Consensus based guidelines to prevent open water recreation drowning

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Background

Many people drown while recreating at open water settings (lakes, rivers, oceans)
Background

- Organizations around the world provide different drowning messages.
- A concise and consistent set of prevention messages is needed.
- Development of drowning prevention guidelines began at
  - workshop at Drowning Prevention Coalition, Seattle
  - workshop at WCD, Porto, Portugal
  - formation of a Task Force of international experts in drowning prevention

The 18 Member International Task Force

**Co-Chairs:**
- L Quan (USA), University of Washington School of Medicine and Seattle Children’s Hospital
- K Moran (New Zealand), University of Auckland
- E Bennett (USA), Seattle Children’s Hospital

**Members:**
- S Beerman (Canada), J Bierens (Netherlands), BC Brewster (USA), J Connelly (Ireland), N Farmer (Australia), R Franklin (Australia), P George (Australia), J Kania (Kenya), B Matthews (Australia), A Rahman (Bangladesh), R Stallman (Norway), T Stanley (New Zealand), D Szpilman (Brazil), RMK Tan (Singapore), M Tipton (UK),

**Secretariat:**
- M Tansik (USA)
Developing the set of Guidelines

The Task Force addressed 5 questions:

- What **hazards** in the environment should I check for when I, my group, or my family goes to open water settings?
- What **rules** should I have for myself, my group or my family around open water?
- What kind of **supervision** should there be for children, teens and adults around open water?
- What **skills** should I or someone nearby have to protect myself or others around open water?
- What **technology aids** should I bring or make sure are available to aid drowning prevention in open water environments?

Methods

- Created a list of guidelines for two groups:  
  - *Keep Yourself Safe* and *Keep Others Safe*.
- Prioritized the guidelines using a modified Delphi technique that consisted of two rounds of ranking the messages.
- Combined and approved the wording of the final messages.
  - All final messages received at least 80% approval by Task Force members.
1. Learn swimming and water safety survival skills.

2. Always swim with others.
3. Obey all safety signs and warning flags.

4. Never go in the water after drinking alcohol.
5. Know how and when to use a lifejacket.

6. Swim in areas with lifeguards.
7. Know the water and weather conditions before getting in the water.

8. Always enter shallow and unknown water feet first.
1. Help and encourage others, especially children, to learn swimming and water safety survival skills.

Photo credit: Centre for Injury Prevention and Research, Bangladesh (CIPRB)

2. Swim in areas with lifeguards.

Photo credit: Centre for Injury Prevention and Research, Bangladesh (CIPRB)

4. Always provide close and constant attention to children you are supervising in or near water.
Keep Others Safe

5. Know how and when to use life jackets, especially with children and weak swimmers.

Keep Others Safe

6. Learn first aid and CPR.
7. Learn safe ways of rescuing others without putting yourself in danger.

8. Obey all safety signs and warning flags.
Limitations

- Task Force composition
  - Not representative of countries, DP types, cultures
- English language - translation required
- Cultural translation required
- Evidence basis incomplete

Evidence basis for guidelines

Evidence:
Avoid alcohol
Evidence basis for guidelines

**Evidence:**
Avoid alcohol

**No Evidence:**

Evidence basis?

Learn swimming and water safety survival skills.
### Evidence basis for guidelines

<table>
<thead>
<tr>
<th>Evidence:</th>
<th>No Evidence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid alcohol</td>
<td>Signage</td>
</tr>
<tr>
<td>Learn to swim</td>
<td>Swim with others</td>
</tr>
</tbody>
</table>

### Evidence basis for guidelines

<table>
<thead>
<tr>
<th>Evidence:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Avoid alcohol</td>
<td>Feet first into water</td>
</tr>
<tr>
<td>Learn to swim</td>
<td>Supervise closely and constantly</td>
</tr>
<tr>
<td>Learn CPR</td>
<td>Learn rescue skills</td>
</tr>
<tr>
<td>Wear a life jacket</td>
<td>Set rules</td>
</tr>
<tr>
<td>Swim in Lifeguarded areas</td>
<td>Know the water</td>
</tr>
</tbody>
</table>
Implications

- Simple generic messages, wide range recreational open water settings, all population groups
- Promotes preparedness, planning, prior to arrival; responsibility
- Expands definition of what is supervision
  - Constant, close, unimpaired
  - Awareness, recognition of distress
  - Responsivity - what to do: rescue, call for help
- Establishes a research agenda for OW drowning prevention

Three Pillars of Injury Prevention

- Education
- Technology
- Policy
Next steps: Education

- Make the guidelines available in different languages
- Disseminate the guidelines to:
  - Local, national, and international organizations promoting water safety
  - General public
- Encourage organizations to adapt the guidelines to address their local open water settings and groups at risk for drowning

Next steps: Policy to Legislation for “Learn to swim”

Increase access to swimming
- especially among low-income and culturally diverse children, youth, and families

Require swimming lessons or swim proficiency for completion of grade school

Photo: Centre for Injury Prevention and Research, Bangladesh
Next steps: Education to Policy to Legislation for “Swim where there is a lifeguard”

Identify lifeguarded sites
Ensure adequate training for OW lifeguarding
Develop funding for ensuring lifeguarded sites

Next steps: Education to Policy to Legislation for “Know the water conditions”

Identify unsafe waters used for recreation
• Prohibit swimming, boating in them
Score them (OW score card)
Identify existing water recreation standards for bathing beaches, swim areas, and other high use water recreation areas

Improve safety at these sites
Next steps: Education to Policy to Legislation for “Don’t drink alcohol and swim”

Legislate for stronger laws to prevent alcohol use
• Boating
• Public beaches

Increase enforcement of laws

Next steps: Education to Policy to Legislation for “Know when and how to use Life jackets”

Identify access to life jackets

Increase access to life jackets
1. Lower cost
2. Life jacket loaner programs
   • Identify where they are
   • Increase programs at sites used by boaters and swimmers

Legislate life jacket use on boats-recreational
• for children, teens, all age groups
Recommendations:

- Develop a process for in-depth discussion of these issues and top recommendations
- Consider consensus statement by ILS
- Develop a research agenda based on the identified issues
Special Thanks to the Task Force members

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Secretariat:
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Thank You!

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