

## Chains Required

All vehicles, including those with four-wheel drive snow tires, should carry chains when traveling during snowy weather. If you don't have chains in your possession, you may not be allowed to proceed.

When highway signs indicate that chains are required, you must stop and install chains or risk being cited and fined. In most cases, there is about one mile between "Chains Required" signs and the final checkpoint. Make sure you pull safely off the roadway to install chains. Do not stop in a traffic lane where you can endanger yourself or others. Watch for pedestrians when approaching chain control areas and slow down as there often are people outside of their vehicles. Chain control areas can change rapidly depending on current weather and road conditions.

The speed limit when chains are required is either 25, 30, or 35 miles per hour. Speed limits are posted at various locations and often enforced by radar.

If you need help, chain installers may be available. Chain installers are not Caltrans employees – they are independent business people who are licensed to install chains. If you choose to use their services, always ask for a receipt that includes the installer's badge number. Chain installers are not allowed to sell or rent chains.

When removing chains, drive beyond the signs reading "End Chain Control." Again, be sure to pull over out of the lanes of traffic where you can safely remove your chains.

### Chain Control Information

- R-1** Chains or snow tread tires required. Snow tires must have a tread depth of 6/32" with a "M & S" imprint on the tire's sidewall.
- R-2** Chains required on all vehicles except four-wheel drives or all-wheel drives with snow tread tires on all four wheels. Four wheel drives must carry chains. If you have four-wheel drive – engage it. Use the "4-high" range only. Use "4-low" only if your vehicle becomes stuck.
- R-3** Chains required on all vehicles – no exceptions.

R-1 and R-2 are the most common chain controls. The highway will usually be closed before an R-3 control is imposed.

## Anticipate Delays And Closures

Weather and road conditions can change rapidly causing changes in chain control locations. In some cases, the highway may be open when you begin your trip, but closed later because of unsafe conditions.

High winds and blowing snow often cause zero visibility conditions. To protect travelers, the CHP may close the road temporarily until conditions improve.

Spinouts and accidents happen frequently during winter storms. These mishaps can force highway closures that last for several hours. Heavily traveled routes are particularly vulnerable to such closures due to their high traffic volumes.

Caltrans strives to reduce the frequency and the length of closures on state highways due to spinouts and accidents. During major storms when traffic flow is heavy, Caltrans may meter traffic. By letting fewer vehicles feed into the storm area, accidents and congestion are reduced. Waiting below the snow line is preferable to being caught in a traffic jam during a snow storm. Metering also gives motorists the option of turning around and waiting out the delay in a warm place rather than waiting inside of their cars.

## Check Conditions Frequently

### HAR

Tune in to Caltrans Highway Advisory Radio (HAR). During storms, Caltrans broadcasts road condition information on low frequency radio transmitters located along some mountain highways. Watch for flashing road signs and tune to the frequency listed. Transmissions are brief, but informative and are updated regularly.

### CHIN

To help keep you informed of changing conditions, Caltrans operates the Caltrans Highway Information Network (CHIN).

**Phone 1-800-427-ROAD (7623)**

As you travel, check road conditions often. CHIN provides up-to-date information on any California highway. This information is also available on the Internet at:

**<http://www.dot.ca.gov/hq/roadinfo>**

For additional copies of this brochure, contact:

State of California  
Department of Transportation  
Division of Maintenance  
1120 N Street  
Sacramento, CA 95814  
Telephone 916-654-2224

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# Weathering the Storm

## Winter Driving Tips



"We're Here  
To Get You  
There"



Winter can be a beautiful time of year.

However, it can also bring a variety of inclement driving conditions to California's roadways.

The California Department of Transportation (Caltrans) wants you to get where you're going safely. This pamphlet offers information to help make your winter driving experience safe and pleasant.

## Winterize Your Vehicle

Check your brakes, windshield wipers, exhaust system and heater/defroster to make sure they are in good working condition.

- **ANTIFREEZE** – Check your radiator fluid level and add antifreeze/coolant as needed.
- **WINDSHIELD WIPERS** – Wiper blades should be replaced, if needed. Adding a winter formula windshield wiper fluid will help deice your windshield.
- **TIRES** – Make sure your tires are properly inflated and that the tread is in good condition.
- **CHAINS** – Always carry chains. They should be the correct size for your tires and in proper working order. Chains must be installed on drive wheels, so you need to know if your vehicle has front or rear wheel drive. Cable-type chains are acceptable, but they may not provide as much traction as traditional chains.

## Be Prepared

Winter weather is never predictable. Expect the worst conditions and be prepared by having an emergency kit in your car. The following items may be of use should you find yourself stranded during a snowstorm:

- **FLASHLIGHT** - With extra batteries.
- **BLANKETS, EXTRA CLOTHING, WATER & SNACKS** - It is a good idea to take along water, food, warm blankets and extra clothing. A lengthy delay will make you glad you have them.
- **CLEAN, DRY TOWEL** – To dry your hands after installing snow chains.
- **GLOVES** – Helpful to protect hands from the cold when installing chains.
- **ICE SCRAPER/DEICER** – To keep windows clear of snow/ice for improved visibility.
- **SHOVEL** – To free your vehicle should you get snowed in.
- **BROOM** – A small broom or brush can be used to clear snow off your vehicle.
- **SPARE KEY** – Many motorists have locked themselves out of their cars when stopping to put on tire chains.
- **SAND/KITTY LITTER** – Sand or kitty litter can help with traction should you get stuck in mud or snow.

## Winter Driving Tips

**ALLOW ENOUGH TIME** – Trips to the mountains can take longer during winter, especially if you encounter storm conditions or icy roads. Get an early start and allow plenty of time to get to your destination.

**KEEP YOUR FUEL TANK FULL** – It may be necessary to change routes or turn back during a bad storm. You may also be in for a long delay if bad weather forces a highway closure.

**SLOW DOWN AND USE YOUR SEAT BELT** – Most winter accidents are the result of driving too fast for the conditions. Avoid speeding and buckle up for safety. Use low gears to slow your vehicle- avoid using the brakes if possible. Remember that having four-wheel drive or all-wheel drive improves climbing traction but does not help to stop your vehicle.

**TURN OFF CRUISE CONTROL** – Don't use your cruise control when driving in snow or wet road conditions. Maintaining control of your vehicle will allow you to react to sudden changes.

**DON'T PANIC** – If you begin to slide while driving on snow or ice, slowly take your foot off the gas pedal, do not use your brakes, and steer your vehicle in the direction you wish to travel. If you must use brakes, gently pump the brake pedal and do not allow them to lock up. If your vehicle is equipped with anti-lock (ABS) brakes, apply firm, steady pressure without pumping.

**BLACK ICE** – The temperature does not have to be below freezing in order for ice to form on road surfaces. Ice can form any time the air temperature drops below 40 degrees, especially when it's windy. Bridges and underpasses can be especially hazardous. Any low or shaded area surrounded by landscaping, or with a nearby source of water, can also have icy spots. Black ice is nearly invisible. Drive cautiously.



**BE OBSERVANT** - Visibility is often limited during poor weather. Slow down and keep a constant watch for other vehicles. When following snow removal equipment, maintain a safe distance and watch for ice and other debris. Do not pass snow removal equipment unless the operator directs you to.

**KEEP WINDOWS CLEAR** – Passing vehicles can spray your car with mud and slush. Utilize your vehicle's windshield wipers and defroster to keep your windshield clear. When driving through falling snow, turn on headlights for extra visibility.

**STAY WITH YOUR VEHICLE** – When stalled, stay with your vehicle and try to conserve fuel while maintaining warmth. Put your flashers on, and be aware of possible exhaust or carbon monoxide problems.