

EXERCISE AND HYDRATION IN EXTREME HEAT TEMPERATURES

Note: As these guidelines may vary between Centres, please check with your Centre Committee to see if these guidelines have been adapted to suit local conditions and requirements.

1 GENERAL

- 1.1 Children and adolescents are covered simultaneously by the recommendations in these guidelines.
- 1.2 It is recommended that if a large increase in temperature is likely to occur, parents and officials should take extra care to ensure athletes are sufficiently hydrated and shade is provided.
- 1.3 It is recommended that greater care be taken of athletes who are not fit, or who are overweight, when exercising in extreme temperatures.

2 EDUCATION

- 2.1 All athletes should be educated on the importance of sun safety and how to be sun smart. This should be conducted at the beginning of the hot weather season. However, if this is untimely for Centres, it should be conducted at a more appropriate time.
- 2.2 All coaches / officials should be educated to recognise the symptoms of heat stress (as described in these guidelines).

3 ATTIRE

- 3.1 All athletes should be wearing sun safe attire on competition days. When exposed to the sun (except when competing), hats or caps should also be worn.
- 3.2 All staff members, officials and volunteers must be seen setting a sun smart example. During competitions, they are encouraged to wear collared shirts, hats and where appropriate sunglasses.

4 SUNSCREEN

- 4.1 Sunscreen should be provided and located in and around the competition arena for athletes, staff, officials and volunteers to use.
- 4.2 The sunscreen must be of the highest quality and meet all Australian standards.

5 SHADE

- 5.1 Shade should be provided where possible at all field events, marshalling and finish areas. It should also be provided where possible in other areas where participants, staff, officials and volunteers will be waiting for long periods of time unprotected from the sun.

6 PUBLIC ANNOUNCEMENTS

- 6.1 It is recommended that during competition, public announcements be regularly made reminding those at the event to stay hydrated, apply sunscreen and remain in the shade, wherever possible.

This will not only assist with fluid intake, but also sun safety by ensuring the Association/Centre is discharging its duty of care to its members. In addition, it will be a positive public relations tool for Little Athletics. Little Athletics will be seen as an organisation that is constantly considering the health and safety of its members, staff, volunteers and spectators.

7 FLUIDS

- 7.1 It is recommended participants drink at least 7-8ml of fluid per kg of body mass no more than 2 hours before exercising to promote adequate hydration and allow time for excretion of excess water.
- 7.2 Children can stave off dehydration during three hours of exercise in 35°C temperatures, if enough fluid is consumed.
- 7.3 During exercise it is recommended that participants should drink fluid at regular intervals to replace water lost through sweating. Participants should aim to drink at least 3ml per kg of body mass (about 250ml for the average athlete of around 70 kilograms every 15 to 20 minutes). However this may vary dependent on the rate of sweating. Fluid taken should be cooler than the ambient temperature.
- 7.4 There should be a water station or a number of water stations in and around the competition arena. They should be located at all field events, marshalling areas and the finish line.
- 7.5 Water is considered an adequate fluid option for activities lasting up to one hour although there is evidence that sports drinks such as Powerade do provide a benefit for exercise that is less than one hour in duration. Participants in events or activities exceeding one hour are recommended to use carbohydrate based sports drinks such as Powerade as a means of replacing fluids, carbohydrates and electrolytes lost during prolonged activity.
- 7.6 Where possible, additional water should also be provided so as to allow participants to douse themselves and thereby assisting in the cooling process e.g. Spray bottles.

8 POSTPONEMENT / CANCELLATION

- 8.1 It is recommended that parents and officials use caution if athletes are continually exercising in ambient temperatures above 40°C for an extended period of time (e.g. more than one hour).
- 8.2 When children are exercising in the heat, parents and officials must also pay close attention to athletes doing intermittent events (i.e. jumps & throws), as well as continuous events, for signs of heat stress.
- 8.3 It is recommended that each competition venue have the necessary equipment to record ambient temperatures throughout the competition conducted in extreme high temperatures.
- 8.4 It is recommended that the organising committee call off events if the weather bureau believes the ambient temperature is likely to rise above 40°C.
- 8.5 On the day of competition, where extreme high temperatures are experienced, it is recommended the ambient temperature be recorded at 15-minute intervals at the same point on the track each time.
- 8.6 It is recommended to the organizing committee, that if the temperature is over 40°C for two consecutive measurements, that no new event should be called until the temperature drops below 40°C, OR, competition should be ceased until the temperature drops below 40°C.
- 8.7 It is recommended that the organising committee postpone events if the first aid personnel indicate that athletes are showing signs of heat stress.
- 8.8 Consideration should also be given to postponing field events that span a considerable time.

WHAT IS HEAT STRESS?

Heat stress may present itself in varied forms, including cramps, heat exhaustion and heat stroke.

HEAT EXHAUSTION

Dehydration can lead to heat exhaustion. Symptoms of heat exhaustion may include:

- High heart rate
- Dizziness
- Headache
- Loss of endurance/skill
- Confusion
- Nausea
- The skin may still be cool/sweating, but there will be signs of developing vasoconstriction, e.g. pale colour.
- Athletes will pass little urine, which will be highly concentrated.
- Cramps may be associated with dehydration.
- The rectal temperature may be up to 40°C and the athlete may collapse on ceasing the activity.

If an athlete is exhibiting signs of heat stress, or heat exhaustion, they should stop, drink more fluids and cool down. The athlete should be removed from the field, laid down in a cool place and given plenty of cool water. If the athlete is confused or unable to drink water, seek medical assistance immediately.

HEAT STROKE

Severe dehydration may lead to heat stroke, which is potentially fatal and must be treated immediately by a medical practitioner. Athletes who keep participating while suffering from heat exhaustion may experience heat stroke. Heat stroke can still occur even if the athlete has been drinking plenty of fluid. It is important to cool the athlete as quickly as possible.

Heat stroke symptoms include:

- Dry skin
- Confusion
- Collapsing

If an athlete is showing any symptoms of heat stroke take the following action:

- Call a Doctor or Ambulance immediately
- Remove the athlete from the field and lay them down in a cool place
- Give cool water to drink, if conscious
- Cool the athlete by putting in a cool bath, shower or under a hose, applying wrapped icepacks to the groin and armpits, or use wet towels.
- Maximise airflow over the athlete through the use of a fan, or fan them with towels.

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