

MONITORING BEACH HEALTH

Public Health Madison & Dane County monitors Dane County area beaches for *E. coli* bacteria and blue-green algae.

Our goal is to prevent harmful bacteria and toxins from making people ill while they enjoy our area lakes and beaches.

We test for...

E. coli bacteria

Waterborne pathogens are most commonly bacteria, viruses or parasites originating from human or animal feces and are associated with illnesses among swimmers.

Because testing for multiple pathogens is time-consuming and expensive, scientists and beach managers use indicator organisms for monitoring. For freshwaters, *Escherichia coli* (*E. coli*) is the best indicator for the presence of pathogens that can make people sick.

Cyanobacteria (blue-green algae)

Photosynthetic bacteria, called cyanobacteria can form harmful algal blooms in freshwater that can be toxic to people and animals, causing a variety of symptoms.

Favorable conditions, including high nutrient levels, sunshine and other factors can promote development of dense populations of cyanobacteria.

How beach monitoring information is communicated

We close beaches when the presence of *E. coli* and cyanobacteria pose a risk to health and well-being.



www.publichealthmdc.com/beaches



Email notifications
Sign-up on the beaches website page



/publichealthmdc



/publichealthmdc



Signs at the beach



Monitoring Beach Health

When do we collect samples?

E. coli bacteria

We collect water for *E. coli* testing at least once a week at each beach.

If bacteria levels are elevated, the beach is closed. Weekday follow-up occurs until the sample meets an acceptable bacteria level, at which point the beach will be reopened.

Cyanobacteria

We conduct visual inspections for blue-green algae blooms at least once a week at each beach.

In addition, if a lifeguard or beach user reports an algae bloom, Public Health staff will follow-up at that beach as soon as possible.

If a blue-green algae bloom is present, water is collected daily to test for cyanobacteria. The beach will remain closed until levels of cyanobacteria are acceptable.



Conditions can change quickly

A number of factors can influence water quality, including recent weather conditions like wind or rain, time of day, waterfowl and wildlife at the beach, number of users, as well as physical characteristics of the beach. It's possible for conditions to vary significantly throughout the day and day-to day.

Before swimming, always take an overall look at water conditions. Since conditions can change quickly, and testing results may not always reflect real-time water quality.

A few things to be aware of:

- Remember that you cannot always see or smell when water conditions are poor.
- Swimming is not advisable after a heavy rainfall because bacteria levels in the water may be elevated.
- Stay away from the water and avoid contact if a cyanobacteria bloom is evident (most often bluegreen in color, but can also be reddish-purple, or brown) or the water is murky. These toxins can also harm animals so keep pets away from water.
- Do not drink lake or river water and wash your hands before eating.
- Wash your pet after swimming.
- Obey beach postings.
- Report suspected cyanobacteria blooms to Public Health Madison & Dane County at (608) 266-4821.









