

Adverse weather driving challenges

Heavy rain, snow, ice, fog, smoke and wind create concerns for all motorists. Regardless of the type of adverse weather condition, hazards encountered are generally the same: reduced visibility, reduced traction, increased stopping distances, increased traffic congestion, and uncertainty over how other motorists will behave. The strategies safety professionals recommend for negotiating these hazards safely are also similar: reduce speed, increase following distance, turn and brake carefully on slippery roads, turn on your lights, look far ahead for emerging hazards, and during severe adverse conditions, park in a safe place and wait until conditions improve.

Following distance

Under ideal road and weather conditions, the recommended “following distance” for large commercial vehicles is approximately six to eight seconds. For smaller vehicles, it is less.

According to the National Safety Council, to calculate the recommended distance, drivers should include one second for each 10 feet of vehicle length, plus add one additional second if traveling faster than 40 mph.

For example, if a 20-foot vehicle is traveling 60 mph, the recommended following distance is three seconds. Two seconds (two 10-foot lengths) plus one second (because the vehicle is traveling more than 40 mph) equals three seconds. Once the recommended following distance is calculated, you need to pick a reference point on the road that the vehicle in front of you has just passed (power pole, parked car, etc.). Count the seconds until you get there (one thousand one, one thousand two, etc.). If you reach the reference point prior to the recommended time, increase your following distance and count again. During adverse weather conditions increase your following distance by one or more seconds, depending on the severity of the conditions.

	Ideal Road/ Weather Conditions	Adverse Weather Conditions
Car/Pickup	2 to 3 Seconds	4 or More Seconds
Straight Trucks	4 to 5 Seconds	6 or More Seconds
Truck Tractors	6 to 8 Seconds	9 or More Seconds

Pull Off the Road During Severe Conditions

Vehicle condition

Driving during adverse weather can be demanding for both the driver and the vehicle. It is important to ensure that your vehicle is ready for all types of weather. A number of items can affect your ability to manage adverse weather and should be inspected before and during your trip, including tires, exhaust system, lights and reflectors, antifreeze, brakes, windshield wipers and washer fluid, fuel tank level, mirrors, tire chains (where allowed by law), heating and defrosting system, and personal gear and supplies.

Make sure you know what to expect during your trip. Listen to the latest weather reports to stay informed about adverse weather conditions. Plan your trip to allow for any unexpected delays. In the case of severe adverse weather, consider changing your route to avoid the worst weather or postponing your trip until conditions improve. Have access to a cell phone, or CB radio, in the event you become stranded.

Adverse weather

Safety professionals offer a number of recommendations for managing the unique hazards associated with various adverse weather conditions.

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Rain

Rain is the most common adverse weather condition. Despite this, drivers often overlook the dangers of driving in rain. The hazards associated with rain include: slippery roads, wet brakes, reduced visibility and traffic congestion. Compensating for these hazards by reducing your speed and increasing your following distance is essential.

Watch for pooling of water on the road. Hydroplaning occurs when tires ride above the road surface on a thin layer of water. Speed, amount of water on the roadway, tire tread depth, tire air pressure, and road surface characteristics are all factors that influence whether a vehicle is at risk of hydroplaning. It is possible for vehicles to hydroplane at speeds as low as 30 mph. Watch for other motorists who are driving smaller, lighter vehicles that may be more likely to lose control of their vehicles. Turn on your lights to help other motorists see your vehicle.

Snow and ice

Snow and ice are common weather conditions in many areas of the country. When freezing temperatures are expected along your route, be prepared for snow and ice. Road conditions can vary considerably depending on the quantity of snow and other characteristics. When driving on snow and ice, carefully consider what speed is appropriate for the prevailing conditions. Accelerate slowly and look far ahead for potential hazards.

In some areas snow chains may be required. Before traveling into these areas make sure you have the required chains and that they are in proper working condition.

In states where snow and ice are uncommon, be especially cautious of motorists who may not have experience driving under these conditions. Allow extra time in your schedule in case there are delays. Remember, some areas of the country may not have adequate equipment to keep roads clear of snow and ice.

Ice and freezing rain present the most hazardous conditions, with glare ice, perhaps, being the most dangerous condition. Stopping distance can increase dramatically on ice and the potential for losing control of your vehicle is high. The risk of being involved in an accident as a result of other motorists losing control of their vehicles is also high.

Ice facts:

- Wet roads can become icy whenever temperatures fall below freezing.
- Melting snow and ice can refreeze at night when temperatures drop below freezing.
- Ice can form in shaded areas, including under overpasses, at times when roads are otherwise free of ice.
- Expect ice to form more quickly on bridges and over-passes as they cool from being exposed underneath, as well as at the surface.
- “Black ice” can form on roads due to vehicle exhaust moisture which drivers may not expect.
- Accumulations of ice on mirrors, antennas, and road signs are indications that ice is forming on the roadway.
- A lack of water spray from other vehicles is also an indication that ice may be forming.

Fog and smoke

Fog and smoke can present serious and unexpected hazards, sometimes greatly reducing visibility in just seconds. Many serious car and truck pile-ups have occurred as a result of these hazards. Watch for fog to accumulate in low-lying areas. The potential hazards of fog and smoke include reduced visibility, headlight glare, sudden traffic congestion and vehicles stopped on the roadway. When approaching fog or smoke, slow down to ensure there is enough space to stop safely if you encounter slowed or stopped traffic. Use your low-beam headlights.

Wind

Strong winds can create an extreme hazard for high-profile vehicles, such as tractor-trailers, buses and recreational vehicles. High winds are often associated with severe storms that can create additional hazards, as well.

The weight and configuration of your vehicle will determine how it will be affected by wind. Light, high-profile vehicles are likely to be affected more readily than heavier, low-profile vehicles. Watch for other motorists who may be having

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difficulties staying in their lane. Dust and dirt can reduce visibility. Blowing debris can cause other motorists to drive erratically.

Summary

Driving defensively is especially critical during adverse weather. Plan ahead and be prepared. Adjust your speed and following distance in all adverse weather conditions. Do not take chances when weather and road conditions deteriorate. Drive with caution and watch for other motorists who lack the skill or experience to drive safely. Most importantly, find a safe place to park and wait for conditions to improve during severe conditions.

For more information, log in to the Risk Control Customer Portal at travelers.com/riskcontrol. (Need help? Read our [Registration Quick Guide](#).) You also can contact your Risk Control consultant or email Ask-Risk-Control@travelers.com.



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