

# FUNDAMENTALS OF HEAT ACCLIMATIZATION PLAN

- ▶ Physical exertion and training activities should begin slowly and continue progressively.
- ▶ Keep each athlete's individual level of conditioning and medical status in mind and adjust activity accordingly.
- ▶ Adjust intensity, rest breaks, and consider reducing uniform and protective equipment.
- ▶ Athletes must begin workouts hydrated.
- ▶ Recognize early signs of distress and developing exertional heat illness. Treat immediately.
- ▶ Recognize more serious signs.
- ▶ An emergency action plan should be in place.



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## STEPS TO SAFETY

- 1 Acclimatize Athletes to the heat!
- 2 Hydrate before, during and after workouts
- 3 Modify activities in relation to environmental heat stress & contributing individual risk factors (i.e. illness, obesity)
- 4 Monitor all athletes during workouts and training in the heat
- 5 Monitor player weights before and after practice/work-out
- 6 Establish an emergency action plan
- 7 Be prepared to cool athletes quickly (i.e. ice towels, cold water submersion)



**PLAY IT SAFE**  
ILLINOIS HIGH SCHOOL ASSOCIATION  
**IN THE HEAT!**



# TYPES OF HEAT ILLNESS

## HEAT CRAMPS

Heat cramps are severe cramping of the skeletal muscles, particularly those most heavily used during exercise. Heat cramps are treated by moving the individual to a cooler location and administering fluids or a saline solution.

## HEAT EXHAUSTION

Heat exhaustion, accompanied by such symptoms as fatigue, dizziness, and vomiting, is caused by the body's cardiovascular system not meeting the body's needs; heat exhaustion typically occurs when your blood volume decreases, by either excessive fluid loss or mineral loss from sweating.

## HEAT STROKE

The most dangerous type of heat illness, heat stroke is characterized by a rise in internal body temperature, cessation of sweating, hot and dry skin, rapid pulse and respiration, high blood pressure, confusion, and unconsciousness.

In addition to immediately contacting medical personnel, individuals can treat heat stroke by cooling the person's body in a bath of water or ice or wrapping the body in a wet sheet and fanning the victim.

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# HEAT INDEX CHART

Heat Index in °F (°C)

Temp in °F/°C	Relative Humidity (%)												
	40	45	50	55	60	65	70	75	80	85	90	95	100
110 (47)	136 (58)												
108 (43)	130 (54)	137 (58)											
106 (41)	124 (51)	130 (54)	137 (58)										
104 (40)	119 (48)	124 (51)	131 (55)	137 (58)									
102 (39)	114 (46)	119 (48)	124 (51)	130 (54)	137 (58)								
100 (38)	109 (43)	114 (46)	118 (48)	124 (51)	129 (54)	136 (58)							
98 (37)	105 (41)	109 (43)	113 (45)	117 (47)	123 (51)	128 (53)	134 (57)						
96 (36)	101 (38)	104 (40)	108 (42)	112 (44)	116 (47)	121 (49)	126 (52)	132 (56)					
94 (34)	97 (36)	100 (38)	103 (39)	106 (41)	110 (43)	114 (46)	119 (48)	124 (51)	129 (54)	135 (57)			
92 (33)	94 (34)	96 (36)	99 (37)	101 (38)	105 (41)	108 (42)	112 (44)	116 (47)	121 (49)	126 (52)	131 (55)		
90 (32)	91 (33)	93 (34)	95 (35)	97 (36)	100 (38)	103 (39)	106 (41)	109 (43)	113 (45)	117 (47)	122 (50)	127 (53)	132 (56)
88 (31)	88 (31)	89 (32)	91 (33)	93 (34)	95 (35)	98 (37)	100 (38)	103 (39)	106 (41)	110 (43)	113 (45)	117 (47)	121 (49)
86 (30)	85 (29)	87 (31)	88 (31)	89 (32)	91 (33)	93 (34)	95 (35)	97 (36)	100 (38)	102 (39)	105 (41)	108 (42)	112 (44)
84 (29)	83 (28)	84 (29)	85 (29)	86 (30)	88 (31)	89 (32)	90 (32)	92 (33)	94 (34)	96 (36)	98 (37)	100 (38)	103 (39)
82 (28)	81 (27)	82 (28)	83 (28)	84 (29)	84 (29)	85 (29)	86 (30)	88 (31)	89 (32)	90 (32)	91 (33)	93 (34)	95 (35)
80 (27)	80 (27)	80 (27)	81 (27)	81 (27)	82 (28)	82 (28)	83 (28)	84 (29)	84 (29)	85 (29)	86 (30)	86 (30)	87 (31)

Category	Heat Index	Possible heat disorders
Extreme Danger	130° F or higher (54° C or higher)	Heat stroke or sunstroke likely
Danger	105°-129° F (41°-54° C)	"Sunstroke, muscle cramps, and/or heat exhaustion likely. Heatstroke possible with prolonged exposure and/or physical activity.
Extreme Caution	90°-105° F (32°-41° C)	"Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Caution	80°-90° F (27°-32° C)	Fatigue possible with prolonged exposure and/or physical activity.

• reproduced from NWS, Birmingham, AL

## IHSA RECOMMENDATIONS

- Use an acclimatization plan during summer contact days.
- Minimize or eliminate live tackling in the summer.
- Avoid dangerous Heat Index levels when conducting workouts.
- Make use of summer contact days to teach and instruct until acclimatization has occurred.
- Be Smart—Play It Safe!

