Escape from a Sinking Vehicle



"Help my Car is Sinking!!!"

Trooper Jonathan Caddell

- Indiana State Police Indianapolis
 - 2006-Present
- Indiana State Police USRT Team II
 - Scuba Diver
- Indiana State Police "BUDS" 2010
 - NAUI Scuba Diver
 - NAUI Advanced Diver
 - NAUI Master Diver
 - NAUI Dry Suit Diver
 - NAUI Rescue Diver
 - NAUI Underwater Investigation Tech.



Mary Kay Kidwell

- Retired Editor and non-profit fundraising donor research specialist.
- Founder getoutaliveorg https://sites.google.com/site/getoutaliveorg/
- Grandmother
 - Trey Kidwell, 17 years old, drowned in a vehicle immersion crash on June 4th, 2007.

Objectives

- Describe the 3 phases of a sinking vehicle
- Describe the 4 steps needed to be taken to safely exit a vehicle in/on the water.
- Describe the common myths associated with escaping a sinking vehicle.
- List several simple tools used to assist with escaping a vehicle.
- Describe the steps to take once you have exited your vehicle.

Exit like a SEAL!



Vehicle Immersion Deaths

- Over 10,000 vehicle immersion crashes every year in the US
- On average 400 people drown in those crashes every year
- ▶ 10% of all Drowning occur in vehicles
- The majority of the 400 fatalities survived the crash and drowned upon submersion
- Vehicle submersion crashes have one of the highest mortality rates of any single vehicle crash
- Since 1960 more than 20,000 men, women, and children have died, trapped inside vehicles underwater.

Woman, 3 Daughters Drown!

December 16, 2007

- **CARMEL, Ind.** Icy road conditions are believed to have been a factor in the deaths of a woman and her three daughters after their van entered a retention pond near Carmel on Saturday night.
- A van driven by Batul Abbas, 47, of Hamilton County, apparently slid off 141st Street and entered a pond near 141st and Towne Road at about 9:30 p.m. Abbas called 911, and the van was submerged when emergency personnel arrived about six minutes later, Carmel police Lt. Jeff Horner said.
- Rescuers brought Abbas and her three daughters (Azmeh, 8; Shaail, 14; and Shazreh, 18) out of the vehicle. All four were taken to hospitals in critical condition but later died, according to Carmel police.
- The first firefighters at the scene went into the water without diving suits and broke the van's windows, clearing the way for divers to take out the van's four occupants, Horner said.

Freezing rain was falling in much of central Indiana when the van entered the pond. Police said they believe icy conditions were a factor in the incident.

Elderly Woman Survives On Top of Car

- LUMBERTON Margaret Britt Simmons is back home with her family, safe and sound, after her rescue late Thursday from the top of her vehicle that was submerged in a pond on a dead-end road in Robeson County.
- Simmons, 84, spent the better part of 30 hours atop the Jeep Cherokee before she was found about 8:30 p.m., authorities said.

3 Phases of a Sinking Vehicle

- ▶ Floating Phase 30–120 seconds
 - Before water reaches bottom of window
 - Ample time to open window
 - DO NOT OPEN THE DOOR
- Sinking Phase
 - Vehicle tilts forward (engine is heavier)
 - Water above edge of window
 - Water higher outside than inside
- Submerged Phase
 - Vehicle full of water/doors can open
 - Unfortunately you are dead

911 - Umberto Delgado Drowning



4 Steps to Survival

- Seatbelts
- Windows
- Children
- Out



Seatbelts

- Hit the button and get it completely off.
- If inverted, push against ceiling to release pressure and pop latch.
- Cut the belt.



Windows

- Roll them down
- Windows will work even after car is partially submerged.
- Break Window with a tool.



Children

- Get children out in oldest to youngest order.
- Older kids can help themselves.
- Once out they can hang on or sit atop the car.



Out

- Get out!!!
- Have older kids exit first, then they can assist with younger children.
- Climb on top of the car.





Two Minutes to Survival







- Your power windows will not roll down Busted
- You should stay in your seatbelt or water will toss you around - Busted
- Ride your car to the bottom, let fill with water then open the door – Busted
- There will be an air pocket to breath at the back of the car - Busted
- You will be pulled down by the suction of the sinking car – Busted

Survival Tools

- Seatbelt cutter
- Window Breaker
 - Glass Hammer
 - Window Break
 - ResQme
 - Head Rest Post
 - Seatbelt buckle
 - Key





So They're On Top the Car, Now What?

- Fast Water/Ice
 - If floating, ride your car until it snags
 - Never Swim against fast water. If you must swim, ride the current and angle towards shore.
 - If in ice and you must jump land flat and roll to shore.

- Slow/Shallow Water
 - Stay on top of car until help arrives
 - If your car sinks, which should take approx. 2-10 minutes, swim or wade to shore.

Questions?

- Contact Info
- Trooper Jonathan Caddell
- Indiana State Police Indianapolis
- **3**17−899−8577
- Jcaddel@isp.in.gov