

Arlington Public Schools Weather Guidelines and Operations During Air Quality Alerts

A subcommittee of the Comprehensive School Health Committee met to develop guidelines related to student participation in outdoor activities and weather conditions. The following color coded chart (Child Care Weather Watch) indicates cold and hot air temperatures in which it is advisable to engage students in outdoor activities and where staff may need to exercise caution.

Outdoor experiences for children are important for many reasons--more space, fresh air and exposure to sunlight. There are times when weather and related conditions limit exposure to outdoor activities. Deciding when students may play outdoors remains the responsibility of the principal based on their professional judgment. There are a number of factors that require consideration before a decision is made as to whether students are allowed to play outdoors. These factors include but are not limited to: temperature, wind chill, frozen ground, sunshine, heat index, humidity, how prepared are the children (coats, hats, gloves/mittens) to maintain a comfortable and safe body temperature to play outdoors, what activity will the children be participating in, and the length of time outside. Students dressed in appropriate apparel and well hydrated should not have difficulty with outdoor activity during a recess period.

Understand the Weather

Wind-Chill



- 30° is *chilly* and generally uncomfortable
- 15° to 30° is *cold*
- 0° to 15° is *very cold*
- 32° to 0° is *bitter cold* with significant risk of *frostbite*
- -20° to -60° is *extreme cold* and *frostbite* is likely
- -60° is *frigid* and exposed *skin will freeze* in 1 minute

Heat Index



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

Child Care Weather Watch

		Wind-Chill Factor Chart (in Fahrenheit)								
		Wind Speed in mph								
Air Temperature	Calm	5	10	15	20	25	30	35	40	
	40	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
	-20	-20	-34	-41	-45	-48	-51	-53	-55	-57
-30	-30	-46	-53	-58	-61	-64	-67	-69	-71	

Comfortable for out door play
 Caution
 Danger

		Heat Index Chart (in Fahrenheit %)												
		Relative Humidity (Percent)												
Temperature (F)	40	45	50	55	60	65	70	75	80	85	90	95	100	
	80	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	106	109	113	117	122	127	132
	94	97	100	102	106	110	114	119	124	129	135			
	100	109	114	118	124	129	136							
104	119	124	131	137										
110	136													

Child Care Weather Watch

Watching the weather is part of a child care provider's job. Planning for playtime, field trips, or weather safety is part of the daily routine. The changes in weather require the child care provider to monitor the health and safety of children. What clothing, beverages, and protections are appropriate? Clothe children to maintain a comfortable body temperature (warmer months - lightweight cotton, colder months - wear layers of clothing). **Beverages** help the body maintain a comfortable temperature. Water or fruit juices are best. Avoid high-sugar content beverages and soda pop. **Sunscreen** may be used year around. Use a sunscreen labeled as SPF-15 or higher. Read and follow all label instructions for the sunscreen product. Look for sunscreen with UVB and UVA ray protection. **Shaded** play areas protect children from the sun.

Condition GREEN - Children may play outdoors and be comfortable. Watch for signs of children becoming uncomfortable while playing. Use precautions regarding clothing, sunscreen, and beverages for all child age groups.

INFANTS AND TODDLERS are unable to tell the child care provider if they are too hot or cold. Children become fussy when uncomfortable. Infants/toddlers will tolerate shorter periods of outdoor play. Dress infants/toddlers in lightweight cotton or cotton-like fabrics during the warmer months. In cooler or cold months dress infants in layers to keep them warm. Protect infants from the sun by limiting the amount of time outdoors and playing in shaded areas. Give beverages when playing outdoors.

YOUNG CHILDREN remind children to stop playing, drink a beverage, and apply more sunscreen. **OLDER CHILDREN** need a firm approach to wearing proper clothing for the weather (they may want to play without coats, hats or mittens). They may resist applying sunscreen and drinking beverages while outdoors.

Condition YELLOW - use caution and closely observe the children for signs of being too hot or cold while outdoors. Clothing, sunscreen, and beverages are important. Shorten the length of outdoor time.

INFANTS AND TODDLERS use precautions outlined in Condition Green. Clothing, sunscreen, and beverages are important. Shorten the length of time for outdoor play.

YOUNG CHILDREN may insist they are not too hot or cold because they are enjoying playtime. Child care providers need to structure the length of time for outdoor play for the young child.

OLDER CHILDREN need a firm approach to wearing proper clothing for the weather (they may want to play without coats, hats or mittens), applying sunscreen and drinking liquids while playing outdoors.

Condition RED - most children should not play outdoors due to the health risk.

INFANTS/TODDLERS should play indoors and have ample space for large motor play.

YOUNG CHILDREN may ask to play outside and do not understand the potential danger of weather conditions.

OLDER CHILDREN may play outdoors for very short periods of time if they are properly dressed, have plenty of fluids. Child care providers must be vigilant about maximum protection of children.

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.

Child Care Weather Watch, Iowa Department Public Health, Healthy Child Care Iowa. Produced through federal grant (MCJ19T029 & MCJ19KCC7) funds from the US Department of Health & Human Services, Health Resources & Services Administration, Maternal & Child Health Bureau. Wind-Chill and Heat Index information is from the National Weather Service.

Heat Index

Heat index is a measurement of the air temperature in relation to the relative humidity. The heat index is based on studies of skin cooling caused by the evaporation of sweat and as an indicator of discomfort. The heat index is higher when high air temperatures occur with high humidity, and lower when they occur with low humidity.

Wind-chill

Wind chill temperature is how cold it "feels like" outside (apparent temperature). Wind chill is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the wind increases, it draws heat from the body, driving down skin temperature and eventually the internal body temperature.

Operations During Air Quality Alerts

The Supervisor, Health, Physical Education, and Athletics, is responsible for notifying members of the School Board and Senior Staff, principals, assistant principals, the Supervisor of Extended Day, summer school administrators and instructional supervisors via a voice mail message when the air quality has reached, or is anticipated to reach, Code Orange, Code Red or Code Purple. These administrators are then responsible for notifying all appropriate staff to implement appropriate modifications of schedules, locations, and activities as described below.

The following guidelines were developed by representatives from the Public Health Division of the Arlington County Department of Human Services, the Arlington Public Schools, and the Arlington County Department of Parks, Recreation and Community Resources. They are based on information from the Metropolitan Washington Council of Governments that is available to the public. They are intended to increase awareness of the health risks of breathing poor quality air. They should be used to guide decisions about appropriate activity levels for students on high ozone alert days. The ozone forecast is based upon meteorological data; it is readily available and updated one to three times a day from May to September when ground ozone is most problematic. It is reported daily in the form of a color code as follows:

- Code Green** - good air quality
- Code Yellow** - moderate air quality
- Code Orange** - approaching unhealthy
- Code Red** – unhealthy
- Code Purple** – very unhealthy

(Air Quality Hotline at 202-962-3299 and ww.mwcog.org/dep/air/airquality_index.htm.)

Planning ahead for Code Orange, Red and Purple days is the best way to help children avoid problems associated with high ozone. School staffs should have a plan to find out the code status for a particular day and develop an action plan that addresses the following:

- Make arrangements in advance for children to have an adequate indoor space when necessary.
- Plan appropriate indoor activities if a Code Orange, Red or Purple day forces students inside.
- Avoid outdoor activities as much as reasonably possible between 11 AM and 7 PM when ozone levels are highest.

	Elementary School Students	Middle School Students	High School Students
Code Orange	<ul style="list-style-type: none"> • Students with asthma and respiratory conditions refrain from all outdoor activities • Reduce time spent outdoors • Limit time outdoors to morning hours before 11 AM, when possible • Decrease vigorous physical activity while outdoors 	<ul style="list-style-type: none"> • Students with asthma and respiratory conditions refrain from all outdoor activities • Reduce time spent outdoors • Limit time outdoors to morning hours before 11 AM, when possible • Decrease vigorous physical activity while outdoors 	<ul style="list-style-type: none"> • Students with asthma and respiratory conditions refrain from all outdoor activities • Reduce time spent outdoors • Limit time outdoors to morning hours before 11 AM, when possible • Decrease vigorous physical activity while outdoors
Code Red	<ul style="list-style-type: none"> • Refrain from all outdoor activities 	<ul style="list-style-type: none"> • Students with asthma and respiratory conditions refrain from all outdoor activities • Healthy students may participate in leisurely walking • Refrain from outdoor band activity 	<ul style="list-style-type: none"> • Students with asthma and respiratory conditions refrain from all outdoor activities • Healthy students may participate in leisurely walking • Refrain from outdoor band activity • High School Athletes with current health (physical) examinations on file in school may participate in no more than 1 hour of outdoor activity which does not include prolonged exertion and have breaks every 15 to 20 minutes. These activities are equivalent to a 'walk-through' practice with no moderate-high intensity drills/activities such as contact, scrimmages, etc.
Code Purple	<ul style="list-style-type: none"> • Refrain from all outdoor activities 	<ul style="list-style-type: none"> • Refrain from all outdoor activities 	<ul style="list-style-type: none"> • Refrain from all outdoor activities