

## Information for the General Public during Harmful Algal Bloom Season

*Information provided as of 6/6/2016 and may be updated or revised.*

### **Background**

The US EPA issued Health Advisories for microcystin in May 2015 for populations based primarily on age and a 10-day exposure period. EPA recommends threshold levels at or below 0.3 ppb in drinking water for children pre-school age (5) and younger. For school- age children (6) through adults, the recommended health advisory levels for drinking water are at or below 1.6 ppb for microcystin.

### **What does this mean?**

The US EPA and Ohio EPA recommend that the public not drink water with microcystin above two threshold levels (0.3/1.6 ppb) depending primarily on age for more than 10 days.

### **How will we know when the threshold is reached?**

The Ohio EPA and the City of Toledo are working together so that if microcystin is present beyond recommended thresholds the public will be informed by a “Do Not Drink” Advisory.

## **Drinking Water Advisories protect the public from adverse health effects by limiting potential exposure to microcystin.**

### **What is the City of Toledo doing to protect the drinking water from algal toxins?**

- Toledo has put an advance warning system in place for early detection of harmful algal blooms which allows us to adjust water treatment methods.
- Toledo has dramatically enhanced its chemical feed capabilities as compared to 2014.
- Staff has streamlined operations and communications regarding water quality.
- The City of Toledo actively works with the Ohio EPA to ensure the public water supply is safe and operating within new microcystin guidelines.

### **How Can I Prepare for a Do Not Drink Advisory?**

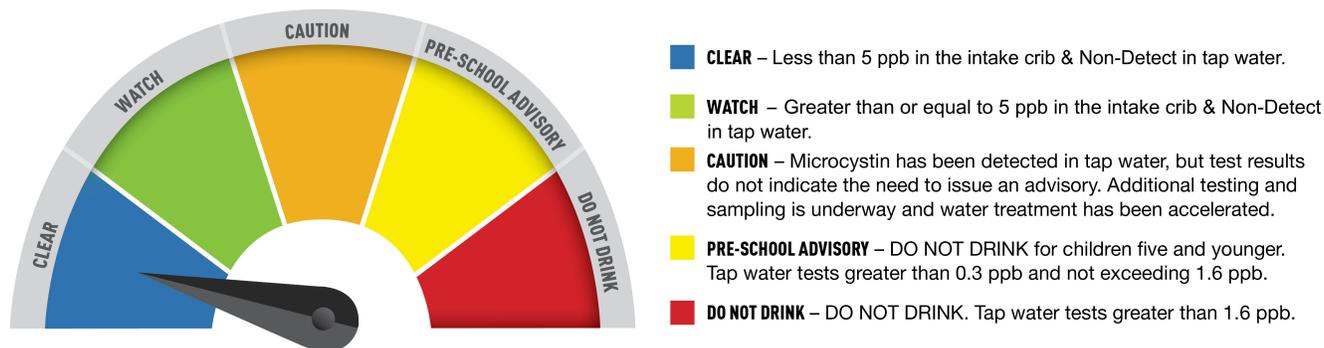
- Residents should keep a 3 to 7 day supply of bottled water on hand, or 1-2 gallons of water per person per day.
- Sign up to receive emergency text alerts through [www.lucascountyalerts.com](http://www.lucascountyalerts.com).
- Toledo water customers can check the water quality dashboard status of the drinking water at [www.toledo.oh.gov](http://www.toledo.oh.gov) , “like” us on Facebook and follow us on Twitter to receive real-time updates.

### **How is the public notified of a Drinking Water Advisory?**

The public is made aware of the status of its drinking water quality, including if needed, any Drinking Water Advisories through the Water Quality Dashboard at [www.toledo.oh.gov](http://www.toledo.oh.gov), broadcast media, electronic billboards, Toledo-Lucas County Health Department website, and via the Lucas County Text Alert system.

## Water Quality

Toledo tests raw and treated water regularly for the presence of toxins, including microcystin created by algae blooms. See scale below for the current status of drinking water quality according to Ohio EPA guidelines.



### Communication

Communication during the Harmful Algal Bloom season is based on the “dashboard” system which shows the conditions in the intake crib in Lake Erie and tap water in five levels from “Clear” to “Do Not Drink.”

- The City of Toledo dashboard reflects accurate information. The dashboard is updated by staff at the Water Treatment Plant to provide current water quality status.
- Citizens may rely on the dashboard.
- Information or rumors that are not verified on the water quality dashboard and reported through media outlets should be disregarded.

### CLEAR

**Why do we see or hear about algal blooms in Lake Erie but the Water Quality Dashboard still states “Clear?”**

- While harmful algal blooms may be found elsewhere in Lake Erie in higher amounts, there is less than 5 ppb present in Toledo's intake crib where raw water enters the treatment process.
- The Ohio Environmental Protection Agency, Great Lakes Observing System, plus university research teams, all join Toledo water treatment professionals in monitoring lake water conditions to provide early warning of potential Harmful Algal Blooms that would affect drinking water supplies.

### WATCH

**What does “Watch” status mean?**

- Water is safe to drink.
- Microcystin is detected in Lake Erie above 5 ppb, but not in tap water. The water treatment process is effectively removing the microcystin.

- Toledo and partners will continue to closely monitor the lake. Toledo now has an advanced warning lake water monitoring system in place.
- Lake conditions are being carefully monitored with data collection sondes in Lake Erie, the intake crib, and at the Low Service Pump Station all prior to the treatment plant.

## CAUTION

### What to Expect with a “Caution” dashboard status

- Water is safe to drink. There are no restrictions on water use.
- A “Caution” dashboard status means microcystin has been detected in tap water but test results do not indicate a need to issue a Do Not Drink Advisory.
- The “Caution” status begins the process of increased sampling and testing, and confirmation testing, while treatment adjustments continue to be made.
- Depending on the results of additional sampling and testing, the “Caution” level may be downgraded to a “Watch” dashboard status or elevated to an “Advisory.”
- Now is the time to check your water supply on hand in the event the “Caution” dashboard status is elevated.
- Toledo water customers can tune in to local news channels and the City of Toledo website to check the status of the drinking water.

## PRE-SCHOOL ADVISORY

### What to Expect with a Pre-School Advisory

- A Pre-School Advisory is a Do Not Drink/Do Not Boil Advisory for bottle-fed infants, children 5 and younger, pregnant women, nursing mothers, those with pre-existing liver conditions and those who receive dialysis treatment. Tap water tests are verified as greater than 0.3 ppb but not exceeding 1.6 ppb.
- Alternative water should be used for drinking, making infant formula, making ice, brushing teeth, and preparing foods for bottle-fed infants, children 5 and younger, pregnant women, nursing mothers, those with pre-existing liver conditions and those who receive dialysis treatment. Boiling water does not make it safe to drink. (Boiling water increases the concentration of microcystin).
- This Advisory is limited to consumption of water only. There is no restriction on bathing, washing, washing hands, washing dishes, doing laundry, watering plants, flushing toilets or other normal water uses. (*Healthcare providers and food service industries may have further restrictions.*)
- Additional health information is available on the Toledo-Lucas County Health Department website at <http://www.lucascountyhealth.com>.
- Toledo water customers can tune in to local news channels and the City of Toledo website for updates on the status of the drinking water.

## DO NOT DRINK

### What to Expect in a Do Not Drink Advisory

- Do Not Drink/Do Not Boil Advisory is in effect for all Toledo water customers. Tap water tests greater than 1.6 ppb.

- Alternative water should be used for drinking, making infant formula, making ice, brushing teeth, and preparing foods. Boiling water does not make it safe to drink. (Boiling water increases the concentration of microcystin).
- This Advisory is limited to consumption of water only. There is no restriction on bathing, washing, washing hands, washing dishes, doing laundry, watering plants, flushing toilets or other normal water uses. (*Healthcare providers and food service industries may have further restrictions.*)
- If needed, water distribution will be coordinated through the Lucas County EMA.
- Additional health information is also available on the Toledo-Lucas County Health Department website at <http://www.lucascountyhealth.com>.
- Toledo water customers can tune in to local news channels and the City of Toledo website for updates on the status of the drinking water.

**I/my child accidentally consumed water during a Pre-School or Do Not Drink Advisory. What do we do now?**

- Switch to an alternate drinking water source once you hear an advisory is in effect.
- If you learned of the Do Not Drink Advisory a day or two into the event, you are still within a safe period. --TLCHD
- If you have consumed water during a Do Not Drink over an extended period, monitor for abnormal behavior and symptoms. Individuals with symptoms should seek medical assistance.
- Unless your child is sick there is no need to go to the emergency room. --TLCHD

**How long will the Advisory last?**

While the utility does not believe there would be a lengthy duration should an advisory occur, repetitive testing will be necessary to make certain that the microcystin is below health advisory levels throughout the distribution system. Therefore, no specific time may be given.

**What are the possible effects of microcystin?**

Consuming water containing microcystins above health advisory levels for periods beyond 10 days may result in abnormal liver function, diarrhea, vomiting, nausea, numbness or dizziness.

**During a Drinking Water Advisory, can I take a shower?**

Drinking water advisories are specific for human consumption of water only and do not pertain to other water uses. There are no restrictions on bathing, washing dishes, doing laundry, watering plants, and other normal uses of water according to the Ohio EPA.

**How much water containing microcystin is consumed for a negative health impact?**

This is dependent on many different factors. US EPA Public Health Advisories of 0.3 ppb and 1.6 ppb by age group and a 10-day exposure period are designed with a safety factor of 1000 to avoid negative health impacts. –US EPA

**Are elevated microcystin levels a concern for pets for their drinking water?**

- The US EPA Public Health Advisories are for humans. Although there is little research on this, the Ohio EPA suggests using alternative water for pets and livestock as a precautionary measure.
- Veterinarians may be consulted with specific questions.

**What does “ppb” mean?**

PPB stands for “parts per billion” and is equal to a single drop of water in an Olympic-size swimming pool or one blade of grass on a football field.

**I filter my water at home with carbon—Does this help?**

No. Carbon filters can hold the toxin. Follow manufacturers’ recommendations for replacement. – TLCHD

**Will I have to flush my plumbing system when the advisory is lifted?**

- Toledo tests water from throughout its distribution system to establish when water is cleared for all uses, including drinking. Citizens may, after an advisory is lifted, run each faucet until it is cold, indicating the fresh stream of water from the water mains has reached the home or business.

**Will I have to change the filters in my home water filter system or icemaker when the advisory is lifted?**

- Depending on filters, they may hold toxins and would need to be replaced. Follow manufacturers’ recommendations for replacement.
- Throw away all ice from icemakers, and the first batch of ice, and change any icemaker filters according to manufacturers’ recommendations. --TLCHD
- Additional information is available at the Toledo-Lucas County Health Department.

**How do I know if my home or business is affected?**

Unless you receive specific information that you are *not* included, it is best to follow Do Not Drink advisories.

**Should I avoid elective medical procedures during a Caution, Pre-School or Do Not Drink Advisory?**

Contact your physician or hospital for information.

**What about dialysis?**

Contact your dialysis center for information.

**Is there any medication or anything we can take to get rid of the toxin if we ingested it?**

Only supportive treatment is provided if needed for longer term exposure with symptoms.  
-TLCHD

**Are there any restrictions on restaurants during a Pre-School Advisory?**

Yes. They must comply with guidelines provided through local health departments. See more information at <http://www.lucascountyhealth.com>.

**Where can I find more information?**

To learn more about the HAs for microcystins, visit EPA's Health Advisory webpage: <http://water.epa.gov/drink/standards/hascience.cfm>. To learn about additional strategies Public Water Systems and others could consider in managing cyanotoxins, visit EPA's CyanoHABs website: <http://www2.epa.gov/nutrient-policy-data/guidelines-and-recommendations>. --US EPA