A Policy Strategy for Open Water Drowning Prevention-from Planning to Action to Evaluation

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Objectives

- Identify at least three different open water drowning prevention policies.
- Identify at least three different partners that can work on drowning prevention policy and system change.
- Learn how policies and systems can promote equity in drowning prevention and water safety programming.
The Drowning Problem

- Drowning is the #2 leading cause of unintentional injury death among children 1-14 years old in the U.S.

- In Washington State, 85% of drowning deaths occur in natural bodies of water, such as lakes, rivers and the ocean.

- There are few policies for open water drowning prevention and few evaluated interventions.
Risk Factors: Open Water Drowning Death

- Age and Gender
  - Males
  - Young children
  - Teens & young adults
- Non-white/ethnic minority
- History of seizures
- Teens swimming in lakes and rivers – peer pressure
- Young children playing in or near “shallow” water
- No life jacket use
- Alcohol and/or drugs
- No lifeguards

- Lack of water competence
- Water conditions (cold, strong current / ocean, river, lake, etc.)
3 Approaches to Injury Prevention

- Education
- Interventions
- Policies

Technologies
What Works? Circle of Drowning Prevention

Drowning Prevention

American Red Cross
Short and long-term state and local policy strategies focus on 7 issues – each have specific policy related strategies and measures of success:

1. Safer water recreation/swim sites
2. Life jacket use
3. Boating under the influence
4. Surveillance
5. Swimming and water safety skills
6. Physical open water barriers
7. Partnerships
Methods

- Different committees or task forces for each strategy
- Consensus approach
  - Policy vs. Guideline
  - Key stakeholders at the table
  - Decide with partners what policy to focus on first
- Local and state approaches
Create Safer Swim Sites

Accomplishments

- Developed tools to assess swim sites and communities
- Developed designated swim site guidelines
- Piloted use of guidelines and evaluated with pre/post survey
- Integrated with state water recreation program’s guidelines

Challenges

- While there are standards statewide for public swim pools, lacked buy-in for open water standards
- Many different agencies control open water sites
- Local communities lack funding to make changes
## Swim Site Report Card Example

<table>
<thead>
<tr>
<th>Designated Swim Area (Bathing Beach Only)</th>
<th>Yes</th>
<th>No</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marked by rope or other marker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear, visible maximum depth marker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth marker provided in shallow swimming area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Float line separates shallow from deep swimming area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear of rocks, weeds, lily pads, or other potential hazards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beach is glass free</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q7 Have you used the guidelines in your work?

Answered: 20  Skipped: 0

- Yes: 55.00% (11)
- No: 35% (7)
- N/A: 10% (2)
Increase Use of Life Jackets

Accomplishments

- Model ordinance that can be tailored for local communities
- 2013 King County ordinance required use in, on and next to rivers with high water flow
  - No recreational river drowning deaths during the period of the ordinance.
  - 14 recreational river drowning deaths in rest of WA
- Increased number of life jacket loan programs by 10% per year-created standard sign
- Assessed life jacket policies in pools and at lifeguarded beaches
- Published observation, survey and focus group data related to life jacket use

Challenge

- Lack of consensus for new state level policies such as on paddlecraft or among teens
Life Jacket Loan Board

Borrow a Life Jacket
Toma prestado un chaleco salvavidas

Old Board
Best practices defined by SeaTow Foundation
User feedback to guide design

Newly Re-Designed Board:
Simplified messaging & design

Borrow a Life Jacket
Toma prestado un chaleco salvavidas

1. Check the label to choose the right size.
Revisa la etiqueta para escoger la talla correcta.

2. Fasten all buckles and zippers.
Abrocha las hebillas y los cierres.

3. Make sure it fits correctly. It should be snug, but not tight.
Asegúrate de que te quede correctamente. Debe quedarte ajustado pero no apretado.

Usalo aquí. Déjalo aquí.
Observational Survey of Life Jacket Use in Boats

Informing Policy on Open Water Drowning Prevention: An Observational Survey of Life Jacket Use In Washington State

• Observation study conducted throughout the state
• Observed life jacket use among > 5000 boaters

Life jacket usage was highest among mandated groups:

• Children (82%), Personal Watercraft (97%), Towed (95%)

Life jacket use in non-mandated groups – only 21%, but:

• Adult role modeling increased use for children and teens
• Adolescents 50% overall and 81% when adult wearing one too

Observational Survey of Life Jacket Use at Swim Areas

Observation study at 10 sites around state observed 1,967 Swimmers

- Results rendered strong age effects and some notable gender effects
- Males more likely than females to wear life jackets in the following age groups:
  - Toddlers, 0-5 years: 58.8% vs 42.6%
  - Preteens, 6-12 years old: 25.5% vs 16.5%
  - All kids, 0-12 years: 33.6% vs 22.9%
  - For all swimmers ages combined: 16.6% vs 11.1%
- While in the water, 58.5% of kids 6 & under were within an arm’s-length of an adult
- Life jacket use was about 50% between those within arm’s-length & further than arm’s length
- Girls somewhat more likely to use substandard flotation devices (17.5% vs. 8%): increased use of water wings by girls (11.2% vs. 3.2%)
- For kids further than arm’s-length from an adult, boys were MUCH more likely than girls to wear life jackets (66.7% vs. 37.8%)
- Life Jackets use by teens were very low for all teenagers and adults BUT wear rates in boats is much greater (Mangione, et al, 2015)
### Boating Under the Influence (BUI)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Misdemeanor</strong></td>
<td><strong>Gross misdemeanor</strong></td>
</tr>
<tr>
<td><strong>Up to $1,000 fine and/or 90 days in jail</strong></td>
<td><strong>Up to $5,000 fine and/or 365 days in jail</strong></td>
</tr>
<tr>
<td><strong>No implied consent</strong></td>
<td><strong>Implied consent</strong></td>
</tr>
<tr>
<td><strong>No penalty for refusing voluntary implied consent</strong></td>
<td><strong>Civil infraction ($2,000 fine) for refusing breath test</strong></td>
</tr>
<tr>
<td><strong>Did not include marijuana</strong></td>
<td><strong>Marijuana-blood warrant: per se limit 5 nanograms</strong></td>
</tr>
</tbody>
</table>
Continued Challenge…
Recommendations Based on Evaluation of BUI Policy

- Provide more training and resources for prosecutors
  - Judge’s BUI Bench Book (in process)
  - Standardized Seated Field Sobriety Tests

- Provide additional training for Marine Law Enforcement
  - BUI detection and enforcement training, plus refreshers
  - Type of evidence and reports prosecutors need
  - Consider vessel impound law

- Make refusing breath test admissible in court

- Suspend boat registration and Boater Education card
 surveillance

Accomplishments

- Added questions to State’s Healthy Youth Survey about life jacket use, swimming lessons and ability
- Identified drowning data collection tools and what’s gathered
- Created and piloted Open Water Drowning Reporting Tool
- Conducted life jacket observations and plan to repeat every 3-5 years
- Consistent surveillance of newspaper articles
- Can you really swim study

Challenge

- Develop state and/or national system to compile and report findings

Swimming and Water Safety Skills

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

- Changed policies and systems at health clinics and pools
  - Improved scholarships
  - Single gender swim
  - Clinic referrals
  - Screening for swimming

- Developing boating, water competency and rescue standards and model policies

Partnerships

- Built partnerships with water safety and recreation organizations including:
  - State Parks Boating*
  - State Water Recreation Program
  - State Injury Prevention
  - American Red Cross
  - Recreational boating organizations
  - Coroners and medical examiners
  - YMCAs, Public pools
  - Law enforcement

*Added an injury prevention member to state Boating Safety Advisory Council

- Identified policy priorities for the Washington State Drowning Prevention Network

- Continued networking with other boating and injury prevention coalitions and advocates (e.g. Safe Kids)
Are we seeing results?

Drowning rates due to unintentional drowning for 1 to 14 years:

2006 to 2010: 1.07 (*CI. .83-1.37)
2010 to 2013: .83 (*CI. .62-1.09)
Policy Development Lessons Learned

- Find the balance between the values of liberty and public safety
- Many people who work in drowning prevention do not know how to promote and change/sustain policy
- Create strong links between policy, education and programs
- Be persistent—people and political will change over time
- Take advantage of opportunities or tragedies to pursue policy development and passage
- Consider the political and financial environment
- Make sure the right people are at the table from the start and add as needed
- Start with guidelines to build buy-in
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Seattle Children’s Drowning Prevention Website
Toolkits include:
- Life Jacket Loaner Programs
- Everyone Swims
- Safer Swim Sites
- Surveillance

www.seattlechildrens.org/dp

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Thank you! Questions?