



# Know the Warning Signs of Heat Illness

*Heat illness is one of the most common infirmities affecting athletes during the hot summer months. With the dog days of summer approaching, it's important for coaches, parents, players and volunteers to understand what causes heat illness and how to identify the warning signs.*

## Heat Rash

One of the primary functions of the skin is to protect the inner workings of the body from outer elements. It also serves as a way for the body to control its temperature, using perspiration to cool down a body that could overheat. Heat rash occurs when the pores become congested and the sweat cannot release from the skin, causing a rash.

### To prevent your athlete from getting heat rash:

- Ensure clothing is not skin tight
- Avoid wearing heavy clothes or long sleeve sweatshirts which increase the body's temperature
- Do not use lotions or heavy creams ("spray-on" sunblock is the preferred method to avoid the sun's harmful UV rays)

## Heat Cramps

Spontaneous muscle spasms when playing in hot weather are usually heat cramps. Generally affecting large muscles like those in legs, heat cramps are a clear sign of dehydration.

### It's important to identify when a heat cramp is taking place because it's one of the earliest signs of heat illness:

- There is often significant sweating coming from the cramped area
- The athlete's body will feel weaker
- Heat cramps usually begin after significant activity has been completed

## Heat Exhaustion

If sweating is unable to cool the body down, heat exhaustion can occur. Heat exhaustion stems from dehydration and can include symptoms like heat rash and cramps. Being able to identify when an athlete is yielding to heat exhaustion is important because it could progress into heat stroke.

### Check for:

- Excessive sweating
- Severe weakness
- Headache
- Nausea and vomiting

## Heat Stroke

Heat stroke is the most serious form of heat-related illness and is one of the leading causes of weather-related deaths during summer months. A form of hyperthermia, heat stroke occurs when the body temperature exceeds 104 degrees. This type of heat illness is a medical emergency and is deadly if not treated.

### Symptoms are important to identify early:

- Confusion, agitation, disorientation, or hallucinations
- Hot and red skin without any sweat
- Seizure, loss of consciousness, and strange behavior
- Heat cramps and rash

The summer baseball season can result in life-long memories and fun experiences for young athletes. However, in a matter of hours, without taking the proper steps to hydrate and protect each athlete, it can also result in a severe medical situation that could change one's life.

Pay close attention, hydrate early and often, and always err on the side of caution.

## Prepare by Hydrating

Hydrating your athlete properly will make illnesses caused by heat less likely. Over a two-hour period prior to the game, athletes should consume at least 16 ounces of fluid. During the competition, it is recommended to drink cold fluids every 10 to 15 minutes.

It's also important that water is colder, as it helps decrease body temperature quicker. Sports drinks can also be absorbed by the body like water and can provide energy to working muscles that water does not.

## Soda and Caffeine Not Helpful

According to fitness experts at Lance Armstrong Foundation, many carbonated drinks increase the chances of dehydration because they act as a diuretic, causing the body to lose water faster. Caffeine contained in drinks is also known to increase heat production in the body quicker than normal.

If your athlete is feeling thirsty, then he/she is already dehydrated – increasing the risks of heat illnesses. Proper hydration, beginning before a contest and through the entire game, will help keep players safe.

For more information on NNLL's Hydration Education Program, visit [www.nnll.org](http://www.nnll.org).



# North Natomas Little League's Hydration Education Program

North Natomas Little League (NNLL) takes athlete safety seriously. As part of NNLL's "culture of safety," beginning in 2015, all Little League parents/guardians are required to sign the attestation below acknowledging their understanding of the NNLL Hydration Education Program.

## NNLL's "Extreme Caution" Heat Alert

North Natomas Little League's heat alert procedures are based on Heat Index Values. The Heat Index, sometimes referred to as the "apparent temperature," is given in degrees Fahrenheit. The Heat Index is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature.

A heat alert will be issued by NNLL on any day when practices or games are scheduled and the expected Heat Index is forecasted to reach or surpass the "Extreme Caution" threshold listed in the NOAA National Weather Service Heat Index chart at right (i.e., when the "apparent temperature" is expected to reach 91 degrees or higher). These days are identified by NNLL as "Hydration Education" days.

Even during cool temperatures, an athlete can dehydrate quickly. The risk of heat illness rises with every apparent temperature increase. It is imperative that players are kept as hydrated and cool as possible. In the event the "Extreme Caution" threshold is expected to be reached, the following precautions should be taken by parents/guardians to prevent dehydration, hyperventilation and heat stroke.

## Parent Precautions

On "Hydration Education" days, parents are encouraged to take the following precautions to ensure the safety of their child:

- Encourage your child to take responsibility for his/her own hydration routine.
- Ensure your child consumes an adequate amount of fluids, beginning first thing in the morning of a game or practice and continuing throughout the day as outlined in the League's "Strategy for Proper Hydration" in the NNLL 2015 Safety Manual (which can be found online at [www.nnll.org](http://www.nnll.org)). Athletes that are not well hydrated BEFORE they step on the field are already at a loss.
- NNLL recommends the use of sunscreen with an SPF (sun protection factor) of at least 15 as a means of protection against the sun's damaging ultraviolet rays. For best results, parents should ensure that sunscreen is applied 30 minutes prior to exposure to allow the ingredients to fully bind to the skin. Sunscreen should be reapplied every two hours (or more often if the player is sweating a lot).

NOAA's National Weather Service  
Heat Index  
Temperature (°F)

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

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution     
  Extreme Caution     
  Danger     
  Extreme Danger

## Parent/Athlete Attestation (please sign and return this portion to your child's coach)

By signing below, I acknowledge the following:

- I know the dangers of heat illness and I understand the importance of proper hydration before, during and after games and practices, especially on days when the apparent temperature on the Heat Index reaches 91 degrees.
- I will encourage my athlete to take responsibility for his/her own hydration routine.
- I will ensure my athlete is properly hydrated before he/she steps on the field.

Athlete's Name Printed \_\_\_\_\_

Athlete's Signature \_\_\_\_\_

Date \_\_\_\_\_

Parent or Legal Guardian Printed \_\_\_\_\_

Parent or Legal Guardian Signature \_\_\_\_\_

Date \_\_\_\_\_

**YES!** Please alert me on days when the Heat Index is forecasted to reach 91 degrees. By checking this box, I will be subscribed to North Natomas Little League communications. Email me: \_\_\_\_\_ Text me: (\_\_\_\_\_) \_\_\_\_\_

