

# Developing a knowledge-based and scientifically supported standard for safe operation of recreational aquatic facilities: Progress of the US model aquatic health code project

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## Background/Introduction

The U.S. Centers for Disease Control and Prevention (CDC) is working with public health and industry representatives across the United States to build a Model Aquatic Health Code (MAHC) (1). In the United States, there is no federal regulatory authority for recreational aquatic venues, and no uniform standards governing the design, construction, operation, and maintenance of swimming pools. Existing code requirements for safety, drowning prevention, and responding to recreational water illnesses (RWIs) can vary significantly. The MAHC will provide data-driven, knowledge-based, risk reduction guidance to prevent disease and injuries. The effort stems from a CDC-sponsored workshop convened in February 2005, to discuss ways to minimize RWI's spread through disinfected swimming venues. In May 2007 a ten member Steering Committee was established to plan MAHC development.

## Aims/Objectives

The aim is to develop a MAHC that is user-friendly, knowledge-based, scientifically supported, and free and accessible to all. The objective is to transform varied swimming pool regulations used by U.S. health agencies into a uniform model national code. Transparency and communication are achieved through a public access website.

## Methods/Implementation

The MAHC Steering Committee guides the work of various Technical Committees.

The Steering Committee members set priorities, create and advise the Technical Committees, and appoint chairpersons. The Steering Committee exercises editorial control of Technical Committees' products to ensure that developed materials are written uniformly and fit the MAHC's mission.

Eleven Technical Committees provide specialized knowledge. The Technical Committees determine the scientific basis, if any, for existing recommendations, identify scientific information gaps, and outline research needs.

Clear rules of engagement are established for the committee participants, which include wide geographic representation and variety of professionals (epidemiologists, environmental health professionals, operators, suppliers, designers, engineers).

Modules are released as completed, which allows prioritization, and keeps a sense of progress. The update process allows all interested stakeholders to submit position papers and vote on modification of the MAHC.

## Progress

Draft modules posted for comment include: 1.0 Preface, 2.0 User Guide, 3.0 Definitions, 6.1-Operator Training/Annex, and 6.5 Fecal-Vomit-Blood Contamination Response/Annex.

## Discussion

The MAHC will drive reductions in RWI and injuries, needs for training and education, needs for epidemiological and environmental health surveillance systems, data collection and analysis to support recommendations, data-based decision making, performance based approaches to aquatic facility design and operation, and creation of a research agenda.

Potential exists for a similar international effort. Given the range of international needs and conditions it is unlikely that a single code could be established, but water safety experts could gain much from an international collaboration to standardize swimming venue health and safety practices (2).

## Conclusion

The MAHC will serve as a model for local and state agencies in the U.S. needing guidance to implement a pool code in their jurisdiction. The process will create a repository of best practices for operation, including the potential for collaboration on an international effort.