

Conquer the cold: Get a grip in all winter driving conditions

Winter tires offer a dramatic improvement in driver control and traction in all cold-weather road conditions when temperatures fall below 7°C.

Toronto, November 5, 2013 – Old man winter is about to lay his ice-cold grip on Canadian roadways and savvy motorists are getting ready by changing over to winter tires.

Tire makers are encouraging motorists to get the facts about winter tires and to carefully consider the safety and performance benefits that today's high-tech winter tires offer in **all** cold-weather road conditions.

A trailblazing report from the Traffic Injury Research Foundation (TIRF) cites extensive research that shows that winter tires deliver superior traction, cornering and braking whether the cold-weather road surface is dry, snow covered, icy or slushy.

The TIRF report can be viewed in its entirety, along with a wealth of other information about the performance benefits of winter tires, by visiting www.rubberassociation.ca and clicking on "Resources" under the "Winter Tires" drop-down menu.

Better traction, shorter stopping distances

One of the most important advantages of these new winter tires is reduced stopping distance when braking. TIRF cites research that shows that at temperatures just below freezing on dry pavement, stopping distances for vehicles with all-season tires can be as much as 30 per cent longer than for vehicles with winter tires. The report also cites research that concludes that winter tires offer better traction on a snow or ice-covered road surface at well below -30°C than an all-season tire has at 4°C.

"The idea that winter tires are only needed for snow covered or icy roadways is outmoded and belies the superior cold-weather performance made possible by advances in winter tire technology," says Glenn Maidment, president of The Rubber Association of Canada, which represents tire makers. "Today's sophisticated winter tires feature specialized rubber compounds that retain elasticity at temperatures well below -30°C. The truth is that winter tires dramatically outperform all-season tires in all cold-weather conditions and decrease collisions and personal injury accidents. The fact that only 52 per cent of Canadian drivers use winter tires should give us all pause for thought about road safety during the cold-weather driving months."

Winter tires save lives, reduce collisions

Research shows conclusively that winter tires save lives and reduce road-accident injuries. A 2011 study by the ministère des Transports du Québec where winter tire use is the law, found that, after the first two seasons of enforcement (winter 2008-2009 and 2009-2010), the total number of road accident victims during winter decreased by five per cent. The study found that the widespread use of winter tires resulted annually in 574 people not suffering an accident. The study also revealed a three per cent reduction in deaths and serious injuries due to road accidents.

Some drivers unwisely opt not to use winter tires because their vehicle is equipped with Anti-lock Braking Systems, All-Wheel Drive or Four-Wheel Drive. These systems however require sufficient traction to be effective and winter tires provide that needed traction.

Another common inaccuracy is thinking that two winter tires, rather than a set of four, are sufficiently safe. This condition can create a traction imbalance between the front and rear wheel positions and make a vehicle hard to control, particularly when cornering.

By far the most common reason motorists do not use winter tires is the cost. The TIRF report shows that using winter tires in the cold-weather months and summer tires in the warm months can reduce fuel consumption by up to five per cent. The cost factor is also tempered by prolonging the life of a vehicle's summer tires, which saves money over time. A number of insurance companies also now offer premium reductions for using winter tires.

Regardless of the type of tires used, motorists are also well advised to drive according to the conditions of the road during the cold-weather months.

Proper tire inflation

An important key to safe motoring in the cold-weather months is proper tire inflation, which is harder to maintain in winter because of greater temperature fluctuations. Every five degree decrease in temperature results in a loss of about one psi in air pressure. A temperature drop of 15°C, for example, which is common in winter, typically results in 10 per cent loss of inflation.

Under-inflated tires have a smaller footprint, which weakens their grip. The result is diminished braking and handling characteristics, along with higher fuel consumption due to increased rolling resistance.

During the cold-weather months, tire makers recommend that drivers measure their tire pressures at least once a month using a reliable tire gauge. If the tire is found to be under or over-inflated, the pressure should be adjusted to the vehicle manufacturer's recommended level. The right pressure for a vehicle's tires can be found in the owner's manual or on the vehicle information placard normally located on one an inside door jam or inside the fuel door.

Winter tire owners should also be aware that excessive tread wear can diminish traction. Tread depth should always be inspected at the start of the cold-weather driving season. Motorists who are uncertain if their tires are overly worn should consult with their local tire professional.

Learn more about the safety and performance benefits of winter tires. Visit www.rubberassociation.ca.