Everyone should be cautious about traveling in extreme winter weather. Cold, snow and ice are demanding on cars, drivers and passengers. Cold affects metal, rubber and other materials in your car. It can reduce the effectiveness of your vehicle’s battery by at least 50 percent. It can freeze tires and keep them flat on the bottom for at least the first half-mile of travel. It can thicken your car’s lubricants, making the engine work too hard. Most importantly, extreme winter weather can threaten your life. Follow these tips to stay safe as you drive in Minnesota.

Plan Before You Travel
Simple planning can save you trouble and even save your life.

Prepare Your Vehicle
Be sure your vehicle is in good winter driving condition. Take along the emergency equipment referred to in this booklet and keep it accessible. Keep your gas tank at least one-half full.

Be Aware of the Weather
Listen to forecasts, road reports and storm warnings. Dress appropriately. Pack extra scarves and mittens. Allow extra time for trips in severe weather.

Make Yourself Easy to Find
Tell someone where you are going and the route you will take. Report your safe arrival. If you stall or get stuck, tie a colored banner (from your winter survival kit) to your antenna or hang it out a window. At night, remove the cover from your dome light and turn the light on. Road crews or rescue units can see a small glow at a considerable distance. To reduce battery drain, use emergency flashers only if you hear approaching vehicles. Keep one person on watch; don’t let everyone rest at the same time.

Stay in Your Vehicle
Walking in a storm can be very dangerous. You might lose your way or become exhausted, collapse and risk your life. Your vehicle is a good shelter.

Avoid Overexertion
Shoveling snow or repositioning your car by pushing it takes a lot of effort in storm conditions. You could risk heart attack or injury. Take it easy!

Keep Cool — Two Ways
1. Calm down and think. The storm will end and you will be found.
2. Don’t work enough to get hot and sweaty. Wet clothing loses insulation value, making you susceptible to hypothermia.

Keep Fresh Air in Your Vehicle
It’s much better to be cold and awake than comfortably warm and sleepy. Wet or wind-driven snow can plug your vehicle’s exhaust system and cause deadly carbon monoxide gas to enter your vehicle. Don’t run the engine unless you are sure the exhaust pipe is free of snow. Keep snow off the radiator to prevent the engine from overheating.

Stay Warm Without Fuel
Keep your blood circulating freely by loosening tight clothing, changing positions frequently and moving your arms and legs. Huddle close to one another. Rub your hands together or put them in your armpits or between your legs. Remove your shoes occasionally and rub your feet.

Don’t Expect to Be Comfortable
The challenge is to survive until you’re found.

Winter Driving Tips

Be Able to See and Be Seen
Clean frost and snow off all windows, mirrors, lights and reflectors. Equip your car with good wiper blades and keep an ample supply of windshield washer fluid. If visibility is poor, use headlamps.

Get a Feel for the Road
When you first start out, accelerate carefully to test wheel-spin and brake gently to test skidding.

Be Gentle
Use the accelerator and brakes slowly to maintain control of your vehicle. Fast acceleration can make wheels spin on ice and snow. Brake with a gentle pumping action. Stepping too hard on the pedal will lock the brakes and cause loss of steering control.
Increase Your Following Distance
Ice or snow can multiply your stopping distance up to ten times.

Make Turns Slowly and Gradually
Heavily traveled intersections can become “polished” and slick. Brake before you come to a curve, not while you are in it.

Turn in the Direction of the Skid
If the rear of your car begins to slide, turn into the direction of the skid. Expect a second skid as the car straightens out, and be prepared to counter this sliding action.

Scattered Slippery Spots
Icy spots on the road surface can cause loss of steering control. Do not use your brake. Take your foot off the gas and steer as straight as possible until your car slows to a safe speed.

Avoiding a Collision
In an emergency situation, you can intentionally steer your car off the road and into a snow bank. You may get stuck, but you’ll avoid a crash.

Making a Winter Driving Survival Kit
Use an empty three-pound coffee can or any similar container with a plastic cover to store the following items:
- Small candles and matches
- Small, sharp knife and plastic spoons
- Red bandanna or cloth
- Pencil and paper
- Large plastic garbage bag
- Safety pins
- Whistle
- Snacks
- Cell phone adapter to plug into lighter
- Plastic flashlight and spare batteries

Reverse batteries in the flashlight to avoid accidental switching and burnout. Warm batteries before using them. Store safety items in the passenger compartment when severe winter weather threatens in case the trunk is jammed or frozen shut. Choose small packages of food that you can eat hot or cold.

Suggested food items:
- Raisins in small packets
- Semi-sweet chocolate in pieces for sharing
- Miniature candy bars
- Chewing gum
- Wrapped hard candies
- Food bars
- Canned soup, meat and poultry

Store bulky and heavy items in an accessible place:
- 30-foot cord to use as homing line when you must exit the vehicle
- Booster cables
- Basic tools
- Sand, cat litter or other grit in a plastic milk carton
- Shovel
- Tow cables or chain
- Sleeping bag or blankets
- Road flares and reflectors
- Snowmobile suit and heavy boots

Emergency Phone Calls
If you become stranded in any part of Minnesota, and you have a cell phone, call 911 to summon help. In other states, you may be able to dial 911 or 0 to reach an operator. When you talk with authorities:
- Provide information on your location, condition of all persons in the vehicle and the problem you are experiencing
- Follow instructions; you may be told to stay where you are and wait for rescuers
- Do not hang up until you know who you have spoken with and what will happen next
- If you must leave your vehicle, write down your name, address, phone number and destination. Place the piece of paper inside the front windshield for someone to see