

Do you know...

- It only takes one teaspoon of salt to permanently pollute 5 gallons of water.
- Salt seeped into the environment can:
 1. Raise sodium levels in our drinking water and increase treatment costs.
 2. Harm fish, plants, and other wildlife.
 3. Corrode vehicles, roads, bridges, and parking lots.
- Salt can make it safer for us to walk and drive around. It helps keep roads open, and allows businesses, government, and social services to stay open with little interruption.
- Since there's no easy or cheap way to remove salt from our environment, we can all do our part to reduce the amount of salt we use and be **#WinterSaltSmart** by following the below tips.



What should you do before a storm?



Have your shovel or snow blower ready

Shovels may be all that you need around Northern Virginia. To make it easier on your back, there are versions with wheels. Remember to take breaks and avoid overloading your shovel with wet snow.

For big storms or heavy weight snow, snow blowers can be helpful.

Make sure to stock up on enough food, drinks and medicine (including prescriptions) before the storm



nvrc

Northern Virginia Regional Commission



Storm prep, continued:

- Always make sure to assemble an emergency or storm preparedness kit.
- Have your salt and traction materials ready and be sure to store them away for rain and snow!

Choosing the right salt

Below is a table with temperature ranges for some of the more common salts.

SALT TYPE	CHEMICAL	Lowest Practical Melting Temperature ¹	Eutectic Temperature ²
Salts that contain chloride	NaCl (sodium chloride) <i>also called "Rock Salt"</i> ³	15° F	-6° F
	MgCl ₂ (magnesium chloride) ³	-10° F	-28° F
	CaCl ₂ (calcium chloride) ³	-20° F	-60° F
	Kcl (potassium chloride) ⁴	25° F	13° F
Salts that do not contain chloride	CMA (calcium magnesium acetate) ³	20° F	-18° F
	Kac (potassium acetate) ³	-15° F	-76° F

For more information on these salts and some alternatives, visit "[Materials to Treat Snow and Ice](#)," and for more information on the temperature ranges of the different salts "[Temperature Ranges and Terminology for Salts](#)."

¹ The temperature that a salt will melt ice in a reasonable amount of time. Also called "Lowest Effective Temperature."

² The lowest temperature that a salt can melt ice. This is not a practical temperature to reference (see the warnings below).

³ Source: https://stormwater.pca.state.mn.us/index.php?title=Lowest_practical_melting_temperature

⁴Source: <http://www.dot.state.oh.us/Divisions/Operations/Maintenance/SnowandIce/Snow%20and%20Ice%20Best%20Practices/Liquid%20Chemicals%20and%20Ice%20Best%20Practices>

What to look out for when purchasing salt

- Labels like "safe," "pet-safe" and "environmentally friendly" can be used inaccurately on certain products, so be sure to read the ingredients.
- Choose the material based on the "Lowest Practical Melting Temperature" not the "Eutectic Temperature."

To understand this better, visit "[Temperature Ranges and Terminology for Salts](#)."

Materials to avoid: **All nitrogen and phosphorus salts are illegal in Virginia.**

1. Nitrogen salts include urea, ammonium sulfate and potassium nitrate, etc.
2. Phosphorus salts may have "phosphate" (PO₄) in the ingredients, although these are rare.

What to do during and after a storm

- Clear snow by shoveling early and often.
- Make sure to clear snow and apply salt only where it is needed.
- Apply salt after clearing snow. Never use salt to "burn off" snow. It will quickly dilute and requires excess use.

Salts should be applied as follows:

- **Sodium chloride:** One 12-oz coffee mug holds enough salt to treat a 20-foot driveway or ten sidewalk squares. Aim for about 3 inches between pieces of rock salt.
- **Calcium chloride:** apply at a rate that is one third of the rate used for sodium chloride.
- Be patient and give the salt time to work. The colder it is, the longer it will take for the salt to melt what snow or ice remains after shoveling.
- If the sun comes out and you can wait, let the sun do some of the work before you apply salt.
- If it is too cold for your salt to work, or you'd rather not use salt, use traction materials instead. These include, sand, bird seed (make sure to use a native blend) and zeolite crystals (like EcoTraction™).
- After the storm, sweep up the extra salt or traction material and use it again next time.