

Surviving Vehicle Submersion in 60 Seconds Fact Sheet

Would you know what to do if your vehicle began to sink in water? Did you know that if you don't get out in the first 60 seconds that it may be too late? Vehicle submersions claim the lives of far too many people who could have survived if they had just known what to do and in what order to do it.

REMEMBER "SWOC" TO ESCAPE A SINKING VEHICLE

SEA TBELTS off

WINDOW open (rear side window)

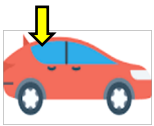
OUT immediately

CHILDREN first (oldest to youngest)

Once you are out, hold on to the vehicle and determine the best route to safety.

- ✗** DO NOT touch your cell phone.
- ✗** DO NOT open the door, this will cause water to rush into the car.
- ✗** DO NOT wait for the vehicle to fully sink! If you wait, your car becomes a coffin.

You must open or break the window before the water rises to the bottom of the window, or the pressure against the window will make it impossible to open or break it.



The best window to open is the rear side window because it stays above the water longer than the front.



An SUV or van hatchback door will be the last to go under water. If you can open the hatchback door, everyone can exit through the rear opening.

QUICK FACTS

- **1 minute** is all the time you have to safely exit a sinking vehicle
- Almost **2 out of 3 U.S. flash flood deaths occurred in vehicles** from 1995 to 2010 (Dr. Greg Forbes, former severe weather expert at The Weather Channel)

- An **annual average of 384 traffic fatalities involved accidental drowning** as one of the causes of death (FARS 2004-2007)

Vehicle submersion fatalities occur in two ways - when a vehicle crashes into water or when a vehicle is swept away by flood waters. Vehicle submersion injuries and deaths can be found in at least 4 separate databases causing the true magnitude of vehicle submersion incidents to be largely underestimated. The 4 databases include;

- Fatal Accident Reporting System (FARS)
- Not in Traffic Surveillance (NTS)
- Centers for Disease Control (CDC)
- Kids and Car Safety (KACS)

SAFETY TIPS & FAMILY SUBMERSION DRILL

Talk to your family about exactly what to do if your vehicle goes into water and review the SWOC steps regularly. Remember, you have 1 minute to escape before the water rises against the side windows preventing them from being opened.

Doing regular “submersion drills” with your family can help them be prepared when a real emergency takes place. Here is what we suggest:

1. Practice the **SWOC** steps parked in your driveway. Have your children repeat the steps in order out loud with you.
 1. **SEATBELTS** off
 2. **WINDOW** open (rear window)
 3. **OUT** immediately
 4. **CHILDREN** first (oldest to youngest)
(please do not actually climb out of the window as you or your children could fall and get hurt).
2. Unbuckling child car seats can be the trickiest part of self-rescue. Practice unbuckling with your eyes closed as it may be dark during an emergency.

NEVER drive through water! It only takes a few inches of water to sweep a vehicle off the road. Be especially cautious at night when water on roadways is difficult to see. Automobile accidents can also result in the vehicle leaving the road and entering a body of water.

[Watch a self-rescue from a submerged vehicle](#)

ALWAYS keep at least one resqme™ window breaker/seat belt cutter tool in your vehicle in an easy to reach location securely fastened using a zip tie or on your keys if you have a keyed ignition. ([order tools here](#)) We recommend zip tying a tool within reach of each passenger seat so each passenger can get themselves out if necessary. Attach a Submersion Instruction Key Tag with your resqme™ tool so you can refer to it in an emergency.



[Learn how to use a resqme™ emergency safety tool](#)

IMPORTANT WARNING: *Window-breaking tools do NOT work on laminated glass, they only work on tempered glass**. Each window in your vehicle should have a sticker indicating what type of glass. In emergency situations, you may not be able to recall. Even if your car has laminated glass* on the front passenger windows, it is likely that it has tempered glass on the back seat passenger windows. Be prepared. Know what windows have tempered glass in your vehicle and mark them with a special sticker. More resources below.

[AAA's list of vehicles that have laminated glass windows on doors.](#)
[Why knowing the type of car windows you have could save your life](#)

For more information on how to keep your family safe visit www.KidsAndCars.org.

***Laminated glass** will crack but remain together due to the plastic layer that is baked **between** the two pieces of **glass**. **Tempered glass** breaks into smaller pieces so you can get out of a vehicle. Most windshields of vehicles have laminated glass because in case there is a crash it helps keep occupants in the vehicle making a crash much more survivable. In general, most vehicles have tempered glass in side door windows especially in the rear doors. *But, some makes and models do have laminated glass in the front driver's and passenger door windows, back windows and the roof.*