



HEALTH SERVICES & PROGRAMS

POMONA UNIFIED SCHOOL DISTRICT

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To: All District Personnel

From: Mark B. Maine, Ph.D., Director – Student Wellbeing / Health Services

Re: High Heat Guidance / Advisory

Date: January 16, 2015

Ref: PUSD BP/AR 5030 Student Wellness

To counteract heat stress, all District personnel must pay attention to weather conditions and use common sense and good judgment for modifying activities and /or school days. This guidance applies to all school sponsored activities. Use the following Heat Index as a guide:

As an example, if the air temperature is 96°F (found on the top of the table) and the relative humidity is 65% (found on the left of the table), the Heat Index--how hot it feels--is 121°.

Heat Index (HI) Chart (Temperature & Relative Humidity (RH))																
RH (%)	Temperature (° F)															
	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
90	119	123	128	132	137	141	146	152	157	163	168	174	180	186	193	199
85	115	119	123	127	132	136	141	145	150	155	161	166	172	178	184	190
80	112	115	119	123	127	131	135	140	144	149	154	159	164	169	175	180
75	109	112	115	119	122	126	130	134	138	143	147	152	156	161	166	171
70	106	109	112	115	118	122	125	129	133	137	141	145	149	154	158	163
65	103	106	108	111	114	117	121	124	127	131	135	139	143	147	151	155
60	100	103	105	108	111	114	116	120	123	126	129	133	136	140	144	148
55	98	100	103	105	107	110	113	115	118	121	124	127	131	134	137	141
50	96	98	100	102	104	107	109	112	114	117	119	122	125	128	131	135
45	94	96	98	100	102	104	106	108	110	113	115	118	120	123	126	129
40	92	94	96	97	99	101	103	105	107	109	111	113	116	118	121	123
35	91	92	94	95	97	98	100	102	104	106	107	109	112	114	116	118
30	89	90	92	93	95	96	98	99	101	102	104	106	108	110	112	114

Note: Exposure to full sunshine can increase HI values by up to 15° F

Precaution and Modification Guidelines for Classroom and Physical Activity based on the Heat Index

***Please note: Heat Index temperature IS NOT the same as regular (thermometer) temperature.

Category	Outdoor Instructional Activities including Physical Education and Events	Precautions and Practice Lengths	SUGGESTED Fluid Intake
Under 95° F Heat Index “Green Flag”	Learning skills decrease with long exposure Heat Index is above 95°.	Low to Moderate Risk. Use Caution for practice sessions and monitor on basis of risk factors. Workout:Rest Ratio as needed or 6:1	Fluid Replacement beverages should be easily accessible in individual fluid containers to permit easier monitoring of fluid intake. Allow athlete to carry water bottles of hydration system when practical.
95° to 99° Heat Index “Yellow Flag”	Encourage loose-fitting, light colored, lightweight clothing; encourage wide brimmed hats and sun screen (Sun Protection Factor [SPF] 15 or higher) during recess and outdoor activities; Encourage students to bring water bottles or take frequent water breaks; increase room ventilation (open windows/doors, use fans); provide wet wipes, damp clothes and/or spray bottles to cool forehead, arms, legs, and face.	High Risk. Use increased caution for practice sessions and consider modifying practice lengths and intensity level. Decrease physical activity at recess and in PE classes and, limit recess to cooler morning hours. Workout:Rest Ratio 2-3:1	Athlete should consume apx. 17-20 fl oz of water 2-3 hours before exercise and 7-10 fl oz of water 10 to 20 minutes before exercise. Fluid replacement should occur every 10-20 minutes at 7-10 fl. oz.
100° to 105° Heat Index “Red Flag”	All of the above and move students/staff to cooler areas of the building, as often as necessary, to avoid being in the above 90° Heat Index areas for longer than 60 to 90 minutes at a time.	Very High Risk. If possible, events should be rescheduled or delayed until safer conditions prevail. If the event must take place, be on high alert. Take steps to reduce risk factors (e.g., more and longer rest breaks, reduced practice time, reduced exercise intensity, access to shade, minimal clothing and equipment, cold tubs at practice site, etc.). Heat index should be rechecked every 30 minutes. Workout:Rest Ratio 1-2:1	Mandatory water breaks every 20 minutes for 10 minutes in duration. Traditional sports drinks with appropriate carbohydrate (CHO) and sodium may provide additional benefit for the athlete. A 6-8% addition of CHO to water is the maximum that should be utilized. All fluids should be cold to optimize gastric emptying.
Above 105° Heat Index “Black Flag”	All of the above and immediately move the students/staff to cooler areas of the building. If there are no suitable locations below the “Black Flag” level, immediately contact the Office of Environmental Health and Safety (OEHS) to determine what actions, including the possible dismissal/modification of school to initiate.	Extreme Risk. No Practice. Heat Index should be rechecked every 30 minutes.	All students must have water readily available to them.

Heat Related Illnesses, Signs/Symptoms and Treatment

Heat Illness	Definition/Description	Signs/Symptoms	What to Do
Muscle (Heat) Cramps	Occurs during or after intense exercise. Athlete will experience acute, painful, involuntary muscle contractions typically in the arms, legs, or abdomen.	Dehydration Thirst Fatigue Sweating Muscle cramps	<ul style="list-style-type: none"> • Stop all activity and sit quietly in a cool place. • Drink clear juice or a sports drink. • Do not engage in exercise/strenuous activity for a few hours after cramps subside, as this may lead to heat exhaustion or heat stroke. • Seek medical attention if heat cramps do not subside in 1 hour.
Heat Syncope	Occurs as result of exposure to high temperatures. Typically occurs during the first 5 days of acclimation to physical activity in the heat. May also occur after a long period of standing after physical activity.	Dehydration Fatigue Fainting Lightheadedness Tunnel Vision Pale or sweaty skin Decreased pulse rate	<ul style="list-style-type: none"> • Lie down in a cool place. • Drink clear juice or a sports drink.
Heat (Exercise) Exhaustion	The inability to continue exercising that is associated with heavy sweating, dehydration, energy depletion, and sodium loss. *Frequently occurs in hot, humid conditions	Normal or elevated body-core temp (97-104°F) Dehydration Dizziness/Lightheadedness Headache Nausea/Diarrhea Weakness Persistent muscle cramps Profuse sweating Chills Cool, clammy skin	<ul style="list-style-type: none"> • Seek medical attention immediately if symptoms are severe, the athlete has existing heart problems or high blood pressure. • You may attempt to cool the athlete by giving: cool, non-alcoholic beverages (as directed by physician), rest, cool shower/bath/sponge bath, moving to an air conditioned environment, and wearing lightweight clothing.
Heat Stroke	Life-threatening unless promptly recognized and treated. Occurs as a result of prolonged heat exposure while engaging in physical activity. Symptoms are a result of the body shutting down when it is no longer able to regulate temperature naturally.	Same Symptoms as Heat Exhaustion and High body-core temp (>104°F) Change in Mood (e.g., apathy, irrational) Hot and wet or dry skin Increased heart rate Confusion	<ul style="list-style-type: none"> • If any symptoms are evident-CALL 911 or seek immediate medical assistance. • Move the athlete to a shady area. • Cool the athlete rapidly using whatever methods you can: immerse the victim in a tub of cool water; place the person in a cool shower, spray the victim with cool water from the hose, sponge the person with cool water; fan the athlete. • Monitor body temperature and continue to cool the athlete until temp drops to 101-102°F. • Continue until medical professionals arrive and take over. If medical attention is delayed, call the emergency room for further instructions.