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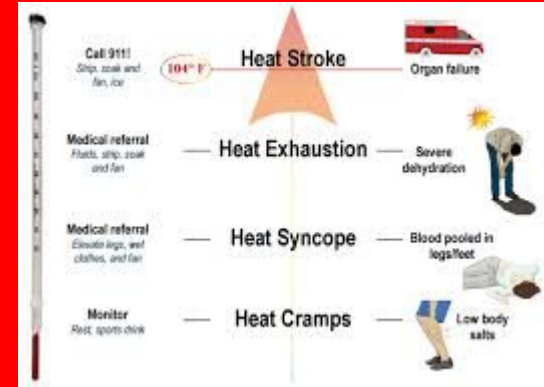
# Heat Illness: Prevention and Recognition

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# Types of Heat Illnesses

- Four types:
  - Heat Cramps
  - Heat Syncope
  - Heat Exhaustion
  - Heat Stroke
- Higher temps+higher humidity=higher risk of heat stroke (medical emergency)
- It is important to recognize the early signs so we can prevent injury



Relative Humidity	AIR TEMPERATURE (F°)										
	70°	75°	80°	85°	90°	95°	100°	105°	110°	115°	120°
0%	64°	69°	73°	78°	83°	87°	91°	95°	99°	103°	107°
10%	65°	70°	75°	80°	85°	90°	95°	100°	105°	111°	116°
20%	66°	72°	77°	82°	87°	93°	99°	105°	112°	120°	130°
30%	67°	73°	78°	84°	90°	96°	104°	113°	123°	136°	148°
40%	68°	74°	79°	86°	93°	101°	110°	123°	137°	151°	
50%	69°	75°	81°	88°	96°	107°	120°	136°	150°		
60%	70°	76°	82°	90°	100°	114°	130°	148°			
70%	70°	77°	85°	93°	106°	124°	144°				
80%	71°	78°	86°	97°	113°	136°					
90%	71°	79°	88°	102°	122°						
100%	72°	80°	91°	108°							



# Prevention

- Proper hydration
  - Hydrate before, during and after practice
- Heat acclimation
  - If you are new to the region, your body needs to get used to the climate
  - You will sweat more, so you need to drink more water/sports drinks
- Wear appropriate clothing
  - T-shirts, shorts, hats, sunglasses
  - Lightweight/dry fit clothing
- Take frequent breaks, in the shade if possible
- Practice early or late to avoid the heat




# Recognition—Signs and Symptoms

- Heat Cramps
  - Profuse sweating and thirst, local muscle pain
- Heat Syncope
  - Dizziness, tunnel vision, pale and/or sweaty
- Heat Exhaustion
  - Fatigue, dizziness, confusion, headache, vomiting
- Heat Stroke
  - Medical Emergency!
  - Loss of balance, aggression, irritability, unusual behavior, confusion, collapse, loss of consciousness

**HEAT-RELATED ILLNESSES**

WHAT TO LOOK FOR	WHAT TO DO
<b>HEAT STROKE</b>	
<ul style="list-style-type: none"><li>• High body temperature (103°F or higher)</li><li>• Hot, red, dry, or clammy skin</li><li>• Fast, strong pulse</li><li>• Headache</li><li>• Dizziness</li><li>• Nausea</li><li>• Confusion</li><li>• Losing consciousness (passing out)</li></ul>	<ul style="list-style-type: none"><li>• Call 911 right away—heat stroke is a medical emergency</li><li>• Move the person to a cooler place</li><li>• Help lower the person's temperature with cool cloths or a cool bath</li><li>• Do not give the person anything to drink</li></ul>
<b>HEAT EXHAUSTION</b>	
<ul style="list-style-type: none"><li>• Heavy sweating</li><li>• Cold, pale, and clammy skin</li><li>• Fast, weak pulse</li><li>• Nausea or vomiting</li><li>• Muscle cramps</li><li>• Tiredness or weakness</li><li>• Dizziness</li><li>• Headache</li><li>• Fainting (passing out)</li></ul>	<ul style="list-style-type: none"><li>• Move to a cool place</li><li>• Loosen your clothes</li><li>• Put cool, wet cloths on your body or take a cool bath</li><li>• Sip water</li></ul> <p><b>Get medical help right away if:</b></p> <ul style="list-style-type: none"><li>• You are throwing up</li><li>• Your symptoms get worse</li><li>• Your symptoms last longer than 1 hour</li></ul>
<b>HEAT CRAMPS</b>	
<ul style="list-style-type: none"><li>• Heavy sweating during intense exercise</li><li>• Muscle pain or spasms</li></ul>	<ul style="list-style-type: none"><li>• Stop physical activity and move to a cool place</li><li>• Drink water or a sports drink</li><li>• Wait for cramps to go away before you do any more physical activity</li></ul> <p><b>Get medical help right away if:</b></p> <ul style="list-style-type: none"><li>• Cramps last longer than 1 hour</li><li>• You're on a low-sodium diet</li><li>• You have heart problems</li></ul>
<b>SUNBURN</b>	
<ul style="list-style-type: none"><li>• Painful, red, and warm skin</li><li>• Blisters on the skin</li></ul>	<ul style="list-style-type: none"><li>• Stay out of the sun until your sunburn heals</li><li>• Put cool cloths on sunburned areas or take a cool bath</li><li>• Put moisturizing lotion on sunburned areas</li><li>• Do not break blisters</li></ul>
<b>HEAT RASH</b>	
<ul style="list-style-type: none"><li>• Red clusters of small blisters that look like pimples on the skin (usually on the neck, chest, groin, or in elbow creases)</li></ul>	<ul style="list-style-type: none"><li>• Stay in a cool, dry place</li><li>• Keep the rash dry</li><li>• Use powder (like baby powder) to soothe the rash</li></ul>





# Tips

- Notice something, say something!!
  - If you see any of your fellow band-mates struggling or acting differently, please let someone know immediately
  - Or if you yourself start to experience any of these, please let someone know!
- Water-to-sweat ratio
  - Replace whatever you are losing!
  - Should be drinking up to 2L (about two full water bottles) or more during hot practices
  - Drink both water and sports drinks
- Monitor your urine color
  - The lighter it is the better!
    - Light = hydrated

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# Questions?

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Resource: <http://www.nata.org>