

## Winter Driving Tips

Help keep your car under control and your winter drive a pleasure by following these easy techniques:

**Maintain Traction** - Start and stop gradually to avoid losing traction in wet or slippery conditions. Drive at steady speeds, avoiding sudden starts or stops. Accelerate slightly when approaching a hill, then maintain steady speed going up. Gearing down ahead of downgrades can help avoid brake wear and reduce the chances of sliding.

**Skids** - Driving sensibly and steadily will avoid most skids. Anticipating turns or lane changes will help. If your vehicle begins to skid, remove your foot from the accelerator or brake and steer in the direction of the skid. When the vehicle steadies itself, turn the wheels straight and proceed.

**Braking** - Be gentle with braking pressure during slippery road conditions. Gentle pumping action on disc brakes will avoid locking the wheels and sending the vehicle into a skid or spin. Anti-lock braking systems provide this action for you. Avoid braking on curves by driving through them at a safe, steady speed. Gear down for going both uphill and downhill.

Four-wheelers can't stop better or faster on ice and snow than 2WD vehicles, even if they are locked into four wheel drive. The heavier the vehicle, the longer it takes to stop, no matter how many drive wheels. Many of the popular sport utility vehicles (SUVs) are heavy and require a greater stopping distance.

## Safety Around Snow Removal Equipment

Colorado's snowplows use distinctive amber and blue lights to warn you well in advance that snow removal operations are underway. When you see these lights, slow down and use caution.

Your best course of action will be to follow well behind the plow with your headlights on, staying away from flying snow and sand which the truck may be spreading to improve traction.

You may also encounter a CDOT truck applying liquid de-icer. Stay back to avoid getting extensive liquid on your windshield.

Avoid driving in the snowplow's blind spots. If you must pass the plow, remember the limited visibility caused by flying snow. Be sure you have enough visibility to avoid the rooster tail of snow coming from the plow's blade. Please do your part by driving safely around Colorado's snowplows.

## Why Does CDOT Use Liquid De-Icers?

Ever wonder what those big tankers are applying to Colorado's highways? CDOT maintenance crews use liquid de-icers like magnesium chloride at the onset of a storm to prevent ice from forming and during and after a storm to break the bond of snow and ice.

**Mobility:** It reduces the formation of snow/ice on the highways and provides a quicker return to bare pavement and higher driving speeds; there is less reliance on the chain law and fewer highway closures.

**Safety:** It reduces accidents caused by snow and ice; there is less sand build-up on the roadway after a storm; the reduction of sand means there is also less damage to vehicle windshields.

**Air Quality:** It does not add air pollutants to the environment like sand does; its use actually helps reduce the pollution caused by sand since CDOT is able to dramatically decrease the amount of sand used on roadways.

**Water Quality:** Sand use can cause more sediment in streams, liquid de-icers have little or no sediment and are less damaging to vegetation and waterways than sand and salt.

**Tip:** Wash your vehicle after snow storms to remove any liquid de-icer build-up.

## Advice From Experts

Colorado's winter driving experts are the Department of Transportation maintenance professionals who patrol and clear the highways. They offer the following tips and advice based on their years of experience:

1. Slow down in winter driving conditions. Most accidents are caused by driving too fast for conditions.
2. Use your low-beam headlights in bad weather, especially where snow is falling heavily or blowing.
3. Don't use your cruise control in slippery road conditions.
4. Remove ice and snow from windows, mirrors, and vehicle lights, both front and rear, as often as necessary.
5. No matter how far you are driving and no matter what the weather conditions, always wear your seat belts.
6. Leave extra room between your vehicle and the one ahead of you in poor visibility and slippery conditions.
7. Your safest place in bad weather is a safe distance behind a snowplow, where you will find the clearest road and the best traction.
8. If possible, avoid driving at all in bad weather conditions. Stay home until the weather improves and the roads clear.
9. A road that has been treated with liquid de-icer may be wet and slippery. It's important to watch your speed, particularly around curves and in canyons.

## Avalanche Information

In avalanche-prone mountain areas, roads may be temporarily closed due to high avalanche danger. Although inconvenient, these closures are intended to protect public safety. Roads will be reopened only when they are determined safe for travel.

From November to April, current information on mountain weather, snow, and avalanche conditions may be obtained by calling the Colorado Avalanche Information Center

## Weather Definitions

**Road Closure** - It is unsafe and unlawful to drive past a road closure at any time for any reason.

**Heavy Snow Warning** - Snow accumulations of 6 inches or more within 12 hours or 8 inches or more within 24 hours are expected at lower elevations, with 8 inches or more in 12 hours and 12 inches or more in 24 hours expected in mountain areas.

**Winter Storm Warning** - Heavy snow is expected, aggravated by blowing and drifting conditions.

**Blizzard Warning** - Sustained or frequent wind gusts of 35 mph or more for at least 3 hours, reducing visibility to less than 1/4 mile, are expected.

## Stuck or Stranded?

If you get stuck on a snowy road, or your car slides off the road, the following guidelines will help you decide what course of action to take:

1. If the road ahead is clear and your car can be dug out, use your shovel and traction mat or sand to free the vehicle. Ease the vehicle out gently and steadily to avoid spinning the tires.
2. If the road ahead is not clear or you slid off the road, and there is no shelter in sight, you are stranded. **Do not leave your vehicle**—it is your only certain source of shelter. Be sure the vehicle exhaust is clear of snow and keep a window slightly open for ventilation. Run the vehicle only a few minutes at a time in order to stay warm. Dress in layers for warmth and cover your entire body with a blanket or sleeping bag. If there are two or more persons, huddle together for warmth.
3. If you are stranded, do not panic. CDOT maintenance crews will be working to open the highways and look for stranded motorists. If you are stranded on a secondary or backcountry road, remain in the shelter of your vehicle until the storm passes so that you can be spotted or can proceed safely on foot.

## BE PREPARED FOR WINTER

Colorado's winter driving conditions can change from sunny to blowing snow within an hour or two. Be prepared at all times, and especially in winter. Know road conditions, know your vehicle, use proper driving techniques for the conditions you find, and have the right emergency gear and equipment along. This brochure provides information to help you.

## WINTER DRIVING BASICS

Be sure your vehicle is in good working condition. Be sure that it is thoroughly checked and all items on the following checklists have been examined.

## AUTOMOTIVE CHECKLIST

- Wiper Washer Fluid
- Antifreeze
- Lights
- Fuel System
- Ignition
- Exhaust System
- Brakes
- Battery
- Heater/Defroster
- Tire Tread
- Wiper Blades

## SAFETY CHECKLIST

- Flares/Reflectors
- Chain/Tow Strap
- Blanket
- First Aid Kit
- Shovel
- Nonperishable Food
- Scraper
- Tire Chains
- Sleeping Bag
- Batteries
- Jumper Cables
- Matches/Lighter/Candle
- Snow Brush
- Flashlight
- Coat/Gloves/Hat
- Sand/Traction Mats

## ROAD CONDITION NUMBERS

For current road information, call 303-639-1111 in the Denver Metro area or outside Colorado. Outside Denver but within Colorado, call toll free 877-315-ROAD. You may also visit the Colorado Department of Transportation web site at [www.dot.state.co.us](http://www.dot.state.co.us).

## Tire/Chain Guidelines

In some cases, drivers may face winter travel prohibitions unless vehicles, including passenger cars, sport utility vehicles, and commercial vehicles, are equipped in certain ways. These could include any of the following:

- Snow tires having adequate tread design or depth to provide sufficient traction
- Four-wheel drive vehicles with adequate tires
- Tire chains

Tire chains are defined as metal chains or other traction devices capable of providing traction equal to or exceeding metal chains under similar conditions.

Studded snow tires are legal in Colorado, but may not be adequate for travel under extreme conditions. Some other states prohibit studded snow tires.



## COLORADO WINTER DRIVING HANDBOOK

### Including:

- Driving Tips
- Snowplow Safety
- Tire & Chain Laws
- Information Sources

Compliments of



COLORADO DEPARTMENT OF TRANSPORTATION  
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