

RISK ENGINEERING

Safety Spotlight



Winter Driving Safety Tips

Preparation

Vehicle Maintenance

As winter approaches, it is crucial to ensure your vehicle is ready to handle the cold weather and snowy conditions. In addition to your usual maintenance routine, here are items to address:



- Batteries: Ensure they are fully charged and in good condition.
- Check tires for adequate tread and pressure.
- Ensure windshield wipers are in good condition. Flipping up the wipers at night will
 prevent them from freezing to the windshield and make the windshield easier to
 clean.
- Top off windshield washer fluid and check antifreeze levels.

Emergency Equipment

- Flashlight, jumper cables, shovel, snow brush, ice scraper, sandbags for additional weight, warm clothing.
- Depending on trip length, carry food, water, and necessary medications.

Route Planning

- Allow extra time for travel based on weather and road conditions.
- Inform others of your departure and estimated arrival times.
- Check weather conditions before and during your trip.
- If delivering goods, prioritize important deliveries before adverse weather hits.

Practice Driving in Winter Conditions

If possible, find an empty lot to rehearse maneuvers cautiously to get a feel how the car reacts. Although you are used to winter weather conditions, it does take some time at the beginning of each season to work into a comfort level with driving in ice and snow.

- Steer into a skid.
- If your vehicle has anti-lock brakes, push down on brakes and keep them down. If not, you will want to pump them.
- Stopping distances will be much longer on ice and snow.

Black Ice

Winter driving is challenging enough without the added danger of black ice. While snow-covered roads are visibly treacherous, black ice is often invisible, catching drivers off guard. Here are some items to pay attention to with black ice:



Formation Conditions:

- Weather Factors: Black ice is more likely to form during rain, fog, or mist in cold weather. When the ground is cold and there is moisture from the sky, conditions are ripe for black ice.
- Time of Day: Black ice can form at any time but is most common in the early morning and evening. Melted snow or ice from the previous day can refreeze overnight.

High-Risk Areas:

- Bridges and Overpasses will ice over before roads because they are exposed to cold air from all sides, unlike roads which are insulated by the earth.
- Black ice can form near the entrances and exits of tunnels where moisture is likely to accumulate. Tunnels also lack sunlight, which can prevent ice from melting.
- Parts of the road shaded by tall buildings or trees are prone to black ice formation.

Temperature Insights:

- Black ice forms most often when the air temperature is at or below 32°F. However, it can also occur when the air temperature is above 32°F if the roadway surface is still at or below freezing.
- Temperature Indicators:
 - If ice forms on the back of your mirrors, it is a sign that roads may be icy.
 - If there is no water spraying up from the tires of vehicles around you, the road may be covered in black ice.
 - Pavement that appears darker and duller than other parts of the road may indicate the presence of black ice.

Additional Winter Safety Tips:

- Even if roads have been salted, some areas may not have received enough salt and could still be icy, especially bridges and overpasses.
- Ensure all passengers wear seatbelts.
- Clear all snow/ice from the windshield and the top of your vehicle.
- Adjust speed to current weather conditions and slow down.
- Increase following distance to allow more stopping time.
- Brake early and gently, especially on curves and hills.
- Remember, entrance and exit ramps are mainly designed for passenger vehicles in dry conditions.
- Accelerate slowly.
- Watch for pedestrians.
- Avoid distractions like phones and electronic devices.

Winter weather can make driving hazardous. If you must drive, follow these tips to stay safe on the road and remember to avoid driving if possible, during severe conditions.