## NOWCASTING BEACH ADVISORIES



Fact Sheet for the General Public

# Lake Erie Nowcast

#### How safe is it to swim at Lake Erie bathing beaches?

To find out, local agencies monitor (sample) the beaches to determine bacteria levels. The bacterium E. coli is found in sewage and other animal wastes. Because the results for E. coli levels take at least 24 hours by traditional methods, we are using other quickly-obtained measurements to predict when E. colli levels may be high. This is called a "Nowcast".

## Scan here to take a Bathing Beach Survey!



#### **How does the Nowcast work?**

The Nowcast system is similar to a weather forecast, but instead of forecasting future weather conditions, the Nowcast system estimates current conditions. A computer model, which takes into account current weather and environmental conditions, is used to estimate bacteria levels. The computer model will predict the likelihood that E. coli bacteria levels may be GOOD (low) or POOR (high), and whether or not a Water Quality Advisory should be issued. This information is provided to the public for use in planning beach activities.

#### Where is the Nowcast system being used?

Nowcast systems have been developed for Huntington Beach, Edgewater Beach, Villa Angela Beach, Maumee Bay State Park and the Cuyahoga River at Jaite in Brecksville.

#### What is the water quality standard for *E.coli*?

The Ohio bathing water standard for E. coli is 235 colony forming units (cfu) per 100 milliliters of beach water tested. If the computer model predicts that E. coli bacteria levels may be below 235, a GOOD Water Quality Nowcast will be made. If the computer model predicts that E. coli bacteria levels may be high, a POOR Water Quality Nowcast will be made and a Water Quality Advisory will be issued.

## What is a Water Quality Advisory?

A Water Quality Advisory is a public notification, typically in the form of a sign posted at the beach, to advise the public that current water quality conditions are not acceptable for swimming due to high bacteria levels. A Water Quality advisory remains in effect until another measurement is made that indicates that bacteria levels are within acceptable limits.

## What illnesses may result from contact with the water?

There is a potential for illness to occur when bacteria levels are high. Gastrointestinal upset, including nausea, vomiting, abdominal cramps, and diarrhea, may occur as a result of swallowing contaminated water. There is also a potential for developing upper respiratory infections, in addition to ear and eye infections. Skin infections may also occur if an open wound is not properly protected. Children, the elderly, and individuals with weakened immune systems are most at risk for becoming ill when bacteria levels are high.

#### How often is the Nowcast system used and where can information be obtained?

The Nowcast system is being used 7 days a week, from Memorial Day through Labor Day. Health officials will make each day's water quality Nowcast by 9:30 AM, based on conditions observed in the morning. Signs will be posted at the entrances to the beach area, reflecting each day's Nowcast. The Nowcast system is Internet-based, providing near real-time, same-day water quality information to the public. Weather changes such as storms are likely to result in a rapid change in water quality conditions.

## **Our Partners**













## For More Information

VISIT THE NOWCAST WEBSITE WWW.OHIONOWCAST.INFO

Contact the Cuyahoga County Board of Health: (216) 201-2000 www.ccbh.net

Contact the USGS, Ohio Water Science Center: (614) 430-7700 http://oh.water.usgs.gov

Northeast Ohio Regional Sewer District's Beach Water Quality Information Line: (216) 432-7301







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Protecting Your Health and Environment