

Key Concepts Influencing Lifeguarding Staffing Plans:

Technical aspects of the MAHC's lifeguarding provisions using visual aides to show factors affecting surveillance, such as blind spots, glare and rotation procedures, and integration into a facility's Aquatic Safety Plan.

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Introduction

- Staffing plan
- Safety plan
- Zones of patron surveillance
- Rotation procedures

Lifeguard Staffing Addressed in MAHC Section 6.0 – Policies and Management

- MAHC does not prescribe specific number or placement of lifeguards
 - performance-based
 - details in Safety Plan

Safety Plan

- Must be developed & implemented (Section 6.3.3)
 - includes lifeguard staffing plan
 - minimum number of lifeguards per safety plan must be provided (Section 6.3.4.3.1)

Lifeguard Staffing Plan

- Zones of patron surveillance
- Rotation procedures

Zones of Patron Surveillance

- The QUALIFIED LIFEGUARD is capable of viewing the entire area of the assigned zone of PATRON surveillance,
- The QUALIFIED LIFEGUARD is able to reach the furthest extent of the assigned zone of PATRON surveillance within 20 seconds,
- Identify whether the QUALIFIED LIFEGUARD is in an elevated stand, walking, in-water and/or other approved position,
- Identifying any additional responsibilities for each zone, and
- All areas of each AQUATIC VENUE are assigned a zone of PATRON surveillance.

Rotation Procedures

- Identifying all zones of PATRON surveillance responsibility at the AQUATIC FACILITY,
- Operating in a manner so as to provide an alternation of tasks for each QUALIFIED LIFEGUARD conducting PATRON surveillance activities such that no QUALIFIED LIFEGUARD conducts PATRON surveillance activities for more than 60 continuous minutes,
- Have a practice of maintaining coverage of the zone of PATRON surveillance during change of QUALIFIED LIFEGUARD,
- Have period(s) of at least 10 minutes of non-PATRON surveillance activity for the purpose of providing an alternation of task.

Factors Affecting Patron Surveillance

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Lifeguard Performing Patron Surveillance



And Not!



Can you see the problem(s)?



Environmental



Maria Joseph 36 mother of 5



Really?



Add on to pools



Positioning



Proper Rotation



Communication



Emphasis



Rotation Complete



Elevated Rotation



At least one always performing surveillance



Rotation Complete





Factors that affect Lifeguard Surveillance

Overcoming Challenges in
waterparks and pools with
special attractions

RAC Carroll, Jeff Ellis & Associates

Addressing the challenges

All aquatic facilities face unique challenges for lifeguard placement, especially with the addition of features most commonly found in waterpark environments. Generally speaking, challenges include:

- **Environmental** - including glare from the sun, lights, and windows.
- **Water characteristics** - including agitation, movement, turbidity, reflection, and refraction of light sources.
- **Attraction characteristics** - including spray features, play features, corners, edges, theming.
- **Swimmers** – the people in the water themselves and the items they bring with them.
- **Complacency on the part of management**

Examples of Challenges

The sun can be a big issue both outside and inside....



Examples of Challenges

Facility
design
and
features....



Examples of Challenges

Curves, islands,
Vegetation....



Examples of Challenges

Objects in
the water....



Examples of Challenges

Spray
features....



Examples of Challenges

Water agitation &
movement....



Examples of Challenges

People....



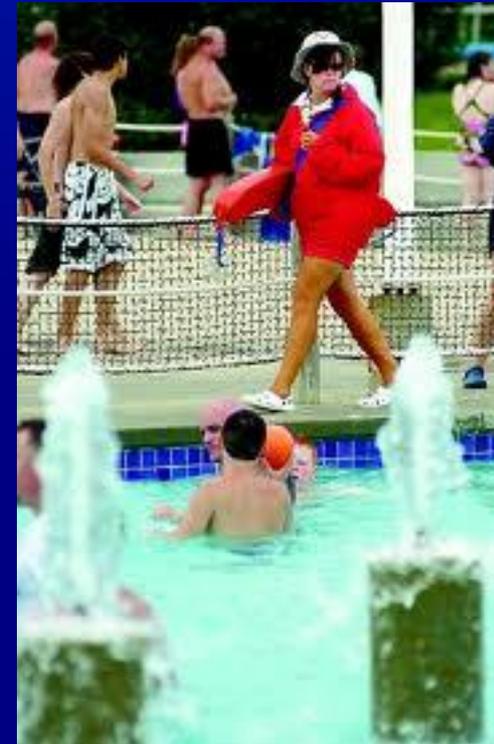
Thoughtful lifeguard placement

Elevated guard stands allow a lifeguard to see farther and may compensate for glare issues....



Thoughtful lifeguard placement

Roving lifeguards allow for seeing around corners and cover longer, curvier zones...



Thoughtful lifeguard placement

Putting lifeguards in the water may help with water movement / agitation and high swimmer density...



Thoughtful lifeguard placement

Splitting a zone into two smaller Zone of Protection[®] areas may be needed as well...



Identifying Zone Responsibilities

Lifeguards need site-specific training covering the zones they will be expected to protect....

- Documentation that details the zone and expected behavior of the lifeguard to adequately protect it – should be used during training and available to lifeguards during operation.
- Supervision and accountability – lifeguards need to be checked and held accountable to follow these expectations.

Example of a good rotation



MAHC Information: Search on "CDC MAHC" or visit the Healthy Swimming MAHC Website:

www.cdc.gov/mahc
 Email: mahc@cdc.gov

CMAHC Information: Search on "CMAHC" or visit the CMAHC Website:

www.cmahc.org
 Email: info@cmahc.org

CDC Home
 Centers for Disease Control and Prevention
 CDC 24/7: Saving Lives. Protecting People.™

A-Z Index A B C D E F G H I J K L M N O P Q R S I U V W X Y Z #

The Model Aquatic Health Code (MAHC): A National Model Public Swimming Pool and Spa Code

MAHC Resources

- Health Promotion Materials
- Newsroom
- Announcements

Healthy Water Sites

- Healthy Water Home
- Drinking Water
- Healthy Swimming/Recreational Water
- Global Water, Sanitation, & Hygiene (WASH)
- Other Uses of Water
- Water-related Emergencies & Outbreaks
- Water-related Hygiene

MAHC Topics

General Information Purpose, outcomes, FAQs...	MAHC Status First complete "knitted" version...
MAHC Development Development & oversight of the MAHC...	Steering Committee Guiding the MAHC process...
Technical Committees Providing specialized knowledge...	

CDC has been working with public health, academia, and aquatics industry representatives across the United States on guidance to prevent drowning, injuries, and the spread of recreational water illnesses at public swimming pools and spas. The Model Aquatic Health Code (MAHC) is a voluntary, science- and best practices-based guidance document that can help local and state authorities make swimming and other water activities healthier and safer. The MAHC serves as a voluntary model and guide for local and state agencies needing to update or implement swimming pool and spa code, rules, regulations, guidance, law, or standards governing the design, construction, operation, and maintenance of public swimming pools, spas, hot tubs, and other disinfected aquatic facilities.

The Model Aquatic Health Code

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 1600 Clifton Rd
 Atlanta, GA 30333
 800-CDC-INFO
 (888) 232-4636
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For more information, please contact us at MAHC@cdc.gov

CMAHC
 Conference for the Model Aquatic Health Code

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Announcements

Workshop: National Environmental Health Association – July 7, 2014
 Springboard to Prevention: The Model Aquatic Health Code, 1st Edition
 This workshop at the National Environmental Health Association (NEHA) Annual Educational Conference (AEC) will present the "knitted" version of the Model Aquatic Health Code (MAHC).
 More...

Meeting: Conference for the Model Aquatic Health Code – October 9, 2014
 This FREE organizational meeting gives public health officials and members of the aquatics industry the unique opportunity to help form the Conference for the Model Aquatic Health Code (CMAHC), which will become the preeminent organization for pool and spa standard of care across the country.
 More...

Welcome to the Conference for the Model Aquatic Health Code

The Conference for the Model Aquatic Health Code (CMAHC) is a nonprofit organization created in 2014 to support and improve public health by promoting healthy and safe aquatic experiences for everyone. The CMAHC will serve as a national clearinghouse for input and advice on needed improvements to the Centers for Disease Control and Prevention's (CDC) [Model Aquatic Health Code \(MAHC\)](#). The MAHC is a voluntary, science- and best-practices-based guidance document that can help local and state authorities make swimming and other water activities healthier and safer. The CMAHC will collect, assess, and relay national input on needed MAHC revisions back to CDC to keep the MAHC current and up to date with the latest public health issues and aquatics sector advances. As a new organization, we encourage interested parties to join and help us build this new organization into a driving force for improved health, safety, and fun at the nation's public swimming facilities.

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