HEAT INDEX FOR TODAY

(WHAT IT FEELS LIKE)

HEAT INDEX 90º - 100º

Sun stroke, heat cramps and heat exhaustion are possible with prolonged exposure and physical activity.

HEAT INDEX 101º - 129º

Sun stroke, heat cramps and heat exhaustion likely. Heat stroke possible with prolonged exposure and physical activity.

HEAT INDEX 130º and higher

Heat stroke or Sun stroke IMMINENT.

HOW TO USE HEAT INDEX:

1. Find today's predicted temperature
2. Next, find today's predicted humidity
3. Follow the answers to #1 and #2. Where they intersect will determine APPARENT TEMPERATURE or WHAT IT FEELS LIKE.

EXAMPLE:

1. Forecasted Temp = 95º
2. Forecasted Humidity = 60%
3. Index (feels like) = 114º

HEAT INDEX CHART

Air Temp. → / Relative Humidity ↓	Apparent Temperature (Degrees Fahrenheit) →								
	70°	75°	80°	85°	90°	95°	100°	105°	110°
0%	64°	69°	73°	78°	83°	87°	91°	95°	99°
10%	65°	70°	75°	80°	85°	90°	95°	100°	105°
20%	66°	72°	77°	82°	87°	93°	99°	105°	112°
30%	67°	73°	78°	84°	90°	96°	104°	113°	123°
40%	68°	74°	79°	86°	93°	101°	110°	122°	137°
50%	69°	75°	81°	88°	96°	107°	120°	135°	150°
60%	70°	76°	82°	90°	100°	114°	132°	149°	
70%	70°	77°	85°	93°	106°	124°	144°		
80%	71°	78°	86°	97°	113°	136°	157°		
90%	71°	79°	88°	102°	122°	150°	170°		
100%	72°	80°	91°	108°	133°	166°			

Heat Index Values were devised for shady, light wind conditions. Exposure to full sun can increase values by up to 15º. Strong winds, particularly with hot, dry air can be extremely hazardous.

5 DAY ACTUAL TEMPERATURE & HUMIDITY FORECAST

1	2	3	4	5
TEMP / HUMIDITY	TEMP / HUMIDITY	TEMP / HUMIDITY	TEMP / HUMIDITY	TEMP / HUMIDITY

HYDRATION SAFETY 365 - HYDRATE, FUEL, FOCUS

An overview of the body, fluid balance and your safety to prevent dehydration and/or accident from occuring because improper hydration is a threat in every season.

FLUID LOSS FACTORS

Factors that contribute to fluid loss* include:

- Sweating
- Exhaling
- Urination
- Diuretic intake
- Natural body exertion to maintain core temperature

*Varying factors: age, gender, environment and conditioning

HEAT FACTORS

Contributing to elevated body temperature and rapid fluid loss:

- High Temperature & Humidity
- Level of Exertion/Work Load or Strain
- PPE & Heavy Clothing
- Poor Air Flow & Circulation
- Machine/Equipment Heat
- Direct Sunlight Exposure
- Medical Precondition
- Lack of Physical Conditioning

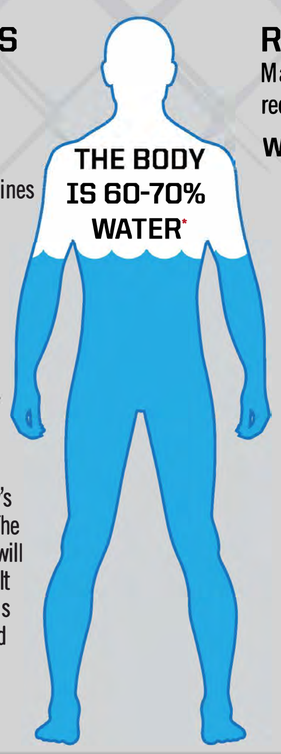
FLUID/ELECTROLYTE LOSS WARNINGS

LOSS	RESULTS
2%	Impaired Performance
4%	Muscular Function & Capacity Declines
6%	Heat Exhaustion
8%	Hallucination & Disorientation
10%	Circulatory Collapse & Heat Stroke

THERMOREGULATION

The body's process of thermal control

As outside temperature rises, the body's first method to keep cool is to sweat. The more heat it experiences vasodilation will occur to radiate the excess body heat. It takes energy to perform these functions and the body needs the proper fuel and fluids to achieve thermoregulation to prevent overheating.



RECOMMENDATION FOR PROPER HYDRATION

Maintaining and balancing the body's fluid level is imperative. A healthy adult, in moderate climate, is recommended to drink:

WATER (cups per day)[1]

In hotter environments and/or strenuous activity, an increase in fluid intake may be necessary.

1 Source: Water: How much should you drink every day? http://www.mayoclinic.com/health/water/NU00283

ELECTROLYTES

Na SODIUM · K POTASSIUM · Mg MAGNESIUM · Ca CALCIUM

Water is necessary, but water alone will not replace lost nutrients and minerals such as electrolytes. Electrolytes consist of minerals such as sodium, potassium, magnesium and calcium, which are critical for cell and muscular function.

6-10 oz. of electrolytes every 15-20 minutes during strenuous activity, especially in hot environments.[2]

Individual circumstances may vary and include water with electrolyte consumption.

2 Source: Role of Carbohydrate-Electrolyte Fluid Replacement in the Industrial Environment. Human Performance Laboratory, University of Alabama, Tuscaloosa, AL.

HYDRATION LEVEL CHART

USE CHART TO IDENTIFY HYDRATION LEVEL

TARGET LEVEL

Maintain level

PROPERLY HYDRATED
If urine resembles or matches these colors.

DEHYDRATED

Needs improvement

DEHYDRATED
If urine resembles or matches these colors more fluids should be consumed.

SEVERELY DEHYDRATED

Immediate attention

SEVERELY DEHYDRATED
If urine matches these colors SERIOUS DEHYDRATION has occurred. It is suggested that a physician be contacted to determine the severity of dehydration.

WARNING

HEAT AWARENESS

1. Environments of 90ºF or above - Use extreme caution, especially during strenuous activity.

2. Acclimate - Allow the body to adjust to high-heat, high-humidity environments.

3. PPE Clothing - PPE is necessary but can greatly increase risk of heat stress; therefore, monitor yourself continuously.

4. Thirst and/or sweat - These are NOT ALWAYS dependable gauges for proper hydration or fluid intake.

5. Know the Symptoms - Be familiar with heat stroke, heat exhaustion and heat cramps to respond quickly. (Review Heat Illnesses to the right)

6. Prevention - Preventing a heat stress injury is much easier than recovering from the injury.

For instant Heat & Hydration training check out sqwincher.com/educate/resources/heat-stress

HEAT ILLNESSES

Symptoms and responses to unprotected heat exposure.

Sunburn: Redness & painful skin; swelling of skin, blisters, fever and headaches are typical in severe cases.	Ointments for mild cases. DO NOT break blisters. If they do break, apply dry, sterile dressing. For severe cases, consult a physician.
Heat Cramps: Painful muscle spasms, usually in the legs and abdomen. Possible heavy sweating.	Apply firm pressure on cramping muscles, then gently massage to relieve muscle spasm. Give sips of Sqwincher every 15 minutes.
Heat Exhaustion: Heavy sweating, weakness, pale and clammy skin, nausea, low blood pressure, rapid pulse, fainting and possible vomiting.	Stop exertion, move to a cool spot and drink Sqwincher every 15 minutes for an hour. If victim vomits, seek immediate medical attention.
Exertional Heat Illness: Stuporous appearance, tired, nausea with possible vomiting. Unsteady gait, heavy perspiration, dehydrated with high body temperature (up to 104ºF), often accompanied by headache, rapid respiration and pulse.	Cease exertion and promptly cool body exterior. Initiate replacement of fluids – water first, then Sqwincher. If victim cannot retain fluids transport to hospital.
Heat Stroke: High body temperature (105ºF or higher), hot, red and dry skin, strong rapid pulse, possible unconsciousness.	Heat stroke is a severe medical problem. Move victim to cooler area and reduce body temperature with cold bath or sponging. Use fans and air conditioners. Get victim to hospital – **DELAY CAN BE FATAL. DO NOT GIVE FLUIDS!**

DISPLAY REVERSE SIDE FOR COLD STRESS

SQWINCHER

For a more in-depth study in hydration, connect to Sqwincher's Hydration Central! www.sqwincher.com/educate

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