

## POLICY: HEAT

<b>Policy No</b>	010	<b>Issue</b>	<b>9</b>		
<b>Board Approval</b>	June 2022	<b>Review cycle</b>	Three yearly	<b>Next review</b>	June 2025

### PURPOSE

DBSA has a duty of care to protect the health, safety and wellbeing of participants, during warm to very hot weather and heatwaves.

When there is a risk of exertional heat illness, DBSA commits to acting in the best interest of all participants by implementing mitigation strategies.

DBSA listens to and respects the views of everyone involved in the sport, including children, family members and volunteers.

### SCOPE

This policy applies a range of people, safety risks and activities.

All Member Clubs, Participants, Volunteers and Officials must comply with this policy.

### Safety Risks

This policy is designed to reduce the risks and prevalence of injury and illness which can occur during physical activity. This includes exertional heat illnesses: muscle cramps, heat syncope (fainting), heat exhaustion and heat stroke. These can occur during warm to hot weather.

### RECOGNISING EXERTIONAL HEAT ILLNESS

A person may, during the course of participating in the sport or other activities of DBSA, develop signs and symptoms of exertional heat illness.

Exertional heat illness can be life threatening, therefore, if a person is concerned about an immediate risk to an individual's health and safety, the person should phone '000' for ambulance attendance as soon as practicable.

Exertional heat illnesses can be categorised from mild to severe.

### Muscle cramps

Symptoms include abdominal, arm or leg muscle pains or spasms.

This may be as a result from the loss of salt and water due to heat and exertion.

First aid treatment may include:

- Stop sport or activity.
- Rest in a cool environment.
- Hydrate.
- Rest before continuing to be active in sport or activity.
- Seek medical help if there is no improvement.

### Heat syncope (fainting)

Symptoms include dizziness, fainting, headache and vomiting. This is a result of a sudden drop in blood pressure as blood flows away from the major organs to the extremities (skin) to try and cool down.

First aid treatment may include:

- Stop activity.
- Rest in a cool environment.
- Hydrate.
- Rest before continuing the activity.
- Seek medical help if there is no improvement.

### Heat exhaustion

Symptoms include profuse sweating, weakness, nausea, vomiting, headache, dizziness, muscle cramps, rapid weak pulse and extreme thirst. It occurs when excessive sweating reduces the blood volume due to a loss of salt and water due to heat and exertion. First aid treatment may include:

- Stop the activity.
- If possible lay person down in a cool environment.
- Cool body (remove outer clothing or wet clothes, mist skin with cool water, fan/aircon).
- Hydrate.
- Seek medical advice (If needed call triple zero '000' for ambulance attendance).
- Prepare to give CPR if necessary.

**Please note:** This is a serious condition that can develop into heat stroke.

### Heat stroke

**This is a medical emergency and requires urgent attention.** Symptoms include red, hot and dry skin (no sweating), rapid pulse, confusion, irrational behaviour, seizures, and unconsciousness. Heatstroke occurs when the core body temperature rises above 40°C and the body's internal systems start to shut down. Many organs in the body suffer damage and the body temperature must be reduced quickly.

First aid treatment may include:

- Call triple zero '000' for an ambulance.
- Lay person down in a cool environment.
- **Do not** give the person fluids to drink.
- Cool body (remove outer clothing or wet clothes, mist skin with cool water, fan/aircon).
- Place ice packs \*(wrapped in towel) under armpits and groin;
- **Stop cooling** if person starts shivering.
- **Position an unconscious person on their side and clear their airway.**
- Prepare to give CPR if necessary.

### RISK FACTORS FOR EXERTIONAL HEAT ILLNESS

DBSA recognises that multiple factors pose a risk to the health and safety of participants, including the environment, factors specific to individuals and factors specific to our sport.

#### Environmental Risk Factors

Climate related environmental risk factors can increase the risk of illness and injury. Risk factors include:

- Air temperature.
- Humidity (it becomes more difficult to regulate body temperature in higher humidity due to a decrease in sweat evaporation).
- Wind speed (this affects the rate of water evaporation).
- Radiant temperature (such as radiant heat from ground surface).

#### Individual Risk Factors

The following individual risk factors are relevant our participants These factors need to be understood by everyone involved in our sport, especially coaches, officials and first aid providers.

a) Age

Children and adults over 65 are considered at greater risk of heat illnesses.

b) Poor physical condition

Some people may experience an exertional heat illness at lower temperatures due to exercising beyond current capacity.

c) Inadequate acclimatisation

This can take place when the body is not conditioned to warm and/or humid climates.

d) Illness or medical conditions

Individuals may be more affected by heat due to medications and illness.

e) Dehydration and electrolyte imbalances

Good hydration is needed to keep the body's core temperature down during sport or hot conditions.

People must rehydrate to compensate for what the body loses in sweat.

f) High intensity of exercise

Causes the body to sweat more and increases the risk of heat illness.

### **Extrinsic / Sport Risk Factors**

Extrinsic risk factors are specific characteristics of the sport activity which can contribute to an increased risk of exertional heat illness. The following risk factors are relevant to DBSA. Many of these risk factors can be adjusted to reduce some of the risk of exertional heat illness.

a) Excessive clothing and athletic gear

Types of clothing that is worn when participating in sport and recreation, is generally chosen to suit the needs of the activity. It may be to increase performance or provide protection from injury. It is important to recognise that some sporting gear may contribute to exertional heat illness during warm to hot conditions.

b) Lack of awareness and education of exertional heat illness

If participants are not aware of the signs and symptoms of exertional heat illness this can pose an increased risk to their health as they may not undertake appropriate preparation steps. (Organisation) will take steps to educate all participants about the meaning and risks of exertional heat illness.

c) Venue and location

Different surfaces radiate various levels of heat. In addition, indoor venues can either increase or decrease the risk of exertional heat illnesses depending on the structure, air flow and availability of air conditioning.

d) Level and duration of activities

More vigorous physical activity increases the body's core temperature, posing a greater risk of exertional heat illnesses. Activities that continue without regular breaks can also pose an increased risk to participants.

e) Time of paddling

During hot weather the warmest parts of the day should be avoided.

### **MITIGATION STRATEGIES**

The risks of exertional heat illness being suffered by participants can be reduced through a range of mitigation strategies. These strategies can be implemented by everyone. In particular, individuals with a duty of care to participants should consider appropriate mitigation strategies during warm to very hot weather conditions.

DBSA encourages member clubs to implement the following sport modification parameters if there is a risk of exertional heat illness to participants.

#### **Hydration**

- Promoting hydration strategies including drinking to thirst before, during and after physical activity and reducing intake of sugar sweetened beverages and coffee.

#### **Water and cooling**

- Encouraging participants to bring additional drinking water
- Increasing availability and access to water for drinking and where appropriate, mist sprays
- Encourage participants to bring cold towels

#### **Shade**

- Increasing the amount of shade available (by providing portable shelters, encouraging participants, and teams or families to bring portable shelters)
- Increasing frequency of breaks for participants

#### **Rescheduling**

- Postponing to future dates
- Cancelling planned events, competitions or activities

#### **Rule changes**

- Reducing length of races or activities
- Allowing for appropriate clothing or uniform modifications where required
- Reducing or removing individual or team penalties if they elect not to participate.

#### **Shorter duration of training time**

- Shortening the event to reduce the exposure
- Shortening participant exposure to high-risk conditions by decreasing workload in training
- Excluding high intensity activities

### Individuals

- Promote individual risk reduction strategies such as hydration
- Avoid participants (including volunteers or officials) waiting for long periods in full sun
- Giving parents the option to remove children from activities, or not attend at all, if they believe it is too hot
- Promote a culture where participants are encouraged to speak up if they feel unwell

### Avoid Incidents

- Monitor those involved in the activities closely and recognise signs and symptoms of exertional heat illness

### ACTIVATING THIS POLICY

This heat policy will be referred to if it is determined by DBSA that there is a risk of exertional heat illnesses during DBSA organised events including regattas, state team training sessions or events.

Requirements for DBSA member clubs to determine heat risk levels include:

- Assessing the risk of any upcoming training sessions, activities, competitions or events.
- Obtaining local weather forecast before and on the day of training sessions, activities, and events.

This policy is activated when:

- Forecast temperature is above 37C.
- A Heat Health Alert is issued for the relative region of South Australia in which the event will take place.
- A total fire ban has been declared in area of event occurring.

While the policy is activated when the forecast temperature is above 37C, modifications are more likely to be put in place in much higher forecast temperatures. To assess the potential mitigation strategies to be put into action, individuals with authority or responsibility can use the following as a guide.

DBSA and all member clubs will promptly communicate any potential or actual changes and mitigation strategies if there is a risk of exertional heat illness to participants.

### Assessment of weather conditions

#### Before the event day

Climate forecasts are available up to seven days before an event. DBSA and those individuals within a Club with the responsibility for the event should monitor forecast ambient temperatures so that appropriate plans and communications can take place.

DBSA use the Bureau of Meteorology (BoM) as the source of climactic information. All staff and volunteers should ensure they have access to:

- The BoM Weather smartphone app <http://www.bom.gov.au/app/>. This provides information on ambient temperature and Apparent Temperature (AT) which includes air temperature and humidity and appears on smartphone app as e.g. 'feels like 37.1C'.
- The BoM website: Forecast Summary of relevant area the event is to occur.

#### SA Health Extreme Heat Strategy

The purpose of the [SA Health Extreme Heat Strategy \(PDF 147KB\)](#) is to reduce the risk of harmful effects of extreme heat on the health of the community by:

- ensuring a planned, managed, and effective response to a heatwave
- providing a coordinated SA Health communication plan; and
- promoting community resilience and adaptation to extreme heat conditions.

As part of the Strategy, health actions have been developed for implementation at each stage of 'Extreme Heat' Alerts. These alerts are issued by the [SA State Emergency Service \(SASES\)](#) in conjunction with the Adelaide [Bureau of Metrology \(BOM\)](#) .



### **On the day of DBSA endorsed events**

Two options can be used by DBSA to monitor climate conditions on the event day.

1. The preferred method is Wet Bulb Globe Temperature (WBGT), a measure of the heat stress in direct sunlight, which considers temperature, humidity, wind speed, sun angle and cloud cover (solar radiation). A WBGT can be measured by:
  - a. Using a WBGT meter at the event site.
  - b. Tracking the WBGT rating at the closest BoM station from this list:  
<http://www.bom.gov.au/products/IDV65079.shtml>
2. Refer to the BoM smartphone app or website. This will provide Information on ambient temperature and Apparent Temperature which includes air temperature and humidity – this appears on smartphone app as 'feels like \_\_C'.

### **References:**

- <https://sma.org.au/resources-advice/policies-and-guidelines/hot-weather/>
- <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/public+health/disaster+preparedness+and+resilience/extreme+heat>
- <https://vicsport.com.au/hot-weather-resources>