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How to handle driving emergencies

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uring several road trips
this summer — totaling
more than 6,600 miles —
my kids and I drove
through torrential
rainstorms, hit a snow squall that left
six cars in a ditch (not ours), had a

high-speed blowout that shredded a rear tire, experienced brake issues after crossing a mountain pass, and dodged wild animals that darted out in front of us—all situations that demanded cat-like reflexes or quick decisions. We also

passed through flash flood zones during a thunderstorm and an area that warned of "blinding sandstorms." We clearly survived each situation, but I couldn't help but wonder: Did I react correctly each time, or should I have done anything differently?

If you're like me, it's been a while — maybe even a few decades — since you took a drivers ed course and vehicles have changed a bit since then.

"You get your license and it's just assumed you are a driving expert for the rest of your life, but technology is extremely different than it was 30 years ago," says Travis Hanson, director of

> training at Team O'Neil Rally School in Dalton, N.H.

I reached out to AAA's safety experts, a rally car national champion, and instructors at driving schools people who teach extreme driving and winter handling skills to stunt

skills to stunt drivers, military and law personnel, and everyday people like you and me — to get tips on how to best handle driving emergencies. Here are some valuable tips in case you need to make split-



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second decisions on future road trips.

DARTING ANIMALS

Hitting an animal such as a moose, bear, or deer can be fatal for all involved — especially if it comes through the windshield — so understanding how to best maneuver your car proves invaluable.

"You have to remember that hitting a large animal is like hitting a Smartcar—it's an extreme impact," says Mary Maguire, AAA's Northeast spokesperson. "If you can't maneuver out of the way, you want to brake as much as you can; then just before impact, take your foot off the brake and the nose of your car will pop up so the bumper will absorb more of the impact."

Don't be afraid to really lay on those brakes either.

"I always want people to remember that the antilock brake system allows you to brake and steer at the same time," says John Paul, AAA's senior manager of traffic safety. "It's pretty dramatic — it may click and crunch and make all sorts of noises, but when you step on the brake all of the weight transfers to the front wheels, which gives you more ability to steer around the moose."

If the animal is shorter than your car's bumper, such as a raccoon, experts at Team O'Neil and AAA recommend that you hit the animal instead of trying to avoid it.

"We all love the little critters, but it's safer for you to hit the animal rather than risk swerving off the road — especially for younger and more inexperienced drivers who tend to overcorrect the wheel, which can put their car into a rollover situation," says Maguire.

Our experience: Thankfully, no critters — large or small — were killed on our road trips. The key to avoidance was slowing down immensely, especially at dusk, and asking my passenger to keep an eye out for darters. Be extra careful in wilderness areas, whether you're driving in northern Maine or national parks out west, which can feel like Wild Kinsdom at times.

LOW-VISIBILITY ISSUES

Torrential rains, blinding sandstorms, and whiteouts can happen quickly, forcing you to make snap decisions often in unfamiliar territory and with little visibility. Do you keep driving slowly while straining to follow the taillights of the car in front of you? Or should you pull off the road, where you may feel like a sitting duck waiting to get struck by another motorist?

"If you're inching along, there could be someone with better eyesight or a better car for handling extreme weather or who's more experienced and you don't want to be hit by that person," says Maguire. "You also become vulnerable to someone who is driving recklessly in bad weather."

Adds Paul, "If it's raining so hard that you can't see where you're going, find a place on the other side of a bridge overpass and pull over." That way, he says, "if someone is driving (on the shoulder) they won't run into you — you can use the underpass to block and protect you."

If you do pull over, make sure you keep your seatbelts on and don't get out of the car, even to warn other drivers of icy spots, pooling water, or other hazards — it's too easy to get hit by other cars in low-visibility conditions or by vehicles that are out of control.

Our experience: I kept driving in several torrential rain showers because I felt I had the visibility to continue driving — and there was nowhere to exit the highway or pull off the road in a safe spot. Next time, I'll look for protective underpasses and make sure to keep plenty of gas in the tank since it makes the car heavier and therefore more stable in stormy weather.

HYDROPLANING

Torrential storms create the potential to hydroplane, when your wheels lose traction on the road's surface causing your car to essentially glide through the water and negate your ability to steer.

"Hydroplaning rarely occurs below 35 miles per hour," says Maguire. "If you see an area [of still water] you want to drop your speed below 35 miles per hour and then keep your foot off the brake or gas so you can coast through the hydroplane area at the slowest speed. And in any situation where you go into a skid, you want to look and steer in the direction you want to go."

Our experience: I was driving well over 35 miles per hour when I hit a pool of water on a highway in northern Utah (there is nothing worse than losing connection with the earth at higher speeds), but I steered in the right direction and thankfully remained on the road.

SNOW SQUALLS

These quick-emerging, localized storms can materialize within seconds on mountain roads — any time of year — often in areas where there's little to no sign of stormy weather. One minute you're belting out "Sweet Caroline" and suddenly the wind starts whipping snow around your car and the road turns slick.

Before you even hit the road, it helps to figure out how your car handles in different situations and conditions.

"We have winter six months of the year in Steamboat and I tell my students to get out and practice driving strategies," says Melanie Nimtz, founder of Colorado's Steamboat Driving



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School. "I suggest they find a safe, empty parking lot and slam on the brakes in a low-traction area at a slower speed to experience sliding, learn which way to turn the wheel, and see how the vehicle will react — so they will know what to do in a real-life situation."

In cold or wintery conditions, also keep an eye out for black ice.

"As soon as the road goes black, you have to keep the distractions to zero—have the kids be quiet, turn the radio down, and roll down the window a bit even though it's a squall," says Hanson of New Hampshire's Team O'Neil Rally School. "You take in a lot of feedback from your hands and your butt. A lot of people underestimate what the tire sound feels and sounds like.

"When it starts raining, it sounds like sizzling," he explains. "As you're driving up a mountain pass, the road still looks wet, but the tires get quiet, which means the water is still there but it's frozen — the auditory cues are huge."

Our experience: A snow squall several years ago caused a 10-car pileup and one fatality, and left me and my kids stranded on a mountainside for seven hours — an experience I would never want to repeat. I obsessively check the outside temperature when driving in mountainous conditions, especially when it's wet. This helped me navigate a snow squall on our road trip through Utah, when half a dozen cars ended up in the ditch (and we did not).

FLASH FLOODS

In the desert Southwest, where the ground is made of sand, clay, and rock, water doesn't sink into the earth very quickly—if at all. On the rare occasions it does rain, water floods through canyons and down basins (also called washes or drainages), often carrying big boulders and logs with it. Water and debris can even wash away paved roads.

"People dramatically overestimate the weight of their vehicle and its ability to withstand a flood," says Jeff Axel, a national park ranger in St. George, Utah. "They also dramatically underestimate the power of flood waters."

According to Maguire, "The top part of the vehicle is air. It takes only 12 to 18 inches of water to carry away a motor vehicle, so you really have to be careful."

If you decide to cross an area with water, "you don't want to drive too fast and splash water into the engine compartment," because you risk stalling the engine, says Brian Martinez, manager of Moab-based Navtec, one of on ly two companies that run four-wheel-drive, canyoneering, and multi-day camping tours in southern Utah's national parks.

Once you get across, pump the brakes to help dry off the brake pads, shoes, and rotors, says Maguire.

Overall, though, it's best to follow this Southwest motto: "Stay Out, Stay Alive."

Our experience: I have a healthy fear of water after getting caught in a flash flood while hiking through a Malaysian jungle years ago. This summer, my son and I had to cross several flash flood zones while driving out to the Needles area of Utah's Canyonlands National Park during a distant thunderstorm. We didn't cross any drainages with flowing water and were prepared to wait out any flooding, even if it meant camping in the car overnight.

BRAKE ISSUES

Little causes more stress than having brake problems on the road. Failing brakes result from three possible issues: a broken brake line, wet brakes, or overheating (often caused by riding the brakes while descending a mountain).

The instant you realize your brakes aren't working properly, downshift to a lower gear (whether you're driving a stick-shift or an automatic) and let the engine help slow you down.

"You want to use a combination of downshifting and braking (if you're still getting any grip), but you don't Snow makes for slow-going and low visibility for commuters on the Mass. Pike.

want a screaming r.p.m.," says Paul, also known as AAA's Car Doctor. "Keep the tachometer under 4000 r.p.m. If you hear the engine really screaming, you're better off playing between neutral and drive so you don't overheat the transmission."

Let's say you're getting no response from your brakes, however. Try using the parking brake by depressing the release button and gently feathering the pressure to engage the brake, but — here's the critical part — don't release the button while the parking brake is engaged.

"You'll cause the wheels to lock up and the car to pirouette — and then you have a bigger problem," says Paul. If nothing seems to work and you're unable to use the parking brake or enjue to slow you down, "you're looking for a runoff ramp (like the truck runoff ramps you see on mountain descents) or a field or someplace that you can drive into and come to a stop."

Depending on your location, look for a curb to rub your tires against or bushes or even snowbanks where you can "scrub off some speed," says Stone from Team O'Neil Rally School.

TIRE BLOWOUT

Some flat tires prove unavoidable, but make sure your tires are in good shape before hitting the road and that they suit the conditions.

"In a snowstorm, I would rather have a rear-wheel-drive on winter tires than an all-wheel-drive on all-weather tires," says Hanson of Team O'Neil Rally School. Winter tires, he maintains, will provide much more control in stormy conditions.

Adds Stone, "All-season tires are kind of like a houseboat: They're not a good house or a good boat."

If you experience a flat tire while driving, firmly grip the steering wheel, gently slow the car down (no slamming on the brakes), and then carefully steer the car off the road to a safe sect.

"Rapid deceleration can cause the car to skid or spin," says Paul. "Even taking your foot off the accelerator quickly can cause a skid. Easy braking and easy steering are the keys to staying under control."

He adds, "always pull off the road to safety. Never stop on the roadway thinking you will limit damage to the wheel or tire — it is too late."

Luckily, I reacted appropriately in each situation we faced, but I've gained valuable tips from these experts on how to handle whatever the road throws at us next time.

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