2017 Drowning Prevention Report

DNR Division of Law Enforcement Indiana Conservation Officers











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MESSAGE from the TEAM

Every day in the United States, about 10 people die from unintentional drowning. Of these, two are children aged 14 or younger (Centers for Disease Control and Prevention, 2017). Even more tragic is that most of these deaths could have been prevented.

While this report highlights statistics and data collection, we remain conscious of the fact that we are talking about people and families. This report is dedicated to those who have lost their lives in Indiana's waterways, the families and friends who are left behind and the responders who sacrifice their safety to prevent these deaths.

Out of compassion, care and concern for the safety of our citizens, the Department of Natural Resources (DNR), the Department of Child Services (DCS), the State Department of Health (ISDH) and the Department of Homeland Security (DHS) have made a commitment to work together to achieve our shared vision that Indiana has ZERO drowning deaths.

To prevent these tragic deaths, we must understand the circumstances, such as "who, what, when, where, why and how". We need to know how the death was investigated, what risk factors were involved, what services were provided to the family and community and/or did any state or local agencies review their policies or programs to prevent future death and injury.

To understand the circumstances involved, we must continually strengthen our data collection, analysis and sharing. This collaborative analysis revealed that if we do not share our data, we are not capturing the information critical to targeting interventions or evaluating success in prevention. This sharing of data among our state agencies has provided the most rigorous and comprehensive analysis and reporting to date.

We hope that these partnerships will help us continue to gain a better understanding of drowning, provide focus and collaboration toward prevention and be shared and utilized in a way that brings us all to a better understanding of how we can effect positive change. It is our sincere hope that this information will assist our first responders, educators, other agencies and the public with the necessary information to effectively prevent drownings from occurring.

To see our vision come to fruition, we need you. We are all partners in this endeavor and we thank you for working with us to reduce water-related tragedies across the great state of Indiana.

Sincerely, The Team



2017 STATISTICS PEOPLE DROWNED in Indiana January 1-December 31, 2017

Drowning by Sex 78% Male, 22% Female

Driving into flooded waters,

including lawn mowers into private ponds, have been in the top 4 leading causes of known drownings over the last 11 years.



Top 3 Drowning

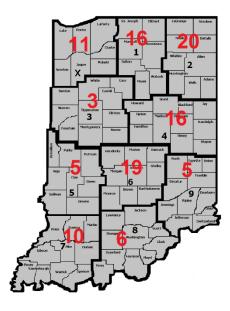
Activities

16% Falling

15% Swimming

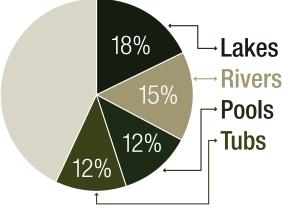
7% Driving

Drownings in Indiana



Divided by Indiana DNR Law Enforcement Districts





RISK MANAGEMENT



There are several ways citizens can prevent or reduce drowining deaths in their communities.

HOW TO REDUCE DROWNING DEATHS



Wear a life jacket (page 5)





Use barriers as needed (page 7)



Take swim lessons (page 17)



Respect all weather (page 19)



Learn CPR (page 21)



Avoid driving into water (page 25)



Avoid alcohol (page 27)



Respect Ice (page 29)



Learn first aid (page 31)

LEARN THESE RESCUE TECHNIQUES (page 15)







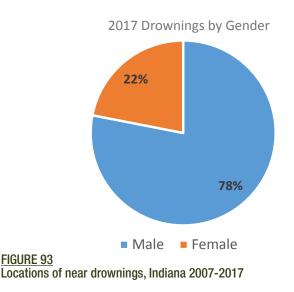


Who Drowns in Indiana?

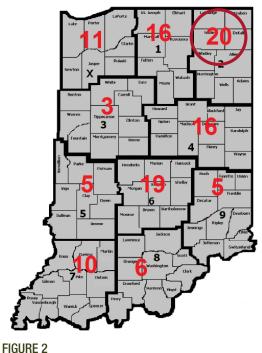
Of the 114 people who drowned in 2017, 78% were male. The 10-year average is 65% male. DNR Law Enforcement District 2 (Natural Lakes, Rivers, and large population) reported the most drowning deaths (17%).

The largest number of drowning deaths occurred among people aged 0 to 12 (29). This is astonishing because the age group 41-65 is the largest category spanning 24 years.

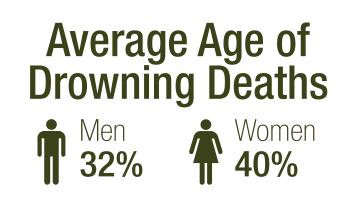
The average age of drowning deaths in Indiana is 34 years old. The average age for males is 32 and 40 for females.



DNR Law Enforecment District with the Most Drownings in a 10 year period



Drownings by DNR Law Enforcement District, Indiana 2007-2017





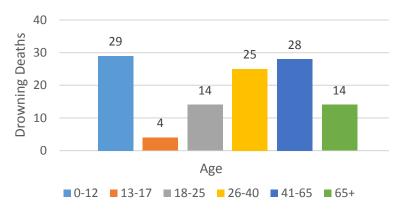


FIGURE 3 Drownings by age group, Indiana 2017

CASE STUDY Wear a Life Jacket

In June 2012, only 17 days apart, two Indianapolis teenagers lost their lives under very similar circumstances while enjoying a trip with friends at a campground in Central Indiana. The trips were intended to provide a day of outdoor recreation for inner city kids who generally did not have much opportunity to participate in these types of activities. The campground is known for the crystal clear lake that is decorated with many floating swimming platforms and specially designed for a day of fun on the water.



Signs are posted from the parking lot to the water that state, "Anyone entering the water MUST wear a life jacket." Each of these teens ignored the warning signs, and both believed that their ability to swim coupled with their level of physical fitness could easily overcome any risk they may encounter a mere few feet from the swimming dock.

Witnesses state that both of these young people showed signs of struggle and were tossed life jackets, but not within their reach. A 14-year-old and a 19-yearold, who both believed that they were good swimmers, tragically lost their lives. This could have been prevented by taking a moment to put on a life jacket.



Proper Life Jacket Fit

PFD Selection, Use, Wear, and Care United States Coast Guard Web site



https://www.uscg.mil/hq/cg5/cg5214/pfdselection.asp#faq

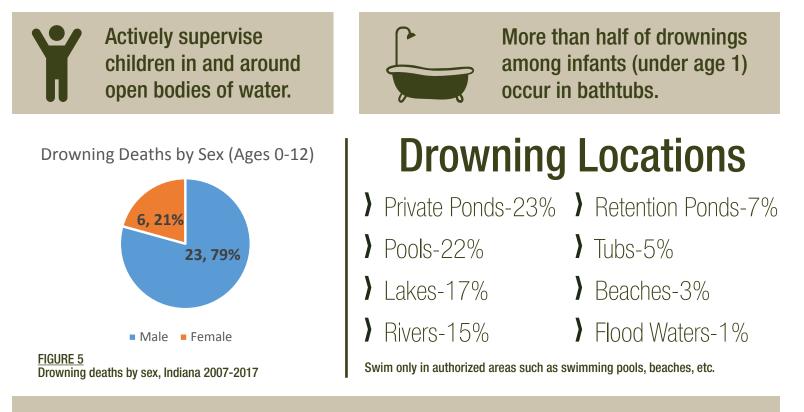


Life jackets are just like the seatbelt in your car.

You never get an advanced warning to put it on prior to an accident. Remember this when selecting a life jacket for yourself or children. Proper fit and comfort increses your willingness to put it on.

Child Drowning Deaths

There were 29 drowning deaths among those aged 0-12 in 2017. Twenty-three (79%) were male and six (21%) were female.



Leading Drowning Activities









The Center for Disease Control reports

drowning as the leading cause of death by age.

- #1 Ages 1-4
- #2 Ages 5-9
- #4 Ages 10-14
- #5 Ages 15-24

Leading Causes of **Child Drownings**





No Protective Barriers

Drownings typically occur when a child is left unattended or during a lapse in supervision.

No parent supervision

CASE STUDY | Parent Supervision & Barriers



Scenario

While attempting to stay cool on a hot summer day, a mother took her young son over to a relative's house to enjoy their above-ground pool. The mother decided that the heat was unbearable and stepped inside the house for a moment to get cooled off by the air conditioning. The child's grandmother was trying to watch the child through a window but would lose visual contact for brief moments. After a short time of not being able to see the child, the mother and grandmother ran outside to check on the 3-year-old and found him lying on the bottom of the pool. Efforts to revive him failed.

A mother was bathing her 2-year-old daughter and allowing her 1-year-old son to play outside the tub. The mother left the bathroom to look for a towel. She returned three to six minutes later to find the 1-year-old face down in the tub.

A family was having a gathering. A 2-year-old male was observed outside with other children playing. The adult supervisor was making lunch for the family. When the adult went to check on the child 10-15 minutes later, she was unable to locate him. He was found in the family pool shortly after.

A mother, father, and their 3-year-old, autistic, nonverbal son were preparing dinner. Each parent believed the child was with the other. The back door was observed open. After searching for 10-15 minutes, they contacted emergency services. Police located the child in a nearby retention pond.

Always use safety locks on doors near water.

A 3-year-old child drowned in a pond located near the backyard of the child's home. The mother of the child allowed the child to play in the back yard, unsupervised, while she remained in the front yard to pull weeds and then talk with her boyfriend. When the mother went to the backyard to check on the child, she was unable to find the child. The child was eventually found in the pond. Due to the fact the child was unsupervised and there were no barriers between the backyard and the pond, the child was able to enter the water and drown.

Solution



It only takes seconds for an accident to happen



Actively supervise around water.

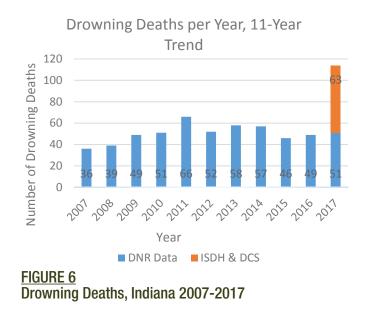


Designate an adult at all times with a verbal handoff.



Drowning Deaths Investigated by the DNR - 11 Year Trends -

Of the 114 drownings reported to all state agencies in 2017 (DNR, ISDH, IDCS combined), 51 (44%) were investigated by the Department of Natural Resources (DNR). The number of DNR drowning investigations increased by two (2) from the previous year and is just under the eleven-year average of fifty (50). The 2017 Indiana drowning report shows a rate of 1.72 drownings per 100,000 population in Indiana compared to the United States average of 1.43 drownings per 100,000 population (CDC WISQARS, 2016). The 2010 U.S. Census Bureau statistics and projections below show Indiana's population increase from 2010 to 2016 (U.S. Census Bureau, 2016).



Indiana's Population 2010-2016

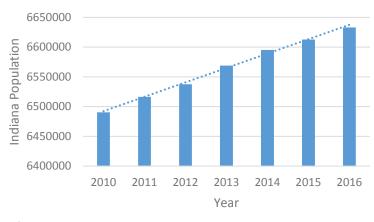
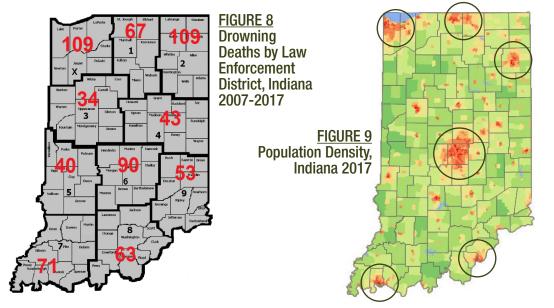


FIGURE 7 Indiana Population 2010-2016

The maps (right) show the number of drowning deaths in each of the 10 DNR Law Enforcement Districts and the major population centers in Indiana. Historically, large bodies of public water are only relevant to drowning deaths 22% of the time. However, bodies of water accessed by private property remain a factor 78% of the time giving a strong indication that population densities are better predictors of drowning deaths.

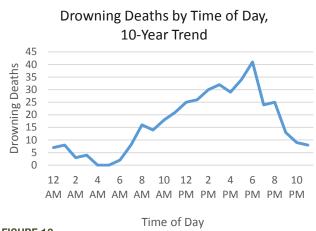


When Drowning Deaths Occur

- By Time of Day - 10 Year Period -



is the most frequent time of day for drowning deaths to occur over the 10-year DNR study period (2007-2016).



p.n

FIGURE 10 Drowning deaths by time of day average, Indiana 2007-2016, DNR data only

FISHING Arrest & Boating Violations

(Non-BWI) appear to most closely match the pattern of time of drowning deaths. The remaining charts compare other water-related activities.



Drowning deaths and fishing violations by time of day average, Indiana 2007-2016, DNR data only

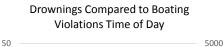




FIGURE 12 Drowning deaths and boating violations (non-BWI) by

time of day average, Indiana 2007-2016, DNR data only

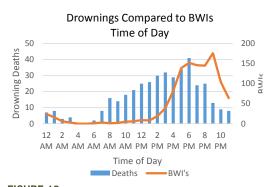
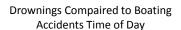
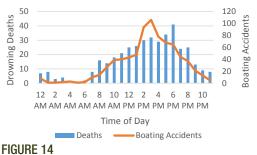


FIGURE 13 Drowning deaths and boating while intoxicated arrests by time of day average, Indiana 2007-2016, DNR data only

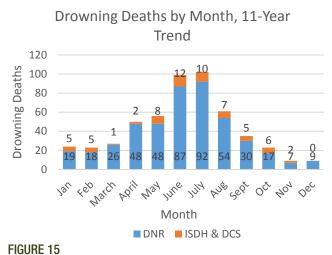




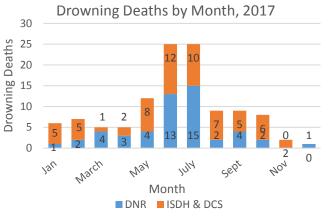
Drowning deaths and boating accidents by time of day average, Indiana 2007-2016, DNR data only

When Drowning Deaths Occur - By Month

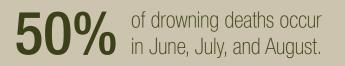
July is the deadliest month for deaths to occur with one hundred two (102) of the recorded drownings over the 11-year DNR study period (2007-2017). June follows closely behind with 99 drownings and then August with 61 drownings. As a comparison, in 2017, June (25) and July (25) were tied for the deadliest months.



Drowning deaths by month, Indiana 2007-2017, 11 year trend



<u>FIGURE 16</u> Drowning deaths by month, Indiana 2017



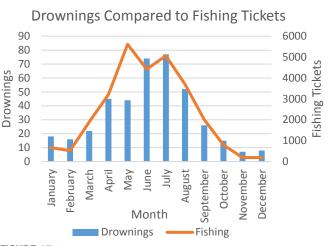
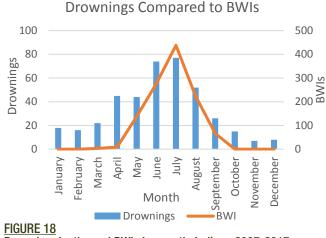
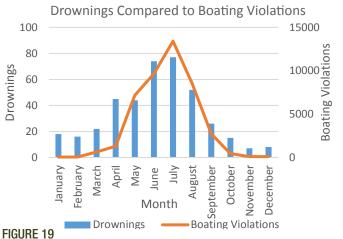


FIGURE 17

Drowning deaths and fishing tickets by month, Indiana 2007-2017



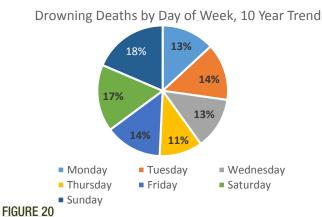
Drowning deaths and BWIs by month, Indiana 2007-2017



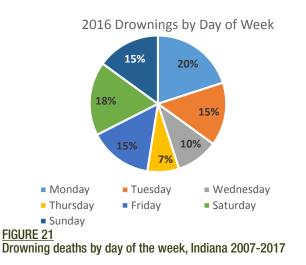
Drowning deaths and boating violations by month, Indiana 2007-2017

When Drowning Deaths Occur - By day of the week

Sundays (18%) are the leading day for drowning deaths followed by Saturday (17%) and then Tuesdays (14%) and Fridays (14%). In 2016 Monday lead (20%); however, Tuesdays remain tied with Fridays.



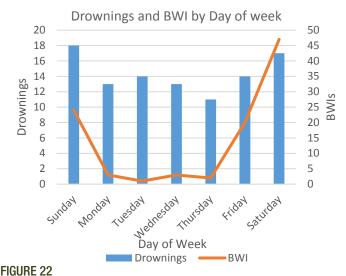
Drowning deaths by day of the week, Indiana 2006-2016, DNR data only



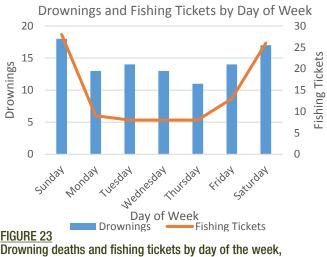
Deaths

Weekdays vs.

Weekends



Drowning deaths and BWIs by day of the week, Indiana 2007-2016, 10 year trend, DNR data only



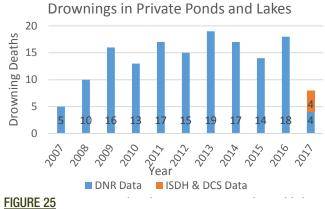
Indiana 2007-2016, DNR data only

Weekends vs. Weekdays, Weekends vs. Weekdays, 2016 Drowning 2007-2016 35% 32% Weekend Weekend Weekday 65% 68% Weekday FIGURE 24

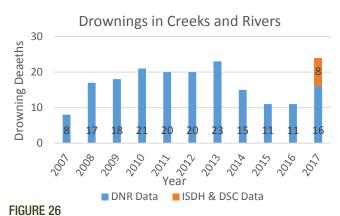
Drowning deaths on weekends and weekdays, Indiana 10 year trend and 2016, DNR data only

Where Drowning Deaths Occur

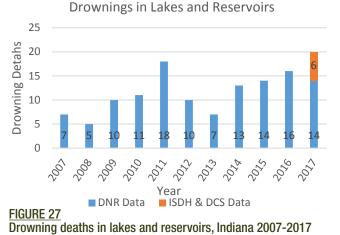
The graphs below represent the drowning deaths reported to or investigated by the DNR for 2007-2016. All agency data was added for 2017. Drownings at creeks and rivers are trending up with a dramatic increase last year; however, agency cooperation in reporting could be a factor. Drownings at lakes and reservoirs are increasing steadily over the past 11 years.



Drowning deaths in private ponds and lakes, Indiana 2007-2017

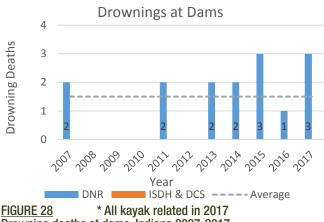


Drowning deaths in private creeks and rivers, Indiana 2007-2017

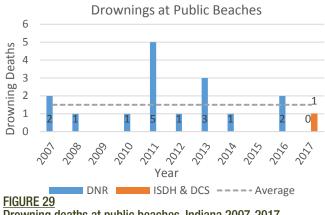


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Specific locations such as dams, public beaches, and retention ponds were reviewed for drownings in the 11year DNR study period. There were an average of 1.5 drownings per year at dams, and in 2017 all three dam drownings were related to kayak use. Drownings at public beaches averaged 1.5 per year. Drownings at retention ponds were the highest at an average of 2.2 deaths per year.

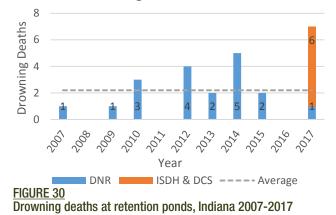


Drowning deaths at dams, Indiana 2007-2017



Drowning deaths at public beaches, Indiana 2007-2017

Drownings at Retention Ponds



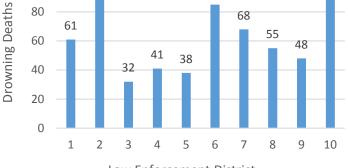
Where Drowning Deaths Occur - By DNR Law Enforcement Districts -

High & Low Record Numbers

District 10 (X) has had the most drowning deaths over the last 11 years (98), 2007-2017. District 2 has had the second most drowning deaths (89), and District 6 had the third most (85).

The most drowning deaths occurred in 2017 (114); however, the increase can be attributed to multiple state agencies working together to share drowning data. District 2 had the highest number of drowning deaths in a year with 20 in 2017. The second highest number of drownings was in District 6 with 19 in the same year (2017). District 3 has the fewest number of drowning deaths in the state (32). 120 100 89 85 80 61 68

Drowning Deaths by DNR Law Enforcement District

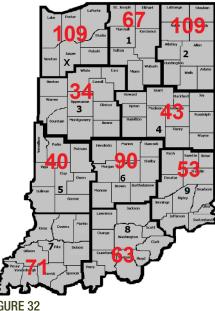


Law Enforcement District

Drowning deaths by DNR Law Enforcement district, Indiana 2007-2017

Geographic Population Comparisons

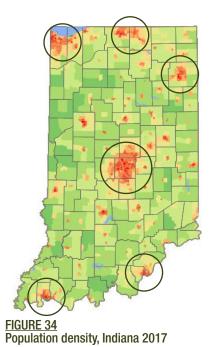
The maps below show the number of drowning deaths of each Law Enforcement District and major population centers in Indiana. Large bodies of public water remain a critical factor in drowning deaths (22% of drownings); however, bodies of water accessed by private property are the dominate location (78% of drownings).



Drowning deaths by DNR Law Enforcement District, Indiana 2007-2017



Major bodies of water in Indiana, 2017

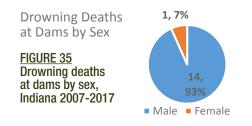


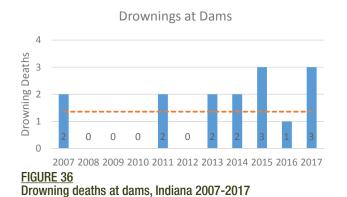
Who Is Drowning at Dams?

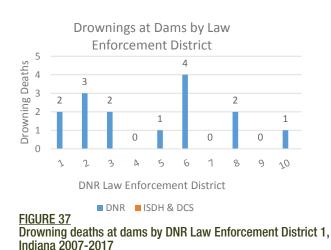
As in other categories male victims (93%) far outnumber the female victims (7%) of dam drowning deaths for 2007-2017. Teens and adults aged 26-40 each make up 33% of these victims.

The average number of drowning deaths at dams per year is 1.4 (Figure 36). DNR Law Enforcement District 6 has investigated the most dam-related drowning deaths during the same timeframe (Figure 37).

Conservataion Officers recover 43% of all waterway dam drowning victims. Other public safety agencies recover 36%, and citizens recover 21% of the victims of these tragic events.







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5 drowning incidents occured at dams in 2017.

2 non-fatal | 2 had lifejackets | All 5 were kayak-related

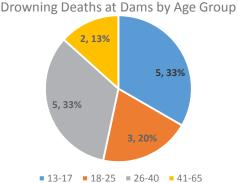


FIGURE 38 Drowning deaths at dams by age group, Indiana 2007-2017



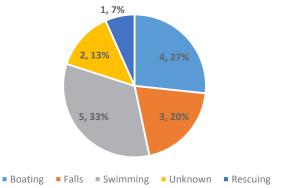
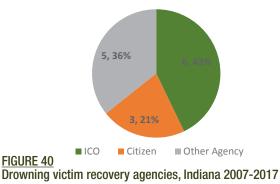


FIGURE 39

Activities at dams before drowning deaths occured, Indiana 2007-2017

Drowning Victim Recoveries



CASE STUDY Rescue Techniques First try to talk the victim to safety.





Extend anything that could pull the victim to safety such as a fishing rod, tree branch, boat oar, trouser belt, towel, jumper cables, or any other object that can extend your reach. If nothing is available, lie flat on the dock/ground/ice and grab the victim's hand or wrist, and pull him or her to safety.





If the victim is too far away to reach, THROW the victim a lifejacket (PFD) or anything else that will float. Coolers, spare tires, pool rafts, or anything else that might float should be considered.





If a boat is available, ROW to the victim and then use an oar or paddle to pull the victim to the back (stern) of the boat. Let the victim hold onto the stern as you paddle to shore. If the victim is too weak, hold onto him or her until help arrives. If using a powerboat, stop the engine and glide to the victim from the downwind side.

₹**?**



Swimmers without lifesaving training should not swim to a victim. Instead, GO for help. If you must swim, take along anything that floats to keep between you and the victim.

Share these rescue techniques with others.

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Who Is Drowning at Public Beaches?

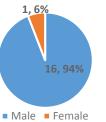
Males make up 94% of the drowning victims at public beaches over the last 11 years. Only one (1) female died at a public beach in the 11-year study period.

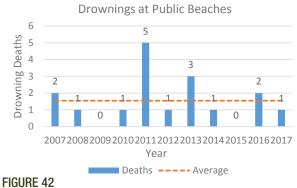
The average number of drowning deaths at public beaches per year is 1.5 (Figure 42). DNR Law Enforcement District 10 encountered the most drowning deaths at these locations (Figure 18).

Conservation Officers recover 47% of the public beach drowning victims. Other public safety agencies recover 20% and citizens recover 33% of these victims

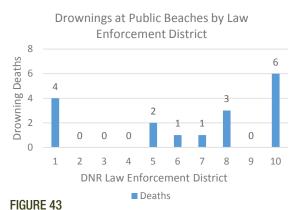
Drowning Deaths at Public Beaches by Sex

FIGURE 41 Drowning deaths at public beaches by sex, Indiana 2007-2017

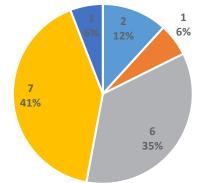




Drowning deaths at public beaches, Indiana 2007-2017



Drowning deaths at public beaches by DNR Law Enforcement District 1, Indiana 2007-2017 Drowning Deaths at Public Beaches by Age Group





Activities at Public Beaches before Drowning

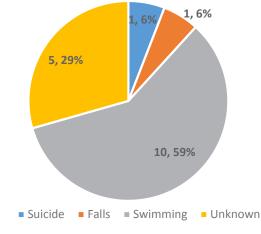
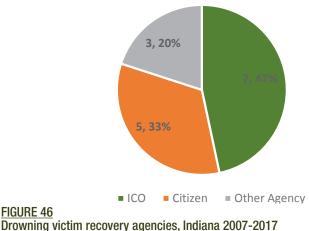


FIGURE 45 Activities at public beaches before drowning deaths occured, Indiana 2007-2017

Drowning Victim Recoveries



CASE STUDY Swim Lessons Swim Lessons Saves Lives!

A 6-year-old child tragically drowned in an Indiana river while spending the day with his mother and his 10-yearold sibling. Neither the children nor their mother knew how to swim. Regardless, the mother did not perceive the threat from the current and gave the children permission to cross the 10-foot deep river to play on the other side

where teenagers were jumping from rocks. Halfway across the river when it became too deep to touch, the children were separated from each other and the 6-yearold was swept away by the strong current. The mother watching this horrific event unfold was unable to save her child's life simply because she did not know how to swim.

> It's nothing to be embarrassed about. Parents, buy one your child will wear. There are many colors and styles now available. Kids will

willingly put on a life jacket that they helped pick out and like.



WEAR A

LIFEJACKET

I earn to swim Water depth should be a minimum 9 feet for diving or jumping. Check water depth \leftarrow) Spit it out < Teach kids not to drink the water. Never chew gum or eat while swimming, diving, or Never leave children unattended playing in water. These are choking hazards.) Never swim alone or in unsupervised places Don't risk death by overestimating Don't take risks ← your swimming ability. Vear a lifejacket

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Who Is Drowning in Lakes & Reservoirs?

Males make up 88% of the drowning victims in lakes and reservoirs. Females make up 12% of the deaths.

The average number of drowning deaths in lakes and reservoirs per year is 11.4 (Figure 48). DNR Law Enforcement District 10 encountered the most drownings during the 10-year period in lakes and reservoirs (Figure 49).

Conservation Officers recover 49% of the drowning victims in lakes and reservoirs. Other public agencies recover 31% and citizens recover 20% of these victims.

15, 12%

Drowning Deaths in Lakes and Reservoirs by sex

Drowning deaths in lakes and reservoirs

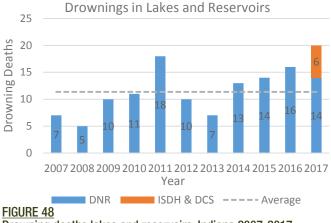
by sex. Indiana

FIGURE 47

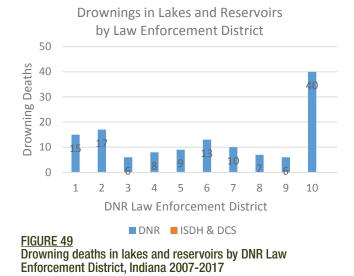
2007-2017

115, 88%

Male Female

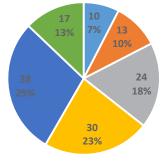






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Drowning Deaths in Lakes and Reservoirs by Age Group



■ 0-12 ■ 13-17 ■ 18-25 ■ 26-40 ■ 41-65 ■ 65+

FIGURE 44

Drowning deaths in lakes and reservoirs by age group, Indiana 2007-2017

Activities in Lakes and Reservoirs before Drowning

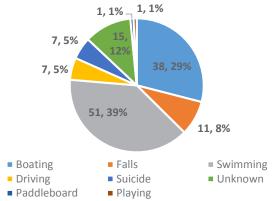


FIGURE 51

Activities in lakes and reservoirs before drowning deaths occured, Indiana 2007-2017

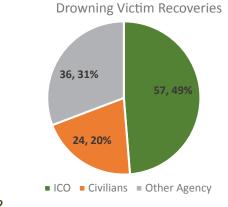


FIGURE 52 Drowning victim recovery agencies, Indiana 2007-2017

CASE STUDY Respect Extreme Weather

where teenagers were jumping from rocks. Halfway across the river when it became too deep to touch, the children were separated from each other and the 6-yearold was swept away by the strong current. The mother watching this horrific event unfold was unable to save her child's life simply because she did not know how to swim.

A 6-year-old child tragically drowned in an Indiana river while spending the day with his mother and his 10-yearold sibling. Neither the children nor their mother knew how to swim. Regardless, the mother did not perceive the threat from the current and gave the children permission to cross the 10-foot deep river to play on the other side

12 Weather Water Concerns

ON THE US COAST GUARD'S LIST OF TOP 10

CONTRIBUTING FACTORS OF BOAT ACCIDENTS

-) Dehydration
-) Tornados
-) Hail
- Hyperthermia

- Straight-line winds
- Heat stroke

WEATHER IS #9

- **S**wamping
- Heat exhaustrion

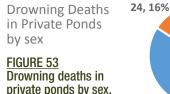
-) Frost bite
- Sun burn
-) Hypothermia
-) Capsize

Who Is Drowning in Private Ponds?

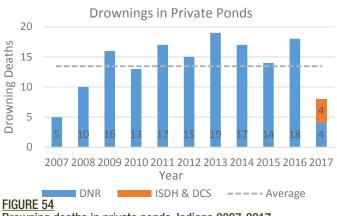
Males make up 84% of the drowning victims in private ponds.

The average number of drowning deaths in private ponds per year is 13.5 (Figure 54). DNR Law Enforcement District 2 encountered the most drownings in private ponds during the 11-year period (Figure 55).

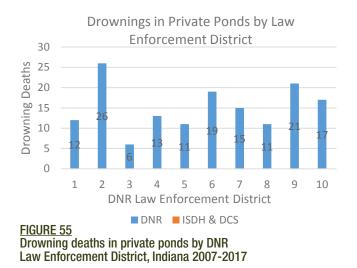
Conservation Officers recover 27% of the drowning victims in private ponds. Other public agencies recover 47% and citizens recover 26% of these victims.



private ponds by sex, Indiana 2007-2017



Drowning deaths in private ponds, Indiana 2007-2017



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Drowning Deaths in Private Ponds by Age Group

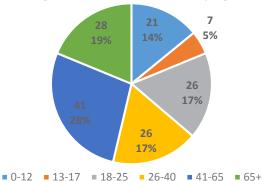
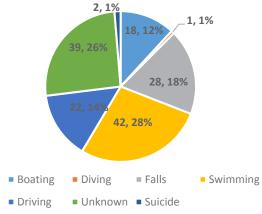


FIGURE 56

Drowning deaths in private ponds by age group, Indiana 2007-2017

Activities in Private Ponds before Drowning



<u>FIGURE 57</u> Activities in p

Activities in private ponds before drowning deaths occured, Indiana 2007-2017



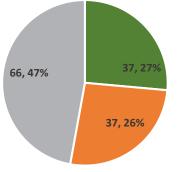


FIGURE 58 Drowning victim recovery agencies, Indiana 2007-2017

CASE STUDY | Learn CPR

Push hard & fast in the center of the chest.

A local landowner had a great property with a nice pond and a fishing pier. Many afternoons he would take a break and sit on the pier to enjoy the peace and quiet that generally existed at this pond. One afternoon in 2001, he just happened by his pond when he saw two bicycles parked near his fishing pier. Assuming he had a couple neighborhood kids who were sneaking in to catch a few fish, he walked up to find a young boy floating face down. He jumped into the water and instantly pulled the pale boy onto the shoreline. He found the boy not breathing and without a pulse. Because he had taken time to learn CPR through a class offered by his local EMS, he knew exactly what to do. The boy was eventually transported to a nearby hospital and was breathing on his own with a prognosis of a full recovery.



Call or Go Online to Find a Class Near You

American Heart Association

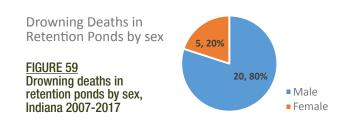
http://cpr.heart.org 1-800-AHA-USA-1 Red Cross http://www.redcross.org 1-800-RED-CROSS

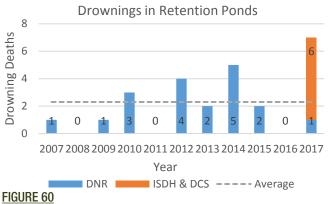
Who Is Drowning in Retention Ponds?

Males make up 80% of the drowning victims in retention ponds. Females make up 20% of the drowning deaths.

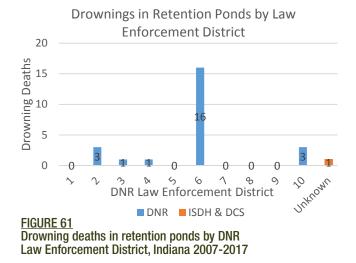
The average number of drowning deaths in private ponds per year is 2.3 (Figure 60). DNR Law Enforcement District 6 encountered the most drownings in retention ponds during the 11-year period (Figure 61).

Conservation Officers recovered 6% of the victims from retention ponds during the 11-year period. Other agencies recover 81% and citizens 13% of these victims.





Drowning deaths in retention ponds, Indiana 2007-2017



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Drowning Deaths in Retention Ponds by Age Group

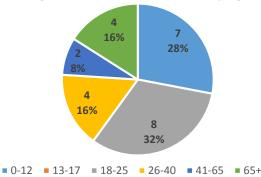


FIGURE 62

Drowning deaths in retention ponds by age group, Indiana 2007-2017

Activities in Retention Ponds before Drowning

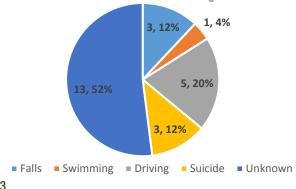


FIGURE 63 Activities in retention ponds before drowning deaths occured, Indiana 2007-2017

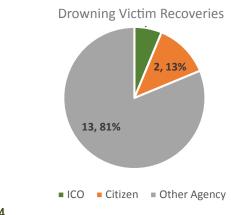


FIGURE 64 Drowning victim recovery agencies, Indiana 2007-2017

Who Is Drowning in Rivers & Creeks?

Prior to 2017, DNR data collection classified rivers and creeks together. This means that the two locations are separated for 2017 data only. For the 11-year study period, males make up 87% of the drowning victims in rivers and creeks. One hundred eighty eight individuals drowned in rivers and creeks from 2007-2017.

The average number of drowning deaths in rivers and creeks is 17.1 per year (Figure 66). DNR Law Enforcement District 7 investigated the most drowning deaths in rivers and creeks in the 11-year period (Figure 67).

Conservation Officers recover 35% of the drowning victims in rivers and creeks. Other public safety agencies recover 53% and citizens recover 12% of these victims.

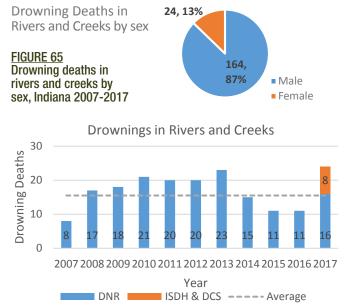
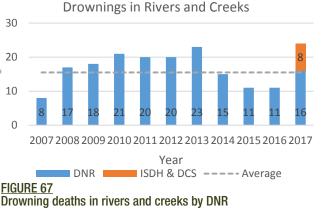


FIGURE 66

Drowning deaths in rivers and creeks, Indiana 2007-2017



Law Enforcement District, Indiana 2007-2017

Drowning Deaths in Rivers and Creeks by Age Group

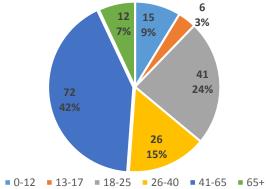


FIGURE 68

Drowning deaths in rivers and creeks by age group, Indiana 2007-2017

Activities in Rivers and Creeks before Drowning

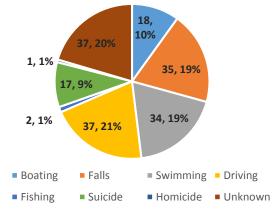
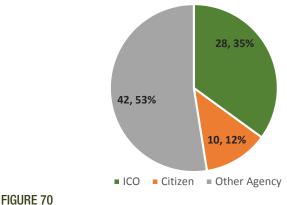


FIGURE 69

Activities in rivers and creeks before drowning deaths occured, Indiana 2007-2017



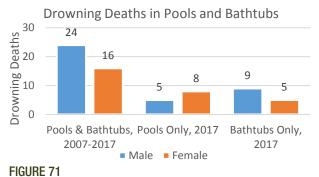


Drowning victim recovery agencies, Indiana 2007-2017

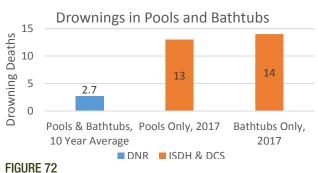
Who Is Drowning in Pools & Bathtubs?

Prior to 2017, DNR data collection classified pools and bathtubs together. This means that the two locations are separated for 2017 data only. For the 11-year study period, males make up 60% of the drowning deaths in pools and bathtubs. In 2017, males made up 38% of drowning deaths in pools and 64% in bathtubs.

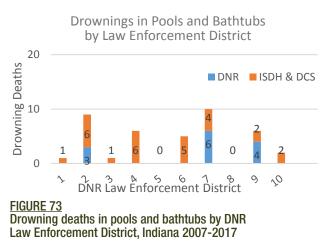
The average number of drowning deaths in pools and tubs was 2.7 (2007-2016) as reported to the DNR prior to the collaborative effort of state agencies. After sharing



Drowning deaths in pools and bathtubs, Indiana 2007-2017

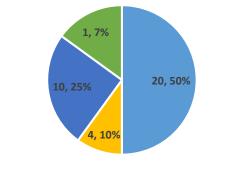


Drowning in pools and bathtubs, Indiana 2007-2017



pools and bathtubs in the 11-year study (Figure 73). No information was available in 2017 for who recovered swimming pool drowning victims. The information gathered by the DNR over the last 10 years shows that citizens recovered

92% of the drowning victims from pools and bathtubs.



Drowning Deaths in Pools and Bathtubs by Age Group

data we learned there were 14 pool drowning deaths and 14

Enforcement District 2 encountered the most drownings in

bathtub drowning deaths in 2017 (Figure 72). DNR Law

■ 0-12 ■ 13-17 ■ 18-25 ■ 26-40 ■ 41-65 ■ 65+ **FIGURE 74**

Drowning deaths in pools and bathtubs by age group, Indiana 2007-2017

Activities in Pools and Bathtubs before Drowning

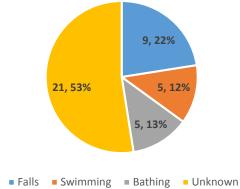
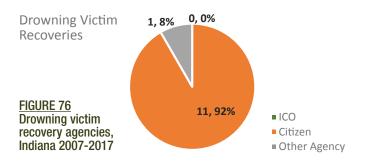
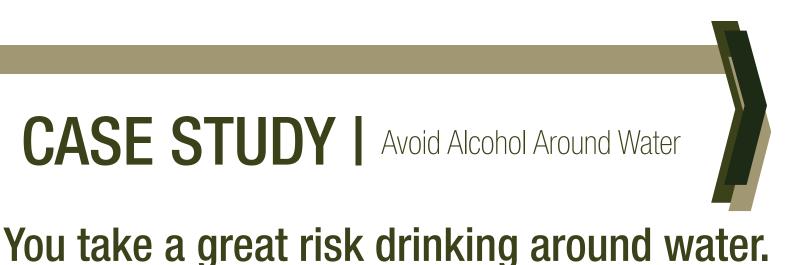


FIGURE 75 Activities in pools and bathtubs before drowning deaths occured, Indiana 2007-2017





On May 28, 2016, a 22-year-old local university basket ball player lost his life while enjoying a day of recreation on an Indiana reservoir in Hamilton County. It had been a long basket ball season and school year, so the opportunity to relax, have fun, and be pulled around on a tube sounded appealing. He had it on his mind that he and his girlfriend were going to drink some beers and unwind from the stressors of life on this particular day. He and his girlfriend were joined on the pontoon boat by another couple.

They all went through their checklist for a day of boating fun and found their list complete with 1/5 of vodka and a case of beer. Their day was set and out to the lake they went. Several hours of fun took place and everyone was in and out of the water throughout the day; then tragedy struck. This young man decided that he wanted to go tubing one final time and well after he had consumed many beers. His girlfriend was in the driver's seat and she had also consumed many beers. Without a worry or a care in the world, she began pulling her boyfriend through the water and making quick turns to increase the excitement of the ride. The tube flipped over and threw the star athlete into the water, but this time he didn't surface.

A 9-1-1 call was made and Indiana Conservation Officers were dispatched to the scene. ICO divers began searching for this missing young man, and ICO investigators began questioning witnesses. The very distraught girlfriend was arrested for operating a motorboat while intoxicated causing the death of the young basketball player. The tragedy continues as the efforts to search for and recover a lifeless body affects all of the officers and EMS personnel involved.



Intoxication contributes to...

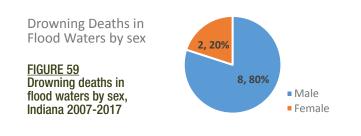
- **) Impaired Judgement-** Alcohol alters your perception of risk and your abilities.
- Greater Risk Taking Behavior- The influence of alcohol removes inhibitions, leaving you more likely to take greater risks, even life threatening ones.
- **) Lack of Coordination-** Alcohol dulls the sense, including: sight, sound, and touch.
- **) Impaired Reaction Time-** Alcohol is a depressant that reduces the rate the brain processes information.
- **)** Reduced Effectiveness of CPR-Should you need rescuing, the consumption of alcohol reduces your chances of surviving as resuscitation methods are less likely to work.

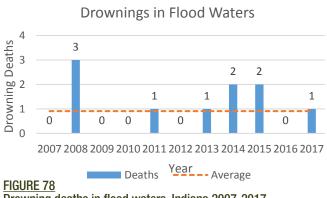
Who Is Drowning in Flood Waters?

Males make up 82% of the drowning victims in flood waters. Females make up 18% of these drowning deaths.

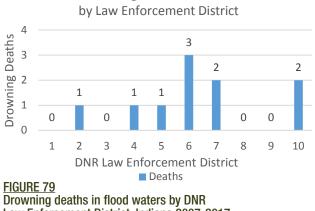
The average number of drowning deaths in flood water per year is 0.9 (Figure 78). DNR Law Enforcement District 6 encountered the most drownings in flood waters during the 11-year period (Figure 79).

Officers recover 56% of the drowning victims in flood waters. Other public agencies recover 33% of these victims.





Drowning deaths in flood waters, Indiana 2007-2017

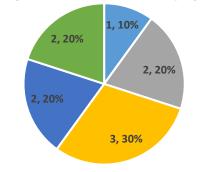


Drownings in Flood Waters

Law Enforcement District, Indiana 2007-2017

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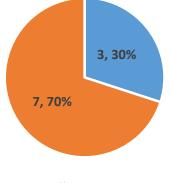
Drowning Deaths in Flood Waters by Age Group



■ 0-12 ■ 13-17 ■ 18-25 ■ 26-40 ■ 41-65 ■ 65+ **FIGURE 80**

Drowning deaths in flood waters by age group, Indiana 2007-2017

Activities in Flood Waters before Drowning



Falls Driving

FIGURE 81 Activities in flood waters before drowning deaths occured, Indiana 2007-2017

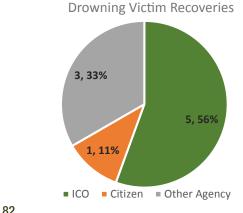


FIGURE 82 Drowning victim recovery agencies, Indiana 2007-2017



CASE STUDY Avoid Driving Through Water Never drive through flood waters.

It had been a few years since the newly married couple had been back home to visit their parents and friends in southern Indiana. They were enjoying spending time together and reminiscing as they traveled through the landscape and memories of their past. However, as the trip grew long they became anxious to reach their destination. The husband was in the driver's seat and he knew there were only a few miles left of their long journey when they came across a sign saying, "high water ahead, road closed". This was a problem for the couple because they were so close to their destination and they weren't sure of any other route. It was dark outside and they just didn't want to waste any more time. The husband decided to take the risk and drive around the road closed sign. Moments later the vehicle stalled and lost power as the floodwaters he had driven into killed the engine and electrical system. The water took their breath away as it began pouring into the passenger compartment of the vehicle, and even more frightening was the fact that the strong current began to carry the vehicle farther away from dry land. Both newlyweds climbed out of the vehicle but in moments were swept away by the frigid water. The husband grabbed onto a low-lying tree limb as he looked back only to see his new bride fighting to stay afloat in the turbulent water. Her strength was fading fast and before he could react-she lost the battle with the strong current disappearing below the water's surface.



Common Causes of Accidents

> Hydroplaning> Unseen Roadway Washed Away> Swept From Roadway

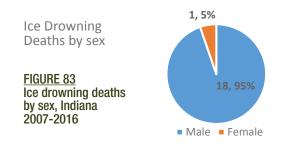


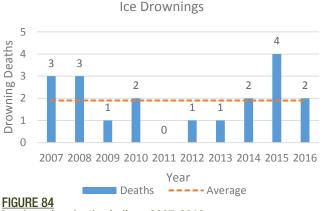
Who Is Drowning by Ice?

There were 19 ice drowning deaths in the 10-year study period from 2007-2016. Males make up 95% and females 5% of the drowning victims.

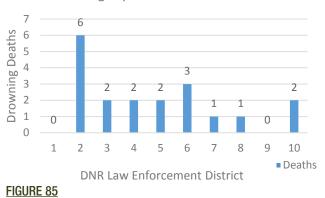
The average number of ice drowning deaths per year is 1.9 (Figure 84). DNR Law Enforcement District 2 encountered the most ice drownings during the 10-year period (Figure 85).

Conservation Officers recovered 56% of ice drowning victims. Other agencies recovered 31% and citizen 13% of these victims during the 10-year period.



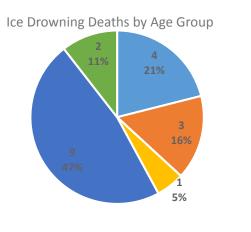


Ice drowning deaths, Indiana 2007-2016



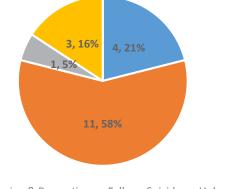
Ice Drownings by Law Enforcement District

Ice drowning deaths by DNR Law Enforcement District, Indiana 2007-2016









Swimming & Recreating Falls Suicide Unknown

FIGURE 87

Activities in or around ice before drowning deaths occured, Indiana 2007-2016



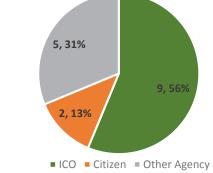


FIGURE 88 Drowning victim recovery agencies, Indiana 2007-2017

CASE STUDY | Respect Ice



Warn Children of Ice Dangers.

Th ice had been laying on the local ponds for a few weeks, but the weather had warmed up over the past few days when two friends decided to take to the ice for a day of ice fishing. They both were sitting close enough to have conversation but far enough away that they weren't adding unnecessary weight to one single area of the ice. Neither friend was paying attention to the melting that was occurring and that their 5-gallon bucket seats were sinking deeply into the ice. Suddenly, one of the friends broke through the ice and was in over 12 feet of water as he tried desperately to cling to the slick edges of the ice. The other friend came to his aid and also fell through while trying to help his friend. Both victims began screaming for help and were heard by a nearby resident who called 9-1-1. Within minutes two deputies responded to the scene and put on their life jackets before going out onto the ice. The deputies tried frantically to get to the victims and were successful in pulling one of the men free of the water. Unfortunately, the second disappeared below the surface. The rescued victim was flown by helicopter to an Indianapolishospital for treatment of severe hypothermia.

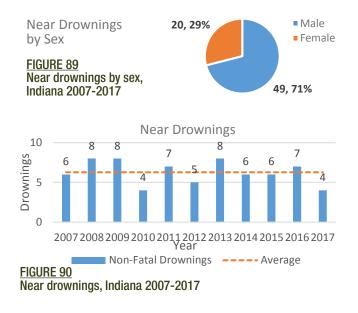


Practice These Ice Safety Tips

- **No Drinking-** Do not drink when on the ice. Alcohol does not make you warmer.
- **Flowing Water-** Do Not go out on ice over flowing water.
- Life Jacket- Always wear a life jacket when on the ice.
- **Ice Picks-** Always wear ice picks when ice fishing.
- Ice Thickness- Frequently check ice thickness. Ice is never consistently the same thickness. 4" of solid ice is the minimum to hold an adult.
- **Night Time-** Do not go on the ice when it is dark outside.
- **Pet/Children Safety-** Warn children not to retrieve pets from ice.

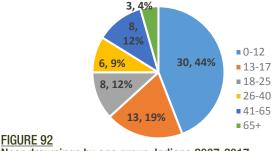
Who Is Nearly Drowning?

Near, or non-fatal, drownings are those that occur and the person does not die from the drowning. Near drownings may or may not include injury. There were 69 near drownings during the 11-year study period. Four near drownings occurred in 2017. The percentage of female near drowning victims (29%) is higher than female drowning death victims (24%). The average near drowning rate for the 11-year study period is 6.3.



Near Drownings by Law Enforcement District 50 Drownings 22 11 8 6 З 2 Ω 1 4 5 6 9 10 **DNR Law Enforcement District** Non-Fatal Drownings FIGURE 91

Near Drownings by Age Group

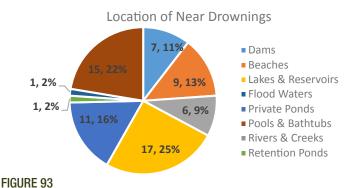


Near drownings by age group, Indiana 2007-2017

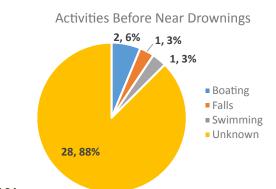
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The willingness for citizens to attempt a rescue specifically in swimming areas significantly increases a drowning victim's chance of survival.

Citizens make up 95% of all near drowning rescues. Other agencies recovered 2% and Conservation Officers recovered 3% of near drowning victims as reported to the DNR. Proximity to the victim is a clear positive factor in survival.

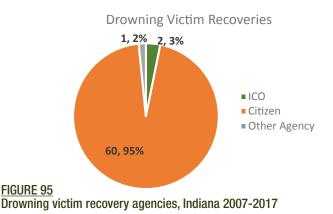


Locations of near drownings, Indiana 2007-2017





Activities before near drownings occured, Indiana 2007-2017



Near drownings by DNR Law Enforcement District, Indiana 2007-2017

CASE STUDY Learn First Aid



First Aid Kits Can Make A Difference.

Two teenage girls had been best friends for many years, and this was their day to be pulled around the reservoir by one of the girl's fathers. They were having a great time, but every now and again one of them would intentionally tip the tube over and both of the girls would go tumbling through the water. In a blink of an eye, tragedy struck and an oncoming boat did not see the girls in the water while they waited for the father to turn around and pick them up. One of the friends was run over by a boat directly in front of her best friend. The cut that extended from the hip to the shoulder blade of her friend was extremely deep, and the bleeding was profuse. The teenage friend began applying direct pressure immediately with a towel that had been thrown in from the father. With assistance from others, the girl was brought onto the boat where the best friend continued to apply direct pressure to the severe laceration. The father was able to get the boat to shore where he was met by Indiana Conservation Officers. The victim was placed on a backboard and carried to a waiting helicopter that transported her to an Indianapolis hospital. The EMTs expressed their appreciation for the friend's knowledge of first aid and her composure to apply direct pressure to her friend's wound. It has been determined that the first aid used by the friend and the quick responses of the other family members saved this girl's life and she made a full recovery.



Additional Life Saving Facts

- **Tourniquets-** Emergency Tourniquets are an essential first aid item.
- Save Someone- You are more likely to save someone you know.

) Red Cross saves- Visit their website or call for more information.

www.redcross.org 1-800-RED-CROSS

Stay Safe, Indiana









