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## Universal Standards and Codes for Aquatics and Water Safety

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## Universal Standards and Codes for Aquatics and Water Safety

In February, 2005, the Centers for Disease Control and Prevention (CDC) in the United States sponsored a workshop called “Recreational Water Illness Prevention at Disinfected Swimming Venues.” The workshop intentionally brought together a large group of individuals from a variety of disciplines and areas who worked at local, state, or federal health agencies along with representatives from the aquatics industry. At the workshop, the participants discussed recreational water illnesses that have been observed to spread through swimming facilities, despite the attempts to adequately disinfect that water. The discussion also included ways to reduce and/or minimize public health risks associated with water contamination and recreational water illnesses at swimming facilities. The National Swimming Pool Foundation, a co-sponsor of the *International Journal of Aquatic Research and Education*, sponsored an initial grant to fund initial discussions and efforts by public health and aquatic industry personnel.

### MAHC

Over the past year or so, the CDC commissioned a series of “technical committees” to study issues related to one solution to the spread of recreational water illnesses. The members of the technical committees are responsible for drafting language that will create a Model Aquatic Health Code (MAHC). The need for the MAHC became apparent when committee members began exploring the exceedingly complicated sets of pool codes that exist across the U.S. The pool codes are the result of legislative and policy action by 50 state legislatures and are enforced by both local and state health agencies. No two codes are even close to being similar. Some local and state codes have not been updated in many years; others are reasonably up to date. Many parts of the code have been influenced by political and lobbying efforts of interested parties. In short, the current situation is a mess.

The development of a Model Aquatic Health Code is intended to prevent disease and injuries while promoting healthy recreational water experiences by promoting a single national aquatic code. It is the intention of the committee that the MAHC transform the current haphazard way that local and state pool codes are created by implementing a culture that operates using data-driven, knowledge-based, and risk-reduction processes. If such a transformation should occur, the result would ensure that up-to-date practices and standards are maintained in all jurisdictions to maximally protect the public health. The MAHC ideal is to create a uniform set of guidelines that relate to the planning, design, construction, operation, and maintenance of all swimming pools and other public swimming areas so that recreational water illnesses are prevented to the greatest possible degree.

In personal communications with several members of technical committees engaged in the current effort, it appears that the process for developing the MAHC is quite challenging. Many members of committees do not have backgrounds in research or experience with evidence-based decision making. As a result, there has been a great deal of “turf protection,” at least in the initial stages. This is not surprising. Any such complex process, such as the MAHC, is often contentious and requires a great deal of discussion and compromise. Personally, I support any effort that has the lofty and important goals stated for the MAHC. In the end it will be worth the effort if members stay true to their stated purposes.

It is noteworthy that although the process and discussions are being lead by members of the steering and technical committees, any interested party is strongly encouraged to comment on the draft language being posted on the CDC MAHC website (<http://www.cdc.gov/healthyswimming/MAHC>). The website contains a large amount of information including many documents that can be downloaded as .pdf files. The site also encourages interested parties to complete an application for membership on an appropriate technical committee in case vacancies occur and replacements are needed. It sounds like something in which interested aquatic experts should consider to volunteer to participate.

## An International Model Code

Obviously, the CDC’s efforts at creating a Model Aquatic Health Code are focused on the United States. As I have contemplated the importance of the U.S. MAHC effort, I began to realize the potential importance of a similar international effort. If the 50 states in the U.S. have diverse codes associated with swimming, lifeguarding, water safety, facility construction, and water disinfection, I can only begin to imagine the incredible diversity that must exist worldwide among the 180+ nations spread across the globe. Of course, a single international Model Aquatic Health Code is unrealistic, given the disparity in needs and conditions around the world. On the other hand, if some mechanism could be invented to promote this kind of discussion, I can only begin to envision how much water safety experts from around the world could learn from each other.

Two existing international efforts might provide a model for examining aquatic health codes and practices. The first is the World Congress on Drowning, sponsored by that International Life Saving Federation that meets every five years and is comprised of representatives from the lifesaving organizations of many countries. This body last met in Porto, Portugal in 2007 and in Amsterdam in 2002. Regular readers of *IJARE* may recall that we published the 2007 World Drowning Report (ILS, 2007) in our 4th issue of the first volume (November, 2007).

The second international conference that meets periodically is the Biomechanics and Medicine in Swimming (BMS) group. Many readers have read my references to the upcoming BMS 2010 conference to be held next month (June 2010) in Oslo, Norway under the sponsorship of the Norwegian School for Sport Sciences. Like the World Congress on Drowning, BMS 2010 will publish both abstracts as well as full text articles of selected papers.

I am not suggesting that either of these organizations serve as the focal point for an international effort to standardize aquatic health practices, but simply that they may provide models for how such an effort might be organized if it is deemed

meritorious. Obviously, significant multinational funding would be required, both from international foundations as well as national governments and perhaps the United Nations. Certainly, if an international effort had similar goals to the U.S. MAHC to promote healthy swimming practices and prevent aquatic injuries and the spread of recreational water illnesses, it would seem that there would be funding available for such a worthy purpose.

## International Water Safety Practices

Along with exploring evidence-based decision making for aquatic health codes, it seems to me that a similar international effort might be needed to examine the multitude of issues that surround water safety practices across the globe. As readers will discover in a future issue of *IJARE*, some countries have bizarre and complex sets of requirements for lifeguarding as a result of federal legislation (Avramidis, in press). The diversity of regulations and laws in at least one country suggest that the same complexity likely exists in many other countries. It seems equally likely that many of the legislative regulations dealing with lifeguarding and water safety probably are not the result of any evidence-based processes.

I propose that organizations such as the International Life Saving Federation could productively hold a summit that systematically investigates not only recommendations made by member aquatic agencies, but actual legislative regulations that enforce how water safety and lifeguarding practices are implemented in various countries. It seems to me that creating “model legislation for water safety practices” would be a worthwhile effort for lifesaving organizations. The effort in discovering and sharing the practices in different countries would be educational in itself. More importantly, it could provide the impetus for many countries to actually adopt legislation based upon best practices that would benefit the water safety of that country’s citizens.

## References

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