Applying knowledge to improve water quality

National Water Program

A Partnership of USDA CSREES & Land Grant Colleges and Universities

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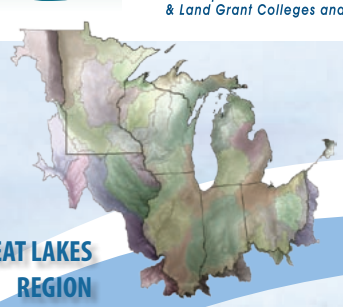
The Environmental Pathogens Information Network (EPI-NET)



GREAT LAKES REGION

National Themes:
Drinking Water and Human Health
Pollution Assessment and Prevention

Project Description

The challenges associated with managing microbial contamination of water resources and the roles that science plays in addressing those challenges are at the forefront of water policy discussions across the country. The Environmental Pathogens Information Network (EPI-NET) is a stable, centralized source of environmental microbiological contamination information that provides a reliable point of reference (methods and data interpretation) on which to develop a coherent national research agenda and good public policy.

In addition to providing the scientific and user communities with a centralized source of information about environmental pathogens, EPI-NET encourages information sharing and cooperation among stakeholders, regulatory officials, and technical experts to the benefit of both the scientific and regulatory communities. EPI-NET also helps the general public understand the science and possible environmental consequences of pathogenic microbes in the environment as well as suggesting prevention approaches. Their website (http://www.epi-net.org) provides visitors with valuable references and the recent news related to pathogen contamination and detection in water and food.

Dr. Von Sigler presents his talk "*Monitoring Recreational Waters: Indicators, Pathogens and the Environment*" at the Beach Workshop in Merrillville, Indiana, February 2007.

Project Goals

The overarching goal of EPI-NET is to develop and then transfer the fullest possible understanding of how microorganisms enter into and function in watersheds so that we can properly manage and prevent the spread of microbial pathogens and the diseases they cause. To reach that goal, a series of workshops and information packages, as well as a comprehensive project website have been developed.

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Outcomes

In their mission to increase awareness of environmental pathogens, EPI-NET held one symposium and two workshops in 2007. The symposium increased participants' understanding of the principles and applications of modern approach to Microbial Source Tracking (MST) and evaluated how current methodologies are applied in watersheds. The workshops provided current, research-based information to professionals working on *E. coli* and other pathogens as part of a beach monitoring program and increased their ability to appropriately use Microbial Source Tracking (MST) to reduce the public health risk posed by beaches with high pathogen levels. The project has also produced three publications: *The Role of Indicators in Pathogen Detection; Tracking Microbial Pathogens*; and *Escherichia coli*. All are available on the project website (http://www.epi-net.org).

Speakers Dr. Richard Whitman from the USGS and Dr. Ron Turco from Purdue University at the Beach Workshop, Merrillville, Indiana, February 2007.

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www.uwex.edu/ces/regionalwaterquality

http://www.epi-net.org

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