



RSA

# **SEVERE WEATHER ADVICE FOR ROAD USERS**

## Severe weather Advice

Communications Department  
April 2009

Údarás Um Shábháilteacht Ar Bhóithre  
Road Safety Authority

# Severe Weather Advice for Road Users

Bad weather such as torrential rain, severe winds, fog, ice and snow can strike suddenly catching road users off guard. In extreme weather conditions it is best to avoid making a journey by road unless absolutely necessary. If driving in such conditions is unavoidable be prepared. The golden rule is drive with care and caution – expect the unexpected.

**Here are some useful tips**

<b>1. Advice for road users in icy or snowy conditions;</b>	
Drivers	<p>Greater levels of observation, anticipation and concentration are required when driving in icy conditions</p> <ul style="list-style-type: none"><li>• Check local and National weather forecasts before setting out on a journey</li><li>• Clear your windows and mirrors before you set out, carry a screen scraper and de-icer.</li><li>• Do not use hot water on the windscreen as it can crack the glass.</li><li>• Remove ALL snow from your vehicle before commencing your journey.</li><li>• Snow left on the roof will become loose and can drop onto the windscreen during braking, thereby causing sudden and severe restriction to your vision.</li><li>• It can also fall off during your drive and cause injury to pedestrians or a reflex action by another driver.</li><li>• Remember it takes longer to stop in icy conditions than on a dry road. Drive slowly and allow extra room between your vehicle and the vehicle in front.</li></ul>

## Severe Weather Advice for Road Users

	<ul style="list-style-type: none"><li>• Use the highest gear possible to avoid wheel spin.</li><li>• Select a low gear when travelling downhill especially if through bends.</li><li>• If driving an automatic, familiarise yourself with the Manual Override function. This will allow you manually select an appropriate gear so as to avoid braking where that might lead to skidding.</li><li>• Manoeuvre gently, avoid harsh braking and acceleration.</li><li>• To brake on ice or snow without locking your wheels, get into a low gear earlier than normal, using the clutch smoothly and allow your speed to fall and use the brake pedal gently.</li><li>• Remember that heavy snowfall and rain reduce visibility. Use dipped headlights and decrease speed smoothly.</li><li>• Watch out for black ice, especially in sheltered/shaded areas on roads, under trees and adjacent to high walls.</li><li>• One of the features of travelling on Black Ice is a sudden reduction in tyre noise.</li><li>• Check tyres, including spare wheel, to ensure minimum tread depth of 1.6mm and correct tyre pressure.</li><li>• Check that your spare wheel is in good condition and is fully inflated. Some cars may have an inflation repair kit instead of a spare wheel. Make sure that you know how to use it.</li><li>• Drivers are encouraged to carry an ice scraper and de-icer as part of an “emergency kit”.</li></ul>
Pedestrians, cyclists and motorcyclists are advised to;	<ul style="list-style-type: none"><li>• If a journey cannot be avoided walk on a footpath, not in the street. If there are no footpaths walk on the right hand side of the road (towards oncoming traffic).</li><li>• <b>Be extremely careful as frost, ice and snow will make walking on footpaths very dangerous</b></li><li>• Remember that footpaths may not be treated so walk with extreme care, make sure you are wearing <b>appropriate footwear</b> and in extreme conditions consider an appropriate walking stick or walking pole.</li><li>• Visibility is reduced in snowy condition so wear high visibility clothing or carry a torch and ensure the lights on your bike are working correctly.</li><li>• Cyclists should adhere to the requirement of a solid white light to the front and a red solid light to the rear.</li><li>• Wear an approved helmet and consider clear eye protection.</li><li>• Motorcyclists/Cyclists should not compromise their safety by their ‘need’ to travel in icy/snow conditions. Cancel your journey or take alternative transport.</li></ul>

## Severe Weather Advice for Road Users

	<ul style="list-style-type: none"> <li>• Motorcyclists should avoid wearing a dark visor in any bad light conditions.</li> <li>• Remember other road users may not 'expect' you and could therefore compromise your safety</li> </ul>
<p>In the event of a minor skid;</p>	<p>Check if your vehicle has any of the following and know how they assist your driving;</p> <p>ABS – Anti Lock Braking System          EBD – Electronic Brake force Distribution          TCS – Traction Control System          EBA – Electronic Brake Assist          ESP - Electronic Stability Programme</p> <p>While all of these systems are a great safety aid to our driving, they are not a substitute for good driver judgement. Drivers should always remember that they cannot defy the cause of physics.</p> <p>If your vehicle begins to skid you should:</p> <ul style="list-style-type: none"> <li>• Identify the cause – It is either, Too much Braking, Too much Steering, Too much Acceleration or a combination of one or all of these.</li> <li>• Remove the cause – GENTLY and SMOOTHLY</li> <li>• If your car has ABS it will NOT skid under braking. If ABS is activated, KEEP your foot on the brake and STEER around that what caused you to brake.</li> <li>• DO NOT TARGET FIX. ALWAYS LOOK FOR AN ESCAPE ROUTE.</li> <li>• If you car does not have ABS and starts to skid on the brakes, pump the brake pedal very fast (Cadence Braking) and steer around that what caused you to brake.</li> <li>• If your vehicle skids and slews sideways -Turn the steering wheel in the same direction as the skid and ease off the accelerator at the same time.</li> <li>• Avoid over correction with too much steering.</li> <li>• Be ready for a secondary skid.</li> </ul>

Other Advice

For updates on weather forecasts Visit Met Eireann's website [www.meteireann.ie](http://www.meteireann.ie) or the National Roads Authority's Road Weather Information website [www.nra.ie/RoadWeatherInformation](http://www.nra.ie/RoadWeatherInformation) .

The NRA has a network of 52 weather monitoring stations and road sensors located on National Roads. These stations are part of an Ice Detection and Prediction System for the forecasting of ice formation on national roads during the winter months. The web-page provides the actual readings from the road sensors in real time. The information provided includes Road Surface Temperature, Air Temperature, Wind Speed, Wind Direction and the Road State i.e. whether there is ice, frost, snow, wet and whether the road has been treated.

All drivers and road users should apprise themselves of these vital visual aids, their location and purpose. Warning signs are listed in the Rules of the Road ([www.rulesoftheroad.ie](http://www.rulesoftheroad.ie)).

<b>2. Advice for road users in severe wet and windy conditions</b>	
Drivers	<ul style="list-style-type: none"><li>• If you have to go out – Prepare yourself and your car before hand.</li><li>• In the event of journeys of a necessary nature inform family/friends of your estimated time of arrival (ETA) and carry a mobile phone.</li><li>• Ensure your mobile phone is charged. Do you have an in-car charger?</li><li>• Have protective clothing, including high visibility jacket and torch in your car.</li><li>• USE COMMON SENSE in bad weather and expect the unexpected.</li><li>• LISTEN AND HEED National and local radio/TV announcements regarding road and weather conditions for your journey.</li><li>• Ensure your car is roadworthy and has sufficient fuel for your journey. Carry out the following safety checks P.O.W.D.E.R . Petrol. Oil, Water, Damage, Electrics and Rubber.</li><li>• Clean all lights and ensure windscreen washer bottle is full. Add washer fluid or crystals to bottle NOT washing up liquid.</li><li>• Use screen wash as available in garages and motor factors to avoid the 'sparkle' of opposing lights on the windscreen, which can cause eye fatigue.</li><li>• Drivers should also have a quality pair of driving sunglasses in</li></ul>

## Severe Weather Advice for Road Users

	<p>their vehicle all year round to combat eye strain, again causing eye fatigue.</p> <ul style="list-style-type: none"><li>• Use dipped headlights at all times of poor visibility.</li><li>• Do not use fog lights, front or rear, unless visibility is reduced to less than 100 metres, roughly the length of a football pitch.</li><li>• You should be familiar with the heating and ventilation controls of your vehicle so as to ensure all glass is kept clear.</li><li>• Allow extra distance between you and the vehicle in front especially when driving behind heavy goods vehicles.</li> <li>• It takes longer to stop a vehicle on wet roads so slow down and allow extra distance between you and the vehicle in front. The 2 second rule becomes the 4 second rule in bad weather and poor visibility according to the conditions.</li></ul>
Drivers	<ul style="list-style-type: none"><li>• Take special care when driving behind goods vehicles as they generate a considerable amount of spray which reduces your visibility, hold back to where you can see their mirrors.</li><li>• Always try to see what is dictating the pace of the vehicle in front of you. (i.e. don't tailgate).</li><li>• Watch out for falling/fallen debris on the road and vehicles veering across the road and the reaction of other road users.</li><li>• Notify the Gardaí about fallen debris on the roadway. NEVER stop on a motorway to remove debris.</li><li>• Control of a vehicle may be affected by strong cross winds. High sided vehicles and motorcyclists are particularly vulnerable to strong winds.</li><li>• Expect gusts at open areas, where gaps in high buildings and hedgerows create a wind channel.</li><li>• Check tyres, including the spare to ensure minimum tread depth of 1.6mm and guarantee correct tyre pressures. Think 'Wear 'n Air'.</li><li>• Check that your spare wheel is in good condition and is fully inflated. Some cars may have an inflation repair kit instead of a spare wheel. Make sure that you know how to use it.</li><li>• Flooding and slippery road surfaces make driving particularly hazardous so always drive with care and caution. Expect the unexpected.</li><li>• Be mindful of surface water. You don't know how deep it is and it may contain hidden objects that could cause you to stall or damage your tyres.</li><li>• Be mindful of Aquaplaning on roads where 100/120kmh</li></ul>

## Severe Weather Advice for Road Users

	<p>speeds apply.</p> <ul style="list-style-type: none"><li>• Aquaplaning occurs where the tyre tread fill with water and is unable to disperse it.</li><li>• After going through water, drive slowly with your foot on the brake pedal for a short distance - this helps to dry the brakes.</li><li>• Watch out for vulnerable road users such as pedestrians, cyclists and motorcyclists and allow extra space.</li></ul>
--	--

<p>Pedestrians, cyclists and motorcyclists are advised to:</p>	<ul style="list-style-type: none"><li>• Be seen. Wear bright clothing with reflective armbands or a reflective belt.</li><li>• Walk on a footpath, not in the street. Walk on the right hand side of the road, facing traffic if there are no footpaths.</li><li>• Take extra care when near traffic or crossing the road in extremely windy conditions as sudden gusts can blow you into the path of an oncoming vehicle.</li><li>• Cyclists should adhere to the requirement of a solid white light to the front and a red solid light to the rear.</li><li>• Wear an approved helmet and consider clear eye protection.</li><li>• Motorcyclists should avoid wearing a dark visor in any bad light conditions.</li><li>• Wear suitable clothing and footwear to withstand the cold/rain. This will allow for good concentration as well as protecting the rider/pillion against fatigue and hypothermia.</li><li>• Remember other road users may not 'expect' you and could therefore compromise your safety.</li><li>• Motorcyclists use anti-misting sprays on both surfaces of visor. If misting occurs due to breath raise your visor slightly to increase the air flow.</li><li>• Take heed of changing road surfaces in poor weather conditions-especially motorcyclists/cyclists.</li></ul>
--	---

<b>3. Advice for road users in the event of Heavy Rainfall/Flooding</b>	
Drivers	<ul style="list-style-type: none"> <li>• It takes longer to stop a vehicle on wet roads so slow down and allow extra distance between you and the vehicle in front 4 seconds at a minimum.</li> <li>• Take special care when driving behind goods vehicles as they generate a considerable amount of spray which reduces your visibility, hold back to where you can see their mirrors.</li> <li>• Watch out for vulnerable road users such as pedestrians, cyclists and motorcyclists.</li> <li>• Use dipped headlights at all times of poor visibility not parking/side lights and fog lights.</li> <li>• Driving in such conditions will result in reduced visibility. Use dipped headlights, not parking/side lights and fog lights.</li> <li>• Don't use fog lights, front or rear, unless visibility is reduced to less than 100 metres, roughly the length of a football pitch.</li> <li>• Be mindful of surface water. You don't know how deep it is or that it may contain hidden objects that could cause you to stall or damage your tyres.</li> <li>• After going through water, drive slowly with your foot on the brake pedal for a short distance - this helps to dry the brakes.</li> <li>• Be mindful of Aquaplaning on roads where 100/120kmh speeds apply.</li> <li>• Aquaplaning occurs where the tyre thread fill with water and is unable to disperse it.</li> <li>• When it happens you feel the steering wheel going light. Keep the wheels straight, ease off the accelerator and don't brake.</li> <li>• The vehicle will reduce speed through deceleration, the water will be dispersed and grip will return.</li> <li>• <b>IT IS VITAL TO STAY CALM IF YOU THINK YOUR VEHICLE IS AQUAPLANING.</b></li> <li>• Flooding and slippery road surfaces make driving particularly hazardous so always drive with care and caution. Expect the unexpected.</li> <li>• Do not believe that all 4x4vehicles can go anywhere and so anything. E.g. fording rivers and driving through flood waters.</li> </ul>



<p>Pedestrians, cyclists and motorcyclists are advised to:</p>	<ul style="list-style-type: none"> <li>• Be seen. Wear bright clothing with reflective armbands or a reflective belt.</li> <li>• Walk on a footpath, not in the street. Walk on the right hand side of the road, facing traffic if there are no footpaths.</li> </ul>
--	---

In such flooded conditions drivers can easily become trapped by rising waters when rivers are flooded. It only takes six inches of water before a driver can lose control of a small vehicle.

**During flooding the following precautions can be taken:**

<p><b>4. Advice for all road users in the event of Flooded Roads</b></p>	
<p>Drivers, pedestrians, cyclists and motorcyclists are advised to:</p>	<ul style="list-style-type: none"> <li>• Leave early to avoid being marooned on flooded roads and always ensure you have enough fuel for your car.</li> <li>• Monitor radio weather broadcasts while travelling.</li> <li>• Try to avoid crossing a road covered in water. Wait until the water level drops or use an alternative route.</li> <li>• If the road ahead is flooded choose another route, do not attempt to drive over it. Flooded roads that appear shallow could be deeper than you think. It is easy to underestimate the power of fast moving water.</li> <li>• You don't know what dangers are submerged in the water, which could cause you to stall or damage your vehicle.</li> <li>• Watch out for washed out roads, earth slides, broken water or sewer mains, loose or downed electrical wires, and fallen or falling objects.</li> <li>• Be aware where rivers or streams may suddenly rise and flood, for example highway dips, bridge, and low areas.</li> <li>• If a road is flooded as a result of a river bursting its banks beware the current could be strong enough to sweep your vehicle away. Low floored vehicles (for example Camper Vans are particularly vulnerable to cross currents. If in doubt, take a different route.</li> <li>• When entering water, go in slowly and keep a steady even throttle.</li> </ul>
<p>Drivers, pedestrians, cyclists and motorcyclists</p>	<ul style="list-style-type: none"> <li>• Remember the air intakes of your vehicle are quite low and any water taken in will not only cause you to stall but will ruin your engine.</li> <li>• Do not create a bow wave which could cut the engine.</li> </ul>

## Severe Weather Advice for Road Users

<p>are advised to:</p>	<ul style="list-style-type: none"><li>• On narrow roads only one car at a time should go through the flooded area so as to avoid one flooding the other.</li><li>• Check your brakes without causing danger to following traffic. After going through deep water, drive slowly with your foot on the brake pedal for a short distance - this helps to dry the brakes.</li><li>• Sometimes roads can be closed due to their fragile state after wet weather or because they are blocked by flooding. Road users should always follow recommended routes and obey signs closing roads to traffic for your own safety.</li><li>• If you are inside a vehicle and water is rising rapidly around you, abandon the vehicle immediately.</li><li>• If you have to leave your vehicle, be wary of strong currents and debris.</li><li>• After flooding the area of the flooded road can be very slippery due to residue.</li></ul>
------------------------	---

<b>5. Advice for road users in the event of Fog</b>	
Drivers	<ul style="list-style-type: none"> <li>• When driving in fog do so with extreme caution, at low speed and with your fog lights turned on.</li> <li>• Be aware that fog can be patchy – so even when conditions appear clear do not drive quickly.</li> <li>• Use dipped headlights and fog lights if visibility is reduced so you can be seen. Dipped headlights direct light down onto the road and help other drivers to see you.</li> <li>• In heavy fog, turn off your radio and let down your driver’s window a fraction, so as you can hear the presence of other traffic.</li> <li>• Do not attempt to use high beam headlights as they will actually reduce your line of sight and dazzle other drivers.</li> <li>• As you enter fog, check your mirrors and slow down. Use your foot brake lightly so that your lights warn following drivers.</li> <li>• Do not drive on the tail-lights of the vehicle in front (Target Fixing). This can give a false sense of security and lead to tailgating – a major danger.</li> <li>• Beware of other drivers who are not using their headlights.</li> <li>• Ensure your windscreen is clear of mist and condensation, use your windscreen wipers if necessary.</li> </ul>
Pedestrians, cyclists and motorcyclists are advised to:	<ul style="list-style-type: none"> <li>• Walk on the footpath or if there is no footpath on the right hand side of the road (walking towards oncoming traffic).</li> <li>• Wear high visibility clothing or carry a torch and ensure the lights on your bike are working correctly.</li> <li>• In extremely foggy conditions, especially in rural areas, only undertake trips by road when absolutely necessary.</li> <li>• Don’t wear ear phones as you need to hear the presence of traffic.</li> </ul>

While it is important to use fog lights it is equally important to turn them off once visibility has improved. This is because they can dazzle other drivers.

There are added dangers when driving on motorways in foggy conditions. As motorways are designed to be driven on at higher speeds drivers mistakenly believe it's safe to continue to drive fast on a motorway in fog. This is not the case. The same rules of slow down and keep your distance, apply to motorways. As a rule of thumb, if you can clearly see the lights of the vehicle in front of you, you are probably too close to them.

Advice for road users in icy or snowy conditions

### **Remember your tyre grip is divided up into 3 demands – BSA**

- Braking
- Steering
- Acceleration

Acceleration, (i.e. motion), places a constant demand on tyre grip. Add in steering and more grip is required of the tyres. If brakes are then applied then the tyre grip can be compromised. The more demand you ask of one, the less you have available for the other two.

Be smooth, think ahead and plan all your actions.

### **Visual Aids for Drivers and Road Users:**

Use the Warning Signs, Cat's Eyes, Road Markings and Junction Marker Posts as visual aids.

- Warning signs are diamond shaped and warn drivers in advance as to the location of junctions, roundabouts, bends, corners and hillcrests.
- Check for temporary signs that indicate the presence of roadworks.
- Amber Cat's Eyes are located on the Left where they denote the hard shoulder or nearside verge. They are also found on the Right edge of the Offside Lane of a Dual Carriageway outlining the Central Reservation.
- White Cat's Eyes denote the lane divide on all roads.
- Green Cats Eyes on the left denote the location of a Junction bellmouth
- Green and White luminous posts can be either side of a junction bellmouth.
- Broken Yellow Lines on the drivers left denote they are on a National Route.
- Solid Yellow Line on the drivers left denote they are on a Motorway.
- Solid (Double and Single) and Broken White Lines denote lane division

**Severe Weather Advice for Road Users**

# Working To Save Lives

## Údarás Um Shábháilteacht Ar Bhóithre Road Safety Authority

Páirc Ghnó Ghleann na Muaidhe, Cnoc an tSabhaircín, Bóthar Bhaile Átha Cliath, Béal an Átha, Co. Mhaigh Eo  
Moy Valley Business Park, Primrose Hill, Dublin Road, Ballina, Co. Mayo  
local: 1890 50 60 80 fax: (096) 25 000 email: [info@rsa.ie](mailto:info@rsa.ie) website: [www.rsa.ie](http://www.rsa.ie)