

DID YOU KNOW???

LAWS OF PHYSICS MAGNIFIED IN WINTER DRIVING

Sixty miles per hour on glare ice – no problem! No problem, as long as you don't try to speed up, slow down, or turn even slightly. But driving requires constantly changing speed and direction no matter what season it is. This is where Newton's first law of motion, which states in part: "***An object in motion continues in motion with the same speed and in the same direction unless acted upon by an unbalanced force***", comes into play. This is why you can go at 60 mph on pure ice - as long as you don't change your speed or direction.

When roads are bare and dry, the coefficient of friction is relatively high compared with slippery roads, and the friction of the wheels upon the road allow for the intended changes in speed and direction. But, when roads are covered with snow and/or ice during winter, the coefficient of friction is substantially reduced, and the end result is the inability for the driver to retain the control of the vehicle that he/she needs.

Every year we read about or see safe driving tips in the media and yet we still have the same problems. And, it's not just the new, inexperienced drivers, but drivers of all ages, even experienced ones. Safe winter driving comes with experience – you cannot read about how fast is too fast for each and every driving condition. These skills are learned through experience. Most every driver I know, including myself, has at some time been going too fast for conditions and ended up in a skid, or worse yet, a crash.

The safety tips normally given are the ones we have heard hundreds of times - drive more slowly, clean your windshield, rear window, lights, mirrors, allow a greater distance from the vehicle in front of you, use your lights in daytime so you can be seen better – you know the routine. We all know what we SHOULD do, but we don't do these things for any number of reasons. But, each year there is always hope, and here's hoping that the usual winter driving tips plus the following less obvious tips are helpful.

1) The immediate areas where vehicles stop and start, such as just before a stop sign or a traffic signal, are usually more slippery than the rest of the road. This is because of the action of vehicles stopping or starting, especially when tires skid when stopping or spin when starting up again. Therefore, always expect these areas to be more slippery.

2) On slippery roads, NEVER use your cruise control. Cruise is trying to keep your speed at the pre-set value which will make it more difficult to control your vehicle.

3) The action of tires on snowy roads often causes the usual tire tracks to become more slippery than other parts of the road. The immediate shoulder and the middle of the driving lane may have more traction than the normal path. Under these conditions, consider driving slightly to the right of the center of the driving lane for better traction.

4) Lastly, winter conditions require more attention to driving than usual. Entering a curve too fast can be fatal - you need to know how sharp it is, and how slow you must go to safely negotiate it. Slippery conditions make it important to observe the curve warning sign (black lettering on a yellow background) which normally has an "advisory" speed limit for DRY conditions, meaning your vehicle should be well below this speed.

Just remember winter driving requires an increased awareness of driving conditions and the necessity to adjust accordingly. Drive safely – winter or anytime.