

## HANDLING DANGEROUS DRIVING CONDITIONS & EMERGENCIES

### REDUCED VISIBILITY

Driving is complicated and requires your full attention even when visibility is good. But when visibility is reduced due to darkness or weather, the driving task can become dangerous if not handled responsibly.

In reduced-visibility conditions you can maintain control and a safe path of travel by:

- Slowing down
- Looking further ahead
- Using IPDE
- Expecting the unexpected

Idaho law requires your vehicle's windows to be clean and free of decals and stickers that obstruct the driver's clear view of the road or intersecting roads (49-943). In addition to keeping your windows free of stickers, make sure your windshield wipers are in working order, the washer fluid container is full, and you wash the windows regularly. In colder weather use the vehicle's defroster to prevent the glass from steaming up. In bright sun conditions, wear sunglasses and use your vehicle's sun visors to block as much of the sun as possible.



Nighttime driving can be very different than driving during daylight hours.

At night, low levels of light make it very difficult to use the IPDE process or Zone Control. If it weren't for your headlights and the reflective material on some roadside objects and signs, it would nearly be pitch dark and driving at night would not be possible.

Because headlights are your primary method for seeing at night, keep them clean and properly adjusted. Use low beams when there are any oncoming vehicles and high beams when there are not.

If an oncoming vehicle's headlights are blinding you, glance to your right at the lane markings or edge of the road to keep remain safely in your lane.

The term "overdriving your headlights" means you are driving at a speed that makes your stopping distance longer than the distance lighted by your headlights. The solution is the same for most driving problems: slow down.

Fog makes it difficult to see and judge distances. Headlights on "bright" will reflect off the water particles in fog and bounce straight back into the driver's eyes. Keep your headlights on "low" in foggy conditions.

### REDUCED-TRACTION CONDITIONS

The first few minutes of a rain storm can be the most dangerous. In those first brief moments, oils and dirt float on the roadway surface and make it very slick.

At certain speeds, in rain or on wet roads, your vehicle's tires can lose contact with the road completely and you will "hydroplane"; a term that means skid out of control. Even with tires that have good tread on them a vehicle can

hydroplane at 35 mph in as little of 1/12<sup>th</sup> inch of standing water. Tires with poor tread can cause hydroplaning at less than 35 mph.



Snow can cover up roadway signs and markings, make it more difficult to steer and brake, and can seriously reduce visibility. Vehicles without four-wheel drive may not be suited for some very deep or slippery road conditions and driving should be avoided.

When snow first falls and it is soft and fluffy, traction is fairly good for most vehicles. However, as time goes by and the snow is flattened by cars and trucks driving on it, the snow becomes packed solid and can turn into ice. The scariest condition is known as "black ice". The ice is not black itself, but the layer of ice is so thin that the color of the road shows through and the road surface appears to be dry. Watch out for black ice on bridges and in the tire tracks of vehicles in front of you.

The technique for driving in snow is as simple as slowing down. Speeds too fast for the conditions are the main cause of crashes and slide-offs on snowy days. Another tip is to gently apply pressure to the accelerator and brake pedal. Tire chains may be put on over each tire that will help increase traction on especially snowy or icy days.

If a vehicle you are traveling in ever becomes stuck in deep snow, you can attempt to "rock it out". The technique requires some coordination and practice but is simple.

1. With the wheels straightened, gently accelerate forward.
2. With Let up on the accelerator and shift into reverse and gently move backwards.
3. Let up on the accelerator and shift back into first gear of DRIVE and gently accelerate again.
4. Repeat this process, gaining a little forward momentum each time you move forward until you are back on the road or unstuck.

### SKIDDING

In severe conditions your vehicle may lose partial or full contact with the road and you might go into a SKID. Skidding can occur if you are braking, accelerating, or steering.

If you suddenly notice your vehicle is not headed in your intended path of travel, correct the skid and regain control. To do so:

1. release the accelerator or brake
2. Shift to NEUTRAL (or depress the clutch)
3. Steer quickly in the direction your vehicle needs to go. (If the back-end slides right, steer right.) If you do the opposite, the vehicle will go into a more severe skid or spin.

### EMERGENCIES

While proper maintenance can prevent most emergencies, by their very nature emergencies are often unpredictable and unavoidable. If prepared, you can reduce the level of trouble in the emergencies you may experience.

Flat tires and blowouts are common emergencies that can be more of an inconvenience than an emergency if handled correctly.

If a front tire goes flat the vehicle will suddenly pull in the direction of the flat tire. If it is your left front tire you could be pulled into oncoming traffic and a deadly head-on collision. If this happens, grip the wheel firmly and let off the accelerator or brake. Steer to the side of the road and stop. When a rear tire loses air the car can fishtail and the situation should be handled like a skid.



Cell phones, car clubs like AAA, and roadside assistance programs have made flat tires less threatening than ever before. Not too long ago a flat tire that couldn't be fixed or changed meant a long walk to the nearest town. Today, many of us have safer options – but how to change a tire is still a skill that could save you time and money in the event of a flat tire or blowout.

Follow these steps to safely change a flat tire:

1. Park on a level surface as far from traffic as possible. Shift to PARK (or REVERSE in a manual transmission vehicle) and set the parking brake.
2. Block the wheel that is diagonally opposite the flat tire with two pieces of wood, rocks, or bricks. This helps prevent the vehicle from rolling once it is raised up by the jack.

3. Take out the spare tire, jack, and lug wrench.
4. Loosen the lug nuts of the flat tire but do not remove them.
5. Raise the side of the vehicle that has the flat tire with the jack.
6. Remove the lug nuts and then the flat tire. Put the lug nuts in a safe place, like your pocket.
7. Mount the wheel with the spare tire.
8. Replace and hand-tighten the lug nuts.
9. Lower the vehicle with the jack.
10. Tighten the lug nuts with the lug wrench in a star or cross-pattern. This will help seat and balance the wheel.
11. Replace or repair the flat tire as soon as possible.

### STUCK ACCELERATOR

If your engine does not return to its regular idling speed when you release the accelerator you might have a broken or stuck accelerator spring. If it is broken it needs replaced before it can be driven again. But to see if it is simply stuck, kick the side of the accelerator once to see if the engine returns to idle speed. If it does not, and you are driving, shift to NEUTRAL (or depress the clutch in a stick shift vehicle). The engine will race but power will be removed from the wheels and you can safely coast to the side of the road where you can turn the vehicle off. After stopping, clear any debris from around the accelerator and kick the side of it again and put your toe under the accelerator and lift. If the pedal will bounce back after being depressed, the problem may be fixed. Test it carefully away from traffic before joining traffic again, if possible.

### OVERHEATED ENGINE

While more common in older and poorly maintained vehicles, any engine can overheat under certain conditions. Driving in hot weather with stop-and-go traffic can cause overheating.

Driving uphill with the air conditioner on high can cause overheating. And driving without enough engine coolant in the system can cause overheating. If you notice your temperature gauge is reading a little WARM, take these steps:

1. Turn off the air conditioner
2. Turn ON the heater. This pulls heat off the engine (and blows it on you).
3. During stops, shift to NEUTRAL and gently press on the accelerator. This will speed up the fan that helps cool the engine.

If the temperature gauge reads HOT or steam is escaping from underneath the front of your hood, pull over and stop in a safe location. Turn off the engine, raise the hood, and let the engine cool. Do open the radiator cap or add water to the radiator until the engine has completely cooled.



### VEHICLE FIRE

Most vehicle fires begin in the engine compartment and can involve very combustible liquids like fuel, oil, and grease. If you do not have a fire extinguisher and your vehicle catches fire, pull over in a location far from buildings – inclu gas stations – and people. Immediately move at least 100 feet away and call the fire department or 911.

### STALLED ON RAILROAD TRACKS

A vehicle that stalls or gets stuck while crossing railroad tracks is a situation that must be resolved immediately. The first step is to check for train traffic. If you see or hear a train, even if

it appears to be a mile away, get out of the car and move in the direction the train is approaching (if the train does hit your car the debris will be thrown down the track away from you and not into you!).

If no train is coming, try restarting your car. If it will not restart, shift to NEUTRAL, get out and find help to push your car off the tracks.



### OFF-ROAD RECOVERY

In Idaho a car rolling (overturning) is the single most harmful event for fatal single-vehicle crashes. In 2010, 49% of all single vehicle fatalities were caused by a roll over and accounted for 29% of all fatalities.

Of the 61 people killed in single-vehicle rollovers in 2010, only 20 were wearing their seatbelt. Of the 41 people who were killed and not wearing a seatbelt, 88% of those were totally or partially ejected from their vehicle.

When a front tire leaves the roadway – for whatever reason- most drivers panic, step on the brake and swerve (overcorrect) to get back on the roadway quickly. These actions can cause the vehicle to catch the edge of the road, turn sideways, and roll.

To prevent this deadly situation, the obvious solution is to always pay attention and always wear your seatbelt. But, if you find that your front wheel or both right side wheels have dropped off the road onto the shoulder, take these steps to safely return to the road:

1. Hold the steering wheel firmly
2. Let up on the accelerator and brake gently
3. Straddle the roadway edge
4. If time allows, select a place to return to the road that appears smoothest and as close to the same level as the road
5. Check traffic
6. If time allows, signal
7. Gently steer left to return to the road

### WHAT TO DO AFTER A COLLISION

If you are involved in a collision with a pedestrian, someone else's property, or another vehicle, you are required to follow certain steps.

1. Stop immediately. Move your vehicle to the side of the road, if possible. Turn the car off. If you hit a parked vehicle, try to find the owner. If you cannot, write your name, address, and phone number on a piece of paper and leave it under the vehicle's windshield wipers.
2. Help the injured. If injuries appear serious, call 911. Never move someone who is injured unless there is more danger if they are not moved.
3. Prevent additional crashes. Use flares or a bystander to warn other drivers at least 100 feet behind the crash site.
4. Send for police if anyone is injured or damage is estimated at \$1,500 or more.
5. Exchange information with the other driver(s). This step is very important. Do not allow another driver to convince you it is not necessary – or you may end up paying for all the damage yourself whether you were at fault or not. Get the names, addresses, license plate numbers, and insurance company names and contact information for each driver involved.

Additionally, if anyone witnessed the crash, try to get their name(s) and contact information. Make a sketch of the scene or take a photo. Cell phones with cameras have helped with this tremendously. Cooperate with police when they arrive. Contact your insurance company promptly. If you fail to do this within the time frame specified in your policy, the company may not be obligated to pay for damages.



# Idaho Public Driver Education

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## REVIEW QUESTIONS HOMEWORK PACKET 10

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

DIRECTIONS: Answer the following questions based on what you learned from the homework packet.

1. Name several objects that are more difficult to see while driving at night compared to daylight driving.
2. The term “overdriving your headlights” means:
3. Why are the first few moments of a rain storm the most dangerous?
4. On a wet roadway – even with good tires - your vehicle can hydroplane at only \_\_\_\_\_ mph.
5. Why is black ice “black”?
6. Explain the technique for getting a vehicle “unstuck” in snow.
7. Which way should you steer if your vehicle’s back end is skidding to the right?
8. Why does turning on the HEATER help an overheating vehicle?
9. How big of a problem are single-vehicle rollovers in Idaho?
10. How do you know if you should you call the police after a collision?