

## HOW TO BEAT HEATSTROKE AND DEHYDRATION

Each year more than 600 people die of heat-related illnesses.

The United States Military has a supplier whose slogan says it best:

**“Hydrate or Die”.**

Without intervention and resolution of the problem, muscle cramps (caused by loss of salt from heavy sweating) can lead to heat exhaustion (caused by dehydration), which can lead to heatstroke (which can cause shock, brain damage, and **DEATH**...“Hydrate or Die”)

Solutions:

- 1. Drink 12-20 oz, 1-2 hours before exercise. Sports drinks and water are the best choices. Didn't plan ahead? 15-30 minutes before exercise, drink at least 10-14 oz of fluid.**
- 2. DO NOT drink liquids that contain Caffeine or more than 15g of sugar per serving.** They will interfere with the body's ability to control its internal temperature.
- 3. Avoid overheating if you are taking medication that impairs heat regulation (Blood flow) or if you are over weight, elderly, or unfit.**
- 4. The quickest way to get liquids metabolized into your system is to drink the liquid at room temperature. Drinking ice-cold liquids causes the stomach to constrict and impedes the distribution of vitamins, nutrients, and electrolytes that the drink provides.**

### Facts about drinking water:

- Lack of water is the #1 trigger of daytime fatigue.**
- A 2% drop in body water can trigger fuzzy short-term memory, trouble with basic math, and difficulty focusing on computer screen or paperwork.**
- 90 – 125 oz. of liquid a day significantly eases back and joint pain for up to 80% of sufferers. The liquid can, also, be accumulated by eating foods high in water content.**
- Drinking five 8 oz. glasses of water daily decreases the risk of colon cancer by 45%, plus it can slash the risk of breast cancer by 79%, and one is 50% less likely to develop bladder cancer.**
- One 8 oz. glass of water at midnight relieves hunger pangs for almost 100% of dieters.**



**Warning signs of Heat Stroke** vary but may include:

- an extremely high body temperature (above 103°F, orally)
- red, hot, and dry skin (no sweating)
- rapid, strong pulse
- throbbing headache
- dizziness, nausea
- disorientation, confusion
- unconsciousness

If you see any of these signs, you may be dealing with a **LIFE-THREATENING** emergency.

**Call 911.**



### FIRST RESPONDER USE:

#### SIGNS OF DEHYDRATION IN BABIES AND TODDLERS

STATUS	No Dehydration	Some Dehydration	Severe Dehydration
CONDITION	Well, alert	Restless, Irritable*	Lethargic or unconscious, floppy*
EYES (Tears)	Normal (present)	Sunken (not present)	Very sunken and dry (not present)
MOUTH & TONGUE	Moist	Dry	Very Dry
THIRST	Drinks normally, not thirsty	Thirsty, drinks eagerly*	Drinks poorly or not able to drink*
SKIN PINCH	Goes back quickly	Goes back slowly*	Goes back very slowly*
DECIDE	The child has no signs of dehydration	If the child has 2 or more signs, including at least 1 major sign, there is some dehydration.	If the child has 2 or more signs, including at least 1 major sign, there is some dehydration.

\* Indicates a Major sign



### Am I Hydrated? Urine Color Chart

1

2

3

4

5

6

7

8

This urine color chart is a simple tool you can use to assess if you are drinking enough fluids throughout day to stay hydrated.

If your urine matches the colors numbered 1, 2, or 3 you are hydrated.

If your urine matches the colors numbered 4 through 8 you are dehydrated and need to drink for more fluid.

**Be Aware!** If you are taking single vitamin supplements or a multivitamin supplement, some of the vitamins in the supplements can change the color of your urine for a few hours, making it bright yellow or discolored.

If you are taking a vitamin supplement, you may need to check your hydration status using another tool like Handout #15: Hydration Check: Body Weight Log.

### Relative Humidity (%)

°F	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136												
108	130	137											
106	124	130	137										
104	119	124	131	137									
102	114	119	124	130	137								
100	109	114	118	124	129	136							
98	105	109	113	117	123	128	134						
96	101	104	108	112	116	121	126	132					
94	97	100	103	106	110	114	119	124	129	135			
92	94	96	99	101	105	108	112	116	121	126	131		
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	80	81	81	82	82	83	84	84	85	86	86	87

Heat Index  
(Apparent Temperature)

### With Prolonged Exposure and/or Physical Activity

#### Extreme Danger

Heat stroke or sunstroke highly likely

#### Danger

Sunstroke, muscle cramps, and/or heat exhaustion likely

#### Extreme Caution

Sunstroke, muscle cramps, and/or heat exhaustion possible

#### Caution

Fatigue possible

## Heat Index Guidance

The National Weather Service uses a "heat index" that alerts the public when combinations of heat and humidity could make hot weather hazardous. **It tells how hot the Heat-Humidity combination makes it feel.**



Skin with decreased turgor remains elevated after being pulled up and released

### SKIN TURGOR (elasticity)

A quick check of skin turgor by pinching the skin over the back of the hand, on the abdomen, or over the front of the chest under the collarbone is a good way to check for dehydration at home.

Mild dehydration will cause the skin to be slightly slow in its return to normal.

To rehydrate, drink more fluids -- particularly water.

If turgor is severe, indicating moderate or severe dehydration, see your health care provider immediately.