

NSF International - The Public Health and Safety Organization

Blue Green Algae In Drinking Water

What Is Blue-Green Algae?

Warm weather along with the right nutrients in lakes, such as phosphates from agricultural runoff, create a perfect environment for the growth of blue-green algae. Large areas of blue-green algae growth are known as harmful algal blooms (or HABs), which can create toxic concentrations of a chemical called cyanotoxin. Cyanotoxins are a group of chemical contaminants formed by blue-green algae. The most common type is microcystin, which is toxic to humans and animals. Municipal water treatment systems cannot always quickly and effectively treat microcystin in drinking water.

HABs have occurred across the globe from Lake Erie in the United States, to Lake Koetshuis in the Netherlands, to Lake Taihu in China.

Potential Health Effects From Microcystin

Exposure to unsafe levels of microcystin concentrations through drinking water or swimming, have been known to cause a wide range of symptoms including fever, headache and vomiting, as well as liver and kidney damage in more severe instances.

The U.S. Environmental Protection Agency (EPA)'s recommended drinking water limit of microcystin for children under age 6 is 0.3 ppb (parts per billion). For everyone else, the drinking water limit is 1.6 ppb of microcystin. These official health advisory levels were determined in cooperation with Health Canada.

What to Do If There is a Microcystin Water Advisory

Don't boil your water. Boiling water that contains microcystin will actually concentrate the toxin. Follow the advice of your municipal water authority regarding drinking, cooking, bathing, dish washing, providing it to pets or filtering the water during the advisory.

Using Bottled Water During a Water Emergency

Bottled water is an excellent option during a drinking water emergency or advisory. Make sure to store your bottled water properly by keeping it out of the garage, away

from chemicals and off the ground. Store bottled water in the same places you would store food in your home. For more bottled water tips, visit: **Five Facts You Should Know About Bottled Water**.

Water Filters that Reduce Microcystin

NSF International scientists and public health experts have been testing and certifying products for more than 70 years. They have tested and certified water filters to ensure they reduce microcystin toxins to below the health advisory levels set by the U.S. Environmental Protection Agency (EPA). To find products that are NSF certified to reduce microcystin in drinking water, visit our web page: NSF Certification Listings for Microcystin Filters.

For any questions about microcystin in drinking water or finding a water filter to reduce microcystin, please contact the NSF Consumer Information hotline: +1.800.673.8010 or send an email to: info@nsf.org.

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