


**Open Water Drowning Prevention Summit :
Policy Approaches for Water Safety**

October 4, 2010





Welcome: A Call to Action

Maxine Hayes, MD, MPH
Washington State Department of Health

Open Water Drowning

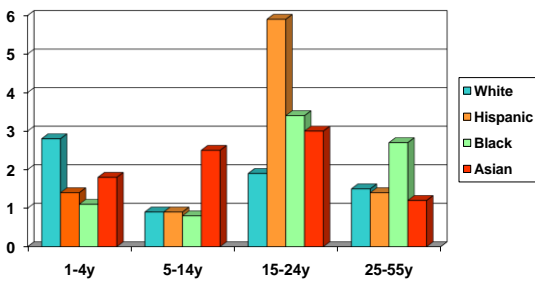
- Open water drowning accounts for about 85% of drownings in WA
- They are swimming, boating, and playing related
- This project focuses on children and youth – they do not always know how best to protect themselves

Where do Open Water Drownings Occur in WA?

- Mostly lakes, then rivers
- 1/3 of drownings in <18 year children (1999-2003) occurred in city, state parks



Drowning Death Rates by Ethnicity and Age, 1999-2003



Addressing Cultural Minorities: Attitudes, Behaviors, and Beliefs Around Water Safety

- Swimming as recreation
- Swimming practices
- Water recreation preferences
- Beliefs about supervision
- Use of swim lessons, pools



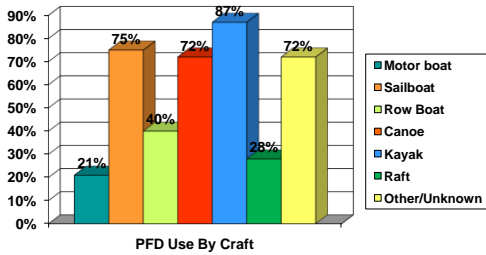
Alcohol and Water Don't Mix

- Nearly half of adult males report drinking alcohol (average 4 drinks) with aquatic activities
- Half of adult drowning deaths are Blood Alcohol Content (BAC)+
- Higher the BAC, higher the risk of drowning death
- Half of boating related deaths are BAC+

Risk Factors for Open Water Drowning Death

- Age: **teen**, young adult
- Gender: **males**
- **Nonwhite/ethnic minority**
- **Alcohol use**
- In water activities – swimming, rivers
- Boating: **No PFD use**
- **No lifeguards**

Results: PFD Use By Craft Type, 2000





NOLS Wilderness Experience

- Young adults
- Real outdoors, high risk activities
- 3 years data: >630,000 program days
1 fatality
Why?



Haddon Matrix Approach to Open Water Drowning Prevention

	Victim	Water	Environment
Pre Event			
Event			
Post Event			

Haddon Matrix Approach to Open Water Drowning Prevention

	Victim	Water	Environment
Pre Event	Learn to Swim Lifejackets Alcohol free		
Event			
Post Event			



Haddon Matrix Approach to Open Water Drowning Prevention			
	Victim	Water	Environment
Pre Event		Close dangerous waterways	
Event			
Post Event			



Haddon Matrix Approach to Open Water Drowning Prevention

	Victim	Water	Environment
Pre Event			Lifeguards Safer sites
Event			
Post Event			Lifeguards



Lifeguards

Prevent drowning
- Decrease drowning risk behaviors

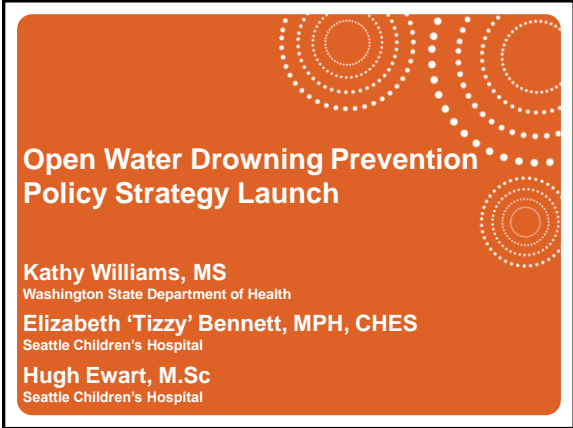
Following a drowning event
- In water Rescue
- Resuscitate

1:18 million risk



Contact

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**Open Water Drowning Prevention
Policy Strategy Launch**

Kathy Williams, MS
Washington State Department of Health

Elizabeth 'Tizzy' Bennett, MPH, CHES
Seattle Children's Hospital

Hugh Ewart, M.Sc
Seattle Children's Hospital

Why Focus on Open Water Safety Policy?

- Fewer policies for open water than other child injury issues
- Policies now in place need improving
- Known ways to improve open water safety
- No one group/agency "owns" open water
- Drowning Prevention Network and Coalitions, with passionate experts who can quickly mobilize around this issue, have been in place for years

What is the New Open Water Safety Policy Guide?

- Comprehensive approach at state and local levels
- Based on data, best practices, and recommendations of the Task Force, Drowning Prevention Network, and many other stakeholders
- Focuses on seven action areas:
 1. Safer Water Recreation Sites
 2. Life Jackets
 3. Boating Under the Influence and Funding for Marine Patrol
 4. Surveillance
 5. Swimming Skills and Water Safety Education
 6. Physical Open Water Barriers
 7. Partnerships

State Policy Context and Your Role

- Historically Awful State Budget
- State Legislative Process Iterative
 - Laying groundwork now is important
- Local Efforts Extremely Influential
 - Often bubbles up to the state level
- Drowning Prevention is a Compelling Issue
 - Legislators will agree with goal of preventing avoidable child deaths
- You Are The Most Important Advocate

Contact Us

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Panel Discussion on Key Open Water Policy Areas

Strengthening BUI Laws
 (Boating Under the Influence of Alcohol and Other Drugs)

Todd Baker
 Clark County Sheriff's Office


Susan Kavanaugh
 Washington State Parks Boating Program

Boating Under the Influence: 2011-2012 Strategies

✓ **Strengthen Washington State's boating under the influence (BUI) law**

Boating Under the Influence Law:
 The Current Situation in Washington

- Washington's current BUI law
- Comparison to Washington's current DUI law
- Columbia River experience
- Impact of alcohol use while on the water



What We Know About BUI Laws in Other State

Oregon BUI Law – Key Features

Oregon Revised Statute 830.325 and 830.505 through 830.550

- Implied consent to field sobriety and breath tests – refusal results in higher penalties and is usable in court
- BUI conviction counts toward DUI penalties
- Penalty includes cancellation of boat registration, numbering, certificate of title for at least one year (can't operate for that period)
- Fines of up to \$6250 and up to one year in jail

What We Know About BUI Laws in Other State

2007 Survey of State Boating Law Administrators



- 13 states: BUI conviction impacts drivers license in some way
 - Impact varies: BUI = DUI, BUI conviction counts toward DUI penalty
 - AK, AR, CA, HI, IN, LA, MA, MN, NH, NJ, OR, TX, UT
- 42 states: Refusal to take a field sobriety test can be used in criminal prosecution (implied consent)
- 21 states: Lower BAC=impaired for those 21 and under

What We Know about BUI and Boating Accidents & Fatalities

Washington Boating Fatality Reports 2000-2009:

- 240 fatalities
 - 75 definitely involved alcohol or drugs (30%)
 - 118 unknown
- Similar BUI statistics nationally for fatalities
- Non-fatal accidents are significantly under-reported so hard to measure impact of BUI

Contact Us

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Life Jackets: Increasing Life Jacket Use and Access to Life Jacket Loaner Programs

Dan Shipman
U.S. Coast Guard

Theresa Fuller
Safe Kids Grant County

Life Jackets: 2011-2012 Strategies

- ✓ Revise Washington State life jacket law to require children age 17 and under to wear life jackets on boats
- ✓ Increase number of life jacket loaner programs at sites used by swimmers and boaters
- ✓ Promote life jacket use at city, county, and state parks
- ✓ Develop and promote standard signage for life jacket loaner programs

Current Life Jacket Law

**RCW 79A.60.160
Personal flotation devices required**

No person may operate or permit the operation of a vessel on the waters of the state without a personal flotation device on board for each person on the vessel. Each personal flotation device shall be in serviceable condition, of an appropriate size, and readily accessible.

No person shall operate a vessel under nineteen feet in length on the waters of this state with a child twelve years old and under, unless the child is wearing a personal flotation device that meets or exceeds the United States coast guard approval standards of the appropriate size, while the vessel is underway. For the purposes of this section, a personal flotation device is not considered readily accessible for children twelve years old and under unless the device is worn by the child while the vessel is underway. The personal flotation device must be worn at all times by a child twelve years old and under whenever the vessel is underway and the child is on an open deck or open cockpit of the vessel. The following circumstances are excepted:

- (a) While a child is below deck or in the cabin of a boat with an enclosed cabin;
- (b) While a child is on a United States coast guard inspected passenger-carrying vessel operating on the navigable waters of the United States; or
- (c) While on board a vessel at a time and place where no person would reasonably expect a danger of drowning to occur.

Proposed Life Jacket Law

**RCW 79A.60.160
Personal flotation devices required**

No person may operate or permit the operation of a vessel on the waters of the state without a personal flotation device on board for each person on the vessel. Each personal flotation device shall be in serviceable condition, of an appropriate size, and readily accessible.

No person shall operate a vessel on the waters of this state with a child **seventeen years old and under**, unless the child is wearing a personal flotation device that meets or exceeds the United States coast guard approval standards of the appropriate size, while the vessel is underway. For the purposes of this section, a personal flotation device is not considered readily accessible for children twelve years old and under unless the device is worn by the child while the vessel is underway. The personal flotation device must be worn at all times by a child twelve years old and under whenever the vessel is underway and the child is on an open deck or open cockpit of the vessel. The following circumstances are excepted:

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- (b) While a child is on a United States coast guard inspected passenger-carrying vessel operating on the navigable waters of the United States; or
- (c) While on board a vessel at a time and place where no person would reasonably expect a danger of drowning to occur.

What We Know about Life Jacket Use & Boating Fatalities


2009 Washington State

- 86.3% of Drowning Victims were not wearing life jackets.
- 2.3 % higher than the National Average, 84%
- Most common vessels involved in a fatal accident:

Open Motor Boats	50%
Non Motorized	29%
Cabin Motor Boats	9.6%

**Life Jacket Loaner Program Access
in a Multilingual Community**

Borrow a Life Jacket
Toma prestado un chaleco salvavidas



1 Borrow a life jacket.
Toma prestado un chaleco salvavidas.

2 Check the label – Choose the right size.
Comprueba la etiqueta – Elige el tamaño correcto.

3 Fasten all buckles, zippers and straps.
Abrocha todos los botones, cierres y correas.

4 Make sure it fits. It should be snug, but not tight.
Asegúrate que te quede bien. Debe quedar ajustado pero no apretado.

5 Wear it here. Use it here.
Déjalo aquí. Déjalo aquí.

Supported by:

In Partnership With: Washington State Department of Ecology, Washington State Department of Health, and Life Jackets Save Lives. Los chalecos salvavidas salvan vidas.

Contact Us

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**Safer Water Recreation Sites:
Lifeguards and Lifeguard Training**

Tony Gomez, RS, BS
Public Health Seattle & King County

Ethan Newton
Covington Aquatic Center

Safer Water Recreation Sites: 2011-2012 Strategies

- ✓ Identify existing water recreation standards for bathing beaches, swim areas, and other high use areas to address issues such as drop-offs, lifeguard coverage, water risks, and rescue equipment availability
- ✓ Research and compile recommended best practices for water safety signs and symbols

Elements of Safer Open Water Sites: Moving From Best Practice to Policy

- Identify need- outbreaks, drowning, climate change and demand on sites, changing demographics, chronic disease prevention and health benefits
- Comparison to rules and regulations developed and implemented for swim pools, spas, water parks
- RCW 70.90 gives Dept. of Health/Board of Health authority to develop rules and regulations for open water
- Need community, industry, political, govt., health services interest

The Importance of Lifeguards and Open Water Lifeguard Training

- Data indicates lifeguards save lives
- Lifeguards provide injury prevention, surveillance, emergency response, and emergency care
- Lifeguarding open water
 - Additional hazards – underwater hazards, pier formations, changing water conditions, etc.
 - Greater skill required – additional skills, additional equipment, greater in-water strength/endurance, etc.
- How to set lifeguard standards for open water
 - Adequate staffing levels?
 - Training?

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Surveillance

Linda Quan, MD, MPH
Seattle Children's Hospital and University of Washington School of Medicine
Diane Pilkey, RN, MPH
Washington State Department of Health

Surveillance: 2011-2012 Strategies

- ✓ Add questions on swimming ability and use of lifeguarded beaches to the Healthy Youth Survey
- ✓ Identify all available data sources and content on child open water drowning
- ✓ Conduct life jacket observations of recreational boaters and develop plan to repeat every three years

Surveillance

• Why have a Surveillance System?

- Identifies who, what, where, how, when about an issue
- Essential for planning, targeting, and evaluating interventions

• What is a *good* Surveillance System?

- Systematic collection AND analysis and interpretation of data
- Timely and ongoing
- Relevant
- Can be shared, multi-use (local and regional)

Selected Sources for Childhood Open Water Drowning Data

Drowning data

- Death certificates
- Hospital discharge data
- Child Death Review
- Boating fatality reports/ Boating accident reports
- Newspaper clipping service
- Other potential: Medical examiner/coroner reports (BAC), EMS trauma

Indicators

- Health Youth Survey- PFD use

Key Local and State Surveillance Strategies

• State level:

- Compile summary of data sources on childhood drowning, including contents of data collection tools and access to data
- Apply to the state Department of Health to add drowning prevention questions to Healthy Youth Survey 2012.
- Identify and disseminate existing protocols for life vest observations

• Local level:

- Support work of local Child Death Review teams
- Regular life vest observational surveys

Contact Us

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Swimming Skills and Water Safety Education: Learn to Swim

Diane Jones
Seattle Parks Aquatics

Swimming Skills and Water Safety Education: 2011-2012 Strategies

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

Swimming Skills and Water Safety Education

- **Why Policies Requiring Swimming Lessons and Access to Swimming Lessons Helps Prevent Drownings**

- Recommendations and referrals for swim lessons from health care professionals give credibility to the importance of learning how to swim
- A high school learn to swim requirement would provide daily exposure to lessons, water safety, and exercise at no cost in a safe, supervised environment
- Streamlined scholarship procedures help citizens navigate the system easier and encourage ongoing participation in swimming lessons

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Open Water Physical Barriers



Open Water Physical Barriers: 2011-2012 Strategies

- ✓ No strategies identified for 2011-2012
- ✓ 2013-2016 Strategy: Identify and promote standards for fencing around irrigation ditches and private ponds

The Value of Partnerships

Mary Borges, BA
Washington State Department of Health and Safe Kids

Partnerships: 2011-2012 Strategies

- ✓ Build partnerships with organizations, associations, and coalitions involved in water safety and water recreation
- ✓ Create opportunities for networking and collaboration on drowning prevention, water safety, and water recreation
- ✓ Identify policy priorities for the Washington State Drowning Prevention Network

Defining Partnership

- Voluntary collaborative agreement
- Participants agree
- Common purpose or undertake a specific task
- Share

Build partnerships with organizations, associations, and coalitions involved in water safety and water recreation



Create opportunities for networking and collaboration on drowning prevention, water safety, and water recreation



Identify policy priorities for the Washington State Drowning Prevention Network

Successful Partnerships

Continue Improvements

Direct Resources

Achieve more with less

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Break



Action Planning

- ✓ Surveillance
- ✓ Advocacy for Life Jacket Use and BUI Policies
- ✓ Partnerships
- ✓ Safer Water Recreation Sites / Lifeguard Training
- ✓ Life Jacket Loaner Programs
- ✓ Inland Northwest Drowning Prevention Strategies (Spokane Site)



Making a Difference

