

REGULATION: HEAT-RELATED ILLNESS PREVENTION GUIDELINES

I. Purpose

The purpose of this regulation is to provide the school guidelines regarding how to recognize, manage and prevent heat-related illness.

II. Definitions

When used in this Regulation, unless otherwise specifically defined where used, the following terms shall have the following meanings:

- A. *Heat-related illness* is a general term describing a number of medical conditions associated with dehydration, poor acclimatization, and exposure to or prolonged exercise in hot and humid environments.
- B. *Heat acclimatization* describes a complex series of changes occurring within the body in response to heat stress over a period of one to two weeks. Adaptations in heat tolerance that come from gradually increasing the intensity or duration of work performed in hot settings allow the body to better cope with activity in hot and humid environments.
- C. *Heat cramps* are a type of exercise-related muscle cramps characterized by painful cramping usually occurring in the arms and legs. Heat cramps may be caused by exercising in hot or humid environments, dehydration, or excess sodium and electrolyte loss commonly associated with exercise in those environments. While not a medical emergency, heat cramps may be confused with a more serious condition, exertional sickling.
- D. *Heat exhaustion* is the body's response to an excessive loss of water and salt, usually through excessive sweating.
- E. *Heat stroke* is the most serious heat-related illness. It occurs when the body can no longer control its temperature, the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Heat stroke can cause permanent disability or death if the person does not receive emergency treatment.
- F. *Heat syncope* refers to fainting (syncope) episodes experienced by individuals exercising in hot and humid environments and results from a temporary decrease in blood flow to the brain causing a brief loss of consciousness. Factors that contribute to heat syncope include dehydration and lack of acclimatization.
- G. While not a heat-related illness, *exertional sickling* is associated with intensive exercise in hot and/or humid conditions, particularly with individuals who may be poorly

acclimatized or deconditioned and may be confused with heat cramps. Exertional sickling is a medical emergency in which the red blood cells of a person carrying the sickle cell trait change shape (sickle) leading to decreased blood flow. This decrease in blood flow can lead to a breakdown of muscle tissue and cell death, a condition known as fulminant rhabdomyolysis.

III. Education and Training

The school will ensure that school staff have training in the recognition of heat-related illness signs, symptoms, and risk factors and in the prevention of heat-related illness.

Student athletes and their parents/guardians also will be informed of the nature and risk of heat-related illness, how to recognize the signs of heat-related illness, and how to prevent heat-related illness.

Heat-related illness prevention education programs may include:

1. Risk factors associated with heat-related illness.
2. Common signs and symptoms of a heat-related illness include heat stroke, heat exhaustion, heat syncope, and heat cramps.
3. Early recognition of a student-athlete displaying signs and symptoms of a heat-related illness and prompt response is critical.
4. Encouragement of immediate reporting by student-athletes experiencing signs and symptoms of a heat-related illness. A failure to do so may delay the medical evaluation of the student-athlete, the determination of the cause of any signs or symptoms, and medical intervention to stabilize the student-athlete. Student-athletes who continue to play while experiencing potential signs or symptoms of a heat-related illness are at risk of experiencing a medical emergency.

III. Removal from and Return to Extracurricular Physical Activity

School staff supervising athletic activities in hot and humid environments should be monitoring student-athletes for any signs or symptoms of heat-related illness and should be prepared to immediately cool a student-athlete suspected of heat exhaustion or heat stroke with whole-body cold-water immersion, cold water dousing (cold shower), ice towels and/or ice bags, and/or the use of fans.

A student-athlete reporting signs or symptoms associated with a heat-related illness to a coach, athletic trainer, or team physician in a practice or game shall be removed from the activity at that time. A student-athlete who has been removed from play, evaluated, and suspected to be at risk of or experiencing heat stroke shall not return to play that same day.

IV. Management

The school will ensure each school has staff trained in the management of heat-related illnesses, including the development of Emergency Action Plans.

Schools and other organizations sponsoring athletic programs are encouraged to develop comprehensive Emergency Action Plans (EAPs) specific to the athletic environment. These valuable resources are intended to help staff prepare for a wide variety of emergency medical situations that may occur during athletic participation. Individuals experiencing or suspected of experiencing a heat-related illness should be removed from activity immediately. The specific treatment and any return to activity requirements will depend on the condition (i.e., heat cramps, heat syncope, heat exhaustion, heat stroke).

Adopted: September 18, 2025

Legal Ref:

Code of Virginia, Chapter 428, Senate Bill 161 (2022) - [link to Senate Bill 161](#)

Code of Virginia, Chapter 428, Senate Bill 161 (2022) - [link to Chapter 428](#)

Cross Ref: Pol 4092 Student-Athlete Extreme Heat Safety and Protection
 Proc 4092-P Procedure for Athletic Practice and Games
 Proc 4092-P1 Procedure for Canceling Athletic Practices and Games Due to
 Extreme Heat or Weather