

Wind Chill (Wind chill factor) - Is based on the rate of heat loss from exposed skin, caused by the combined effects of wind and cold. As the wind increases, heat is carried away from the body more rapidly, driving down the body temperature.

Freeze - Used when temperatures at or near the surface (ground) are expected to be 32 F or below for several hours and may kill vegetation.

Frost - The formation of ice crystals which develop during conditions of temperatures near freezing, clear skies, light winds and high humidity

Hypothermia - When the core body temperature drops below 95 F.

Frostbite - Damage to body tissue caused by that tissue being frozen.

Watches and Warnings

A **Winter Storm Watch** means that severe winter conditions, such as heavy snow and/or ice, may affect your area, but its occurrence, location and timing are still uncertain. A winter storm watch is issued to provide 12 to 36 hours notice of the possibility of severe winter weather. A winter storm watch is intended to provide enough lead time so those who need to set plans in motion can do so.

A watch is upgraded to a **Winter Storm Warning** when 6 or more inches of snow is expected in the next 12 hours, or 8 or more inches in 24 hours, or 1/4 inch or more of ice accumulation is expected. Winter Weather Advisories inform you that winter weather conditions are expected to cause significant inconveniences that may be hazardous. If caution is exercised, advisory situations should not become life-threatening. A Blizzard Warning means that snow and strong winds will combine to produce a blinding snow (near zero visibility), deep drifts, and life-threatening wind chill. Be sure to listen carefully to the radio, television, and NOAA Weather Radio for the latest winter storm watches, warnings, and advisories.

New Wind Chill Chart
Wind (mph)

Caln	5	10	15	20	25	30	35	40	45	50	55	60
40	36	34	32	30	29	28	28	27	26	26	25	25
35	31	27	25	24	23	22	21	20	19	19	18	17
30	25	21	19	17	16	15	14	13	12	12	11	10
25	19	15	13	11	9	8	7	6	5	4	4	3
20	13	9	6	4	3	1	0	-1	-2	-3	-3	-4
15	7	3	0	-2	-4	-5	-7	-8	-9	-10	-11	-11
10	1	-4	-7	-9	-11	-12	-14	-15	-16	-17	-18	-19
5	-5	-10	-13	-15	-17	-19	-21	-22	-23	-24	-25	-26
0	-11	-16	-19	-22	-24	-26	-27	-29	-30	-31	-32	-33
-5	-16	-22	-26	-29	-31	-33	-34	-36	-37	-38	-39	-40
-10	-22	-28	-32	-35	-37	-39	-41	-43	-44	-45	-46	-48
-15	-28	-35	-39	-42	-44	-46	-48	-50	-51	-52	-54	-55
-20	-34	-41	-45	-48	-51	-53	-55	-57	-58	-60	-61	-62
-25	-40	-47	-51	-55	-58	-60	-62	-64	-65	-67	-68	-69
-30	-46	-53	-58	-61	-64	-67	-69	-71	-72	-74	-75	-76
-35	-52	-59	-64	-68	-71	-73	-76	-78	-79	-81	-82	-84
-40	-57	-66	-71	-74	-78	-80	-82	-84	-86	-88	-89	-91
-45	-63	-72	-77	-81	-84	-87	-89	-91	-93	-95	-97	-98

Frostbite occurs in 15 minutes or less

$$\text{Wind Chill (}^{\circ}\text{F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

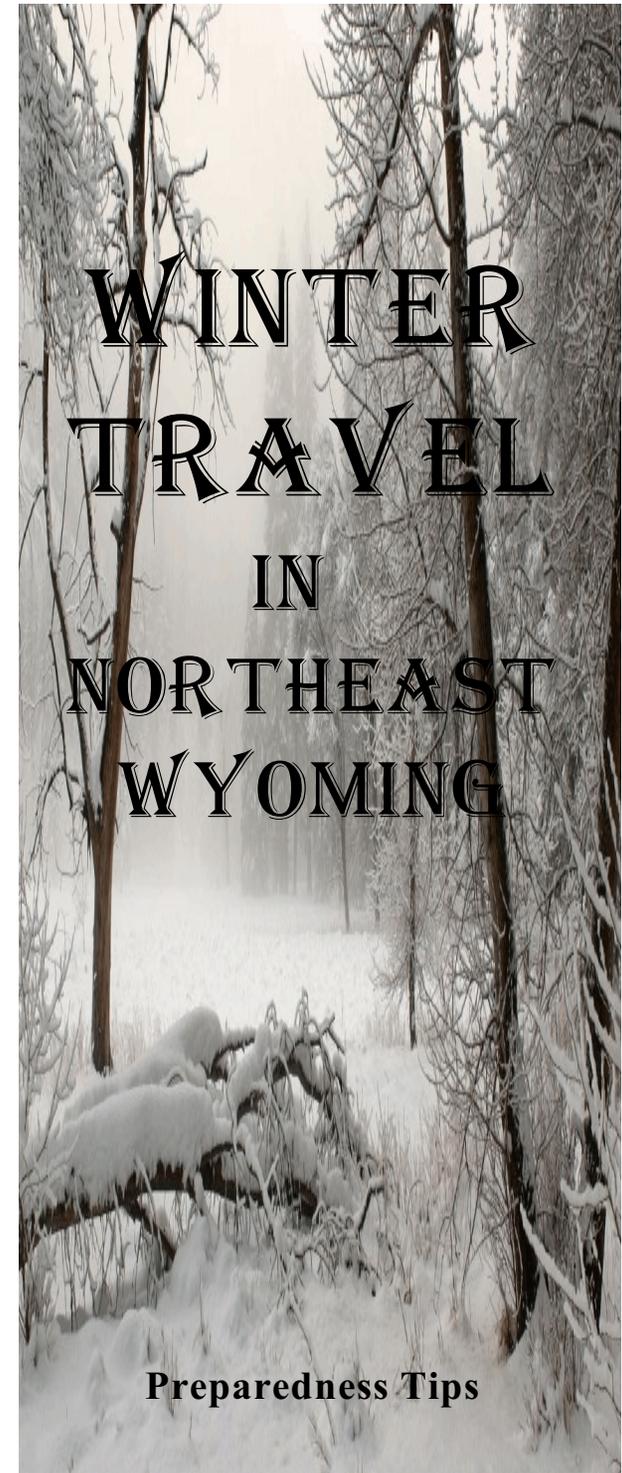
Where, T = Air Temperature ($^{\circ}\text{F}$)
V = Wind Speed (mph)



For additional safety information,
please contact the

**Campbell County
Emergency Management Agency**

500 So. Gillette Avenue, Suite 1100
Gillette, Wyoming 82716
307-686-7477



Traveling in Wyoming during the winter can be both routine and challenging.

It takes very little for the weather to change from a nuisance into a life threatening event. One minute you have excellent visibility, the next you can't see the end of your hood. One minute your vehicle is working perfectly, the next it's broken or in a ditch. There are some steps you can take to ensure the survival of you and yours.

Before Traveling –

Learn all you can about the weather forecast for the area through which you will be traveling. You can check with NOAA Weather Radio

Gillette.....162.500 MHz (Channel 5)
Newcastle.....162.475 MHz
Sheridan.....162.475 MHz
Kaycee.....162.550 Mhz
Casper.....162.400 MHz
Terry Peak (S.D.).....162.525 MHz
Rapid City (S.D.).....162.550 MHz

On the Internet, go to www.crh.noaa.gov/unr for the Rapid City office of the National Weather Service.

Local radio stations broadcast forecasts and traveler's advisories at:
96.9, 103.9 and 100.7 FM and 1270 AM.

Your Number One Rule for Traveling Safely:

If the road barricades are down,
indicating the road is closed...

DO NOT DRIVE AROUND THEM!

Once the barricades are in place, no searching for travelers in distress will take place until just before the road is reopened, which could be several days. And, the Wyoming Highway Patrol and the Courts take a very dim view of barricade jumping and express that with tickets and large fines!

For the latest on current traveling conditions, the Wyoming Highway

Department maintains a toll free 24-hour recorded telephone line which can be reached by dialing 511 or alternatively, 1-888-WYO-ROAD (888-996-7623)

Their internet site at www.wyoroad.info includes live web cameras positioned around the state.

Winter Vehicle Kit Components

It is advisable to assemble a kit containing the followig items and keep it in your vehicle all winter and spring.

- ◆ Carbon Monoxide Detector
- ◆ Matches in waterproof container
- ◆ Emergency heating source such as Sterno (be careful of toxic fumes) or Candles (be careful of open flame!)
- ◆ Toilet Tissue
- ◆ Metal Cup with handle (can be used to melt snow, warm liquids)
- ◆ Water (remember, this may freeze while stored in your car)
- ◆ Flashlight
- ◆ Extra Batteries
- ◆ Emergency ("Space") Blanket
- ◆ Pocket Knife
- ◆ Three Empty 3-pound coffee cans with lids
- ◆ Kitty Litter or Sand (for traction & weight)
- ◆ Long cord or clothesline (to attach self to car so can find way back to vehicle)
- ◆ Chemical Light Sticks
- ◆ Playing Cards, etc. (for something to do)
- ◆ Special Medications you might need
- ◆ Baby supplies (if appropriate)
- ◆ Sleeping Bag or 2 blankets per person
- ◆ Extra Winter Clothes (jackets, pants, boots, socks, mittens, hats/stocking caps)

Should Have in Vehicle Anyhow

- ◆ First Aid Kit
- ◆ Battery Booster Cables
- ◆ Basic Repair Tools (pliers, screwdriver, adjustable wrench)
- ◆ Tow Chain
- ◆ Shovel
- ◆ Extra oil

Nice to Have

- ◆ Cellular Phone or 2-Way Radio (CB, etc.)
- ◆ High Calorie/Non-Perishable Food Supply
- ◆ Powdered drinks (coffee, tea, cider, cocoa, etc.)
- ◆ Plastic spoons
- ◆ Ax or Saw
- ◆ Signal Flares
- ◆ Transistor Radio
- ◆ Extra Batteries

Terms You Should Know

The weather service has specific meanings for certain terms they routinely use in forecasts:

Snow - A prediction of snow indicates a steady fall of snow for several hours or more. It may be modified by terms such as "light," "intermittent," or "occasional" to indicate lesser intensity or periodic snow.

Snow Flurries - Light snow falling for short durations, producing no accumulation to a dusting.

Snow Showers - Snow falling at varying intensities for brief time periods. Some accumulation is possible.

Snow Squalls - Brief, intense snow showers, accompanied by strong, gusty winds. Accumulations may be significant.

Drifting Snow - Falling snow or loose snow on the ground, being blown into mounds, causing uneven snow depths. The wind carries the snow near the ground, causing little or no restriction to visibility.

Blowing Snow - Wind-driven snow that causes reduced visibility and sometimes significant drifting. Blowing snow may be snow that is falling or snow that was once loose on the ground and has been picked up by the wind.

Heavy Snow - Snow accumulating 6 inches or more in 12 hours or less or 8 inches or more of snow in 24 hours (for non-mountainous areas below 6,000 ft) AND 8 inches or more in 12 hours or less or 12 inches or more of snow in 24 hours (mountainous areas above 6,000 ft).

Blizzard - Sustained winds or frequent wind gusts of 35 mph or more, considerable snow or blowing snow (visibility less than 1/4 of a mile).

Sleet - Ice pellets or granules of frozen rain. Sleet occurs when rain falls into a layer of air with temperatures below freezing. Sleet usually bounces when hitting a surface and does not stick, but can accumulate on roadways, creating a hazard to motorists.

Freezing Rain - Rain that falls onto a surface with a temperature at or below freezing, causing it to freeze to the surface, forming a coating of ice or glaze.

Freezing Drizzle - Drizzle that falls onto a surface with a temperature at or below freezing, causing it to freeze to the surface, forming a thin coating of ice or rime. Drizzle is a very light precipitation with little accumulation, but even a small amount of ice can cause a problem.

Ice Storm - A significant and sometimes damaging accumulation of ice due to freezing rain. Significant ice accumulations are usually accumulations of 0.25 inches or greater.