

# CDC's Model Aquatic Health Code (MAHC) Lifeguard Requirements



Unintentional Death Prevention Committee  
Child Fatality Task Force  
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**Protecting swimmers from drowning:  
CDC's Model Aquatic Health Code (MAHC)  
Lifeguard Requirements**

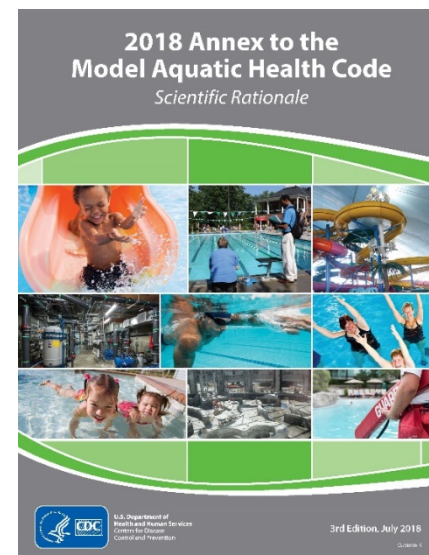
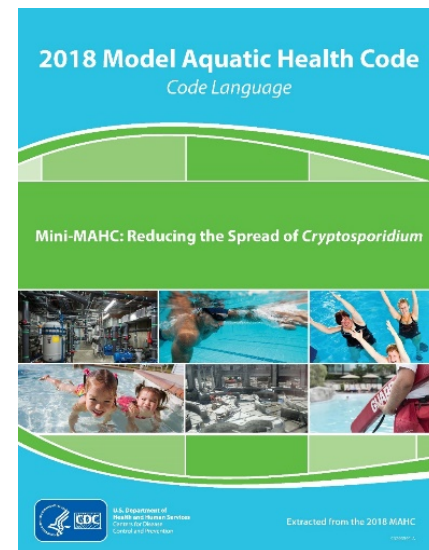


What is the MAHC?



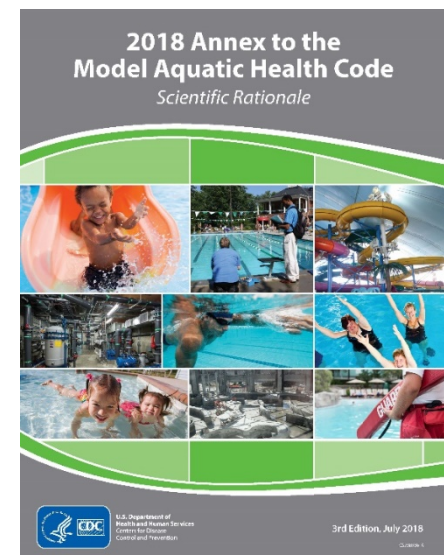
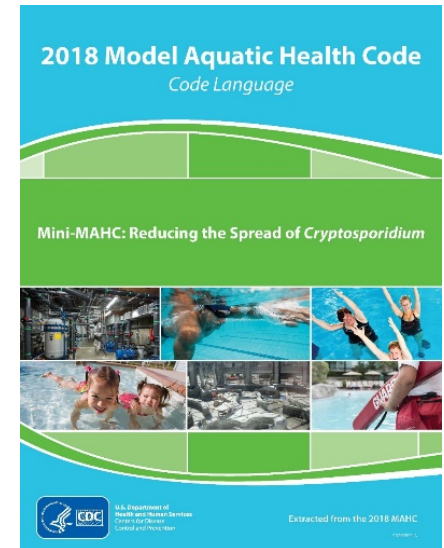
# What is the Model Aquatic Health Code (MAHC)?

- Voluntary model public pool and spa code based on science and best practices created by CDC and national consortia of PH/industry
  - 1st Edition released August 2014
  - 2nd Edition released July 2016
  - 3rd Edition released July 2018
- Helps local and state authorities and aquatics sector make swimming and other water activities healthier and safer



# What is the Model Aquatic Health Code (MAHC)?

- States/localities can use MAHC to create/update existing pool codes
  - Reduce risk for outbreaks, drowning, and pool-chemical injuries
  - Saves resources; no need to reinvent codes in each jurisdiction
- All-inclusive and addresses design, construction, operation, maintenance, policies, and management of public aquatic facilities



# Protecting Swimmers from Drowning: How Does the MAHC Help?

- **Pools Requiring Lifeguards is Based on Risk**
  - Conditions present that result in higher risk to patrons
  - Conditions present that result in higher risk to persons attempting to assist bather in distress

# Protecting Swimmers from Drowning: When are Lifeguards Required ?

- Pools Requiring Lifeguards is Based on Risk
  - Water depth greater than 5 ft
  - Unsupervised children under 14 yrs of age
  - Used by youth groups (including child care and school groups)
  - Used for group practice or instruction
  - Larger pools (any point in pool greater than 30 ft from nearest deck)
  - Moving water such as wave pools and lazy rivers
  - Waterslide landing pools

# Protecting Swimmers from Drowning: When are Lifeguards Required?

- **Pools Requiring Lifeguards is Based on Risk (continued)**
  - Bathers enter water from any height above deck (diving boards, starting platforms, drop slides, climbing walls)
  - Alcohol use (alcohol sold or served within pool enclosure)



# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- Water depth greater than 5 ft
  - Likely that an untrained adult can provide assistance
    - Average adult bather's head above waterline
- Unsupervised children under 14 yrs of age
  - Ability to make decisions especially when complying with rules, requires adult supervision
  - Water depth over nose/mouth for height of 50<sup>th</sup> percentile female at 14 yrs of age

# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- Used by youth groups (including child care and school groups)
  - Chaperones cannot manage both patron surveillance activities and activities of individual children
    - Activities of the group distract from watching/surveillance of the bathers
    - Need to separate responsibility of chaperone from that of providing dedicated patron surveillance
  - Chaperones not trained as lifeguards are at risk if a rescue is needed

# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- **Used for group practice or instruction (exercise programs, swim lessons, competitive swimming, sports, etc.)**
  - **Instructor's primary focus is on the activity not on patron surveillance**
  - **Need to separate responsibility of coach/instructor from that of providing dedicated patron surveillance**

# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- Larger pools (any point in pool greater than 30 ft from nearest deck)
  - Reasonable ability of untrained person to use aquatic rescue throwing device/ring buoy up to distance of 30ft

# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- Moving water such as wave pools and lazy rivers
  - Unwanted movement of bather by force of the water
    - Moved away from safety
    - Lose balance and have sudden submersion



# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- **Waterslide landing pools**
  - Induced current/water movement from pump supplying water for slide lubrication

# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- Bathers enter water from any height above deck (diving boards, starting platforms, drop slides, climbing walls)
  - Risk of spinal cord injuries
    - Need qualified lifeguards to monitor behaviors and control use

# Protecting Swimmers from Drowning: Rationale for When Lifeguards are Required

- Alcohol use (alcohol sold or served within pool enclosure)
  - Alcohol use frequently reported as a contributing factor in drownings and spinal cord injuries
  - Use by caregivers contribute to drownings related to lapses of supervision of children
  - Qualified lifeguards mitigate risk through active surveillance, enforcement of rules, and rescue and emergency care

# Protecting Swimmers from Drowning: How Does the MAHC Help?

- **MAHC Lifeguard Requirements -setting the lifeguard(s) up for success**
  - Adequate training
    - Victim recognition
    - Rescue skills
    - Preventive lifeguarding
    - Pre-service and in-service
  - Adequate #'s of guards for surveillance
    - Zones of patron surveillance
      - Size, shape, blind spots, response time





# MAHC

More Information: Search on  
“CDC MAHC” or visit the  
Healthy Swimming MAHC  
Website: [www.cdc.gov/mahc](http://www.cdc.gov/mahc)  
Email: [mahc@cdc.gov](mailto:mahc@cdc.gov)

# CMAHC

More Information: Search on  
“CMAHC” or visit the CMAHC  
Website: [www.cmahc.org](http://www.cmahc.org)  
Email: [info@cmahc.org](mailto:info@cmahc.org)

# Contact Information

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<https://youtu.be/zuZIfy4aBEY>

On 30 January 2016 in Helsinki, Finland, a 5-year-old child drowned in a public swimming pool in the city without anyone noticing. Left unattended by his mother who was in a sauna with friends, the little boy wanted to bath in a basin where had lost his footing. Quickly, we can see him struggling to stay on the surface of the water and join the edge of the pool, without success. Unfortunately, none of the swimmers in the pool notice the child in distress who eventually loses consciousness before floating on the surface, inert. It is only after 4 minutes that a woman notices the body and finally carries his body out of the water.

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Questions ?