, quantification of toxicological effects, other regulatory standards, analytical methods, and treatment technology for drinking water contaminants. HAs describe concentrations of drinking water contaminants at which adverse health effects are not anticipated to occur over specific exposure durations (e.g., one-day, ten-days, several years, and a lifetime). HAs also contain a margin of safety to address database uncertainties. HAs serve as informal technical guidance to assist federal, state and local officials, as well as managers of public or community water systems in protecting public health when emergency spills or contamination situations occur.

In 2015, the EPA developed Health Advisories (HA) for the cyanotoxins, cylindrospermopsin and microcystins:

- Fact Sheet: 2015 Drinking Water Health Advisories for Two Cyanobacterial Toxins
 https://epa.gov/ground-water-and-drinking-water/drinking-water-health-advisory-documents-cyanobacterial-toxins
- US EPA Drinking Water Health Advisory for the Cyanobacterial Toxin Cylindrospermopsin
 https://epa.gov/ground-water-and-drinking-water/drinking-water-health-advisory-documents-cyanobacterial-toxins>
- US EPA Drinking Water Health Advisory for the Cyanobacterial Microcystins Toxins
 https://epa.gov/ground-water-and-drinking-water/drinking-water-health-advisory-documents-cyanobacterial-toxins>

These HAs are not regulations and should not be construed as legally enforceable federal standards. HAs may change as new information becomes available.

Cyanotoxin	Drinking Water Health Advisory (10-day)	
	Bottle-fed infants and pre-school children	School-age children and adults
Cylindrospermopsin	0.7 μg/L	3.0 μg/L
Microcystins	0.3 μg/L	1.6 μg/L

The EPA also developed Health Effect Support Documents (HESD) for the following cyanotoxins: anatoxin-a, cylindrospermopsin and microcystins. The HESDs constitute a comprehensive review of the published literature on the chemical and physical properties of these toxins, the toxin synthesis and environmental fate, occurrence and exposure information, and health effects.

- US EPA Health Effects Support Document for the Cyanobacterial Toxin Anatoxin-a
 https://epa.gov/ground-water-and-drinking-water/drinking-water-health-advisory-documents-cyanobacterial-toxins>
- US EPA Health Effects Support Document for the Cyanobacterial Toxin Cylindrospermopsin https://epa.gov/ground-water-and-drinking-water/drinking-water-health-advisory-documents-cyanobacterial-toxins>
- US EPA Health Effects Support Document for the Cyanobacterial Microcystins Toxins
 https://epa.gov/ground-water-and-drinking-water/drinking-water-health-advisory-documents-cyanobacterial-toxins>

The EPA developed a series of tools to support states and utilities to assist them as they consider whether and how to manage cyanobacterial toxins in drinking water.

Cyanotoxin Management Tools for Public Water Systems https://epa.gov/ground-water-and-drinking-water/cyanotoxin-management-tools-public-water-systems

Several U.S. states have implemented standards or guidelines that apply to cyanotoxins in drinking water. For more information on the state-specific standards or guidelines, contact your state environmental or public health department.

• List of State Health and Environmental Agencies https://epa.gov/home/health-and-environmental-agencies-us-states-and-territories

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