Data Driven Strategies for Drowning Prevention

April 12, 2017
About the National Center

The National Center for Fatality Review and Prevention is a resource and data center that supports child death review (CDR) and fetal and infant mortality review (FIMR) programs around the country.

It is funded in part by Cooperative Agreement Number UG7MC28482 from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB).
The Center aligns with MCHB priorities and performance and outcome measures such as:

- Healthy pregnancy
- Child and infant mortality
- Injury prevention
- Safe sleep
HRSA’s overall vision for the Center

- Through delivery of data, training, and technical support, the Center will assist state and community programs in:
  - Understanding how CDR and FIMR reviews can be used to address issues related to adverse maternal, infant, child, and adolescent outcomes
  - Improving the quality and effectiveness of CDR/FIMR processes
  - Increasing the availability and use of data to inform prevention efforts and for national dissemination

Ultimate goal: improving systems of care and outcomes for mothers, infants, children, and families
Webinar Goals

Participants will:

• Gain a general understanding of childhood drownings
  – Highlight age, race, gender and differences

• Understand evidence based prevention strategies in three settings:
  – In and around the home
  – Swimming pools
  – Open bodies of water
Speaker Panel

Diane Pilkey, Health Resources and Services Administration

Elizabeth ‘Tizzy’ Bennett, Seattle Children’s Hospital

Angela Steel, Safe Kids Worldwide

Linda Potter, NCFRP

Q&A portion of today’s webinar
Housekeeping

• Webinar is being recorded and will be available with slides in a few days on our website: www.ncfrp.org. The Center will notify participants when it’s posted.
• All participants will be muted in listen only mode.
• Questions can be typed into the Question Window. Due to the large number of participants, we may not be able to get to all questions in the time allotted. The Center will answer all questions and post the answers on the NCFRP web site:
  https://www.ncfrp.org/
Data Driven Strategies for Drowning Prevention

Angela Steel, BSN, CPN, MPH
Injury Epidemiologist, Safe Kids Worldwide

Background on Drowning Deaths:
What does the data show?
Collaborations and Acknowledgments

- This research was conducted in collaboration with the National Center for Fatality Review and Prevention and with the support of Nationwide’s Make Safe Happen program.
- SKW would like to acknowledge the input and support of the following individuals in the development and completion of the two reports referenced in this presentation:
  - **Julie Gilchrist**, Division of Unintentional Injury Prevention, National Center for Injury Prevention & Control, Centers for Disease Control and Prevention
  - **Diane Pilkey**, Emergency Medical Services for Children and Injury Prevention Branch, Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health & Human Services
  - **Teri Covington**, National Center for Fatality Review and Prevention at the Michigan Public Health Institute
  - **Heather Dykstra**, National Center for Fatality Review and Prevention at the Michigan Public Health Institute
Methodology

- Conducted in-depth data analysis to explore national trends and circumstances surrounding fatal drownings among children ages 0-17 years of age for the years 2005 to 2014.
  - National fatality data from the National Child Death Review Case Reporting System (CDR-CRS)
    - Supervision, pool barriers, rescue and resuscitation and emergency services.
    - State and national fatality data from the Centers for Disease Control and Prevention’s WONDER Online Database
- Conducted a survey of 1,000 parents of children 1-12 years to understand attitudes, beliefs and behaviors of parents related to water safety.
Datasets

- Timeframe: 2005 to 2014
- Age range: 0 to 17 years
- National Child Death Review Case Reporting System (CDR-CRS)
  - Supervision, pool barriers, rescue and resuscitation and emergency services.
- Centers for Disease Control and Prevention’s WONDER Online Database
  - State and national fatality data

<table>
<thead>
<tr>
<th></th>
<th>CDR-CRS (N=3,328)</th>
<th>WISQARS (N=9,772)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 year</td>
<td>7.8</td>
<td>6</td>
</tr>
<tr>
<td>1-4 years</td>
<td>50</td>
<td>52.8</td>
</tr>
<tr>
<td>5-9 years</td>
<td>14.4</td>
<td>13.8</td>
</tr>
<tr>
<td>10-14 years</td>
<td>11.8</td>
<td>11.4</td>
</tr>
<tr>
<td>15-17 years</td>
<td>16</td>
<td>15.9</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>68.9</td>
<td>71</td>
</tr>
<tr>
<td>Female</td>
<td>30.5</td>
<td>29</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>65</td>
<td>72</td>
</tr>
<tr>
<td>Black</td>
<td>19.8</td>
<td>23.8</td>
</tr>
<tr>
<td>Native Hawaiian,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Islander,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td>American Indian</td>
<td>1.4</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Multi racial</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>7.4</td>
<td>7.4</td>
</tr>
</tbody>
</table>
Fatal Drownings Among Children From 1985 to 2014

60% reduction in the number of drowning deaths in 30 years
Proportion of Fatal Drownings by Age and Location
From 2005 to 2014

<table>
<thead>
<tr>
<th>Age group</th>
<th>Bathroom</th>
<th>Pool</th>
<th>Natural Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>85%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>1-4 years</td>
<td>10%</td>
<td>68%</td>
<td>22%</td>
</tr>
<tr>
<td>5-9 years</td>
<td>5%</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>10-14 years</td>
<td>8%</td>
<td>25%</td>
<td>67%</td>
</tr>
<tr>
<td>15-17 years</td>
<td>4%</td>
<td>14%</td>
<td>82%</td>
</tr>
</tbody>
</table>
Age is a key determinant

Drowning Risk Varies by Age

Less than 1 year olds are more likely to drown at home.

1-4 year olds are more likely to drown in a pool.

5-17 year olds are more likely to drown in natural water.

54% of child drowning deaths are among children ages 0 to 4.
DROWNINGS IN AND AROUND THE HOME
Drownings In and Around the Home

- Infants are at greatest risk for drowning in this setting
- Buckets, wells, cisterns, septic tanks, decorative ponds, toilets and bathtubs common hazards
- Bathroom—bathtub—accounts for most deaths
Bathtub Drownings

- Number of deaths over time: 54% reduction for infants, 26% increase for children 1-14 years.
- Children under 2 years drown at 13 times the rate of those over 2 years.
- 85% occurred in child’s own home.
- Inadequate supervisions a factor in 75% of deaths.
- CPR initiated in 83% of cases and 911 called in 88% of cases.

![Graph showing bathtub drownings data](image)

2005-2014, n=854
DROWNINGS IN POOLS
Fatal Drowning Rate Among Children In Pools From 2004 to 2013

18% INCREASE in fatality rate for kids 5-9 years
Age and Gender Affect Risk in Pools

- Fatality rate for children **1-2 years**:  
  - 8 times higher than 5-9 years  
  - 15 times higher than 15-17 years  
  - 23 times higher than infants

- **Boys** more likely to drown than girls and gender gap widens with age:  
  - Boys under **10** years have **twice** the risk of girls the same age.  
  - Boys **10-17** years have **three** times the risk of girls the same age.
Racial Disparities in Pool Drownings

- Among those **under 5**, Caucasian children drown at higher rates.
- Among those **5-17 years**, African-American children drown at 4.5 times higher rates.
- Among **African-Americans**, the fatality rate is 2.6 times higher for **boys** than girls.
- Among **Caucasians**, the fatality rate is only 1.9 times higher for **boys** than girls.
Circumstances Surrounding Pool Drownings

Location of Fatal Drowning by Age Group From 2005 to 2014

Children ages 5-9 years were equally likely to drown at a friend’s home as their own.
Barriers Around Pools

Proportion of all pool drownings where a barrier to access was in place and breached (n=1,466)

- Fence: 27%
- Gate: 22%
- Door: 19%
- Alarm: 2%
- Pool cover: 2%

Almost half of all pool drowning fatalities involved the failure of at least one physical barrier.
• Almost HALF of the time, they were not supervised by an adult.
• If they were supervised, in HALF of these cases the supervision was not adequate due to drugs, alcohol or other distractions.

Children 1-4 years of age were least likely to be supervised at time of pool drowning death.
### Swimming ability

Almost half of kids 10-17 years who drown in pools reportedly could swim.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Could not swim</th>
<th>Could swim</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 Years</td>
<td>98%</td>
<td>2%</td>
</tr>
<tr>
<td>5-9 Years</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>10-14 Years</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>15-17 Years</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Rescue and Resuscitation Around Pools

Proportion of Drowning Deaths When CPR Initiated By Age Group

With increasing age, decreasing likelihood that CPR was attempted during a pool drowning.
DROWNINGS IN NATURAL WATER
Natural Water Drowning Fatalities Over Time

Drowning Fatality Rates Among Children From 2004 to 2015

24% increase for children 0-4 years and 27% increase for 5-9 years.
Natural Water Drownings

More than HALF of deaths were 10 years of age or older, but children under 5 still account for 27% of these deaths.

Boys account for 82% of deaths in natural bodies of water and drown at 4 times the rate of girls.

Only 7% of drownings in natural water between 2005 and 2014 involved watercraft.

Proportion of Natural Water Drowning Fatalities
By Age Group From 2005 to 2014

- 0-4 years, 27%
- 5-9 years, 17%
- 10-14 years, 21%
- 15-17 years, 35%

2005 to 2014, n=3,035
Natural Water Drownings

Number of Fatal Drownings by Age Group and Location From 2005 to 2014

Older kids are more likely to drown in lakes and rivers, while younger children more likely to drown in ponds.
Racial Disparities in Natural Water Drownings

Natural Water Drowning Fatality Rates by Age Group and Race
From 2005 to 2014

Among teens, the fatality rate for African American boys is 2 times the rate of Caucasian boys, 14 times the rate of African-American girls, and 24 times the rate of Caucasian girls.
Circumstances Surrounding Natural Water Drownings

- **62%** of natural water drowning deaths occurred in the presence of an adult, but in **25%** of cases supervision was compromised by drugs or alcohol, distraction, sleepiness, injury or illness.

- Drugs or alcohol were detected in the system of **11%** of the children who drowned in natural bodies of water between 2005 and 2014.

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**Proportion of Natural Water Drownings When CPR Initiated**

By Age Category From 2005 to 2014

- 0-4 years: 70%
- 5-9 years: 49%
- 10-14 years: 49%
- 15-17 years: 24%
Evidence Based Prevention: How can we protect our children?
Layers of Protection

• Barriers
• Supervision
• Water Safety Education
• Rescue and Resuscitation
In and Around the Home

- **Top Tips:**
  - Keep young children within arm’s reach when around water.
  - Avoid distraction.
  - Empty all tubs, buckets, containers and kiddie pools IMMEDIATELY after use and store them upside down.
  - Know what to do in an emergency.
  - Learn CPR and basic water rescue skills.
Barriers Around Pools

Components of effective barriers:
- Completely separate the pool from the house and yard
- 4-sided fencing
- At least 4 feet high
- Self-closing and self-latching gates
- Door alarms

Pool Owners' Perceived Importance of Barrier Fencing

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 ft high isolation fencing</td>
<td>40%</td>
<td>41%</td>
<td>19%</td>
</tr>
<tr>
<td>5 ft high perimeter fencing</td>
<td>60%</td>
<td>30%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Presence of Pool Barriers Reported by Parents

- **Pool drain cover**: 35% (Own Property), 31% (Friend's Pool)
- **Pool alarm**: 26% (Own Property), 12% (Friend's Pool)
- **Pool cover**: 29% (Own Property), 23% (Friend's Pool)
- **Access door lock**: 28% (Own Property), 25% (Friend's Pool)
- **Access door alarm**: 21% (Own Property), 10% (Friend's Pool)
- **Regular gate**: 25% (Own Property), 23% (Friend's Pool)
- **Self-closing/self-latching gate**: 29% (Own Property), 23% (Friend's Pool)
- **5 ft. perimeter fencing**: 28% (Own Property), 25% (Friend's Pool)
- **5 ft. isolation fencing**: 22% (Own Property), 18% (Friend's Pool)

Legend:
- Red: Friend's Pool
- Blue: Own Property
Supervision Around Pools

- Appropriate supervision means:
  - Within arms’ reach for young children
  - Constant visual supervision for all children

48% of parents surveyed think that if their child was drowning nearby, they would hear him or her splashing, crying or screaming.

56% of parents surveyed think that a lifeguard is the primary person responsible for supervising their children at the pool.

Parent's proximity to child in the pool by child's age:

- 1-2 years
  - In the water, within arm's reach: 71%
  - In water near child, but not within arms reach: 60%
  - Sitting on edge of pool: 32%
  - Sitting or lying near pool: 21%

- 3-6 years
  - In the water, within arm's reach: 15%
  - In water near child, but not within arms reach: 13%
  - Sitting on edge of pool: 23%
  - Sitting or lying near pool: 23%
Supervision Around Pools

Proportion of parents who have left their child without supervision at a pool by age

- **1-2 years**: 60% Never, 22% Less than 2 minutes, 19% 2 or more minutes
- **3-4 years**: 53% Never, 24% Less than 2 minutes, 22% 2 or more minutes
- **5-12 years**: 32% Never, 25% Less than 2 minutes, 44% 2 or more minutes

Parents are more likely to leave children unsupervised if they are older, have taken swim lessons, or parents perceive them as strong or adequate swimmers.
Supervision Around Pools

What is a Water Watcher?
- An adult who commits to watching children in and around water, so that while they are in the role, their eyes and attention are only on that task.
- This only ends when the children leave the water and/or they turn over the responsibility to another Water Watcher.

Using the Water Watcher system for a certain amount of time (such as 15-minute periods) prevents fatigue and lapses in supervision.

The Water Watcher card is a tool that helps underscore the importance of the role and identifies who has undertaken the responsibility for active supervision.
Proportion of Children Who Have Had Swim Lessons
By Parent Swim Lesson Status

<table>
<thead>
<tr>
<th></th>
<th>Formal</th>
<th>Informal</th>
<th>Both</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent had no lessons</td>
<td>11%</td>
<td>16%</td>
<td>17%</td>
<td>63%</td>
</tr>
<tr>
<td>Parent had informal lessons</td>
<td>4%</td>
<td>10%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>Parent had both formal &amp; informal</td>
<td>13%</td>
<td>50%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Parent had formal lessons</td>
<td>72%</td>
<td>57%</td>
<td>20%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Children were more likely to have had swim lessons if:
- Their parents had swim lessons
- They were older
- They had a pool on their home property
- They had a higher household income
- They lived in an urban or suburban setting (versus rural).
Most Important Skills Children Should Know in a Pool as Selected by Parents

- Floating: 68% had, 78% did not
- Composure - not panicking: 54% had, 70% did not
- Breath control: 57% had, 59% did not
- Treading water: 40% had, 49% did not
- Knowing where you are in the water: 39% had, 50% did not
- Locating an exit from the water: 40% had, 46% did not
- Doggy paddle: 35% had, 43% did not
- Understanding body...: 28% had, 28% did not
- Exiting the water without a ladder: 17% had, 23% did not

Child HAD swim lessons | Child DID NOT have swim lessons
Rescue and Resuscitation Around Pools

Proportion of Parents Who Think it is Important to be Trained in CPR
- Yes: 97%
- No: 3%

Proportion of Parents who are Actually Trained in CPR
- Yes: 64%
- No: 36%

Most common reasons parents had not been trained:
- Lack of time or opportunity (29%)
- Not seen as necessary (22%)
- No reason (22%)
- Cost (3%)
Questions??

• For more information:

Safe Kids Worldwide Research page: https://www.safekids.org/research

Contact information:
Angela Steel
asteel@safekids.org
Phone # 202-662-0611

Open Water Drowning Prevention
Evidence-Based Best Practices

Elizabeth Bennett MPH, MCHES
Linda Quan, MD

Data Driven Strategies for Drowning Prevention
4.12.17
What Works: Circle of Drowning Prevention
Focus On The Site: Safer Water Recreation Sites

- A new study shows better rate of survival
- Assess swim area sites
- Identify unsafe waters used for recreation
  - Prohibit or limit swimming, boating in them
- Improve safety at sites:
  - Designate swim sites you want swimmers to go
  - Work with local agencies


Washington State Designated Swim Area Guidelines
Manage Natural Bodies of Water

Close, dangerous bodies of water:
- Ship Canal, Seattle
- Rivers with fallen trees
# Swim Area Checklist Example

<table>
<thead>
<tr>
<th>Designated Swim Area (Bathing Beach Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marked by rope or other marker</strong></td>
</tr>
<tr>
<td><strong>Clear, visible maximum depth marker</strong></td>
</tr>
<tr>
<td><strong>Depth marker provided in shallow swimming area</strong></td>
</tr>
<tr>
<td><strong>Float line separates shallow from deep swimming area</strong></td>
</tr>
<tr>
<td><strong>Clear of rocks, weeds, lily pads, or other potential hazards</strong></td>
</tr>
<tr>
<td><strong>Beach is glass free</strong>fibers**</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
</tr>
</tbody>
</table>
Lifeguards

Control patrons’ behaviors; prevent risk taking

Recognize a drowning in progress

Perform rescue

Start CPR

Efficacy:

USLA estimates risk of drowning death is 1/18 million visits

Seattle lifeguarded beaches: No drowning deaths for 10 years
Increase Life Jackets Worn On and Near Water
Life Jackets

- Must be USCG approved (also called personal flotation device/PFD)
- Must be worn
- Must fit
- Must be secured
- Efficacy: Decrease drowning death risk in boats by 50% (*Cummings* 2009)
- Decrease drowning death risk in boating accidents by 40% (*Stempski et al.* 2014)
- Decrease drowning death risk in children playing near water (*Yang et al.* 2007)
## Policy

### Observed PFD Use by Mandated PFD use

<table>
<thead>
<tr>
<th>Life Jacket Use Required by Law</th>
<th>#</th>
<th>% life jacket use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Water Craft (PWC)</td>
<td>333</td>
<td>97</td>
</tr>
<tr>
<td>Water Ski/Being Pulled by Boat</td>
<td>125</td>
<td>94</td>
</tr>
<tr>
<td>Age 0-12</td>
<td>525</td>
<td>82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Jacket Use Not Required by Law</th>
<th>#</th>
<th>% life jacket use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kayak</td>
<td>208</td>
<td>80</td>
</tr>
<tr>
<td>Canoe</td>
<td>147</td>
<td>60</td>
</tr>
<tr>
<td>Inflatable</td>
<td>60</td>
<td>43</td>
</tr>
<tr>
<td>Motorized Boat</td>
<td>877</td>
<td>21</td>
</tr>
<tr>
<td>Age 13-17</td>
<td>446</td>
<td>50</td>
</tr>
<tr>
<td>Age 18-64</td>
<td>3919</td>
<td>22</td>
</tr>
</tbody>
</table>
Association of Life Jacket Use by Adult and Child and Adolescent in a Boat

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Adult wore lifejacket</th>
<th>RR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;6 yo</td>
<td>87%</td>
<td>100%</td>
</tr>
<tr>
<td>6-12 yo</td>
<td>77%</td>
<td>93%</td>
</tr>
<tr>
<td>13-17 yo</td>
<td>36%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Chung C et al. Life jacket observation study in WA State, 2010
Increase Access to Life Jackets: Life Jacket Loaner Programs

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. Check for correct fit: snug but not tight.
   Verificar que el tamaño sea correcto: ajustado sin apretar.

   Úsalo aquí. Déjalo aquí.

Provide adult supervision at all times.
Proporcionar supervisión adulta en todo momento.
Life jackets save lives.
Los chalecos salvavidas salvan vidas.

Borrow and use a life jacket at your own risk.
Toma prestado un chaleco salvavidas y úsalo bajo tu propio riesgo.

In Partnership With:
Washington State Drowning Prevention Network
Google Maps:

Washington State Life Jacket Loaner Program Locations

Wearing life jackets when playing, swimming, or boating in lakes, rivers, and the ocean can help keep you and your loved ones safe. Bring your own lifejackets or plan your visit to parks and beaches that have life jacket loaner programs. Use this map to visit a place with a Free Life Jacket Loaner Program.

Life jacket sizes and the number of life jackets vary by location. Some programs are only open during the summer and some may have limited hours. If you’re unsure about whether there will be life jackets to borrow, please bring and use your own. To learn more about when and how to use a life jacket, visit www.seattlechildrens.org/dp.

This list is compiled by Seattle Children’s Hospital, Washington State Department of Health, Safe Kids Washington, and the Washington State Parks and Recreation Boating Program. Contact drowningprevention@seattlechildrens.org with changes and additions.

Public·4 Collaborators·1,025 views
Created on Jul 25, 2012·By·Updated yesterday
Rate this map·Write a comment·KML·
MESSAGE FOCUS:
A life jacket buys you time to be rescued if you fall out of your boat.

It may be impossible to get back into your boat if it is swamped or capsized, and it may be too far to successfully swim to shore. Wearing a life jacket will keep your head above the water to survive until you are rescued.

Barriers to Overcome
I think it’s legal; Lack of awareness/knowledge

Motivators
Safety Net/Security
...The right thing to do...
...and avoid emotional pain (once they know)

Emotional Connections
I think it’s legal; Lack of awareness/knowledge

Persuasive Supporting Facts
Impaired driving laws in Canada apply to driving a boat as well as to driving a car on the road (It is Illegal to operate any boat while impaired , i.e. with a blood alcohol level over .08)

2015 World Conference on Drowning Prevention-McCullough Associates
International Task Force on Open Water Drowning Prevention Guidelines

Learn swimming and water safety survival skills.
Swimming Lessons

Decreased drowning deaths in < 5 yo children
- No swim lessons increased likelihood of death
  RR=2.3 (1.4 to 4.5) Yang et al. 2007- China
- Any swim lessons decreased likelihood by 50% Brenner 2010- USA

Decreased drowning deaths in older children:
- SwimSafe
  Rahmen et al. 2012 Bangladesh
Formal Swim Lessons by Race/Ethnicity

AI/AN=American Indian/Alaska Native
PI=Pacific Islander
Goal: Health Equity

1. Irwin, C.C., et al. Urban minority youth swimming (in)ability in the United States and associated demographic characteristics: Toward a drowning prevention plan., 2009
Swim Lessons - Old Focus:

- Lessons should be developmentally appropriate
- Should be positive experience
- Ideally should include parental learning

- Skill acquisition achieved age 4 y (average)
- The real question is when can swim lessons stop?
New Focus: What is Water Competency?

Research evidence supports inclusion of the following:

1. Entry into deep water
2. Surface and level off
3. Integrated and effective breathing
4. Swim on the front
5. Swim on the back
6. Roll from front to back and back to front
7. Turn, L & R, on Front & Back
8. Surface dive & swim underwater
9. Survival float, front and back
10. Tread water
11. Use of life jacket
12. Exit safely
13. All of the above with clothes
14. All of the above in open water
15. Knowledge of local hazards
16. Recognize and avoid risk
17. Assess ones own competency
18. Recognize a drowning person and lay rescue skills
19. Judgment of risk and action
20. Attitudes & values
A culturally competent approach to drowning prevention
Vietnamese-American Focus Groups: What they wanted

Beliefs:
• Fate

Skills:
• Skills to evaluate water
• Water safety combined with swimming lessons

Infrastructure:
• Age/language specific classes
• Free swim classes (incentive)
• Safe and free places to swim

How to reach them?
• Schools
• Media

Quan et al. Beliefs and practices to prevent drowning among Vietnamese-American adolescents and parents. 2006
A Drowning prevention education campaign tailored to Vietnamese-American community

How: Church leaders, community health workers, Vietnamese newspapers, language schools, Tet festival

Objectives:

- Increase swim lessons: Held pool sessions
- Increase life jacket use: Education sessions and low cost life jacket sales/fitting at Head Start
- Increase use of lifeguarded sites:
  - Created/translated brochures of sites/bus routes
  - Parks dept worked to increase Asian lifeguards

Message: Need to be prepared for American lifestyle/challenges
Muslim-American Communities: What they wanted

Women or men only swims
- Socializing: Swimming was a recreational activity in Somalia
- Obesity control

Skills:
- Water safety and learn to swim

Infrastructure:
- Privacy

How to reach?
- Community leaders
Everyone Swims: a policy and system change approach

Women or men only swim sessions
  • Now held county wide at YMCA and public pools
  • Men-only sessions added after males request
  • Continues through various funding sources

Permanent infrastructure changes made to several public swimming pools

Challenges to exclusive usage of public pools

Stempski et al. Everyone Swims: a community partnership and policy approach to address health disparities in drowning and obesity. 2015
Thank you!

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QUESTIONS

Recording of webinar and slides will be posted within a week on National Center website: www.ncfrp.org
Save the Date!

May 10, 2017, 2:00 pm – 3:00 pm EDT

State Level Fatality Review Advisory Boards in Action: Best Practices for Establishing and Managing

Registration details to follow
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Thank you!

Additional questions can be directed to info@ncfrp.org