

Tailgate Meeting Guide: Hydroplaning

Use this guide to develop and lead a discussion with employees about hydroplaning – what it is, the hazards it present and what each driver and the organization can do to reduce risks.

What is hydroplaning?

Hydroplaning refers to the loss of traction that occurs when vehicle tires encounter more water than they can disperse or scatter. The tire essentially “floats” on the resulting layer of water. Because the tire loses contact with the pavement, traction is eliminated or greatly reduced until the tire re-establishes effective contact.

What happens?

The loss of traction causes a loss of braking, steering and power control. A hydroplaning tire cannot respond to the driver’s braking or steering efforts until the layer of water is dissipated and the tire re-establishes sufficient contact with the pavement.

Often, hydroplaning causes only a momentary loss of control from which the driver quickly recovers. However, that loss of control can also cause a sudden sideways veer to the next lane or off the road, or initiate an uncontrollable skid leading to a crash.

When and where are hydroplaning risks greatest?

- During and after heavy rain.
- During and after a rain that follows warm, dry weather. Such weather allows oily residue to form on the pavement; even a light rain mixed with that residue creates very slippery conditions.
- When roads are slushy. Often called slush-planing, the same concepts apply. However, the combination of rain and melting snow is even more dangerous.
- On roads that have rutted or grooved surfaces
- On roads that have no slope or camber (or lean)

How do I avoid hydroplaning?

1. Slow down when roads are wet. Hydroplaning can occur at any speed, but risk increases with speed, particularly above 55 km/hr. Slow down 15 to 20 km/hr during heavy rain.
2. Keep tires properly inflated. Check the driver’s door sill for recommended tire pressures.
3. Rotate tires regularly and replace them before tread depth wears to 5/32” (or 4 mm). Tire grooves are designed to channel water away from beneath the tire. As tread depth decreases so does the tire’s ability to prevent hydroplaning.
4. If you regularly drive in wet conditions consider buying tires specially designed to reduce hydroplaning risks.
5. Some performance tires have limited tread depth and a very wide contact patch. They may provide great

traction in ideal conditions but during wet weather wide tires are particularly prone to hydroplaning.

6. Pay attention when you drive. Does your vehicle *feel* like it has positive contact and traction? Watch for plumes of spray from vehicles ahead. Look for unexpected “twitches” and brake lights.
7. Beware of big puddles. Steer around them, if it is safe to do so.
8. Read the road. Water accumulates in the ruts or grooves of well-travelled BC roads. In addition to having a greater risk of hydroplaning, the ruts can really “pull” your vehicle if you start to hydroplane. Adjust your lane position slightly to the left or right of those ruts to avoid water accumulations.
9. On some multi-lane roads, the design is such that water tends to accumulate on the right-hand lane. If it is safe to do so, avoid those accumulations by using the other lane.
10. Turn off cruise control.

What do I do if my vehicle hydroplanes?

1. Keep calm; sudden or exaggerated driving manoeuvres are never the right response to hydroplaning.
2. Take your foot off the accelerator. Avoid hard braking. No sharp or quick turns.
3. Wait to feel the tires reconnect with the road surface and regain traction.
4. Once you have regained control, evaluate why your vehicle hydroplaned. Usually, that means slowing down a little. You may want to safely pull off the road to have that conversation with yourself.

Tailgate Meeting Discussion Topics and Activities

1. Identify routes that are prone to hydroplaning (e.g. roads with bad rutting, known locations of water pooling). Can routes be adjusted to avoid these locations on rainy days?
2. Ask employees to share their hydroplaning experiences. What were the circumstances and conditions? What did they do? What were the results? What would they do differently?
3. Are there specific vehicles or driving circumstances (e.g. empty cube van on wet and windy day) that all drivers need to think about?
4. Make tire tread depth checks part of your vehicle inspection process. Is the company outfitting fleet vehicles with tires suited to the conditions? Are employees who use their own vehicle for work meeting the same standards?
5. Watch a video. [How to drive in heavy rain](#) [What to do if you hydroplane](#)
6. Include hydroplaning as part of your next driver training activity.

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