

Model Aquatic Health Code	Module Review Comment Form	
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The Model Aquatic Health Code (MAHC) Steering Committee and Technical Committees appreciate your willingness to comment on the draft MAHC modules. Comments are due 60 days after the draft module is posted on the MAHC website. Please complete all fields including contact information and provide your detailed comments as completely and succinctly as possible. Please save this form and e-mail to MAHC@cdc.gov with the **Module Name** in the Subject Line. If this is not possible, please send printed copies to:

MAHC Coordinator
 Waterborne Disease Prevention Branch
 Division of Foodborne, Waterborne, and Environmental Diseases
 Centers for Disease Control and Prevention, Mailstop C-09
 1600 Clifton Rd NE
 Atlanta, GA 30329-4018

NOTE: All comments must be received or postmarked by the submission deadline.

NOTE: As part of the MAHC public comment process, all comments as well as reviewer names and affiliations are public information and will be included in the public comment response document to be posted to the MAHC section of the Healthy Swimming website.

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Date Submitted	10-05-12
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Comment Instructions: Please see reviewing guidance at the front of each module for details about the draft module and submitting comments. **Reminder:** please be as specific, complete and succinct as possible in suggestions for improving this draft module. Use the following form fields to submit one change per line. Comments are helpful but suggested revisions to address the comment will speed the review and posting process. Use additional pages as necessary. Fields will expand to accommodate the text.

1. **Draft MAHC Module Section Number:** Provide specific number (e.g., 6.2.1) of draft MAHC section where a change is needed.
2. **Recommended New Draft MAHC Section Language:** Provide specific amended language.
3. **Basis for Suggested Change:** Are these comments supported by published scientific studies, existing state or local codes, or other references or editorial in nature?
4. **Reference Citation Supporting Suggested Change(s):** Please provide the full reference citation information that supports suggested change(s) including notation of specific page number or section number. Mark *Editorial*, if no reference information is provided

Copy and Paste Additional Comment Rows as Needed

Module Section Number	Recommended New Draft MAHC Module Section Language	Basis for Change	Reference Citation
4.8.3.1 Code	Starting platforms shall be installed and conform to <u>applicable standards established by the</u> Federation Internationale de Natation (FINA), USA Swimming, National Collegiate Athletic Association (NCAA), National Federation of State High School Associations (NFHS), <u>YMCA</u> or other sanctioning bodies.	To better clarify the intent of the section.	Editorial
4.8.3.1 Annex	The intent is to require <u>4 feet (1.22 meters)</u> 6 feet 7 inches (2m) water depth unless there is a different governing body (e.g. FINA, USA Swimming, NCAA, NFHS NFSHSA , <u>YMCA</u> , etc.) <u>standard that is applicable for sanctioned competitions and for organized practice.</u> FINA USA Swimming, NFHS and the NCAA allow 4 feet (1.22 m) at starting platforms. As is well documented in case histories and litigation, this depth is unsafe	<u>Correction:</u> FINA’s minimum starting depth is 4 feet 6 inches. <u>Editorial Comment:</u> Instruction and supervision is the	Dr. Joel Stager and the Counsilman Center for the Science of Swimming completed a study in 2011 on racing start safety published in the International Journal of

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	<p>for high school age beginners. Five feet (1.52 m) is on the edge of safety for a high school age male to make a starting error. The most conservative and safest starting depth is 6 feet 7 inches or 2 meters. This is consistent with the recommended minimum starting depth for Olympic competition.</p> <p>A seminal study in 1990 investigated 74 neck injuries occurring with use of springboards and jumpboards. Of these injuries, 12.2% occurred in water less than or equal to 4 ft; 66.2% occurred in water less than or equal to 5 ft., 94.6% occurred in water less than or equal to 6ft. all injuries occurred in water of 7 ft or less. These data support increased the diving depth under diving boards or starting blocks due to the increased height before entry and associated increased body velocity.</p> <p>The Counsilman Center for The Science of Swimming completed a study in 2011 on racing start safety. This study suggests that proper education, awareness and supervision are the keys to safe racing starts. Racing starts should always be performed under the direct supervision of a certified coach.</p>	<p>primary key to safety. It is important that the Code and Annex recommend supervision of a certified coach.</p> <p>There is no definitive documentation or research that supports the statement “<i>this depth is unsafe for high school age beginners. Five feet (1.52m) is on the edge of safety for a high school age male to make a starting error.</i>”</p> <p>There is no research to support the claim that 6 feet 7 inches is the safest starting depth. Also, 6’7” depth is not the recommended minimum <u>starting</u> depth for Olympic competition.</p> <p>We strongly suggest that you remove the final paragraph in this section since the referenced</p>	<p>Aquatic Research and Education. Pages 187-198 of this study address the demonstrated ability of competitive swimmers to modify racing start depth when directed. http://www.indiana.edu/~kines/pdf_files/council/WHITE_2011.pdf</p> <p><u>Suggestion:</u> We strongly recommend that the Technical Committee meet with Dr. Stager to get his input. Dr. Stager is arguably the leading authority in the USA on racing start safety. USA Swimming would be happy to assist with arranging such a meeting.</p> <hr/> <p>Note FINA Rules FR 2.3 (pg. 361) and FR 3.3 (pg. 364) in the 2009-2013 FINA Handbook</p> <hr/>

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		<p>1990 study actually reviewed the use of springboards and jumpboards and <u>not</u> starting platforms. The angle of entry for dives off of jumpboards and diving boards is entirely different than for racing starts. This study has no bearing whatsoever on racing start safety.</p>	<p>Multiple editorial comments.</p>
4.8.2.1 Code	<p>Starting platforms shall be removed or prohibited from use during all recreational or non-competitive swimming activity.</p>	<p>No change; supporting comment.</p> <p><u>Editorial Comment:</u> Separating recreational swimming from competitive swimming is the most effective way to facilitate a practical minimum water depth for competitive use of starting platforms. Prohibiting and preventing use of starting platforms by recreational swimmers is paramount.</p>	<p>Editorial</p>

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4.8.3.3 Code	Starting platforms shall be installed in a minimum water depth of 6 feet and 7 inches (2.01 m) 4 feet (1.22 meters).	<p>The industry standard in the United States is 4 feet as evidenced by NCAA, NFHS, and USA Swimming rules.</p> <p><u>Point of Information:</u> 6 ft. 7 inches is the minimum competition pool depth required by FINA for the Olympic Games and World Championships. This is the high performance depth specified for elite level international competition. It is a “fast-pool” factor not a safety feature. FINA’s minimum depth for racing starts is 1.35 meters (4ft. 6 in.).</p> <p><u>Editorial Comment:</u> The proposed 6’7” minimum depth arbitrarily changes the current industry standard with no definitive research or</p>	<p>The Counsilman Center for The Science of Swimming completed a study in 2011 on racing start safety published in the International Journal of Aquatic Research and Education. Pages 187-198 of this study address the demonstrated ability of competitive swimmers to modify racing start depth when directed. http://www.indiana.edu/~kines/pdf_files/council/Wbite_2011.pdf</p> <hr/> <p>Note FINA Rules FR 2.3 (pg. 361) and FR 3.3 (pg. 364) in the 2009-2013 FINA Handbook</p> <hr/> <p>Multiple editorial comments.</p>

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		<p>analysis to support that 6'7" is safer than 4' or any other depth.</p> <p><u>Editorial Comment:</u> Greater pool depth does not guarantee racing start safety. Proper education, awareness and supervision are the keys. USA Swimming requires a specific teaching progression for racing starts. In addition, it is required that all swimmers be certified as proficient in performing a racing start before they are permitted to start in 4 feet.</p> <p><u>Editorial Comment:</u> If the minimum 6'7" requirement is part of the final code, it will be very problematic for competitive swimming <u>and</u> for many recreational programs. Thousands of pools that</p>	

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		currently host swim meets and practices for every major competitive swimming organization would be adversely impacted.	
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