



The roads are a dangerous place on even the nicest day, but in the winter, the dangers of driving can increase dramatically. According to the Department of Transportation, winter weather conditions are responsible for over 192,000 injuries and 2,200 deaths each year. Outside of injury and loss of life, winter weather conditions are responsible for millions of dollars in property damage incidents.

Although employers cannot control roadway conditions, they can promote safe driving behavior by ensuring workers: recognize the hazards of winter weather driving; properly train for driving in winter weather conditions; and are licensed (as applicable) for the vehicles they operate.

Employers should set and enforce driver safety policies. Employers should also implement an effective maintenance program for all vehicles and mechanized equipment that workers are required to operate. Crashes can be avoided. Employers should ensure properly trained workers inspect the following vehicle systems to determine if they are working properly:

- **Brakes:** Brakes should provide even braking. Also check that brake fluid is at the proper level.
- **Cooling System:** Ensure a proper mixture of 50/50 antifreeze and water in the cooling system.
- **Electrical System:** Check the ignition system and make sure that the battery is fully charged and that the connections are clean. Check that the alternator belt is in good condition with proper tension.

- **Engine:** Inspect all engine systems.
- **Exhaust System:** Check exhaust for leaks and that all clamps and hangers are snug.
- **Tires:** Check for proper tread depth and no signs of damage or uneven wear. Check for proper tire inflation. To have adequate snow traction, a tire requires at least 6/32-inch deep tread.
- **Oil:** Check that oil is at proper level.
- **Visibility Systems:** Inspect all exterior lights, defrosters (windshield and rear window), and wipers. Install winter windshield wipers. Clean the inside of the windows thoroughly. Apply a water-shedding material (such as Rain-X) to the outside of all windows, including the mirrors. Make sure your windshield washer system works and is full of an anti-icing fluid. Check your lights. If you have an older car with sand-pitted headlights, get a new set of lenses.

Winter Driving Tips:

- Monitor weather for any incoming snowstorms or icy conditions and plan your travel around those conditions. Do not put yourself in a situation where you are stuck on a roadside.
- Do not drive in wintery conditions if possible.
- Be a defensive driver. Stay clear of other drivers and maintain a safe distance in case you need to brake or turn to avoid an accident.
- Slow down. Winter weather conditions necessitate having to reduce your speed. Reducing your speed will give you more time to react as well as help to avoid losing control of your vehicle.

- The best way to avoid an accident during the winter months is to avoid driving in dangerous conditions. If you absolutely must drive in bad weather conditions, travel main roads that have already been plowed and salted. Notify your supervisor if necessary to alert him or her you will be late for work due to road conditions. Take your time getting to your destination.
- Run the air-conditioner. In order to remove condensation and frost from the interior of windows, engage your air-conditioner and select the fresh air option: It's fine to set the temperature on "hot." Many cars automatically do this when you choose the defrost setting.
- Give yourself a brake. Learn how to get maximum efficiency from your brakes before an emergency. It's easy to properly use antilock brakes: Stomp, stay and steer. Stomp on the pedal as if you were trying to snap it off. Stay hard on the pedal. Steer around the obstacle. If you drive on icy roads or roads that are covered with snow, modify your ABS technique: After you "Stomp" and the ABS begins cycling — you will feel pulses in the pedal or hear the system working — ease up slightly on the pedal until the pulsing happens only once a second.
- For vehicles without ABS, you'll have to rely on the old-fashioned system: You. For non-ABS on a mixed-surface road, push the brake pedal hard until the wheels stop rolling, then immediately release the brake enough to allow the wheels to begin turning again. Repeat this sequence rapidly. This is not the same as "pumping the brake." Your goal is to have the tires producing maximum grip regardless of whether the surface is snow, ice, or damp pavement.
- Watch carefully for "black ice." If the road looks slick, it probably is. This is especially true with one of winter's worst hazards: "black ice." Also called "glare ice," this is nearly transparent ice that often looks like a harmless puddle or is overlooked entirely. Test the traction with a smooth brake application or slight turn of the wheel.
- Remember the tough spots. You must remember where icy roads tend to occur. Bridges and intersections are common places. Also, wherever water runs across the road.
- Too much steering is bad. If a slick section in a turn causes your front tires to lose grip, the common — but incorrect — reaction is to continue turning the steering wheel. If the icy conditions end and the front tires regain grip, your car will dart whichever way the wheels are pointed. That may be into oncoming traffic or a telephone pole. Something very similar happens if you steer too much while braking with ABS. Sadly, there are situations where nothing will prevent a crash, but turning the steering too much never helps.
- Avoid rear-tire slides. First, choose a car with electronic stability control. Next, make sure your rear tires have at least as much tread as your front tires. Finally, if you buy winter tires, get four.
- Technology offers no miracles. All-wheel drive and electronic stability control can get you into trouble by offering a false sense of security. AWD can only help a vehicle

accelerate or keep moving. It can't help you go around a snow-covered turn, much less stop at an icy intersection. Don't let these lull you into overestimating the available traction.

An emergency kit with the following items is recommended in vehicles:

- Cellphone or two-way radio
- Windshield ice scraper
- Snow brush
- Flashlight with extra batteries
- Shovel
- Tow chain
- Traction aids (bag of sand or cat litter)
- Emergency flares
- Jumper cables
- Snacks
- Water
- Road maps
- Blankets, change of clothes