



# EMERGENCY CARE GUIDELINES



## ● INTRODUCTION

Tournament directors should be prepared for medical emergencies and evacuations in case of disasters. The ordinary standard of care does not require a tournament director to be trained in emergency medical care. However, common sense suggests that tournament directors should be prepared for medical emergencies and evacuations in case of disasters. This pamphlet outlines guidelines for emergency care practices that should be implemented by tournament directors.

## ● TOURNAMENT PREPARATION

It is important to think about the possibility of a medical emergency taking place at your tournament ahead of time. Once you have anticipated this possibility, you have already begun preparation. Consider having the following in place at the start of the tournament:

### Emergency Phone Numbers

- Identify at least one working phone on site. If you are using a cellular phone, it must be fully charged and must work on site. Many cellular phones do not work in certain areas or locations.
- Know the phone number and location of the nearest hospital.
- Know the phone number of a local ambulance company. Let the company know beforehand that you are hosting a tennis tournament, and speak to appropriate personnel about the best protocol to follow in case of an emergency.
- 911: Remember, when in doubt or in case of a medical emergency, call 911, which will activate the emergency response system and prompt an emergency medical vehicle to be sent to your site.
- Walk the tournament site in order to know the best way for an emergency vehicle to enter.
- All tournament personnel should be aware of the emergency phone numbers and know how to activate 911.
- When activating 911, or when calling the local ambulance company, instructions should be clear. You should indicate the following:

- The number of people who are in need of emergency medical care
- Their ages (or approximate ages)
- The location
- The person to whom emergency medical services should report

In addition to activating the emergency response system, the parent or guardian of a minor should be located as soon as possible. For adults, the spouse, parent or next of kin should be notified as soon as possible. Remember, for emergency medical care, activating 911/emergency response system takes precedence over calling family members.

### Supplies (on-hand)

- Towels (for clean up and for use by players, if necessary).
- Water: Ample drinking water should be available on site.
- Ice: There should be ice available for both heat illness and acute strains/sprains.
- Gloves: Exam gloves should be on site and worn by anyone who may come into direct contact with blood, which includes caring for an injured player or spectator/staff, or cleaning a blood spill.
- First Aid Kit: A basic first aid kit should be on site, but remember, this should only be used within your comfort zone. Medications should not be dispensed except upon the recommendation of a physician on site, and the physician must document such recommendation. First aid kits should include:

Band-Aids, both small and large	Scissors
Medical gauze	Sunscreen
Athletic tape and Elastic (ACE) bandages	Skin antiseptic cleaner such as Betadine
Plastic bags, including red plastic bags	Skin antiseptic cream

## ● ON - SITE EMERGENCY CARE

The following sections describe medical situations and conditions the tournament director should be prepared to manage. Remember, the best management often means identifying that someone needs emergency medical care, and then accessing emergency treatment via 911 or a local ambulance company.

### Universal Precautions

Universal precautions should be taken with any human blood and body fluids tainted with blood, in that all such fluids should be considered contaminated and potentially infectious. Thus, anyone handling blood or blood products should do so with latex exam gloves, and the individual handling the blood should have no open sores (non-latex exam gloves are available for latex-allergic/sensitive individuals). As a practical example, if a player is bleeding and someone on site is helping the player by applying a bandage or applying pressure with a towel, that individual should be wearing exam gloves. If there is a blood spill on court, this must be cleaned in accordance with current USTA Regulations (Friend at Court: The USTA Handbook of Tennis Rules and Regulations: Medical Time-Out). If a mop and water are not utilized, a towel with water is acceptable. In this instance, the individual should be wearing exam gloves. Blood products should be disposed of in readily identifiable red plastic bags.

### Heat Illness

Heat illness refers to an acute medical condition that arises from a combination of dehydration and overheating within the body. Heat illness occurs most commonly in hot, humid conditions, especially if there is little wind. It is important to be aware of the temperature and humidity throughout the day, and to anticipate heat illness occurrences when the apparent temperature, or heat index, is equal to or greater than 90 degrees, as per the chart below.

The symptoms and signs of heat illness include unusual or excessive tiredness, headache, nausea (with or without vomiting), cramps, dizziness, passing out and high body temperature. Heat stroke is a medical emergency, and typically individuals appear acutely ill, have a high body temperature, and are unable to drink any fluids.

Post signs advising players to drink plenty of fluids before, during and after play. Try to provide and identify areas with shade for cooling, as well as plenty of fluids and cold, wet towels or icepacks. If the player cannot drink or has no desire to drink, has lost consciousness or has a change in level of consciousness, or if there is any doubt about the player's condition, emergency transport to the nearest hospital should be arranged via 911 or a local ambulance company. While awaiting emergency transport to arrive, the player should be removed from the heat and cooled with cold, wet towels applied to the body, specifically the armpits, groin and head.

### Acute Allergic Reactions/Anaphylaxis

Acute allergic reactions are most likely to occur at a tennis tournament as a result of an insect bite or a bee/wasp sting. The reaction can range from localized swelling and discomfort, to more generalized swelling, to difficulty breathing with wheezing, to a life-threatening cardiovascular collapse. Localized reactions can be treated with ice. If the rash continues to worsen, if there is any difficulty breathing, or if there is wheezing or facial swelling, or any changes in the level of consciousness, the player should be transported immediately to the nearest hospital via 911 or the local ambulance company.

Some players may have an established history of severe allergic reactions and may have experience using Epipen (epinephrine auto-injector). Such players may self-administer Epipen in accordance with their comfort zone. Even in this scenario, the emergency response system/911 should be activated to ensure immediate medical evaluation and management of the individual.

## Strains/Sprains

Acute strains and sprains usually occur in the setting of a fall. Symptoms include localized swelling and pain. Acute management includes limb elevation with application of ice and a compression bandage (ACE bandage). Remember: RICE: Rest; Ice; Compression; Elevation). Players must then follow-up with their physician for further management. For severe strains and sprains, players should be evaluated that day, either in a physician's office or in the emergency room, in order to rule out an underlying fracture. Acute strains and sprains are not life threatening, and the treatment on site should consist of the elevation and ice application. The player or guardian should then be advised to seek appropriate medical follow-up care.

## Other Emergencies

Life-threatening emergency can occur at any time, and can include a seizure, heart attack, sudden fall with head trauma, or sudden collapse. Your job is not to make a diagnosis, but to activate the emergency response system via 911 or a call to the local ambulance company. It is important to maintain an environment of calm, and to remove all unnecessary people from the scene.

## Medication

You should not administer medication on site, including aspirin, products containing acetaminophen, or over-the-counter cold remedies. Some over-the-counter products contain medications that may be on the anti-doping banned list. It is the player's responsibility to properly take such medications under the direction of his physician, his guardian, or both. In addition, never supply any food supplements, protein drinks, or energy supplements other than standard sport drinks (e.g., Gatorade). These supplements may be tainted with banned substances for doping control.

## Thunderstorms and Lightning

Lightning is a potential severe hazard and life-threatening consequence of an approaching storm near outdoor tennis matches, and tournaments should be prepared for immediate cessation of all matches or warm-up in the event of lightning. In essence, if lightning is sighted, all activity should stop and everyone should seek appropriate shelter. A 30-30 rule may be used, which is as follows:

- If lightning is sighted and thunder then occurs in 30 seconds or less, everyone on site should be instructed to seek appropriate shelter. Dividing the number of seconds between lightning and thunder by 5 gives the distance of lightning in miles. (For example, a flash-to-bang count of 30 seconds means a distance of 6 miles.)
- Activity should not resume until a minimum of 30 minutes has elapsed since the last lightning strike was seen.

Once a lightning hazard has been identified, everyone on site should seek appropriate shelter. The primary choice is any substantial, frequently inhabited building with working electricity, telephones and plumbing. While inside, one should avoid using electrical devices or telephones attached to cords, and plumbing, e.g., showers, should not be used. If such a building is not available, the next safest location is a fully enclosed vehicle with a metal roof and closed windows. Do not touch the metal framework while inside the vehicle.

The following locations should be avoided:

- Open fields
- Proximity to open water
- Trees, flag poles, or light poles

If anyone has been struck by lightning, emergency medical services should be activated immediately. If possible, the injured person should be moved to a safer location.

This Heat Index Chart provides general guidelines for assessing the potential severity of heat stress. Individual reactions to heat will vary. It should be remembered that heat illness can occur at lower temperatures than indicated on the chart. In addition, studies indicate that susceptibility to heat illness tends to increase with the very young and the elderly.

1. Across the top of the chart, locate the **ENVIRONMENTAL TEMPERATURE** (i.e., the air temperature).
2. Down the left side of the chart, locate the **RELATIVE HUMIDITY**.
3. Follow across and down to find the **APPARENT TEMPERATURE**. Apparent Temperature is the combined index of heat and humidity. It is an index of the body's sensation of heat caused by the temperature and humidity (the reverse of the "wind chill factor").

Note: Exposure to full sunshine can increase Heat Index values.

<b>HEAT INDEX</b>											
<b>ENVIRONMENTAL TEMPERATURE (F°)</b>											
	70°	75°	80°	85°	90°	95°	100°	105°	110°	115°	120°
<b>Relative Humidity</b>	<b>Apparent Temperature*</b>										
0%	64°	69°	73°	78°	83°	87°	91°	95°	99°	103°	107°
10%	65°	70°	75°	80°	85°	90°	95°	100°	105°	111°	116°
20%	66°	72°	77°	82°	87°	93°	99°	105°	112°	120°	130°
30%	67°	73°	78°	84°	90°	96°	104°	113°	123°	135°	148°
40%	68°	74°	79°	86°	93°	101°	110°	123°	137°	151°	
50%	69°	75°	81°	88°	96°	107°	120°	135°	150°		
60%	70°	76°	82°	90°	100°	114°	132°	149°			
70%	70°	77°	85°	93°	106°	124°	144°				
80%	71°	78°	86°	97°	113°	136°					
90%	71°	79°	88°	102°	122°						
100%	72°	80°	91°	108°							

\*Combined index of heat and humidity...what it "feels like" to the body.

<b>APPARENT TEMPERATURE</b>	<b>HEAT STRESS RISK WITH PHYSICAL ACTIVITY AND/OR PROLONGED EXPOSURE</b>
<b>90° - 105°</b>	Heat cramps or heat exhaustion possible
<b>105° - 130°</b>	Heat cramps or heat exhaustion likely, Heatstroke possible
<b>130° and up</b>	Heatstroke highly likely

Source: National Oceanic and Atmospheric Administration.



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# HEAT INDEX CHART

(Appears in USTA Emergency Care Guidelines, 2003 edition)

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130° and up	Heatstroke highly likely

Source: National Oceanic and Atmospheric Administration.