Whether it’s snow, sleet or ice, winter weather can cause extremely dangerous road conditions. In 2020, there were 374 fatal crashes, and an estimated 25,000 injury crashes that occurred in wintry conditions. Preparing yourself – and your vehicle – for winter weather is key.

Driving in Winter Weather

The Basics

Slow down. It’s harder to control or stop your vehicle on a slick or snow-covered surface. In fact, in 2020, there were an estimated 119,000 police-reported crashes that occurred in wintry conditions. On the road, increase your following distance enough so that you’ll have plenty of time to stop for vehicles ahead of you.

Don’t crowd a snow plow or travel beside the truck. Snow plows travel slowly, make wide turns, stop often, overlap lanes, and exit the road frequently. If you find yourself behind a snow plow, stay far enough behind it and use caution if you pass the plow.

What to Do in an Emergency

If you are stopped or stalled in wintry weather, stay focused on yourself and your passengers, your car, and your surroundings.

- Stay with your car and don’t overexert yourself.
- Let your car be seen. Put bright markers on the antenna or windows and keep the interior dome light on.
- Be mindful of carbon monoxide poisoning. Make sure your exhaust pipe is clear of any snow and run your car only sporadically — just long enough to stay warm. Don’t run your car for long periods of time with the windows up or in an enclosed space.

NHTSA.gov/WinterDrivingTips
Changes You May Notice

Tires
As the outside temperature drops, so does tire inflation pressure. Make sure each tire is filled to the vehicle manufacturer’s recommended inflation pressure, which is in your owner’s manual and on a label located on the driver’s side door frame. Do not inflate your tires to the pressure listed on the tire itself. That number is the maximum pressure the tire can hold, not the recommended pressure for your vehicle.

Some other tips:
• Inspect your tires at least once a month and before long road trips.
• It’s best to check the tires when they’re cold, meaning that they have not been driven on for at least three hours.
• Check each tire’s age. Some vehicle manufacturers recommend replacing tires every six years regardless of use.

An inspection is not just about checking tire pressure and age. Remember to check:
• for any damage or conditions that may need attention;
• the tread and sidewalls for any cuts, punctures, bulges, scrapes, cracks, or bumps. The tread should be at least 2/32 of an inch or greater on all tires; and
• your spare tire.

If you find tire damage, take your vehicle to a tire service professional.

Consider installing snow tires, but before buying new tires, visit NHTSA.gov/Tires to review tire safety ratings. The Uniform Tire Quality Grading System (UTQGS) lets you compare tire treadwear, traction performance, and temperature resistance.

Car Seats
In colder weather, parents typically dress their children in winter coats. But it’s important to know that heavy coats can interfere with the proper harness fit on a child in a car seat. When your child will be secured in a car seat, pick thin, warm layers, and place blankets or coats around your child after the harness is snug and secure for extra warmth.

Also, make sure car seats and booster seats are properly installed and that any children riding with you are in the right seat for their ages and sizes. Go to NHTSA.gov/CarSeat to see NHTSA’s child passenger safety recommendations to find the right seat for your child’s age and size, and check out NHTSA’s Child Car Seat Inspection Station Locator to find a free car seat inspection site near you, or to get information on virtual inspections.

Coats in Car Seats: What’s Best for Toddlers?
Changes You May Notice continued

### Batteries
When the temperature drops, so does battery power. In cold weather, gasoline and diesel engines take more battery power to start, and electric and hybrid-electric vehicles’ driving range can be reduced. Have a mechanic check your battery, charging system, belts, and for any other needed repairs or replacements.

### Safety Technologies
Familiarize yourself with the safety technologies on your vehicle and how they perform in wintry conditions. Know whether your vehicle has an antilock brake system and learn how to use it properly. Anti-lock brake systems prevent your wheels from locking up during braking. If you have antilock brakes, apply firm, continuous pressure to the brake pedal. If you don’t have antilock brakes, you may need to pump your brakes if you feel your wheels starting to lock up. For more information on driver assistance technologies, visit NHTSA.gov/DriverAssistTech.

### Floor Mats
Due to slushy winter conditions, you might consider switching out your usual floor mats for thicker material or rubbery ones. Improperly installed floor mats in your vehicle could interfere with the operation of the accelerator or brake pedal, increasing the risk of a crash. Follow the manufacturer’s instructions for mat installation and use retention clips to secure the mats. Always use mats that are the correct size and fit for your vehicle.

### Preparing Your Vehicle

#### Lights
Check your headlights, brake lights, turn signals, emergency flashers and interior lights. Be sure to also check your trailer brake lights and turn signals, if necessary.

#### Windshield Wipers
You can quickly go through a lot of windshield wiper fluid in a single snowstorm. Make sure your vehicle’s reservoir is full of high-quality “winter” fluid with de-icer before winter weather hits. Make sure defrosters and all windshield wipers work and replace any worn blades. Consider installing heavy-duty winter wipers if you live in an area that gets a lot of snow and ice.

#### Cooling System
Make sure you have enough coolant in your vehicle, and that it meets the manufacturer’s specifications. See your vehicle owner’s manual for recommendations. Check the cooling system for leaks, test the coolant, and drain or replace the old coolant.

You may also want to visit your mechanic for a tune-up and ask them to check for leaks, badly worn hoses, or other needed parts, repairs, and replacements.
Before You Go

Stock Your Vehicle
Carry items in your vehicle to handle common winter driving-related tasks, and supplies you might need in an emergency, including:
- a snow shovel, broom, and ice scraper;
- abrasive material (sand or kitty litter), in case your vehicle gets stuck in the snow;
- jumper cables, flashlight, and warning devices (flares and emergency markers);
- blankets for protection from the cold; and
- a cell phone and charger, water, food, and any necessary medicine.

Gas Up or Plug It In
Keep your gas tank close to full whenever possible. For electric and hybrid-electric vehicles, decrease the drain on the battery. In general, lithium ion batteries have reduced energy at lower temperatures. Additionally, most all vehicle batteries will use battery power for self-heating in low temperatures. The battery drain due to heating can be minimized by keeping your electric vehicle as warm as possible during freezing temperatures. A common way to do this: plug your vehicle in at night during the winter, keeping the battery temperature in its optimal ranges.

Plan Your Route
Before heading out, make sure to check the weather, road conditions and traffic. Familiarize yourself with directions and maps before you go—even if you use a GPS—and let others know your route and anticipated arrival time. On longer trips, plan enough time to stop to stretch, get something to eat, check your phone, and change drivers or rest if you feel drowsy.

Year-Round Safety

Check for Recalls
Go to NHTSA.gov/Recalls and enter your vehicle identification number (VIN) to quickly learn if your vehicle has a critical safety issue that has not been repaired, and how to get that repair done for free. You can also download NHTSA’s SaferCar app (NHTSA.gov/app) and enter your vehicle and equipment information. If a recall is issued, you’ll get an alert on your phone.

Avoid Risky Driving Behaviors
You know the rules: Do not text or drive distracted; obey posted speed limits; and always drive sober. Both alcohol and drugs can impair safe and responsible driving by affecting things such as coordination, judgment, perception, and reaction time. And remember: always wear your seat belt.