

# NEW WIND CHILL CHART NOW BEING USED!



# Wind Chill Guide

In order for your body to work properly, its temperature needs to be around 98.6 degrees Fahrenheit. If cold causes your body temperature to drop below 95 degrees, your heart begins to slow, your body becomes weak and your mind becomes confused. This could place you in a life-threatening situation. That is why you should understand the hazards of wind chill.

The NWS is planning to implement a replacement Wind Chill Temperature (WCT) index for the 2001/2002 winter season. The reason for the change is to improve upon the current WCT Index used by the NWS and the Meteorological Services of Canada. The new WCT index will:

- Use wind speed calculated at the average height (5 feet) of the human body's face instead of 33 feet (the standard anemometer height)
- Be based on a human face model
- Incorporate modern heat transfer theory (heat loss from the body to its surroundings, during cold and breezy/windy days)
- Use a consistent standard for skin tissue resistance

For example: Assuming an air temperature of 5 degrees and a wind of 30 mph.  
Old WCT = -41    New WCT = -18

**New Wind Chill Chart**  
Wind (mph)

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

**Frostbite occurs in 15 minutes or less**

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

Where, T = Air Temperature (°F)  
V = Wind Speed (mph)