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Recreational Water Illness Prevention, 2009: Charting a Course through Stormy Waters

Editor's note: NEHA strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, we feature a column from the Environmental Health Services Branch (EHSB) of the Centers for Disease Control and Prevention (CDC) in every issue of the Journal.

In this column, EHSB and guest authors from across CDC will highlight a variety of concerns, opportunities, challenges, and successes that we all share in environmental public health. EHSB's objective is to strengthen the role of state, local, and national environmental health programs and professionals to anticipate, identify, and respond to adverse environmental exposures and the consequences of these exposures for human health. The services being developed through EHSB include access to topical, relevant, and scientific information; consultation; and assistance to environmental health specialists, sanitarians, and environmental health professionals and practitioners.

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The conclusions in this article are those of the author(s) and do not necessarily represent the views of the Centers for Disease Control and Prevention.

An international financial crisis, changing national priorities, reduced budgets for public health—these are stormy and challenging times for public health. Many new issues are affecting pool programs. Examples include the following:

- an increase in the number of outbreaks reported,
- emergence of the chlorine-resistant parasite *Cryptosporidium* as the leading cause of pool-associated outbreaks,
- problems with air quality at indoor aquatic facilities,
- continued pool chemical handling accidents,
- growing evidence that pools are not being maintained as well as needed,
- state and local legislators seeking to eliminate pool programs, and
- enactment of the Virginia Graeme-Baker Pool and Spa Safety Act (http://www.cpsc.gov/cpscpub/prerel/prhtml09/09065.html).

Such challenging times sometimes make public health professionals think that they need to wait before moving in new directions to protect the public's health. Staying on course, however, is essential and can be done by following the thread that runs through these issues. All of these issues can be addressed by building a strong national model pool code. Recommendations for such an effort came from a 2005 national workshop titled, "Recreational Water Illness Prevention at Disinfected Swimming Venues." Fulfilling the call for this code—the national Model Aquatic Health Code (MAHC)—can show lawmakers that public health can create an effective and practical code to protect the health and safety of American swimmers.

In 2007, the Centers for Disease Control and Prevention (CDC) and the New York State Department of Health, with a start-up grant from the National Swimming Pool Foundation, initiated the MAHC process (http://www.cdc.gov/healthyswimming/MAHC). This effort includes nationwide membership from the public health community, the aquatics sector, and academia that addresses healthy swimming issues such as infectious disease control, drowning, and injuries at aquatic facilities. This effort should reduce the tremendous burden on individual state and local jurisdictions that have to go through a pool code revision.

Key Advantages to the MAHC

1. **New Approach.** The MAHC is an open-access, user-friendly, data-driven, knowledge-based, and scientifically supported model health code that reduces risk and promotes healthy recreational water experiences. The process will push the envelope on existing knowledge so that the MAHC fosters a systems- or performance-based approach to protecting public health and safety and sets a research agenda for promoting healthy swimming.
2. **National Consistency.** It will serve as a model for state and local jurisdictions to transform their varied pool regulations into a set of nationally consistent standards that promote the health and safety of the swimming public.
3. **Data Collection.** It will transform the traditional pool process into one where the data collected are risk-based, serve as a surveillance tool for tracking MAHC

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efficacy, are used for decision making and program evaluation, and underscore the public health necessity of pool programs.

Building on this foundation, the MAHC will ensure that the best available standards and practices are presented for voluntary adoption by state and local agencies seeking to enhance and update their pool codes.

The MAHC now has a full organizational structure with a Steering Committee and Technical Committees for topics from "Disinfection and Water Quality" to "Facility Design and Construction." Volunteers from across the public health disciplines and aquatics sector are devoting their time to drive the development of the MAHC. Visit the MAHC Web site (http://www.cdc.gov/healthyswimming/MAHC/structure_content.htm) to read the MAHC modules. Modules are posted as they are completed rather than waiting for assembly as a complete document.

Modules first build on generally accepted practices and are accompanied by annexes that explain the rationale behind the language and a summary of the pertinent data and literature. This process identifies data gaps and directs the research agenda that will drive future change in the MAHC. Modules will be updated as new data become available so the MAHC will remain at the cutting edge of aquatics. The long-term vision is that the MAHC will stay current with new developments by involving all stakeholders in a consensus process for changing the code. This change process will be modeled after the Conference for Food Protection, which maintains the Food and Drug Administration's *Food Code*.

This year, it's time to pull together and speak with one public health voice to build this model code, reduce the burden on individual health jurisdictions, and address current and future issues that have been pushing pool programs to their limits. No one person or jurisdiction has the resources to accomplish such a sweeping task, but your involvement as part of a national consortium can make this work. Investing some time now to participate, review, or give a few suggestions will pay high dividends in the future when your jurisdiction seeks to update its code or demonstrate how important pool programs are for protecting your community. Ensure your voice is heard in this important process: visit the MAHC Web site and fill out the application packet (http://www.cdc.gov/healthyswimming/MAHC/pdf/MAHC_Tech_Comm_Nomination.pdf).

Resources

- MAHC Web site: http://www.cdc.gov/healthyswimming/MAHC
- Existing MAHC modules: http://www.cdc.gov/healthyswimming/MAHC/structure_content.htm
- MAHC application packets: http://www.cdc.gov/healthyswimming/MAHC/pdf/MAHC_Tech_Comm_Nomination.pdf

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- Epi-Ready Team Training Program
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- Onsite Wastewater System Program
- Radon/Indoor Air Quality Training Program

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