



Low-visibility conditions require extra measures

Driving at night is more difficult because of reduced visibility. However, low visibility conditions often occur during the day, caused by heavy rain, thick fog, snowfall, dust or smoke. Often in the Pacific Northwest, visibility is reduced to less than one-quarter mile and a dense fog advisory is issued. During these times and in other low visibility conditions, follow these safety tips:

- Slow down and don't use cruise control.
- Keep your headlights clean and your windshield clear.
- Increase following distance.
- Eliminate distractions so you can focus on the road.
- In fog or during snowfall, use your low beams. High beam lights could reflect back, making visibility worse for you and other drivers.
- In fog, use your foglights — but remember, Oregon law says you must turn them off when within 500 feet of an oncoming vehicle and within 350 feet when following another vehicle.
- Avoid entering an area if you cannot see a safe distance ahead.
- If you suddenly encounter a severe loss of visibility, pull off the pavement as far as possible. Stop, turn off your lights, set the emergency brake and take your foot off the brake to be sure the taillights are not illuminated. Turn on your emergency flashers.
- In dense fog or blinding snow conditions, if you can't pull off the roadway, slow down, turn on your low beam headlights and sound the horn occasionally. Use the white fog line or roadside reflectors if necessary to help guide you and don't change lanes or attempt to pass.
- Never stop in the travel lanes.

"Too fast" is too risky!

One of the most common driver errors contributing to crashes is "driving too fast for conditions." Weather conditions do impact travel safely, so slow down and be ready to make other adjustments as road conditions change.

Be seen - use headlights at all hours in winter!

Turning on your low-beam headlights during the daytime in the winter months can help make your vehicle more visible to other drivers, bicyclists and pedestrians.

Driving with your lights on during the day throughout the winter helps contrast your vehicle against buildings and other terrain features. Diminished visibility results when there is little contrast between the color of a vehicle and its background, such as a lightly colored car against snow or a green car against foliage. Small cars are harder to see at a distance compared to pickups and SUVs. Headlights also contribute to safety on highways with one lane of travel in each direction.

Improved visibility can help prevent crashes such as head-on collisions and side-swipes, as well as collisions with pedestrians and cyclists. Tests conducted by the Society of Automotive Engineers determined that with headlights off, drivers can see oncoming cars when they are an average of 2,074 feet away. With headlights on, that distance more than doubles to an average of 4,720 feet.

Also, remember to keep your car headlights clean. Get in the habit of wiping off your lights at the gas station; that way you're ready for low-visibility conditions.

A look inside ODOT's winter storm toolbox

Our goal is to use the right tool at the right time to increase traveler safety while limiting environmental damage.

By themselves, our winter storm tools — sanding, salting, deicing and plowing — do not make the roadway surface completely safe during or immediately after a storm. You, the traveler, play a very important role: You judge whether it's safe to travel.

Your role requires you to be practiced in the skills necessary to travel safely in the conditions you face; to know when it's best to not travel, if conditions are too dangerous; to keep your vehicle in safe operating condition to be able to travel; and to have the tools, equipment, food and water you need in case you must stop and wait for help.

Travel at speeds appropriate for current road and weather conditions. Carry chains when you travel through Oregon's snow zones.

Solid salt

We don't plan to use salt every time it snows or we encounter an ice storm. Solid salt is just another tool in our toolbox, along with liquid deicer, sand and our equipment (an increasing variety of snowplows). Each has a time and place; each is deployed when we believe it is most effective. Our goal is to maximize safety while minimizing the environmental effects each of the different winter toolbox tools can cause. In eastern Oregon salt is primarily used on the interstate system and some secondary highways, depending on the need and a variety of other factors. Typical salt application rate is around 200 pounds per lane mile.

We continue to analyze our use of salt. Since each storm is different, we cannot state ahead of time when or where we will use salt. Our best advice is to assume that we used sand, salt or liquid deicer to fight snow and ice before, during and after every winter storm. Always wash your car after a

winter storm, including the undercarriage.

Liquid deicer

Liquid magnesium chloride with corrosion inhibitor has proven to be an effective way to provide reasonably safe road surfaces in winter conditions. We generally use it both before and during a storm to prevent ice and snow from bonding to the pavement. Travel is safer. And we can use less sand. As with the other tools in our other toolbox, we use the lowest application rate at the right time and place to achieve the desired road conditions. To protect water quality, we only use deicers that meet strict quality specifications.

Sand

When deicers will not be cost-effective (based on a variety of environmental and pavement variables), we use sanding material to provide better traction for safer driving. We use sand only when and where appropriate. We try to avoid applying sand to bare pavement to avoid bounce and scatter. We often pre-wet sanding material with liquid deicer to help it stay where we placed it. We place barriers to capture scattered sand along sensitive waterways. And we pick up sand after placing it — often repeating the drop/pickup cycle several times during a storm. It takes three to five times as long to pick it back up than it does to place it.

Snowplows

Plowing is the most efficient way to remove snow and ice from the pavement, and is most effective when salt or liquid deicer has been used to break the bond between pavement and ice or snow. In 2018 ODOT added new tow plows and dual wing plows in eastern Oregon that can clear two lanes of freeway in one pass. The new plows function as a "force multiplier," doing the work of two trucks with only one operator. This helps free up crews and equipment that may be needed elsewhere.



ODOT's dual wing plows can clear two lanes in one pass.