

Daily Weather Watch for Early Childhood & K-12 Education



Monitoring weather conditions throughout the day allows early childhood and K-12 schools providers to adapt their plans for daily playtime, recess or field trips. Weather safety should be an important part of your daily routine and an essential part of addressing the health and safety needs of children in the early childhood and K-12 environment. **Use this chart and the helpful links below to help safely plan for daily outdoor time.**

Wind Chill



- 30° is **chilly** and generally uncomfortable
- 15° to 30° is **cold**
- 0° to 15° is **very cold**
- -15° to 0° is **bitter cold** with significant risk of **frostbite**
- -15° to -60° is **extreme cold** and **frostbite** is likely
- -60° is **frigid** and exposed **skin will freeze** in 1 minute

■ Comfortable for outdoor play ■ Caution ■ Danger

Wind-Chill Factor Chart (in Fahrenheit)

	Calm	5	10	15	20	25	30	35	40
Air Temperature	40	36	34	32	30	29	28	28	27
30	30	25	21	19	17	16	15	14	13
20	20	13	9	6	4	3	1	0	-1
10	10	1	4	-7	-9	-11	-12	-14	-15
0	0	-11	-16	-19	-22	-24	-26	-27	-29
-10	-10	-22	-28	-32	-35	-37	-39	-41	-43

Wind speed in mph

Heat Index



- 80° or below is considered **comfortable**
- 90° beginning to feel **uncomfortable**
- 100° **uncomfortable** and may be **hazardous**
- 110° considered **dangerous**

Heat Index Chart (in Fahrenheit %)

	40	45	50	55	60	65	70	75	80	85	90	95	100
Air Temperature (F)	80	80	81	81	82	82	83	84	84	85	86	86	87
84	83	84	85	86	88	89	90	92	94	96	98	100	103
90	91	93	95	97	100	103	105	109	113	117	122	127	132
94	97	100	103	106	110	114	119	124	129	135			
100	109	114	118	124	129	130							
104	119	124	131	137									

Relative Humidity (Percent)

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Watching the weather is part of ensuring safety during playtime, recess and field trips.

Fluctuations in the weather forecast require *childcare providers and schools to be flexible while attending to the health and safety of children in their care. What clothing, beverages, and sunscreen are appropriate for all age ranges, consider the following recommendations:*

- Dress children to maintain a comfortable body temperature (in warmer months - lightweight cotton and in colder months - several thin layers of clothing). General rule of thumb for older babies and young children is to dress them in one more layer of clothing than an adult would wear in the same conditions.
- Ensure adequate hydration by offering water or other unsweetened beverages. Drinking fluids helps the body maintain a comfortable temperature.
- Use sunscreen with a **SPF of 15 or higher** year round. Apply sunscreen generously and frequently if outdoors for extended periods of time. Read the label of the sunscreen product to determine optimal time before reapplication is necessary. Using sunscreen helps block harmful rays from the sun. Look for sunscreen with both **UVB** and **UVA** protection. Make use of shaded play areas whenever possible.

Condition **GREEN**

Most children may play outdoors and be comfortable. While conditions are optimal for outdoor activities, responsible adults should watch for the child that becomes uncomfortable while playing outdoors.

INFANTS AND TODDLERS - Infants/toddlers are unable to tell the childcare provider if they are too hot or cold. The infant/toddler may become fussy when uncomfortable. Infants/toddlers tolerate shorter periods of outdoor play.

YOUNG CHILDREN - Young children will need to be reminded to stop playing and drink a beverage and apply more sunscreen.

OLDER CHILDREN - The older child may need a firm approach to wearing proper clothing for the weather (they may want to play without coats, hats, or mittens in cold weather). Adults may need to remind them to apply sunscreen and encourage adequate hydration.

Condition **YELLOW**

In addition to following all guidance under Condition GREEN, use caution and closely observe children for signs of heat or cold exposure while outdoors. Small fluctuations in weather conditions can affect comfort levels while outdoors. Clothing, hydration, and sunscreen are important considerations. Adults should be mindful and observant during outdoor activities and consider reducing the amount of time children spend outdoors if conditions become less favorable.

Condition **RED**

Outdoor plan is not recommended for Infants/toddlers and young children due to potential health risks. Encourage indoor activities for all age groups, but if school policy allows, ensure older children play outdoors with increased adult supervision and attention to even small fluctuations in weather conditions along with increased adherence to recommendations related to clothing, hydration, and sunscreen application.

Understand the Weather

The weather forecast may be confusing unless you know the meaning of the words.

Blizzard Warning: There will be snow and strong winds that produce a blinding snow, deep drifts, and life threatening wind chills. Seek shelter immediately.

Heat Index Warning: How hot it feels to the body when the air temperature (in Fahrenheit) and relative humidity are combined.

Relative Humidity: The percent of moisture in the air.

Temperature: The temperature of the air in degrees Fahrenheit.

Wind: The speed of the wind in miles per hour.

Wind Chill Warning: There will be sub-zero temperatures with moderate to strong winds expected which may cause hypothermia and great danger to people, pets and livestock.

Winter Weather Advisory: Weather conditions may cause significant inconveniences and may be hazardous. If caution is exercised, these situations should not become life threatening.

Winter Storm Warning: Severe winter conditions have begun in your area.

Winter Storm Watch: Severe winter conditions, like heavy snow and ice are possible within the next day or two.

References:

- American Academy of Pediatrics: Top Safety Tips for Preventing Heat, Sun-Related Illnesses in Children this Summer <https://www.aap.org/en/news-room/news-releases/health--safety-tips/american-academy-of-pediatrics-top-safety-tips-for-preventing-heat-sun-related-illnesses-in-children-this-summer/>
- Iowa Department of Health and Human Services, <https://hhs.iowa.gov/sites/default/files/portals/1/user-files/128/child%20care%20weather%20watch%20june%202020%20final.pdf>
- Air Now Air Quality (check by zip code) <https://www.airnow.gov/>
National Weather Service Wind Chill/Heat Index <https://www.weather.gov/ctp/ChillHeat>
- Caring for Our Children National Resource Center for Health and Safety in Childcare and Early Education 4th Ed. <https://nrkids.org/CFOC>