SAFETY MEMO

March 27th, 2023 – Potholes



Introduction

Potholes are holes in the pavement encountered by drivers on daily trips. It is often necessary to turn off or brake sharply to avoid them. While potholes are unfortunately here to stay, it's possible to avoid costly damage or accidents by keeping your eyes on the road.

Development of potholes

Constant traffic, heat, sunlight, and freeze/thaw cycles create cracks in paved roads. This allows water and snow to seep into the crevices below the road surface. As temperatures drop, the water freezes, causing the ground to expand and push the pavement upwards. Thus, when the ice melts, it creates a space between the pavement and the ground. When vehicles continue to roll on the cavity, the surface of the pavement cracks and creates a hollow space, thus leading to the development of a pothole¹.

Safety Considerations

About one third of the roughly 33,000 road deaths each year in the United States are caused by poor road conditions². If riding in a pothole is unavoidable, however, it may be relevant to follow these recommendations:

- Leave room between yourself and other vehicles or pedestrians, at least 1,5m. Varying distance may be imposed local legislation.
- Regularly make sure that your car's tires are properly inflated to their rated pressure.
- Keep your eyes on the road.
- Reduce your speed.
- Hold the steering wheel firmly.

In bad weather conditions, potholes are less visible especially if they are filled with water or snow. It is then difficult to say how deep the hole may be.

Potholes are especially dangerous for anyone who drives a 2-wheeled vehicle such as a bicycle, motorcycle, or scooter. The impact may cause a loss of control of the vehicle. On a rough road and especially in rainy conditions, it is essential to leave a safe distance with other road users to allow them to avoid potholes. Other safety considerations for 2-wheeled vehicles include³:

- Always keep your equipment functional and in good condition.
- Pay attention to the state of the road up ahead of your bicycle, motorcycles, scooters.
- Always wear a helmet when riding a bicycle scooter or motorcycle.
- Keep elbows and knees bent to absorb impacts.
- Make sure the tires are properly inflated to their rated pressure.
- Relax your shoulders and grip on the vehicle.
- If you cannot avoid driving over the pothole, slow down and release the brake before hitting the pothole.



Figure 1: Pothole in the Road courtesy of Getty Images' iStock

https://www.cyclingweekly.com/fitness/training/cyclists-guide-to-dealing-with-potholes-139074



¹ School of Traffic. What's wrong with all potholes? Nd. Excerpt from https://trafficschoolonline.com/blog/what-deal-all-these-potholes

² Pothole.Info. The facts about potholes. Nd. Excerpt from https://www.pothole.info/the-facts/

³ Cycling Week. Cyclist's guide to dealing with potholes. October 10, 2017. Excerpt from