The Story

"Flooding never happens here. Tom was trying to get home. He drives on the road near the stream every day. We knew it had been raining a lot, but it had been so dry, we were actually happy about the rain. Tom saw some water on the road, but thought it wasn't deep. And, after all, he was in a truck, high up off the ground. But then his truck started to float, and before he knew it, his truck was washed downsteam with him in it. Fortunately, his truck got stuck on a rock or something, and someone saw him and threw him a line. Tom got out okay. But we really learned from this, not to drive in floods."

- Testimony of Marilyn and Tom (last name withheld), interviewed by the American Red Cross after Tropical Storm Allison struck Texas in late June 2001.



For more information, contact your local National Weather Service Office

or National Weather Service, Office of Climate, Water, and Weather Services 1325 East-West Highway Silver Spring, MD 20910

http://tadd.weather.gov

Water Predictions for Life Decisions

This is an Advanced Hydrologic Prediction Service Safety Message





U S DEPARTMENT OF COMMERCE National Oceanic & Atmospheric Administration NOAA's National Weather Service National Safety Council Federal Alliance for Safe Homes



The Problem

Tom was fortunate. He was rescued and lived to tell his tale. But others did not fare as well. A man in Pennsylvania, who refused to abandon his home during an evacuation, later was swept away as he attempted to leave in his automobile.

A man in Arlington, Texas, trying to prove to his friend the water he was crossing was safe enough to drive through, lost his life as he attempted to wade to the other side.

These tragic events happen too often. Ironically, many drivers rescued from flood waters reported they were in a hurry to reach the safety of their home as a reason for attempting to cross a flooded road.

Automobile commercials advertising the ability to drive through water lead to a false sense of security at best and tragic consequences at worst.

The Centers for Disease Control (CDC) report that over one-half of all flood-related drownings occur when a vehicle is driven into hazardous flood water. The next highest percentage of flood-related deaths are due to walking into or near flood waters.

The Reason

Where does the idea that "my heavy vehicle will keep me safe" come from? Perhaps from the false trust in the weight of the vehicle you drive.

Many believe their 3,000 pound or more vehicle will remain in contact with the road surface. . . that it is too heavy to float. Think about that for a moment. Aircraft carriers weighing 97,000 tons float.

Vehicles (and ships) float because of buoyancy. In fact, most cars can be swept away in 18-24 inches of moving water. Trucks and SUVs do not fare much better with an additional 6-12 inches of clearance.

Actually, in moving water, all that needs to happen is for the vehicle to become buoyant enough for the force of the moving water to push it sideways.

Once swept downstream, the vehicle will often roll to one side or perhaps flip over entirely. The driver then only has a few seconds to escape the vehicle. Many drivers panic as soon as the vehicle submerges and are found later with their seat belt still fastened.

The Solution

The solution is simple. Turn Around, Don't Drown. Stay out of flooded roadways. The water may be much deeper than it appears as the road bed may be washed out. Also, respect the "road closed" barrier that may be posted to warn you of danger.

This solution applies to anyone attempting to walk or wade through flowing water. As little as six inches of rapidly moving water can sweep you off your feet.

Consider carefully where you camp and/or park your vehicle along a stream or wash, especially during threatening conditions.

Be especially cautious at night when it is harder to recognize flood dangers.

Finally, know when you are at risk! Keep abreast of the latest weather watches and warnings from the National Weather Service with the NOAA Weather Radio or through your favorite news source.

Forces on Vehicles From High Water

The car will be carried when:
Buoyancy Force Greater Than Vehicle Weight



There is no friction force once the vehicle is lifted off the road

Nearly half of all flood fatalities are vehicle related

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