

Snow & Ice Control



On Ontario's Highways



Stay well
back to help
snowplows do
their job.

Adjusting to Winter Conditions

Ontario winters are challenging for motorists. They are equally challenging for Ministry of Transportation staff and contractors responsible for snow and ice control on our provincial highways.

Road user safety is a top priority of the Ministry of Transportation. Every effort is made to promote safe highways and to provide an efficient winter maintenance service for the public.

Weather conditions can be variable and unpredictable, placing extra demands on your vehicle and your driving skills. Take the time to ensure you are well prepared for winter roads and always adjust your speed to existing conditions.

Leaving Room for Plows

To do the job right, snowplows and salt and sand trucks must travel slower than regular traffic. Sight lines and visibility near a working snowplow are severely restricted by blowing snow, and passing can be dangerous. Remain at a safe distance when you see the flashing blue lights of these vehicles.



Plowing

Echelon plowing is the practice of staggered snowplows operating across all lanes of a roadway. Though sometimes annoying to drivers, it is the safest and most efficient snow removal method for multi-lane highways. Plowing in echelon clears all lanes at once by passing a ridge of snow from one plow to the next. It is extremely dangerous to pass either between or around these snowplows because of whiteout conditions and the ridge of snow being passed between plows.

DID YOU KNOW . . .

For effective operations, snowplows and salt or sand spreaders must travel at speeds considerably slower than the maximum speeds posted for highways? Please be patient and stay well back while snow and ice control crews are at work.





Sand and salt play a big role in keeping roads safe.

Melting Snow and Ice

Road salt is one of the most effective snow and ice control materials available. Timely application of salt will prevent snow and ice from bonding to the road surface. For this reason, salt is often spread early in a storm to prevent snow buildup and to aid in snow removal operations. In some areas, liquid anti-icing material is applied directly to the pavement to prevent frost and black ice.

Road salt, assisted by the sun, traffic, and warmer daytime temperatures, is also used as a melting agent to eliminate ice or packed snow. You may notice that salt is often applied in a narrow strip along the centre or high point of the highway. This provides a salt-water mixture, which flows across the roadway, ensuring the most efficient and effective use of the material.

The Ministry of Transportation recognizes the importance of effective salt management and employs the most up-to-date practices available. The ministry continues to investigate ways to control and reduce salt usage, while ensuring highway safety.



Providing Traction

Sand is used to provide traction on slippery surfaces. Unlike salt, it does not melt snow and ice.

Sand is used most often when temperatures are too low for salt to be effective. Sand is also used at higher temperatures if traction is required immediately, particularly on hills, curves, bridges, intersections, and snow-packed roads. Extra caution should be exercised when driving in these road conditions.



DID YOU KNOW . . .

The effectiveness of road salt is reduced greatly when temperatures fall lower than -12°C ? This is why bare pavement is hard to achieve below -12°C .



Traffic volumes and road type determine how quickly highways are serviced.

Snow & Ice Control Standards

Ontario's snow and ice control standards are consistent with the best practices used across North America. Traffic volumes and road type determine how quickly highways are serviced.

A severe or long storm may delay restoration to normal conditions, even with the best efforts of road crews.

Plowing begins promptly after the onset of a storm, with priority given to main highway lanes. It may take up to eight hours for plows or sanders to reach all ramps and low-volume roads.

Snow and ice control standards indicate a specified time for roadways to be restored to normal conditions after a storm has ended. The standard varies depending on traffic volume and road type. For example, the standard is eight hours for highways. Some roads with the lowest volumes are maintained in snow-packed conditions throughout the winter.

Technological Improvements

The Ministry of Transportation is continually working on improvements in snow and ice control operations and on safe ways to reduce salt usage. Some technologies currently in use are:

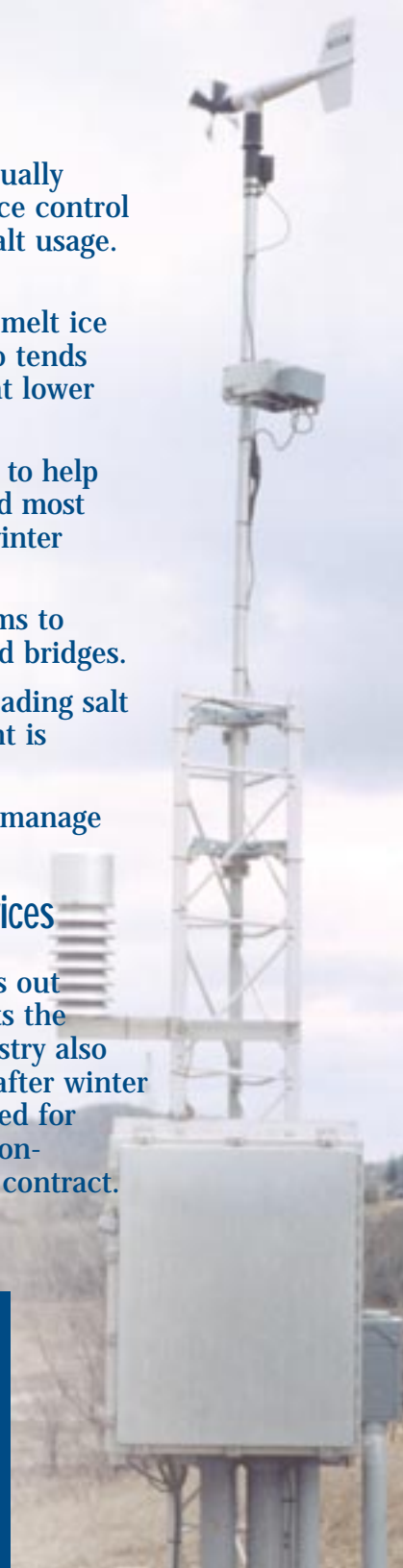
- De-icing liquids added to road salt to melt ice and snow faster. “Pre-wetted” salt also tends to stay on the road better and works at lower temperatures than dry salt alone.
- Road and weather information sensors to help staff and contractors make the best and most timely decisions on how to deal with winter conditions.
- Stationary automated anti-icing systems to prevent slippery conditions on selected bridges.
- Electronic control equipment for spreading salt and sand to ensure the correct amount is distributed.
- Real-time vehicle location systems to manage winter snow and ice control.

Contracting of Snow & Ice Control Services

The Ministry of Transportation contracts out its snow and ice control services, but sets the standards used by contractors. The ministry also monitors operations before, during and after winter storms. Contractors are closely scrutinized for compliance to standards. Penalties for non-compliance are severe, including loss of contract.

DID YOU KNOW . . .

The police have the authority to close highways? Sometimes the safest and best action is to close a highway until weather conditions improve enough to allow snow control operations to be carried out.





Check conditions and exercise caution.

Changing Road Conditions

Throughout the winter, maintenance crews monitor weather and road conditions day and night, seven days a week. The crews report updated highway conditions a minimum of four times daily, as highway closures occur and conditions change. Despite the best efforts of snow and ice control crews, extreme weather may prevent the roads from being cleared quickly.

Road Closures

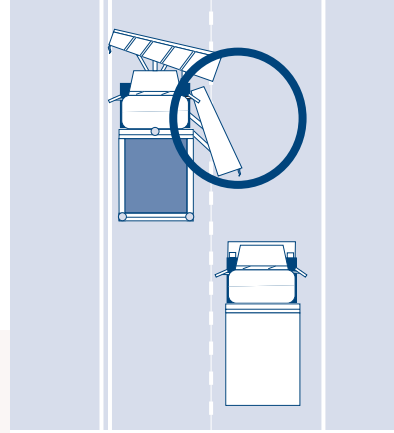
Extreme weather may result in the closing of roads. **Respect road closures and do not attempt to drive on these roads until they are re-opened.** Always obey emergency road closing signs/barriers and follow the directions of any police officer. It's for your safety. Remember, it is against the law to drive on a closed highway.

Emergency Vehicles

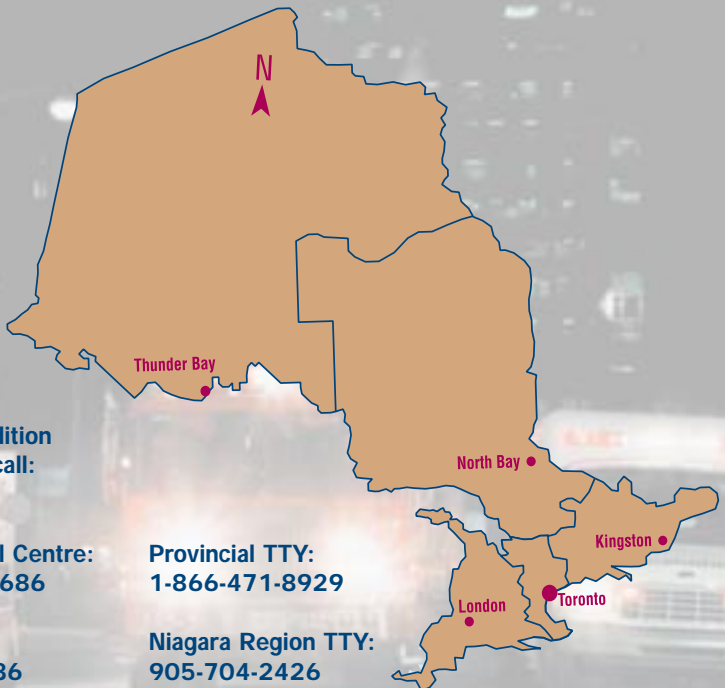
Every day, police, fire, ambulance, and other emergency vehicles respond to urgent calls. Time lost getting to their destination could mean the difference between life and death. Seconds can save a life. Take flashing red lights and sirens seriously. Clear the way. Pull to the right and stop. It's the law.

Road-Ready and Weather-Wise

- Listen to the radio for road and weather updates and check conditions before leaving.
- Plan extra time to get to your destination and consider delaying your trip in bad weather.
- Always exercise caution and drive according to conditions.
- Watch for the flashing blue lights of snow and ice control vehicles. When approaching them from behind, slow down, stay back, and be patient. **DO NOT PASS around or between them.**
- Use the winter driving safety tips on the flip side of this booklet.



It is
dangerous
to pass a
plow!



For road condition
information, call:

MTO INFO

Provincial Call Centre:
1-800-268-4686

In GTA:
416-235-4686

Provincial TTY:
1-866-471-8929

Niagara Region TTY:
905-704-2426

OR on the Internet:

<http://www.mto.gov.on.ca/english/traveller/conditions/index.html>