Ask A Plow Truck Driver

We may be in a warming trend, but Punxsutawney Phil did see his shadow. If you believe Phil, that means we have about four weeks left of winter weather. Phil knows that it’s better to be prepared and learn about resources available to you BEFORE winter storms arrive.

PennDOT knows about winter weather and roadways. They have to plan and prepare since PennDOT maintains nearly 40,000 miles of roads and 25,400 bridges statewide, which translates into nearly 91,800 snow-lane miles — enough to circle the world nearly four times! To tackle this task, PennDOT uses 2,199 trucks, plows, and salt spreaders, operated by about 4,700 on-the-road workers.

Over the past five winters, PennDOT has used an average of 801,453 tons of salt to keep Pennsylvania drivers moving. That is three Statues of Liberty.

Click the link below to read more......
To the Sandwich Board!

Four Types of Winter Precipitation Explained.
You turn on the TV or open your weather app and see a wintry mix in the forecast. What comes to mind if you close your eyes? Might you ponder images of snow, slush, and ice? Let’s break down the types of wintry precipitation and discuss how they form.

To get started, we need to do some prep work. The atmosphere surrounding us is layered, from the tips of the grass blades to the wings of an airliner at cruising altitude. So, let’s compare the sky to a delicious PB&J sandwich. You know that sweet and creamy combination squeezed between two slices of bread? (I wrote this before lunch, apologies). Well, the sky has layers just like this too, but less flavorful. Each layer may have different qualities, such as moisture content and temperature, plus these layers are moving in time. So, back to the PB&J as a reference to talk about the layers in each example below. The top slice of bread represents the bottom of the cloud, the yummy peanut butter is cold air, the jelly is warm air, and the bottom slice of bread is the ground. We’ll assume the cloud is filled with nothing but snowflakes.

**Snow:** Snow is probably the easiest sandwich to build - but it means you missed an ingredient in your PB&J! Looking at you, J! Between those slices of bread, you just spread the peanut butter (cold air) only. In the atmosphere, once the snowflake falls out of the cloud, it drops to the ground through nothing but below freezing air. Sometimes we could be a touch above freezing near the ground, but the snowflake doesn’t have enough time to melt before landing.

**Sleet:** This time around, we have the jelly, thank goodness! But we try to overcompensate and add a bunch of it between two slices of bread, both covered in a layer of peanut butter (The order is like this: bread, PB, jelly, PB, bread – the correct way of making a PB&J of course!). In the sky, this means the snowflake drops from the cloud into cold air. Then, it falls through a thick layer of warm air, which allows it to melt into a raindrop. Then, the raindrop falls back through another layer of cold air and freezes before bouncing off the ground as a frozen raindrop, or sleet as we call it.

**Freezing Rain:** If sleet is frozen rain, then what the heck is freezing rain? Glad you asked! Back to the cutting board! This time, we construct our PB&J as follows: bread, then a nice layer of PB, followed by a thick layer of jelly, and a super thin layer of PB on the bottom slice. In the sky, the snowflake drops and melts in that warm layer before falling to the ground as a cold raindrop. Here’s the trick, though. The ground is at or below freezing, so the moment that cold raindrop hits the ground (sidewalks, cars, roads, etc.), it freezes into ice – thus the name freezing rain!

**Rain:** Finally, we have rain...yes, we can get rain any time of the year, but we also get it in winter. So, this sandwich is the one where you end up with a soggy slice of bread without the protective layer of peanut butter on BOTH slices of bread (like a normal person would make it). So, we have the top slice, peanut butter, then jelly, then the bottom slice. In the atmosphere, this would be a snowflake dropping into cold air under the cloud and then
falling the rest of the way through warm air. The snowflake melts into a raindrop and stays a 
raindrop as it hits the above freezing ground.
Hungry yet?? I hope you enjoyed this explanation of the different types of wintry 
precipitation. Here’s a picture of the wintry precipitation types to help.

![Wintry Precipitation Types](image)

Winter Weather Safety
Tips We Love

Unfortunately, Punxsutawney Phil saw his shadow, and we have about four more weeks of 
unpredictable winter weather left.
What! Is your trunk empty?
Where is your winter emergency travel kit?
Always have a winter emergency travel kit 
inside your vehicle, whether it is summer or 
winter. Each season presents its own obstacles.
Switching out your supplies every season will
help keep you and your loved ones safe when traveling.  
Make sure to include these items in your winter emergency kit:

- Flashlight and batteries
- Cell phone and charger
- Snow shovel
- Jumper cables
- Blanket
- Battery-operated radio

For more supplies to include in your kit, check out Ready PA's Build a Kit for Your Vehicle here.

Beams: Low and High. So many choices, but which is correct?  
Use your low beams in bad weather, especially in heavy or blowing snow. Using your high beams when driving in snow, rain, or even fog will challenge your vision and make it worse. Why is this the case? The bright light from your headlights shines towards the snow and/or fog, and the bright light will reflect back to you, causing a glare. Especially during snowstorms, the snowflakes and ice crystals will allow even more light to reflect back to you, causing a wall of glare.

For more Winter Weather Driving tips, check out PennDOT’s Winter Driving Guide.

Cruisin' and Lookin' for a Bruisin'

Do not use cruise control while driving on snow-covered roads. Cruise control is convenient, especially for those long drives. But, during winter weather, using cruise control can be dangerous. The purpose of cruise control is to maintain a constant speed. With that being the case, if you skid or hydroplane in snow, ice, or rain, your vehicle will accelerate, and the wheels will continue to spin to try to keep your speed.

If you plan to travel during the winter, learn more safety information from PennDOT.

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Do You Know A Young Leader?

Do you know a young leader who is passionate about making a positive impact on their community? The Federal Emergency Management Agency (FEMA) is looking for students in grades eight through 11 interested in supporting disaster preparedness to join the Youth Preparedness Council (YPC). There have been young leaders from Pennsylvania chosen for the YPC in the past.
Why is it Important for Youth to Apply?
FEMA created the Youth Preparedness Council in 2012 to bring together young leaders from across the country who are interested in disaster preparedness and community service. The YPC demonstrates FEMA’s commitment to involve America’s youth in preparedness-related activities. It also provides young people an opportunity to present their perspectives, feedback and opinions to FEMA staff. During their terms, YPC members can make a difference in their community, gain valuable leadership and emergency management experience, and work with like-minded peers to help strengthen preparedness and resilience across the country.

How to Apply?
The online application is open, and closes March 6, 2023, 11:59 p.m. PT. To learn more about the YPC and application requirements, visit here and visit here to apply.

FEBRUARY TIP SHEET: WINTER TRAVEL SAFETY TIPS

FEBRUARY SOCIAL MEDIA TOOLKIT

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