



# WIND CHILL

Wind Chill is the term used to describe the rate of heat loss on the human body resulting from the combined effect of low temperature and wind. As winds increase, heat is carried away from the body at a faster rate, driving down both the skin temperature and eventually the internal body temperature. While exposure to low wind chills can be life threatening to both humans and animals alike, the only effect that wind chill has on inanimate objects, such as vehicles, is that it shortens the time that it takes the object to cool to the actual air temperature (it cannot cool the object down below that temperature).

Additional information, including PDF brochures and Wind Chill Charts, can be found on the [National Weather Service Wind Chill Page](http://www.nws.noaa.gov/om/windchill/index.shtml) (<http://www.nws.noaa.gov/om/windchill/index.shtml>).



## Wind Chill Advisory/Warning Criteria for the [NWS Sioux Falls County Warning Area](#)

During times of adverse cold weather, wind chill advisories and warnings are issued by the National Weather Service to alert the general public of the impending threat. As with other winter weather events, advisories are issued when the wind chill is more of a nuisance rather than life-threatening. While the warnings are issued when the wind chill can be life-threatening if an individual is not properly dressed for the cold.

- **Wind Chill Advisory:** Issued when the wind chill is 20 below zero or lower with a minimum of a 10 mph wind.
- **Wind Chill Warning:** Issued when the wind chill is 35 below zero or lower with a minimum of a 10 mph wind.

# Wind Chill Chart

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

*Frostbite occurs in 15 minutes or less*