

Wind Chill Factors/Heat Stress Index

Part I WIND CHILL FACTORS

WIND CHILL DETERMINATION CHART

Temperature	Winds calm	5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph
50°								
40°				32	30	29	28	28
30°	30	25	21	19	17	16	15	14
20°	20	13	9	6	4	3	1	0
10°	10	1	-4	-7	-9	-11	-12	-14
0°	0	-11	-16	-19	-22	-24	-26	-27

National Weather Service

How cold is too cold to allow outdoor play?

Factors such as; temperature, wind chill, frozen ground, and sunshine all need to be taken into account when considering outdoor activities.

- Wind chills of 15° to 30° are *cold*; no students should be permitted outside in these conditions without appropriate clothing (coats, hats, mittens).
- Wind chills of 0° to 15° are *very cold*, older students may play outside for short periods of time **only with appropriate clothing**.
- Wind chills between -20° and 0° are *bitter cold* with a significant risk of frostbite; students **should not go outside** for play.
- Wind chills less than -20° are *extreme* and frostbite is likely. Students **should not be outside for play or dismissal**.

Consult your local weather to determine actual wind speeds and temperatures in your school area. www.wrc.weatherplus.com is an excellent site that can be tailored to your location.

Part II
OFFICE OF CATHOLIC SCHOOLS DIOCESE OF ARLINGTON
HEAT STRESS INDEX

RELATIVE HUMIDITY (%)													
T	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136												
108	130	137											
106	124	130	137										
104	119	124	131	137									
102	114	119	124	130	137								
100	109	114	119	124	130	137							
98	105	109	113	117	123	128	134						
96	101	104	108	112	116	121	126	132					
94	97	100	103	106	110	114	119	124	129	135			
92	94	96	99	101	105	108	112	116	121	126	131		
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	81	81	82	82	82	83	83	84	85	86	86	87

Schools without air conditioning may dismiss early when the heat index exceeds 100.

How hot is too hot to allow outdoor activities?

- Heat index of **130 or higher** is *extremely dangerous*. Heat stroke is highly likely with continued exposure.
- Heat index of **105-129** is *dangerous*. Heat stroke, heat cramps or heat exhaustion is likely; heat stroke is possible with prolonged exposure and/ or physical activity.
- Heat index of **90 – 104** *requires extreme caution*. Heat stroke, heat cramps and heat exhaustion are possible with prolonged exposure and/ or physical activity.
- Heat index of **80 – 89** *requires caution*. Fatigue is possible with prolonged exposure and or physical activity.

Heat Cramps - may occur after prolonged exposure to heat. They are the painful intermittent spasms of the abdomen and other voluntary muscles.

Heat Exhaustion - may result from physical exertion in hot environments. Symptoms may include profuse sweating, weakness, pale skin, rapid pulse, dizziness, nausea, headache, vomiting, and unconsciousness. The skin is cool and clammy with sweat. Body temperature may be normal or subnormal.

Heat Stroke - is a serious medical condition that urgently requires medical attention. Sweating is diminished or absent, which makes the skin hot and dry. Body temperature is very high (106 degrees F. and rising), and if uncontrolled, may lead to delirium, convulsions, coma, and even death.