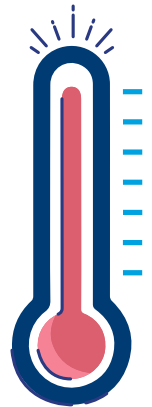


# Heat Illness FAQs

## 1. When are heat illnesses most likely to occur?

- It is important to remember that each athlete is different so heat illnesses are possible whenever warm temperatures occur. (1).
- Heat illness is most common when temperatures hit the 90's, however, there are reports of heat illness occurring at temps down into the mid 70s (1).
- The key is monitoring weather conditions and modifying activity as the heat and humidity levels rise. A chart with recommendations can be found here: [ksi.uconn.edu/prevention/temperature-monitoring/](http://ksi.uconn.edu/prevention/temperature-monitoring/) (Iowa is in Category 2).

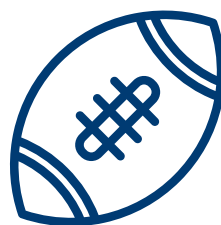


## 2. If it is a warm or humid day, how do I prevent a heat illness?

- A key first step is an acclimatization. This allows the body to adapt to the heat. This is done by progressively being more active in heat over 1-2 weeks. Specific recommendations can be found at: [doi: 10.4085/1062-6050-44.3.332](https://doi.org/10.4085/1062-6050-44.3.332)
- Understand who is more likely to get a heat illness. Athletes who have a history of heat illness, lower conditioning level, high body mass index, dehydration, less sleep, or have a fever are more likely to develop a heat illness. (2)
- High-intensity practices with insufficient rest breaks, dark-colored clothing, wearing protective equipment, and not having access to water are other factors that can increase the risk of heat illness.
- Other methods of prevention include having athletes monitor their urine color to know if they are dehydrated (dark is dehydrated) and having athletes weigh themselves before and after practices so they know how much fluid they lost. For every 2.2 lbs lost, an athlete should drink 1 liter of fluids. (2)
- Having a well developed heat illness plan on hand so all coaches and personnel know what to do.

## 3. Should I stay out in the heat between games and practices so I can get used to the heat and be ready to play?

- It takes up to 10-14 days to be fully acclimatized to heat.
- Acclimatization loss occurs at a rate of about 3% in a five day span (1) so it will not be impacted by a few hours in a cool area (3).
- Cooling down between games will actually benefit the athlete and help prevent a heat illness.



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# Heat Illness FAQs

## 4. How do I know if an athlete is getting overheated?

- Symptoms of **heat exhaustion** are fatigue, vomiting, sweating, cramping, headaches, dizziness, and a rectal temp  $<105^{\circ}$  (4).
- Symptoms of **heat stroke** are disorientation, confusion, loss of consciousness, rectal temp  $>105^{\circ}$  (4).
  - Heat stroke is the most dangerous form of heat illness (5).
  - Athletes need to be cooled down immediately and then sent to the ER.



## 5. What are the best ways to take an athlete's temperature?

- The best way to take a core temperature is with a rectal thermometer (4).
- Other ways of taking a temperature (forehead, oral, ear) have been shown to be 1-3 degrees lower than the actual core temperature. Knowing the precise core temperature is key to making sure the athlete has a positive outcome.
- Taking a rectal temperature is not comfortable. However, heat illnesses are preventable. Taking steps to prevent them from occurring will prevent the need to take one.
- If working with athletes who are minors, the use of rectal thermometry should be discussed ahead of time with administrators and included in their heat illness plan.

## 6. What are the best ways to treat a heat illness?

- The key is to cool and rehydrate the athlete as quickly as possible.
- The NATA states that cold water immersion is the most effective treatment for heat illness, particularly heat stroke (1).
- Ice towels, air conditioning, removing excessive equipment, and rehydration are key for heat exhaustion.
- For heat stroke, quick action is crucial. The quicker the cold immersion occurs, the less likely the event will be fatal (6).
  - **First**, lower core body temp within 30 minutes (5). More damage occurs the longer the body stays above  $103^{\circ}$  (5).
  - **Second**, transport them to a hospital.



## 7. Where can I get more information?

- The Korey Stringer Institute has a wealth of information related to heat illnesses. [ksi.uconn.edu/heat-illnesses/](https://ksi.uconn.edu/heat-illnesses/)
- If you need assistance in developing a heat emergency plan, the Drake Athletic Training Program would be happy to help, reach us at: [drakeatprograms@drake.edu](mailto:drakeatprograms@drake.edu)

1) [training-conditioning.com/article/debunking-heat-illness-myths/](https://training-conditioning.com/article/debunking-heat-illness-myths/)

2) [ksi.uconn.edu/prevention/temperature-monitoring/](https://ksi.uconn.edu/prevention/temperature-monitoring/)

3) [www.journal.org/article/S1080-6032\(18\)30199-6/fulltext#seccesectitle0005](https://www.journal.org/article/S1080-6032(18)30199-6/fulltext#seccesectitle0005)

4) [National Athletic Trainers' Association Position Statement: Exertional Heat Illnesses, Casa et al., 2015](#)

5) [ncbi.nlm.nih.gov/pmc/articles/PMC6783627/](https://ncbi.nlm.nih.gov/pmc/articles/PMC6783627/)

6) <https://www.mayoclinic.org/diseases-conditions/heat-stroke/diagnosis-treatment/drc-20353587>