

Carlisle and West Cumbria Advanced Motorists (CWCAM)

10 top tips for driving in Winter, assuming your journey is necessary.

1	<p>Be prepared: Make sure that you and your car are well prepared for adverse weather.</p> <ul style="list-style-type: none"> • A regularly serviced vehicle is less likely to break down; • Allow extra time for your journey; • Check the quality and pressure of your tyres. The legal minimum tread depth is 1.6mm over the centre three quarters width of the tyre, with no cuts or bulges in the side walls. However, we recommend changing tyres when the tread depth drops below 3mm. Check tyre pressures at least once per week and adjust if necessary, when the tyres are cold; • Ensure the windscreen is clean and free from winter grease and salt. Clean the windows with neat screen wash on a cloth; • Ensure the screen wash is topped up with at least a 50/50 mix of screen wash to water; • Carry a container of ready mixed screen wash in the boot; • Ensure your wipers are working and in good condition;
2	<p>Remove snow and ice from the vehicle before driving: Highway Code (HC) Rule 229:</p> <ul style="list-style-type: none"> • You MUST be able to see, so clear all snow and ice from your windows; • You MUST ensure that lights are clean and number plates are clearly visible and legible; • Make sure the mirrors are clear and the windows are demisted properly; • Remove all snow that might fall off into the path of other road users; • Check your planned route is clear of delays and that no further snowfalls or severe weather are predicted; <p>Note: The HC provides 'guidance' to road users; however, failure to comply with 'MUST' and 'MUST NOT' statements are offences in Law for which the road user can be prosecuted.</p>
3	<p>Slow down and drive to the conditions: Accelerate; brake and steer gently and progressively by avoiding any sharp or sudden inputs to the main controls.</p>
4	<p>Maintain a minimum of gap of at least 8 - 10 seconds to the vehicle ahead:</p> <p>Stopping distances can be ten times longer on icy roads, compared to dry roads.</p> <p>Note: Although HC Rule 126 recommends a 2 second gap on a dry road surface, it would be ideal, but totally unrealistic, for everyone to have a '10 times greater distance' of 20 seconds on icy roads: congestion on urban roads would be unacceptable. A workable and realistic minimum is therefore to have an 8 to 10 seconds minimum gap to the vehicle ahead. By stating safe gaps in seconds rather than metres, or car lengths, means that the gap increases proportionally with speed!</p>

5	<p>Use headlights when visibility is reduced: HC Rule 226: you MUST use headlights when visibility is seriously reduced, generally when you cannot see for more than 100 metres (328 feet). You may also use front or rear fog lights, but you MUST switch them off when visibility improves (HC Rule 236).</p> <p>Note: Although HC Rule 226 states: 'You may also use front or rear fog lights' this does not literally mean one or the other; use both front and rear fogs if the visibility is below 100 metres.</p>
6	<p>When driving through flood water:</p> <p>When driving on flooded roads, the best advice is to turn around and find another route! Do you really want to risk writing your car off for the sake of a few minutes added to your journey time? However, if you do decide to drive through flood water:</p> <ul style="list-style-type: none"> • Estimate the depth of the water before entering. Do this by judging how high it rises up walls; buildings; traffic light posts Etc; • A general rule of thumb would be to avoid entering water with a depth of more than six inches. Clearly it depends on your vehicle. E.G. a Range Rover or a Land Rover Discovery with variable suspension, can 'wade' in water up to 27.6 inches with the 'off-road' suspension selected; • Never attempt to drive through flowing water any deeper than 4 inches; • Do not enter flood water if there is any other vehicle already in the water. A vehicle ahead may stall and block the road; a vehicle coming towards you will create a bow wave, that will constructively interfere with your own bow wave, greatly increasing the risk to both vehicles; • Before entering the water, set the revs at about 2000 RPM. This should be enough to stop water entering the exhaust, where it can do serious damage to a catalytic converter; even if the car does not have a 'cat', water entering the exhaust could do damage as the pressure can be enough to prevent exhaust gas escaping; the back pressure of exhaust gas is then likely to stop the engine combustion process: in other words, the engine will stall. If the revs are set any higher than about 2000 RPM, there is a risk of sucking water up the air intake and into the engine. An egg-cup full of water is enough to write-off an engine! • In a manual car, select a low gear (I.E. 1st is best) and drive slowly by slipping the clutch. Enter the water at 1 or 2 miles per hour and then gradually accelerate to 3 or 4 miles per hour. The gentle bow wave generated ahead of your car will create a suction effect behind the wave, which reduces the height of water beneath the engine, decreasing the risk of sucking water into the air intake. In an automatic car, select 1st, if possible, to prevent the car changing up, and then drive slowly as explained above; • If your car stalls in the water DO NOT attempt to restart it. The bow wave will have moved away from the car allowing the water level to rise beneath the engine compartment. Attempting to restart the car, could suck water up into the engine through the air intake and this will seriously damage engine components. Furthermore, with no exhaust gas flowing, water will flood into the exhaust and possibly cause thermal shock to the catalytic converter: it may even flood into the engine compartment, depending on the water depth;

7	<p>Dealing with snow covered hilly roads:</p> <p>The same general advice applies here, as it does to driving through flooded areas: turn around and find another route! However, if you feel that you must drive:</p> <ul style="list-style-type: none"> • Do not attempt to drive up a snow-covered hill if there is a vehicle ahead, which is either ascending or descending: drive one at a time; • Select the highest gear possible when setting off. I.E. most diesels should be able to set off in 3rd gear; petrol engined cars have less torque than their diesel equivalents, but should be able to move off in 2nd gear. Many automatics allow manual gear selection, which also prevents the automatic from changing gear as it normally would, if 'drive auto (D)' were selected; • Once you start moving, try and avoid stopping; hence the advice to drive up or down the hill one at a time; • Avoid excessive acceleration; drive slowly and keep the car in the same gear used to move off from rest; • Keep to the section of road where other vehicles have already driven; • Avoid any excessive use of brakes; steering or accelerator: all inputs to these controls should be gentle and progressive;
8	<p>Carry a winter driving kit in the car, comprising:</p> <ul style="list-style-type: none"> • A flask of hot drink; • A 'space blanket' for each occupant; • High energy foods; • An entrenching tool for shovelling snow from beneath the wheels; • A fully charged mobile phone and mobile phone charger, which either has its own battery, or can be connected to the car's electrical system; • A torch; • Jump leads. Note: If needed; with the cars close enough for the leads to reach between them, put both cars in neutral and tuck in any loose clothing; Connect the end of the <u>RED positive lead to the positive terminal on the working battery</u>. Do the same for the other end of the RED lead connecting it to the positive terminal of the dead battery. Connect the end of the <u>BLACK negative lead to the negative terminal on the working battery</u>. Then attach the other end to an earthing point (I.E. an unpainted metal part on the engine block or chassis) well away from the flat battery and fuel system. Leave both engines off for 3 minutes to let current flow from the healthy to the flat battery and it will start to charge. Start the working car's engine and let it run for about a minute. Start the car with the flat battery. Let both cars run for about 10 minutes with higher than idling revs (2000 to 3000 RPM should be fine). Turn off both engines and then disconnect the jump leads in the reverse order in which they were fitted. The car that had the flat battery should now start normally, but if not, the battery may be damaged beyond repair and need replacing: call your Recovery provider! • A first aid kit; • Tow rope;

9	<p>Use your Air Conditioning: In the summer, Air Conditioning keeps your car cool; in the winter, it removes water vapour from the air within the car, making it less likely that the windows will steam-up and reduce visibility. Furthermore, if Air Conditioning is switched off during the winter, the seals dry out and bacteria thrives within the pipes; when the car is then switched on in the summer there may be a terrible smell coming through the Air Conditioning due to the bacteria culture. The system may also be losing pressure and become inoperable owing to the dried-out seals. It is recommended that the Air Conditioning is left on both summer and winter, to ensure it remains fully functional and effective.</p>
10	<p>Fit Winter Tyres: Winter tyres differ in three ways:</p> <ul style="list-style-type: none"> • There is more natural rubber in the tyre, which keeps it flexible and supple at temperatures below 7⁰C, when other tyres stiffen up and lose grip; • There are more 'sipes' (I.E. slots) cut into the tread pattern; • The tread is made up in blocks, which vibrate as the tyre rotates, causing snow to be shaken out of the tread; <p>Note: Winter tyres will shift more water than a non-winter tyres, so they are good in very wet conditions as well as being good in the snow.</p>