



EASTERN WASHINGTON SURF SOCCER CLUB

HOT WEATHER

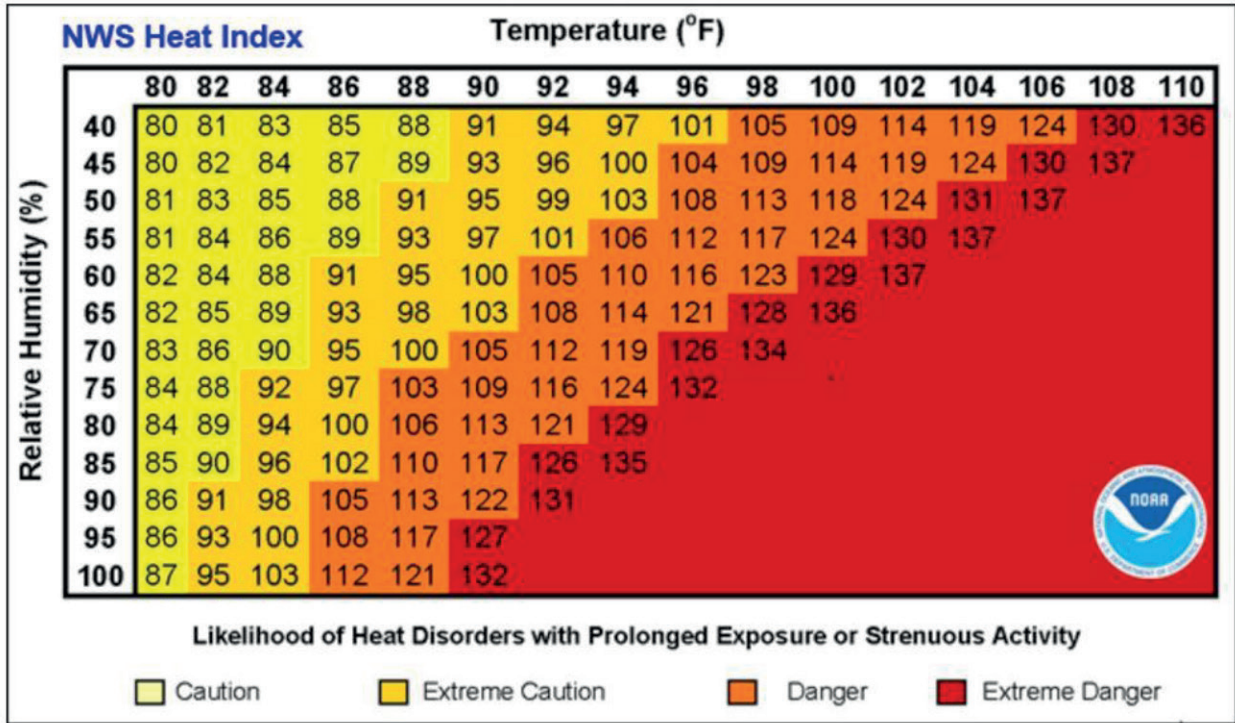
The following guidelines have been established for practices and games shall be determined on a case-by-case basis by the club administration.

Hot Weather Practice Recommendations:

Heat Index	Recommendations
Up to 89°	Normal Practices; Hydration breaks every 15-20 minutes of training. Provide hydration breaks of 4 minutes for each 30 minutes of continuous play (i.e., minute 30 and 75 of 90-minute match)
90° - 99°	Mandatory hydration breaks every 10-15 minutes with a 5-minute break every 20 minutes of play. Maximum two hours of training.
100° - 105°	Mandatory hydration breaks every 10-15 minutes with a 5-minute break every 15 minutes of play. Maximum one hour of training
105° +	Suspend Play

When temperatures and humidity rise above normal levels, the potential for risk rises. Be aware of these dangers and be prepared to stop or delay practices and/or games to ensure proper hydration. Allow for frequent water breaks. Incidents of dehydration, heat exhaustion, heatstroke and sunburn are avoidable. The proper and continued hydration of players is essential starting at least 24 hours prior to any scheduled event. Sunscreen of appropriate strength should be applied frequently. Plenty of shade should be provided to participants by trees, tents or buildings. Scheduling of practices outside of the hottest part of the day, whenever possible, is preferred. When playing multiple games in a day or over several days when participating in tournaments, it is recommended that there are at least two hours between games and only two games per day for players is strongly recommended – unless the playing time is reduced.

Heat is a problem when it prevents the body from cooling itself. The hotter the body gets, the more likely it is to increase fatigue levels, develop cramps and increase the possibility of heat exhaustion and heat stroke. The hotter and more humid the weather, the faster these problems can develop.



WBGT (Heat Stress Monitoring) & Region-Specific Guidelines/Heat Index*

- Recommend using WBGT on-site at time of training and check as often as possible.
- If on-site WBGT measures are not available, on-site measures of temperature and humidity can be used to predict WBGT using the chart below. (NOTE: Heat Index is not ideal because it doesn't factor the heat from the sun).
- If no on-site temperature measures are available, use temperature and humidity from local weather station measures and use the chart below to predict WBGT.



Step 1: Find the Wet Bulb Globe Temperature (WBGT)

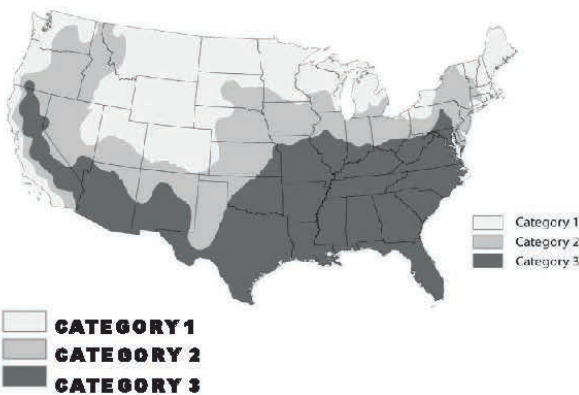
- Measure the temperature and humidity at your site.
- Find the estimated WBGT corresponding below.

		Wet Bulb Globe Temperature (WBGT) from Temperature and Relative Humidity																																			
		Temperature in Degrees Fahrenheit																																			
		68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0					
Relative Humidity (%)	0	59.0	60.8	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0
	5	60.8	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0	
	10	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0		
	15	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0			
	20	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0				
	25	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0					
	30	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0						
	35	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0							
	40	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0								
	45	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0									
	50	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0										
55	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	104.0	105.8	107.6	109.4	111.2	113.0	114.8	116.6	118.4	120.2	122.0												
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NOTE: This table is compiled from an approximate formula which only depends on temperature and humidity. The formula is valid for full sunshine and a light wind. Table adapted from Bureau of Meteorology

Step 2: Find Your Regional Category

- Determine which region category you are in based on the map below, to determine which WBGT guidelines in the table you should follow.



TRAINING & MATCH PLAY LIMITS

CANCELLATION OF TRAINING:

Depending on your region category, recommend cancellation of training or delay until cooler when WBGT for

Cat1 > 86.2°F Cat2 > 89.9°F Cat3 > 92.0°F

MATCH PLAY HYDRATION BREAKS: WBGT OF 89.6°F

Provide hydration breaks of 4 minutes for each 30 minutes of continuous play (i.e., minute 30 and 75 of 90-minute match)



Step 3: Find Your Alert Level and Work to Rest Recommendations

- Based on your WBGT and Regional Category determine your Alert Level and Work to Rest Recommendations using the table below.

ALERT LEVEL	WBGT BY REGION (° F)			EVENT CONDITIONS	RECOMMENDED WORK TO REST RATIOS (ACTIVITIES & BREAKS)
	CAT 1	CAT 2	CAT 3		
BLACK	>86.2°	>89.8°	>92.0°	Extreme Conditions	No Outdoor Training, delay training until cooler, or Cancel Training.
RED	84.2-86.1°	87.8-89.7°	90.1-91.9°	High Risk for Heat Related Illness	Maximum of 1 hour of training with 4 by 4 minute breaks within the hour. No additional conditioning allowed.
ORANGE	81.1-84.1°	84.7-87.7°	87.1-90.0°	Moderate Risk for Heat Related Illness	Maximum of 2 hours of training with 4 by 4 minute breaks each hour, OR a 10 minute break every 30 minutes of training.
YELLOW	76.3-81.0°	79.9-84.6°	82.2-87.0°	Less than Ideal Conditions	3 Separate 4 minute breaks each hour, OR a 12 minute break every 40 minutes of training
GREEN	<76.1°	<79.8°	<82.1°	Good Conditions	Normal Activities. 3 Separate 3 minute breaks each hour of training, OR a 10 minute break every 40 minutes

EXCESSIVE HEAT IMPACT ON PLAY

Depending on your Region Category, it is recommended that training or match play be canceled or delayed until cooler when WBGT exceeds these levels:

- Region Category 2 >86.2°F
- Region Category 1 >89.9°F
- Region Category 3 >92.0°F

Once an alert level is determined, follow these “Work to Rest” ratios to modify training to help ensure safe play:

- Alert Level Black – No outdoor training, delay training until cooler or cancel
- Alert Level Red – Maximum of one hour of training with four separate 4 minute breaks within the hour. No additional conditioning allowed
- Alert Level Orange – Maximum two hours of training time with four separate 4 minute breaks each hour, or a 10 minute break after 30 minutes of continuous training
- Alert Level Yellow – Use discretion, provide three separate 4 minute breaks each hour, or a 12 minute break every 40 minutes of continuous training
- Alert Level Green – Normal Activities, provide three separate 3 minute breaks each hour of training, or a 10 minute break every 40 minutes



It is recommended to include scheduled hydration breaks when the WBGT reaches 89.6°F. Provide hydration breaks of four minutes for each 30 minutes of continuous play. In a regulation 90-minute match, this would schedule the hydration break at minute 30 and 75.

Provide adequate communication of environmental conditions, cooling methods and other resources to players and staff. This includes ensuring unlimited access to water and other fluids, making sure players and coaches are aware of planned breaks for hydration and the duration and time of training.

ACCLIMATIZATION

Acclimatization is the body's natural adaptation to exercising in the heat. This process typically takes 10-14 days. Effective acclimatization should require a gradual graded progression of exercise in the heat. This typically applies at the start of preseason (summer months) where athletes are beginning fitness training and progressive training exposure in heat is recommended.

Guide for Acclimatization (10-14 Days)

Avoid the hottest part of the day for training sessions (11am-4pm)

Days 1-5

- One formal practice a day
- Maximum three hours of training time (this includes warm up, stretches and cool down)

Days 6-14

- Double practice days can begin day 6 and not exceed five hours in total practice time between the two practices
- Minimum of three-hour rest period between each training session during double practice days. The three-hour rest period should be in a cool environment to allow the body to fully recover
- Each double practice day should be followed by a single practice day with practice time not to exceed three-hours
- Athletes should receive one-day rest following six days of continuous practice

SPECIFIC HEAT-RELATED ILLNESSES

The first steps to recovery in all these cases are replacing fluids and cooling the body by resting in a cool, shaded place. Fanning or spraying with water will also help bring down the body temperature.

Heat Cramps

Heat cramps usually affect those who sweat a lot during strenuous activity. This sweating depletes the body's salt level, as well as hydration. Low salt levels lead to painful muscle cramps. Heat cramps may also be a symptom of heat exhaustion.

Heat Exhaustion

Heat exhaustion is the body's response to an excessive loss of water and salt, usually through excessive sweating. Someone suffering from heat exhaustion may appear confused or disoriented. It can lead to extreme weakness or fatigue, dizziness and nausea.



Heat Stroke

Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature. When this happens, the body's temperature rises rapidly, the sweating mechanism fails and the body is unable to cool down. The surge in body temperature can happen very quickly, within 10 to 15 minutes, rising to 106° Fahrenheit or higher. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Someone suffering heat stroke will be dizzy and confused. They may slur their speech, have hallucinations or complain of a throbbing headache. While their skin may be warm to the touch, they may actually complain of chills. If you suspect heat stroke, get the on-site medical provider or call 911.