## **Pennsylvania Department of Health**

The Pennsylvania Department of Health (DOH) controls and funds several aspects of water quality relating to human health. Specifically, DOH regulates and monitors inland beaches in accordance with the Federal Beach Environmental Assessment and Coastal Health Act, which helps ensure public safety.

All permitted inland beaches are regulated by the DOH under 28 Pa. Code §18.28 (relating to bathing beach contamination). Weekly testing for *Escherichia coli* density is required based on USEPA 2012 Recreational Water Quality Criteria. *E. coli* are bacteria found in the environment, foods, and the intestines of people and animals. *E. coli* bacteria are not typically pathogenic in and of themselves, but rather serve as a pathogen indicator of the potential for human illness. *E. coli* samples are used to determine closures of those beaches based on human health impact. Exceedance of thresholds and the geometric mean of samples are monitored for re-opening a beach. A closed beach is also inspected at the designated swimming area to observe for discharge of a possible pollutant. Waterfowl control is encouraged and recommendations to reduce plant life to promote visibility of the bather are suggested.

The Federal Beaches Environmental Assessment and Coastal Health Act (BEACH Act) was signed into law on October 10, 2000. This Act requires the EPA to develop criteria for testing and monitoring recreational water issues. BEACH Act funding is used to sample and analyze public, permitted bathing beach waters located along the Lake Erie shoreline in Pennsylvania and provide public notification of the results. Funding covers the cost of sample collection and analysis. Results are posted at each beach, on electronic sign boards on Presque Isle, on local websites, and on social media. A new interactive map allows the public to easily view the current status of beaches: open, advisory, or restriction. BEACH Act funds also contribute to the development and implementation of a predictive model that uses daily buoy data and other conditions to determine if a precautionary advisory should be issued for Presque Isle beaches.

Harmful Algae Blooms (HABs) are an emerging environmental health issue for recreational waters. Through policy, DOH has adopted the EPA Recommended Human Health Recreational Ambient Water Quality Criteria and Swimming Advisories for Microcystins and Cylindrospermopsin (May 2019) guidelines for permitted beaches under the DOH Public Bathing Place Program. The extent and significance of the HABs problem from a public health perspective is not known as health conditions resulting from cyanobacteria toxin exposure are not currently reported to DOH. An interagency Task Force was created for the formulation of a joint response strategy including public policy and education and an interagency workgroup has been meeting to coordinate monitoring and sampling of HABs events.