DANCER HEALTH TIPS FROM UAB SPORTS & EXERCISE MEDICINE

Heat-Related Illness and Dehydration in Dancers

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The negative impact of heat on dance/athletic performance is well-studied. Performing artists can encounter a variety of challenging performance situations, particularly during the summer months. Exposure to abnormal or prolonged amounts of heat and humidity can cause various types of heat-related illness. Sweating and the evaporation of sweat from the skin's surface is usually the primary way that the body can cool itself down when exposed to heat and during increased physical activities. Sweating causes the body to lose fluids, so adequate hydration is key for prevention.

How can you recognize heat-related illness?

Heat-related illness can occur when your body temperature rises and your body can no longer get rid of the extra heat. Early signs and symptoms can include:

- Dehydration thirst
- Muscle cramps
- Cool/clammy skin
- Fatigue
- Dizziness or lightheadedness
- Weakness
- Headache
- Nausea

Multiple factors can contribute to heat illness. In addition to air temperature and relative humidity, lack of air motion and other sources of heat (such as stage lights) can play a role. In addition, any costume that can prevent evaporation and certain medications can also contribute to dehydration.

What are tips to reduce your risk of heat-related illness?

Dancers can reduce their risk of heat-related illness by:

- Being aware of heat-related illness symptoms
- Staying hydrated
- Monitoring weather and temperature conditions
- Taking frequent breaks
- Wearing appropriate clothing for the heat
- Using cooling fans or air conditioning

What is the proper amount of hydration for dancers/athletes?

Before Performance/Rehearsal:

- 4 hours prior 7.5-15 oz. of cool fluid (5-7 ml/kg body weight)
- 20 minutes prior 6-10 oz. of cool fluid (3-5 ml/kg body weight)

During Performance/Rehearsal:

- Every half hour of activity 6-8 oz. of cool fluid
- Fluid intake should equal or exceed sweat and urine loss

After Performance/Rehearsal:

 Within 2 hours of activity – at least 20 oz. of cool fluid for every pound of body weight lost during activity

Avoiding heat-related illness should not be confused with performing adequate warm-up. Please see our November 2024 article for best warm-ups for dance.

Is there a dancer health related topic you want to learn more about? Or maybe you have a specific question? Send those to use via email (rachel@alabamadancecouncil.org) and we will try to answer them in future articles.

References:

- O'Connor FG, DeGroot DW. Heat-Related Illness in Athletes. JAMA. 2024 Aug 27;332(8):664-665.
- Roberts WO, Armstrong LE, Sawka MN, Yeargin SW, Heled Y, O'Connor FG. ACSM Expert Consensus Statement on Exertional Heat Illness: Recognition, Management, and Return to Activity. Curr Sports Med Rep. 2023 Apr 1;22(4):134-149.
- Dance/USA Task Force on Dancer Health. www.danceusa.org/dancerhealth.

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