TOOLBOX TALKS

Winter Driving Hazards

It is an understatement that the British Winter is unpredictable. Weather conditions can change very quickly from good to bad and often the best advice when there are severe weather conditions is to simply follow the National Meteorological Weather Warnings and stay off the roads.

During winter months we expect adverse climatic conditions and we can change the way we drive to reduce the risk of an accident. However, many motor vehicle accidents are blamed on poor weather conditions and research has shown that we do not in fact change the way we drive as much as we should during poor weather. The main cause of accidents in winter therefore is not the poor weather but poor driving, driving attitude and lack of respect of the prevailing weather.

Snow and Ice

- A third of all vehicle accidents occur when the roads are wet or frozen.
- Frost, ice or snow on the roads will reduce the grip of tyres. This means you are much more likely to skid and it can take **10 times** further to stop than on a dry road.

If the road is wet, stopping distance doubles immediately. The faster you travel, the longer it takes to stop. The safest way to prevent skidding and reduce stopping distances is to slow down. Drive with respect of the present climatic conditions and brake evenly and gently within plenty of time.

How can you avoid skidding?

Skidding is caused by harsh control of a vehicle; harsh braking, acceleration or steering. However, research has proved that excessive speed is the root cause of the majority of skidding vehicles. The best way of avoiding skidding therefore is simply to **slow down.**

If you do skid the basic advice is to take your feet off all the pedals until the wheels grip again. If you do apply a harsh braking technique you risk locking the wheels and losing control of the vehicle.

Gentle braking will reduce the possibility of the wheels locking. If they do start to lock, using a technique called **cadence** (pumping the brake pedal on and off) helps to keep wheel lock to a minimum. This is the principal of ABS (Antilock Braking System). If ABS is fitted to your vehicle the system will automatically produce the cadence breaking technique when harsh breaking occurs.

Keep Yourself Informed

Keeping yourself informed of the up to date road and weather conditions is easily obtainable through radio, TV, local meteorological offices and the internet.

By ensuring you are aware of adverse weather conditions you are taking the first steps in the assessment of driving hazards for your journey and you are more likely to adjust your driving technique to reduce the risk of an accident. The old phrase of forewarned is forearmed is never truer than when applied to being prepared for driving.

Winter Sun

The low sun in winter is a big problem for many drivers. Unlike in summer when the sun is higher, winter sun can shine directly into a driver's eyes. The problem is even worse when the road surface is wet or frozen; the sun shines directly into the driver's eyes and reflects up from the road surface. The only way to reduce the risk of an accident is to significantly reduce speed and make use of sunglasses.

Drive to the Conditions – Not the Limits

At **30 MPH**, in perfect conditions it will take a vehicle at least 23 meters (75 feet) to stop in an emergency. When the road surface is wet a stopping distance of 46 meters will be required and under icy conditions this rises to 230 meters. Check the chart below to make sure you know your stopping distances and remember that in the wet these virtually double; so always increase the distance between you and the car in front i.e. go from a 2 second break to 4 seconds.

In residential areas, no matter what the weather conditions, your speed is crucial. When there are plenty of road hazards: pedestrians, bicycles, parked cars, junctions – do you really need to be driving exactly on the limit. Don't forget speed limits tell you the maximum speed at which you can travel on the road; they are not a speed target to reach! This particularly applies to driving in adverse weather conditions.

Twenty is Plenty

At **20 mph** a vehicle stopping distance will be at least 12 meters (dry), 24 meters (wet) or 120 meters when the roads are icy, these stopping distances are much less than when a vehicle is travelling at 30 mph. More importantly, if a pedestrian is hit by a vehicle at 20 mph they have a 90% chance of surviving. At 35 mph their chances of survival are only 50/50.

Precautions to make winter driving safer

- ✓ Ensure the vehicle is serviced at the correct frequencies. Check tyres have the correct tread depth, are in good condition and of the correct inflation pressures.
- ✓ Make sure windscreen wipers and washers are working correctly and that the washer fluid contains an antifreeze solution.
- ✓ Make sure windows are thoroughly defrosted before driving off in the morning.
- ✓ Use lights on your vehicle at all times of the day. As daylight hours in the day become shorter and poor weather conditions more prevalent, make sure you can be seen by other road users.
- ✓ Be mindful to only use fog lights when appropriate – During good visibility or daylight conditions these can be distracting to other drivers who may be dazzled by the intensity of these lighting units.
- ✓ Ensure that you have adequate spare warm clothing, shovel, torch and drinks available in your vehicle in case of emergency.

Winter Driving Hazards – Questions

Q1. Compared to driving in dry conditions, in wet weather your stopping distance will:
Double?
Treble?
Be up to 10 times further?

A1 ……

Q2. What 3 things cause a vehicle to skid?

A1 ……

A2 ……

A3 ……

Q3. How can you avoid your vehicle skidding?

A ……

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Q4 Pedestrians have a 50% chance of surviving a collision if hit by a vehicle travelling at 20 mph True or False?

A ……

Q5. Detail some of the precautions you can take to make driving safer in winter conditions?

A1 ……

A2 ……

A3 ……

A4 ……

Employee Name: ……. **Employee Number: ……**

Manager's Name: …… **Date: ……**