

# Hot Weather Guidelines



The Blackwood Golf Club Committee has the health and well-being of Club members and guests as a high priority.

These guidelines have been adapted from Sports Medicine Australia policies and guidelines regarding the prevention of heat illness in sport in children and adults. It should be noted that these are purely guidelines. They should be considered not just for competitors, but also for caddies, officials and volunteers involved in the game.

The risks involved with heat illness from vigorous exercise are significant. While the lower activity levels of golf compared to athletics mean that the risks are somewhat reduced, the individual response to heat varies from person to person and therefore no hard and fast guidelines will suit every member of a population. Those who need to be especially vigilant include children, overweight people, those un-acclimatised (having come from cooler climates), those who are unwell or otherwise at risk.

Factors which impair the body's ability to dissipate heat are:

- High ambient temperature
- Solar radiation
- Humidity (which compromises the efficacy of sweating)
- Dehydration

The recommendations set out below are intended to address each of these factors.

1. These guidelines are for generally more strenuous activities than golf.
2. Table 1 provides an approximate guide to weather conditions and appropriate individual responses.

## Hydration

The more athletes sweat, the more fluid they must consume to avoid dehydration. Dehydration is fluid loss which occurs during exercise, mainly due to perspiration and respiration. High levels of dehydration may increase the risk of heat stress. To diminish the risk of heat stress, fluid should be consumed before, during and after activity.

It is recommended participants drink at least 7-8 ml of fluid per kg of body mass (average is about 500 ml) no more than 2 hours before exercising to promote adequate hydration and allow time for excretion of excess water.

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 3 ml per kg of body mass (about 250 ml for the average athlete of around 70 kilograms every 15 to 20 minutes or 500-750 ml every hour). However, this may vary dependent on the rate of sweating. Fluid taken should be cooler than the ambient temperature.

Water is considered an adequate fluid option for activities lasting up to one hour. Participants in events or activities exceeding one hour are recommended to use carbohydrate-based sports drinks as a means of replacing fluids, carbohydrates and electrolytes lost during prolonged

activity. In high risk conditions, players should be encouraged to drink fluids at scheduled drinks breaks and should be provided convenient access to fluids during activity without unnecessary interruption to the game or event.

In regard to post-event re-hydration, it needs to be remembered that this can take 24 hours or more.

Guidelines for post-event re-hydration include replacing 150% of fluid lost through activity.

A loss of weight of 1 kg equates to 1 litre of fluid. The athlete should therefore aim to replace this with 1.5 litres of water, sports drink or a combination of the two.

## Clothing

Light coloured, loose fitting clothes, of natural fibres or composite fabrics, with high wicking (absorption) properties that provide for adequate ventilation are recommended as the most appropriate clothing in the heat.

## Age and gender of participant

- Female participants may suffer more during exercise in the heat because of their greater percentage of body fat.
- Young children are especially at risk in the heat. Prior to puberty, the sweating mechanism, 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 rapidly in hot conditions.
- Although children can acclimatise to exercise in the heat, they take longer to do so than adults.
- Veteran participants may also cope less well with exercise in the heat. Reduced cardiac function is thought to be responsible for this effect.

## Predisposed medical conditions

- It is important that players who have a medical condition or are taking medication are aware that this may predispose them to heat illness.
- Examples of illnesses that will put the participant or official at a high risk of heat illness include asthma, diabetes, pregnancy, heart conditions and epilepsy. Some medications and conditions may need special allowances.
- Participants and officials who present with an illness such as a virus, flu or gastro or who are feeling unwell are at an extreme risk of heat illness if exercising in moderate to hot weather.

Table 1

Ambient Temp °C	Relative Humidity	Risk of Thermal injury	Possible Action
21 – 25	> 60%	Low – mod	Increase vigilance
26 – 30	> 50%	Moderate	Moderate intensity. Take more breaks

<b>Ambient Temp °C</b>	<b>Relative Humidity</b>	<b>Risk of Thermal injury</b>	<b>Possible Action</b>
31 – 35	> 30%	High – very high	Limit intensity. Limit duration of activity
36 & above	> 25%	Extreme	Consider postponement