

HOT WEATHER POLICY

INTRODUCTION

Motorcycling South Australia Inc. (MSA) has formulated this Hot Weather Policy to minimise the risk of injury, illness and possible death in South Australian motorcycle sports by assisting administrators, officials, coaches and riders to recognise and manage potentially dangerous situations.

This policy shall apply to all members, administrators, officials, coaches, volunteers and riders associated with Motorcycling South Australia Inc.

RATIONALE

MSA and all affiliated organisations need to ensure that a reasonable Duty of Care is provided to all riders, volunteers, officials and spectators. MSA encourages a common sense approach. This Policy focuses on the comfort and well being of all individuals and aims to maintain the highest levels of enjoyment and participation for all.

Hot weather can harm the performance and the health of all participants (riders, officials and spectators), and all levels from the recreation rider to the elite rider.

The object of this document is to prevent injury and possible death from heat illness by assisting officials, coaches and participants to recognise and manage potentially dangerous heat situations.

RECOMMENDATIONS

What to Provide at a Meeting being held in Hot Weather

- When ever adults, children or adolescence are participating, provide plenty of cool drinking water
- Sunscreen
- Shelter
- Water spray bottles for officials
- Ice (optional)
- Sports drinks such as Gatorade or Powerade (optional)

What is required at a Meeting being held in Hot Weather

- The Riders Briefing MUST include a warning of the dangers of competing in hot weather. The Steward has the power the cancel or postpone a meeting
- If medical personnel believe that heat illness is affecting a participant, that participant will no longer be permitted to officiate or compete

Other considerations at a Meeting being held in Hot Weather

- Modifying the event to reduce the risk of heat illness
- Rotating officials to give more breaks
- Changing timing of events to cooler parts of the day

BACKGROUND

Physical activity in hot environments creates competitive demands on the cardiovascular system, which is required to increase blood supply to the exercising muscles. At the same time it must regulate the body temperature by increasing skin blood flow in order to produce the sweat that keeps the body cool.

Factors that can contribute to heat injury include:

- High ambient (air) temperature
- Solar radiation
- Humidity
- Dehydration
- Illness
- Medical conditions
- Affects of alcohol and/or drugs

Moderate to high intensity exercise in hot environments, with the associated fluid loss and elevation in the body temperature, can lead to:

- Dehydration
- Illness
- Heat exhaustion / Heat stress
- Heat stroke
- Decrease in performance

INFORMATION – HEAT ILLNESS

Heat illness occurs in strenuous sport or sport exposed to prolonged periods of hot weather. During activities participants (riders and officials) should listen to their bodies. If they start to experience any of the following symptoms or signs they should stop immediately. Heat illness can still occur even in the presence of good hydration.

Symptoms of heat illness may include:

- Light headedness and dizziness
- Nausea
- Obvious fatigue
- Cessation of sweating
- Obvious loss of skill, coordination or unsteadiness
- Confusion
- Aggressive or irrational behaviour
- Altered consciousness
- Collapse
- Ashen grey pale skin

Heat illness in sport presents as dehydration, heat exhaustion or heat stroke.



Dehydration

Fluid loss occurs during exercise, mainly due to perspiration and respiration. The loss of fluids makes a participant more susceptible to fatigue and muscle cramps. Inadequate fluid replacement before, during and after activity will lead to dehydration and may lead to heat exhaustion and heat stroke.

To minimise dehydration, drink about 2 cups of water in the 2 hours before exercising. During exercise lasting 60 minutes or longer, 2-3 cups (500-750ml) of cool water or sports drink per hour are sufficient for most sports.

Heat Exhaustion

Heat exhaustion is the more common sports-related heat illness and is characterised by:

- High heart rate
- Dizziness
- Headaches
- Loss of endurance/skill/confusion
- Nausea
- Skin may be clammy/cool/sweating but there will be signs of vasoconstriction eg pale in colour
- Participant may collapse on stopping activity

To avoid heat exhaustion; if people feel unwell during exercise they should immediately cease activity and rest. Further benefit comes if the rest is in a shaded area with some passing breeze (from a fan if necessary) and the person takes extra hydration. Misting or spraying with water can also help.

Heat Stroke

Heat stroke is rare, but it is a life threatening condition and is characterised by:

- Dry skin
- Confusion
- Participant may collapse during activity

Persons who continue to participate when suffering from heat exhaustion may experience heat stroke. Heat stroke can still occur even if they have been drinking plenty of fluids and must be treated immediately by a medical practitioner.

This is a potentially fatal condition and must be treated immediately. It should be assumed that any collapsed athlete is at danger of heat stroke. The best first aid measures are “Strip/Soak/Fan”:

- Strip off any excess clothing
- Soak with water
- Fan
- Ice placed in groin and armpits is also helpful

The aim is to reduce body temperature as quickly as possible. The athlete should immediately be referred for treatment by a medical practitioner.



MANAGING EVENTS – RISK GUIDELINES

All hot environments present participants with some level of risk. The following tables provide estimates of risk related to weather and also guidelines to managing activity in order to minimise heat stress.

Ambient Temperature

Easily understood and most useful on hot, dry days.

Ambient Temp	Relative Humidity	Risk of Heat Illness	Recommendations
15-20		Low	Heat Illness can occur in long distance events Caution over-motivation
21-25	Exceeds 70%	Low-moderate	Increase vigilance Caution over-motivation
26-30	Exceeds 60%	Moderate-high	Moderate early pre-season training Reduce intensity and duration Take more breaks
31-35	Exceeds 50%	High-very high	Uncomfortable for most people Limit intensity Take more breaks Limit duration to less than 60 minutes
36 and above	Exceeds 30%	Extreme	Very stressful for most people Postpone to cooler conditions (or cooler part of day) or cancel

WBGT

Further information might be gained from what is known as the Wet Bulb Temperature which takes into account both the ambient or air temperature and the humidity. The WBGT is suitable for hot, humid days. It is important to note that the higher the humidity, the less likely cooling will occur through the evaporation of sweat.

WBGT	Risk of Heat Illness	Recommendations
Less than 20	Low	Heat Illness can occur in long distance events Caution over-motivation
21-25	Moderate-high	Increase vigilance Caution over-motivation Moderate early pre-season training Take more breaks
26-29	High-very high	Limit intensity Take more Breaks Limit duration to less than 60 minutes
30 and above	Extreme	Consider postponement to a cooler part of the day or cancellation of event



It is possible to obtain an ambient temperature from the Bureau of Meteorology and then use the information to make educated decisions on what mechanism will need to be put in place to reduce the effects of extreme heat of participants.

Children, Gender and Heat

Young children are especially at risk in heat. Prior to puberty the sweating mechanism which is essential for effective cooling is poorly developed. The ratio between weight and surface area in the child is also such that the body absorbs heat more rapidly in hot conditions. Children take longer to acclimatise to physical activity in heat than does an adult.

Female participants may suffer more during exercise in the heat because of their greater percentage of body fat.

Veteran participants may also cope less well with exercise in the heat. Reduced cardiac function is thought to be responsible for this.

FACTORS TO CONSIDER BEFORE CANCELLING OR MODIFYING AN EVENT

Remember to consider riders, officials and volunteers.

- Temperature
- Duration and Intensity of Event
- Conduct of Competition – opportunities for breaks
- Time of the day
- Local Environment – Airflow, shade, radiant heat from surface
- Clothing – requirements of discipline
- Acclimatisation of rider – Is it a heatwave after cooler weather?
- Fitness levels of participants
- Age and gender of participants
- Predisposed medical conditions
- Equipment in place to reduce risks – water available, etc.

On race day the Steward (with the consultation of the Clerk of Course) has the power to cancel or postpone the meeting and should always put the safety of the riders, officials and volunteers first.

OTHER RESOURCES

For further information on recommendations for safe sport:

- Sports Medicine Australia – Beat the Heat and Heat Policy
<http://www.sma.org.au/information/heat.asp>

POLICY REVIEW

This Policy will be reviewed on an annual basis to ensure that it remains current and practical.

