Drowning Prevention Week: How Iowa is using media, educational activities, and drowning data to reduce drowning

World Aquatic Health Conference
October 17, 2019
Overview

IDPH Swimming Pool and Spa Program
PHHS Block Grant Funding
Drowning Data
Drowning Prevention Awareness
Other Projects
IDPH Swimming Pools & Spas Program

Iowa Code 135I

Powers and Duties:

- Conduct inspections
- Establish minimum safety and sanitation criteria
- Establish minimum qualifications for operators and lifeguards
- Establish and collect fees to defray the cost of administration
- Adopt rules
- Contract with local inspection agencies
IAC 641 Chapter 15

Scope:

Establish minimum standards for construction and safety and sanitation criteria
Annual registration
Establish minimum qualifications for operators and lifeguards
Contract with local inspection agencies

IAC 641-15 Swimming pool and spa operations.
Swimming pools and spas shall be operated in a safe, sanitary manner and shall meet operational standards.
IDPH Swimming Pools & Spas Program

Over 1300 facilities

60 local inspection agencies cover 99 counties

Centralized state health department

Home rule
Preventive Health and Human Services (PHHS) Block Grant

- Administered by CDC
- Compete annually for funding
- Healthy People 2020 objectives
- Core programs
  - Sexual violence prevention (mandatory)
  - Local Public Health Services
  - EMS/Trauma

THIS PRESENTATION WAS SUPPORTED BY FUNDS MADE AVAILABLE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION, CENTER FOR STATE, TRIBAL, LOCAL AND TERRITORIAL SUPPORT, UNDER FFY 2018 Grant# NB01OT009207
Preventive Health and Human Services (PHHS) Block Grant

FFY 2016: $19,000

FFY 2017: $21,000

FFY 2018: $21,000
Preventive Health and Human Services (PHHS) Block Grant

GOALS:

Professional Development for Staff
Analyze Drowning Data
Promote Statewide Awareness
Professional Development for Staff
Why Drowning Prevention?

- Leading Cause of Unintentional Injury –Related Death in Children aged 1-4
- 2017 alone almost 1000 deaths among US children younger than 20 years
- Populations with increased drowning risk
  ◦ Toddlers
  ◦ Adolescents
  ◦ Underlying Medical Condition
    ◦ Epilepsy, Autism, Cardiac Arrhythmias
- Non-fatal injuries are largely underreported
  ◦ Long-term effects can cause permanent disability

Analyze Drowning Data

- Established data-sharing agreement in 2015 to obtain drowning death data
- Drowning prevention intern identified demographic trends and variables related to deaths from 2015-2018: month, day, sex, location, time, and age group
- Develop procedure for data analysis
Drowning Deaths in Iowa 2015-2018
Drowning Deaths in Iowa 2015-2018

Drowning Deaths by Year

2015-2018 Comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Deaths</th>
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<tbody>
<tr>
<td>2015</td>
<td>40</td>
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<tr>
<td>2016</td>
<td>60</td>
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<tr>
<td>2017</td>
<td>40</td>
</tr>
<tr>
<td>2018</td>
<td>40</td>
</tr>
</tbody>
</table>
Iowa Drowning Deaths by Month

Drowning Deaths by Month
Iowa 2015-2018

Number of Deaths

Month

Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Iowa Drowning Deaths by Day

Drowning Deaths by Day
Iowa 2015-2018

Number of Deaths

Day

Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday
Iowa Drowning Deaths by Age
Iowa Drowning Deaths by Sex

Drowning Deaths by Sex
2015-2018 Comparison

Number of Deaths

Sex

Male | Female

2015 | 2016 | 2017 | 2018

- Male
- Female
Iowa Drowning Deaths by Time of Day
Iowa Drowning Deaths by Location

- **2015**
  - River, Stream Or Canal: 36.4%
  - Lake or Pond: 6.8%
  - Home: 6.8%
  - Residential Pool: 2.3%
  - Roadway: 1.7%
  - Other: 1.7%

- **2016**
  - River, Stream Or Canal: 50.0%
  - Lake or Pond: 13.8%
  - Home: 27.6%
  - Residential Pool: 3.4%
  - Roadway: 3.4%
  - Other: 1.7%

- **2017**
  - River, Stream Or Canal: 45.5%
  - Lake or Pond: 31.8%
  - Home: 6.8%
  - Residential Pool: 13.6%
  - Roadway: 1.7%
  - Other: 1.7%

- **2018**
  - River, Stream Or Canal: 25.0%
  - Lake or Pond: 33.3%
  - Home: 20.8%
  - Residential Pool: 10.4%
  - Roadway: 8.0%
  - Other: 2.1%
Promote Statewide Awareness of Drowning Prevention

- Media
- Workgroup
- Community Events
- Designation of Drowning Prevention Week
Promote Statewide Awareness of Drowning Prevention

Media

- Movie trailer in 2016
- Radio spots in 2017, 2018, & 2019
- Introduced on Facebook and Twitter 2018 and 2019
- Targeted messaging: adult males, general public/women
# Radio Summary 2019

**Iowa Department of Public Health**

### Drowning Prevention Radio Campaign Summary

<table>
<thead>
<tr>
<th>Network</th>
<th>Length</th>
<th>Flight Dates</th>
<th>Paid Spots</th>
<th>Bonus Spots</th>
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<tr>
<td>Radio Iowa</td>
<td>:30</td>
<td>5/20/19 – 6/15/19</td>
<td>16</td>
<td>9</td>
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<tr>
<td>HITS 99.9</td>
<td>:30</td>
<td>5/20/19 – 6/15/19</td>
<td>24</td>
<td>4</td>
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<tr>
<td>KRNA/KAZR</td>
<td>:15</td>
<td>5/20/19 – 6/15/19</td>
<td>24</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL**

| Three Weeks | 81 Spots |

<table>
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<tr>
<th>Network</th>
<th>Reach</th>
<th>Frequency</th>
<th>Gross Impressions</th>
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<td>2.1</td>
<td>825,900</td>
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<tr>
<td>KRNA</td>
<td>KAZR</td>
<td>HITS 99.9</td>
<td></td>
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</table>

**Radio Investment:** $6,080  | **Bonus Value:** $3,350

Source: Nielsen TAPSCAN, Fall 2018 NRD, Persons 18+
Radio Summary 2019

Iowa Department of Public Health
Drowning Prevention Digital Campaign Summary

Radiolowa.com
Impressions 150,780

FACEBOOK
Impressions 95,040
Reach 46,418
Link Clicks 592

Digital Investment: $920
# Radio Summary 2018

## Iowa Department of Public Health

### Drowning Prevention Radio Campaign Summary

<table>
<thead>
<tr>
<th>Network</th>
<th>Length</th>
<th>Flight Dates</th>
<th>Total Local Messages</th>
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<td>June 4 – 30</td>
<td>1,602</td>
<td>40</td>
<td>10</td>
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<tr>
<td>KRNA I HITS 99.9 I KAZR</td>
<td>:15’s</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>Four Weeks</td>
<td></td>
<td><strong>1,602</strong></td>
<td><strong>50</strong></td>
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<th>Network</th>
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<td>HITS 99.9</td>
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Radio Investment: $6,080 | Bonus Value: $2,220

*Source: Nielsen TAPSCAN, Spring 2018 NRD, Persons 18+*
Radio Summary 2018

Iowa Department of Public Health
Drowning Prevention Digital Campaign Summary

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<tr>
<th>Radiolowa.com</th>
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<td>2</td>
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<tr>
<td>Totals</td>
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Digital Investment: $920
# Radio Summary 2018

## Iowa Department of Public Health

Drowning Prevention Digital Campaign Summary

<table>
<thead>
<tr>
<th>FACEBOOK</th>
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<td>2</td>
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<td>64,245</td>
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[Images of Facebook ads promoting drowning prevention]

1. Drowning is the leading cause of death by unintentional injury in children between the ages of 1 and 5. Stay safe this summer by practicing good water safety.

2. Drowning is the leading cause of death by unintentional injury in children between the ages of 1 and 5. Stay safe this summer, learn to swim.

[Images of other campaign materials]

1. Prevent Drowning Tips and Information
2. Find Swimming Lessons Near You
Radio Summary 2018

Iowa Department of Public Health
Drowning Prevention Digital Campaign Summary

<table>
<thead>
<tr>
<th>TWITTER</th>
<th></th>
<th></th>
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<tbody>
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<td>Ad</td>
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<td>Clicks</td>
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<td>1</td>
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<td>73</td>
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<td>2</td>
<td>10,033</td>
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<tr>
<td>Totals</td>
<td>37,208</td>
<td>118</td>
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</table>
Promote Statewide Awareness of Drowning Prevention – Media

Develop [testimonial drowning prevention video](#)
Promoting Awareness - Workgroup

Workgroup members
- State and Local Health Departments
- Hospitals
- Bass Pro Shops
- Drowning Survivors
- Swimming Pool Facilities

Collaboration with other agencies, facilities, professional associations, community partners

Meeting frequency
- Intern – Biweekly/Monthly from February through July
- Year round meetings
Promoting Awareness – Community Events

- World’s Largest Swimming Lesson
- Nationwide Insurance Health Fair
- Clowns at the Carousel
- Children’s Water Festival
Promoting Statewide Awareness of Drowning Prevention
Designation of Drowning Prevention Week

• Governor’s Proclamation
• Press Release

PROCLAMATION

WHEREAS, unintentional drowning continues to be a leading cause of death by injury, and many of these deaths and injuries are preventable; and

WHEREAS, direct supervision of young children and non-swimmers by their parent or caregiver and properly constructed barriers including self-closing and lockable gates are essential to reduce the risk of drowning deaths; and

WHEREAS, formal swimming lessons have been shown to reduce the risk of drowning, and CPR administered quickly can improve the outcomes in drowning victims; and

WHEREAS, use of Coast Guard approved life jackets by boaters and non-swimmers can reduce the risk of drowning; and

WHEREAS, Shallow Water Blackout can cause swimmers to pass out and may be the leading cause of drowning among those who can swim; and

WHEREAS, swimmers and those supervising others in and around the water should avoid alcohol as it is a contributing factor in a significant number of drowning deaths;

NOW, THEREFORE, I, Kimberly K. Reynolds, Governor of the State of Iowa, do hereby proclaim the week of June 17-23, 2018, as DROWNING PREVENTION WEEK in Iowa, and urge all citizens to join in this effort to increase awareness, education and utilization of proven drowning prevention strategies.

IN TESTIMONY WHEREOF, I HAVE HERETOunto subscribed my name and caused the great seal of the State of Iowa to be affixed. Done at Des Moines this___ Day of June in the Year of Our Lord Two Thousand Eighteen.
Press Release

IDPH News Release

FOR IMMEDIATE RELEASE
June 17, 2016

Contact: Polly Caven-Kramer
Polly.Caven-Kramer@idph.state.ia.us

Drowning Prevention Week June 19-25
Learn, Provide, Know

Governor Branstad signed a proclamation on June 2 declaring June 16 through 23 as Drowning Prevention Week. In 2015, there were thirty-nine drowning deaths in Iowa. The Iowa Department of Public Health (IDPH) supports Drowning Prevention Week and encourages Iowans to take three steps toward water safety:

1. Learn - All parents and caregivers are encouraged to learn adult and infant CPR. Immediate recognition at the site of an incident before thearrival of emergency medical services is associated with a significantly better outcome for children involved in a water injury.

2. Provide - IDPH recommends homeowners with pools or spas install fencing or barriers to prevent young children from gaining access to the water without supervision. To be effective, barriers should:
   • Be at least 48 inches tall.
   • Have no openings that would allow passage of a 4-inch sphere.
   • Be of a non-climbable design.
   • Have self-closing, self-latching, locking gates.

3. Know - All parents and caregivers should know how to swim and should teach their children to swim as well.

To help encourage learning to swim, IDPH is partnering with Safe Kids and the Altoona Aquatics Center for the World’s Largest Swimming Lesson on June 24. Similar events will be taking place across the nation. For more information on the World’s Largest Swimming Lesson, visit www.worldlargestswimminglesson.org/location.

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SAFE KIDS
UnityPoint Health

FOR IMMEDIATE RELEASE

Contact: Amy Vanner
Office: 515-201-6800 | Cell: 515-205-6800

WHEREALAMOONCampan Aquatics Park, 1220 Venhuyce Dr. Altoona, IA 50009

World’s Largest Swimming Lesson™ Set For June 24, 2015

DES MOINES, IA – Friday, June 24, 2016, 9:30 a.m. tons of thousands of kids and adults from aquatic facilities around the world will come for The World’s Largest Swimming Lesson™ (WLSL).

Safe Kids Greater Des Moines is an official Host Location for the 2016 WLSL taking place at 9:30 a.m. at Alamoon Campus Aquatic Park in Altoona, IA. Team WLSL holds the current Guinness World Record™ for the largest simultaneous swimming lessons with 32,450 participants, and they hope to break the record again.

Urgently drowning remains the leading cause of unintended injury related death of children ages 1-4, and the second leading cause of accidental death for children under 14. Research shows participation in formal swimming lessons can reduce the risk of drowning by 88% among children aged 1 to 4, yet many kids do not receive formal swimming or water safety training.

The World’s Largest Swimming Lesson™ was created as a platform to help aquatic facilities and the many different regional, national and international water safety and drowning prevention organizations, work together to communicate the fundamental importance of teaching children to swim.

# # #
Current Projects
IAC 641 15.4(7) Reports. Swimming pool and spa operators shall report to the local inspection agency, within one business day of occurrence, all deaths; near drowning incidents; head, neck, and spinal cord injuries; and any injury which renders a person unconscious or requires immediate medical attention.

Contracts with Local Inspection Agencies
The contractor agrees to forward reportable incidents received within one day of receipt.
Incident Reporting and Response

Information Gathering

- Witness statements
- Incident description and diagram
- Original approved plans and specs
- Swim testing
- Lifeguard zones of surveillance
- Video footage
- Police reports
- Caregiver supervision
Incident Reporting and Response

1. Receive incident report
2. Log into Incident Tracking Sheet
3. Is it reportable?
   - Yes: Schedule Incident Review Meeting
   - No: End
4. Is a site visit necessary?
   - Yes: Conduct site visit
   - No: Provide feedback to facility
5. End
Supervision and Admission Age

IAC 641 15.4(4)"d"(1)

Except for wading pools and spray pads, lifeguards are required at municipal and school swimming pools of any size and other swimming pools having a water surface area of 1500 ft\(^2\) or larger. Swimming pools operated by apartments, condominiums, country clubs, neighborhoods, manufactured home communities, or mobile home parks are exempt from lifeguard requirements.

IAC 641 15.4(6) Signage must be provided where lifeguards are not provided:

"d"(1) The sign at a swimming pool shall state that lifeguards are not on duty and children under the age of 12 must be accompanied by an adult.

"d"(2) The sign at a wading pool shall state that lifeguards are not on duty and children and children must be accompanied by an adult.
Supervision and Admission Age

- Cities greater than 5,000
- N=76
- Trends based on population

Unsupervised Age Minimum at Pool Facilities

Number of Facilities

Unsupervised Age Minimum

- 5,000-6,000
- 6,000-10,000
- 10,000-20,000
- 20,000-50,000
- 50,000+

Number of Facilities vs. Unsupervised Age Minimum

- Cities greater than 5,000
- N=76
- Trends based on population
Supervision and Admission Age

Minimum Age of Unsupervised Child

- Cities greater than 5,000
- N=76
Haddon Matrix for Drowning Prevention Strategies


Layers of Protection
Layers of Protection: The Most Important One

Adequate supervision, described as close, constant, and attentive supervision of young children in or around any water, is a primary and absolutely essential preventive strategy.

Challenges

- Involvement in local activities
- Workgroup sustainability
- Release of data
- Reporting of incidents
Program Successes

• Established relationships with other public and private partners
• Ensured sustainability by developing tools and procedures
• Developed timeless drowning prevention messages
• Drowning dataset for 2015-2018
• Unique experience for public health interns
References

1. Iowa Code § 135I

2. 641 - IAC Chapter 15


We would like to express our special thanks of gratitude to our interns over the past three years who have analyzed the data and created the charts and graphs seen in this presentation today. This program would not be possible without you.