Chains Required

All vehicles, including those with four-wheel drive or 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.

Anticipate Delays

Weather and road conditions can vary rapidly, causing changes in chain control locations. Be aware that even though the highway was open when you began your trip, this could change due to unsafe conditions.

High winds and blowing snow often cause zero visibility conditions. To protect travelers, Caltrans or the CHP may hold traffic temporarily until conditions improve.

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

Caltrans strives to reduce the frequency and the length of delays 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 - Road Conditions via Radio

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 - Road Conditions via Phone or Internet

To help keep you informed of changing conditions, Caltrans operates the Caltrans Highway Information Network (CHIN), providing up-to-date information on any California highway.

Phone 1-800-427-ROAD (7623)
or 511 (where available)

Before you leave and as you travel, check road conditions often. This information is also available on the Internet at:

http://www.dot.ca.gov

For additional copies of this brochure, contact:

State of California
Department of Transportation
Division of Maintenance
1120 N Street, MS-31
Sacramento, CA 95814
Telephone 916-654-4470

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. For California Relay Service TTY please call 711.

G-0094

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.

Weathering the Storm

Winter Driving Tips

Caltrans

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 the 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. When the term "chains" is used here, it means any "tire traction device" (not necessarily link type chain) which meets the requirements of CA Vehicle Code Section 605.

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 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 THE 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 the vehicle.

TURN OFF CRUISE CONTROL – Don't use 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 vehicle begins 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 th vehicle and try to conserve fuel while maintaining warmth. Put flashers on, and be aware of possible exhaust or carbon monoxide problems.

FOG – Reduce speed, use headlights on low-beam along with fog lights (if equipped) as high beam will cause light to reflect off the fog or snow and can further impair driver's ability to see. Stay to the right using the white edge line next to the shoulder, away from the center of the road as oncoming traffic can't see either. Never stop in the road. If you decide visibility is not enough to drive, pull off the travel way when safely able to do so.

FLOOD – Avoid driving through deep water. Turn around and find another route. Be aware if attempting to drive through deep water, it may cause the engine to stall. The average automobile can be swept off the road in 12 inches of moving water. If you become stalled in deep water and you attempted to restart the engine, it may cause irreparable damage to the engine. Watch for items traveling downstream as they can create additional hazards. Remember to test the brakes, as wet brakes have lost stopping power and need to be dried out.

SLOW FOR THE CONE ZONE – To stay safe in work zones, always be alert, never use mobile phones, and avoid changing lanes and crowding other drivers. Obey posted speed limits, merge when directed to do so, and be patient. Always slow for the cone zone!

"MOVE OVER" LAW – California state law requires motorists to slow down, and if safe, move over when a Caltrans or emergency vehicle is flashing warning lights. This protects the safety of workers, who face danger from fast moving traffic. Violating the law could also cost you a $50 fine, so slow down or move over!