How to Survive an Emerged Vehicle

Palm Beach County reported in one year that their third leading cause of drowning was due to cars crashing into canals. In the United States each year, 10,000 vehicles go into the water due to crashes which resulted in 300 fatalities.

A vehicle’s float time above the water’s surface may be as little as 30 seconds before it starts sinking. This is not enough time to call emergency dispatchers and have them arrive on the scene for rescue. Instead you need to use the time more efficiently and have the knowledge and tools to save your life in this type of situation.

In this scenario with children and adults in the vehicle, you must stay calm and 1.) Get your seat belt off; 2.) Get your window down. Use caution when trying to open doors as the vehicle is sinking, the rush of water into the vehicle can cause doors to slam shut; 3.) Get the passengers out the window. Oldest passengers out first because they can help themselves get out through the window and be there to receive any smaller children as they are handed out. Immediately after you have gotten the window down, get to the back of the vehicle as you may have to release or cut your children out of any restraint. Hold them by the hand, and get out or hand them out through the open window or other open escape route. Certain car seats are sufficiently buoyant to float a child on the surface of the water; 4.) Get out yourself.

Staying in the vehicle with the windows up waiting for the pressure to equalize is not a good idea as the vehicle must be completely full of water for equalization of pressure inside the vehicle before you can open the door.

Rehearse emergency escape and self-survival procedures with your passengers and have a rescue/escape tool readily available in each family vehicle.

To learn more please visit the following sites: www.safehealthychildren.org/how-to-escape-a-sinking-car-4-simple-steps/, www.lifesaving.com, and www.pbcgov.org/dpc.

- Article by William Fuller, District One Traffic Incident Management Project Manager.

District One Has Successfully Brought the Strategic Highway Research Program to Our Area

Congress authorized the Strategic Highway Research Program (SHRP-2) as part of the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) to provide funding to the Transportation Research Board (TRB) to research better ways to improve the safety, renewal, reliability, and capacity of the nation’s highway system. In pursuit of these goals, partner organizations such as TRB, American Association of State Highway and Transportation Officials (AASHTO), and Federal Highway Administration (FHWA) developed the SHRP-2 training.

This multi-agency TIM training is a National program that equips responders with a common set of core competencies and assists them in achieving the TIM National Unified Goals and in strengthening TIM programs. The training curriculum includes such topics as: responder safety, statistics, standards and terminology, and quick clearance, to name a few. The training included both class instruction and tabletop exercises.

The Florida Department of Transportation (FDOT), District One’s Traffic Incident Management Team (TIM), and the Florida Highway Patrol (FHP) Troop F recognized the need for the training in our local area which resulted in our partners from Metric Engineering and Declan Engineering offering a four hour SHRP-2 training course to 295 first responders over a two week period this past June at the Manatee Technical Institute-Criminal Education Center in Bradenton, Florida and to the SWIFT SunGuide Center in Fort Myers, Florida.

FHWA has set an ambitious target to reach over one million responders over the next ten years with this multidisciplinary training course. To assist in this goal, District One’s TIM Team is planning SHRP-2 sessions in the Polk County area and will be looking for first responders from fire, law enforcement, emergency medical services, and other transportation agency partners to join in the effort to promote “Best Practices” of Traffic Incident Management as National Unified Goal.

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Secondary Crashes

When incidents disturb steady state traffic conditions and create traffic fluctuations, the likelihood of crashes increases. Secondary incidents are collisions resulting from abrupt changes in traffic flow conditions caused by prior traffic incidents.

Primary incidents could be as trivial as a vehicle breakdown or as severe as a multi-vehicle crash. Secondary crashes are crashes which result from an existing primary incident. Traffic incidents and secondary incidents are a major source of congestion.

Traffic incidents such as motor vehicle crashes often adversely affect normal traffic flow by reducing speed, blocking lanes, inducing queues, and distracting motorists. They account for approximately 60% percent of urban freeway delay. Despite their notable impact on mobility, the most serious problem associated with incidents is the risk of secondary crashes. For instance, a study by Tedesco found that the crash risk can be six times higher in the presence of a prior crash. It is estimated that each additional minute that a primary incident remains on the roadway increase the likelihood of a secondary crash by about 3%. In addition, studies showed that more than 10% of crashes were the direct result of previous incidents. In the United States, secondary crashes alone were responsible for an estimated 18% of all fatalities on freeways and 20% of all crashes. The occurrence of secondary crashes can further increase congestion and impede incident management operations. Therefore, it is crucial to examine secondary crashes, understand their characteristics and provide necessary countermeasures. (1)

Safety concerns apply both to the personnel who handle incidents and to secondary crashes. Approximately half of police, emergency medical service (EMS), and firefighter fatalities occur as a result of transportation incidents. About 10% of firefighters and nearly 8% of police officer deaths were caused by a worker being struck by a vehicle. (2)

Because the occurrence of traffic incidents are unavoidable, traffic incident management (TIM) programs are launched to mitigate the impact of incidents and have been widely employed throughout the world. Why is traffic incident management (TIM) so important in helping with crashes and secondary crashes? Different TIM programs seek to tackle the impacts of incidents from various perspectives, such as reducing incident duration or detection time, and controlling traffic demand around the incident scene. (3) Effective TIM saves the lives of emergency responders who are often killed or injured at incident scenes and help reduce secondary crashes:

Furthermore Florida has been very proactive and aggressive in formulating and deploying various initiatives to reduce the incidence or improve the impact of secondary crashes. Some of these initiatives include the enactment of the “Move Over Law”, the “Move It, Yes You Can!” Program, the Open Roads Policy, and the establishment of the Traffic Incident Management Teams and Road Rangers programs. These programs have reduced many secondary crashes and the associated losses in property damage as well as injuries and deaths.

Traffic control often is not a consistent part of all incidents. All responders may not understand and use the basic procedures required for the safe movement of traffic. Proper use of traffic control, and continuous monitoring of the incident impact can improve responder safety and traffic flow and decrease secondary crashes and motorist delays. Improvements in traffic control, quick clearance, and management of the original incident scene could reduce the rate of secondary crashes. (5)

(1) The National Traffic Incident Management Coalition, Promoting a National Agenda for Traffic Incident Management;
(2) Secondary Crashes: An Important Component of Roadway Incident Management;

Article by Metric Engineering, Inc.