EXTREME WEATHER, HEAT & UV POLICY

References:

A **Australian Bureau of Meteorology www.bom.gov.au**

B **Sports Medicine Australia *'Beat the Heat'* Fact Sheet www.sma.org.au**

C **Wet Bulb Globe Temperature Index (SA) *http://www.bom.gov.au/products/IDS65004.shtml***

D **Heat Alert Button @ www.smasa.asn.au/resources/resources.htm**

E **Cancer Council SA www.cancersa.org.au**

INTRODUCTION

Golf SA Extreme Weather, Heat & UV Policy has been introduced to reduce the risk of heat related injury and prevent permanent skin damage from over-exposure to UV radiation to players, caddies & officials involved in Golf SA golf events or activities. The policy also contains a number of guidelines to assist players, caddies & officials in recognising and managing extreme weather, heat and UV radiation exposure.

1. Suspension of Play/ Cancellation of Play Policy[1]

1.1 Day of Competition

In circumstance of extreme hot weather and humidity, play may be suspended or cancelled at the discretion of the respective Golf SA Match Committee or Representative thereof present at the host venue.

The assessment of extreme hot weather conditions will be undertaken with reference to temperature and humidity information provided by the Bureau of Meteorology.

Should play be suspended due to excessive heat/ humidity conditions, play shall not be resumed until such conditions moderate. If the weather forecast for the remainder of the day shows no likelihood of cooler conditions, play shall be abandoned for the day.

1.2 Prior to Day of Competition

Should the forecast temperature and humidity conditions for a specific tournament location at 6.00pm on the day prior to a Golf SA competition be viewed as excessive by the Golf SA Match Committee or Representatives thereof, the afternoon round (if applicable) may be cancelled.

1.3 Player Discretion

During Golf SA competitions held between December 1st and February 28th in each calendar year, any competitor may withdraw either before or during the event due to hot weather/ humidity conditions.

Competitors who elect to withdraw in this manner will be issued with a full refund of their entry fee or if possible allocated to a comparable alternate event.

2. Heat Stress/ Illness Prevention Recommendations

2.1 Event Scheduling

Wherever possible, golf events are to be scheduled to avoid hot conditions. Events held during summer are to be played during the morning subject to type of event, field size and venue availability.

[1] See Annex A

2.2 Hydration

2.2.1 Players, Officials and Volunteers

A key factor to minimise the risk of heat related illness is appropriate hydration by all players, caddies and officials.

High levels of dehydration may increase the risk of heat related illness. Thirst alone should not be relied upon as an indicator of fluid needs. Fluid requirements for optimal hydration differ between individuals, therefore it is essential that players monitor specific fluid losses during training and competition. It is recommended that all players, caddies and officials adhere to the following hydration guidelines:-

- Each person should drink 10 to 15 ml per kg body weight of either cooled water or sports drink within 2 hours before playing or practicing to promote adequate hydration and to allow time for excretion of excess water. This should include a large drink of 300 – 500mls consumed within 15 minutes of playing or practicing.
  Note: It should be noted that fluids are best served at 15 – 20 degrees Celsius and not ice cold.
- During a round of golf, each person should drink cooled fluid at regular intervals to replace fluid lost through sweating. It is recommended that each person consume at least 150 – 250ml every 15 minutes during the round. Fluids taken should be cooler that ambient (air) temperature.
  Note: This amount may vary according to an individual's body size & rate of sweating, in addition to environmental conditions.
- Aside from on- course water supplies, each individual should take a water bottle containing a minimum of 1000ml of cooled fluids onto the course
- Following completion of the round, each person should drink cooled water/ sports drinks to fully re- hydrate themselves.
- Fluid loss during a round can be assessed by an individual weighing themselves before and after a round of golf. For each kilogram lost during the round, the individual will have approximately one litre of fluid deficit. While fluid losses will be minimised by drinking before, regularly during and then after exercise, sweating and fluid losses will continue after exercise. Accordingly, following a round of golf, each person should aim to replace at least 1.5 times the amount of fluid deficit.
- It should be noted that in conditions of high sweat loss, the consumption of excessively large quantities of fluid, in particular water or other beverages without additional sodium, may increase the risk of low blood sodium, or hyponatraemia. Hyponatraemia is a potentially dangerous condition, so aim to drink enough fluids to replace losses, but not in great excesses of this amount.
- If you are unsure as to your fluid requirements during a round, consult a Sports Dietitian to help you.

2.2.2 Venues

During all Golf SA events played over the summer period, in addition to permanent on- course water facilities, Golf SA officials shall monitor the course to ensure drinks available on request.

2.3 Clothing

Within the dress requirement guidelines of the respective host venue, it is recommended that all players, caddies and officials wear light coloured, loose fitting clothes of natural fibres or composite fabrics with high wicking (absorption) properties that provide for adequate ventilation.

2.4 Hats

It is recommended all players, caddies and officials wear hats to assist in the prevention of heat illness. Ideally, hats should be wide brimmed and well vented.

2.5 Resting in Shaded Areas

Wherever possible, during a round of golf in hot weather conditions, all players, caddies and officials should rest in naturally shaded areas when not actively playing strokes.

In addition, players, caddies and officials are encouraged to utilise other artificial means of shade such as umbrellas and on- course structures during a round of golf in hot conditions.

3. Ultraviolet (UV) Radiation/Sun Protection

The following sun protection measures should be implemented any time UV index is 3 and above. It is recommended that players, caddies and officials are aware of UV levels and sun protection times. UV levels

can be monitored by accessing the Bureau of Meteorology website (www.bom.gov.au/sa/uv) or by downloading the SunSmart app on any smart phone.

3.1 Event Scheduling

Events should be scheduled to avoid, where possible, peak UV periods of the day and year.

3.2 Shade

Wherever possible, during a round of golf, all players, caddies and officials should rest in naturally shaded areas when not actively playing strokes.

In addition, players, caddies and officials are encouraged to utilise other artificial means of shade such as umbrellas and on-course structures during a round of golf anytime UV index is 3 and above.

3.3 Clothing

It is recommended that players, caddies and officials wear clothing that protects as much skin as possible any time UV index is 3 and above. Shirts with collars and longer sleeves, as well as pants or longer style shorts will provide good protection. Wearing gloves is recommended to further reduce the amount of skin exposed.

3.4 Hats

It is recommended all players, caddies and officials wear hats that provide protection to the face, neck and ears such as broad-brimmed hats, bucket hats or legionnaire style hats.

3.5 Sunscreen

Broad spectrum sunscreen with a minimum SPF (Sun Protection Factor) rating of 30 should be used by all players, caddies and officials. In addition, it is recommended that all players, caddies and officials carry sunscreen with them during a round for periodic re-application a minimum of every two hours.

It should be noted that sunscreen does not offer complete protection against UV radiation and should always be used in conjunction with other protective measures including clothing, hats, sunglasses and seeking shade.

3.6 Sunglasses

To prevent UV damage to the eyes, players, caddies and officials should wear close-fitting, wraparound sunglasses that meet the Australian Standard 1067:2003 (Sunglasses: Category 2, 3 or 4) and cover as much of the eye area as possible.

4. Prior Medical Conditions/Fitness Levels

Any player, caddie or official with a pre- existing medical condition, illness or is overweight that may exacerbate the risk of heat illness should take every precaution or consider excluding themselves from participation during hot weather conditions.

Examples of medical conditions include asthma, diabetes, heart conditions or epilepsy.

Any player, caddie or official that is experiencing a high temperature, viral infection, and diarrhea or vomiting should be excluded from participating due to the increased risk of heat illness.

Golf SA assumes no responsibility for any medical situation in relation to a competitor who experiences the applicable above conditions. It is recommended that competitors with a pre-existing medical condition and/or illness consult a medical practitioner for advice prior to playing golf in hot conditions.

5. Extreme Weather

When extreme weather is forecast the Match Committee should initiate procedures and monitor the weather. This may be dome by contacting local authorities such as the Bureau of Meteorology.

Extreme weather may be defined as weather that threatens the immediate or long-term safety of individuals, as a result of rain, lightening, wind or heat (already covered). Events are likely to be cancelled or postponed or modified in the following circumstances, two to five hours prior to the event:

5.1 Rain

If it is raining heavily play/competition may be discontinued for a period of up to half (½) an hour and conditions reassessed to determine whether play should continue.

5.2 Lightning

In Australia, lightning accounts for five to ten deaths and well over one hundred injuries annually. A large percentage of lightning strike victims survive but many of these suffer from severe life-long injury and disability. Statistics show that approximately 25% of people killed by lightning are playing sport. When thunderstorms threaten, Officials and Coaches must not let the desire to start or complete an event or a coaching session hinder their judgment when the safety of athletes, officials or spectators is in jeopardy.

5.3 Lightning Facts:

- All thunderstorms produce lightning and are dangerous.
- Lightning often strikes outside the area of heavy rain and
- Any time thunder is heard, the thunderstorm is close enough to pose an immediate lightning threat to your location.
- When thunderstorms are in the area but not overhead, the lightning threat can still exist even if it is sunny overhead, not raining, or when clear sky is visible.
- Many lightning casualties occur before the thunderstorm rains have moved into the area. This is often due to people not seeking shelter soon enough.
- Large numbers of casualties occur after the rain dissipates. This can be due to people being in too much of a hurry to go back outside and resume activities.

5.4 Emergency Plan:

A. Chain of Command: Identify who has the authority to call for the suspension and subsequent resumption of activities.

B. Weather Watcher: Appoint a weather watcher to monitor the weather forecasts in the days leading up to the event, and who also on the day looks for signs of developing local thunderstorms such as high winds, darkening clouds and any lightning or thunder.

C. Providing Warnings: Activity organizers' should promote lightning safety to athletes, officials and spectators. A protocol needs to be in place to warn all individuals at risk from a lightning strike.

D. Safety Tips: Consider placing lightning safety tips and/or emergency procedures in programs, flyers, handbooks and placing lightning safety warning signs around the venue. Consider reading lightning safety messages over the PA system if thunderstorms are forecast or are imminent.

E. Information: The information should contain:
- Criteria for the suspension and resumption of activities
- The location of safe shelters and the best way to access them.

F. Safe structures and locations: Define and list safe structures and locations to evacuate to in the event of lightning. No place is absolutely safe from a lightning threat however some places are safer than others.

Safe structures:
- The primary choice for a safe structure is a large, fully enclosed building.
- If a building is not available, a fully enclosed vehicle with a metal roof and the windows completely closed is a reasonable alternative.

Unsafe locations and situations:
- An open field
- Close vicinity to the tallest structure in the area (e.g. tree/s, light pole).
- Small structures such as rain/picnic shelters, tents, equipment sheds
- Use of indoor phones
- Use of electrical appliances
- Umbrellas or any object that increases a person's height

6. Criteria for suspension and resumption of activities

The sound of thunder should serve as an immediate warning of lightning danger. Generally speaking, if an individual can see lightning and/or hear thunder he/she is already at risk.

A procedure for announcing the suspension and resumption of activities should be in place.

6.1 The 30 – 30 Rule

By the time the flash-to-bang count approaches 30 seconds - all individuals should already be inside a safe shelter.

Wait at least 30 minutes after the last sound (thunder) or observation of lightning and ensure conditions are completely safe before leaving shelter to resume activities. Each time lightning is observed or thunder is heard, the 30-minute clock should be re-started.

The National Lightning Safety Institute in the US recommends the saying: "If you can see it, flee it; if you can hear it, clear it".

Follow your set criteria for the suspension and resumption of activities without exception.

6.2 First Aid

Lightning victims do not carry an electrical charge, are safe to handle, and need immediate medical attention. Cardiac arrest is the immediate cause of death in lightning fatalities. Some deaths can be prevented if the victim receives the proper first aid:

- Call an Ambulance at once.
- Check the victim's pulse and breathing**.** Begin CPR if necessary.
- If possible, move the victim to a safer place. Be aware that the thunderstorm may still be dangerous. Don't let the rescuers become victims.

SUSPENSION OF PLAY/CANCELLATION GUIDELINES

Golf SA provides the following guidelines for the Modification, Rescheduling or Cancellation of Play. Heat stress increases with increases in air temperature but be aware that there are not clear demarcations in risk between temperature ranges. Relative humidity levels can increase stress markedly.

In cases of high humidity together with high ambient temperatures the Wet Bulb Globe Temperature index should be used. The Bureau of Meteorology website http://www.bom.gov.au/products/IDS65004.shtml will be used as the specific reference for ambient temperature or WBGT.

Golf SA Suspension/Cancellation of an Event will be authorized by the following:

- ***Golf SA Match Committee***
- ***CEO Golf SA***
- ***Club Match Committee and/or Match Referee Authorised by Golf SA***

Junior Events

All Junior Events/Competitions/Activities:
If the forecast temperature is ***34C*** and above ALL Golf SA Junior Events/Competitions and Outdoor Activities will be ***Modified, Rescheduled or Cancelled.*** This includes Go-Go Golf Activities, School Holiday Camps, Development Camps where outdoor participation is required and Competitions.

Up to Age 15 Years:
If the participants are predominantly in the age group up to 15 Years the event/competition will be cancelled, modified and/or rescheduled as follows:

- **Forecast >34C:** Play first 18 holes only. Amend tee times to earliest possible time. No play should commence after 12.30pm.

Up to 18 Years:
If the participants are predominantly in the age group from 15 – 18 years the event/competition will be cancelled, modified and/or rescheduled as follows:

- **Forecast >34C:** Play first 18 holes only. Amend tee times to earliest possible time. No play should commence after 12.30pm.

Open Events

Women's Open Events

- **Forecast >35C:** Play first 18 holes only. Amend tee times to earliest possible time. No play should commence after 12.30pm.

Men's Open Events

- **Forecast >36C:** Play first 18 holes only. Amend tee times to earliest possible time. No play should commence after 12.30pm.

Veteran's & Seniors Events

Women's & Men's Veterans & Seniors Events:

- **Forecast >34C:** Play first 18 holes only. Amend tee times to earliest possible time. No play should commence after 12.30pm.

Notification of Suspension

Any change to an event will be publicised as widely as practical including on the Golf SA website www.golfsa.com.au and taking into account Sports Medicine Australia Media Releases

AMBIENT TEMPERATURE & WET GLOBE BULB TEMPERATURE INDEX

AMBIENT TEMPERATURE

Ambient temperature is the most easily understood guide available, and is most useful on hot, dry days.

AMBIENT TEMPERATURE	RELATIVE HUMIDITY	RISK OF HEAT ILLNESS	RECOMMENDED MANAGEMETN
15-20		Low	Heat illness can occur in distance running. Caution over-motion.
26-30	Exceeds 70%	Low-Moderate	Increase vigilance. Caution over-motion
26-30	Exceeds 60%	Moderate	Moderate early pre-season training. Reduce intensity and duration of play/training. 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 per session.
36 & Above	Exceeds 30%	Extreme	Very stressful for most people. Postpone to cooler conditions (or cooler part of the day) or cancellation.

WGBT

Further guidance might be gained from what is known as the Wet Bulb Globe Temperature (WGBT) index. The WGBT is useful when the humidity is high.

WGBT	RISK OF THERMAL INJURY	RECOMMENDED MANAGEMENT FOR SPORTS ACTIVITIES
< 20	Low	Heat illness can occur in distance running. Caution over-motion.
21-25	Moderate to High	Moderate early pre-season training. Reduce intensity and duration of play/training. Take more breaks.
26-29	High – Very High	Limit intensity, take more breaks. Limit duration to less than 60 minutes per session.
30 & Above	Extreme	Postpone to cooler conditions (or cooler part of the day) or cancellation (allow swimming)

The above information reproduced from the Sports Medicine Australia Guidelines.

The Bureau of Meteorology (BOM) produces ambient and WBGT readings for many locations in Australia. You can check these readings and a guide for the relative risk for locations at www.bom.gov.au/products/IDS65004.shtml or by clicking 'Local Hot Weather Alerts' button at www.sma.org.au

EASE THE FREEZE INJURY DUE TO COLD EXPOSURE

HYPOTHERMIA (low body temperature)

- Occurs when the **body's core temperature** falls below **35°C**
- **Air temperature** of no great severity can produce it
- It's **onset can be so gradual** that no one, including the victim, may notice it until too late
- Can occur at room temperature if an individual **is wet**, inadequately **clothed**, **drunk**, chronically **ill** or very **old**
- May affect the **heart, lungs and other major abdominal organs** as well as the skin and soft tissues **chilblains or frostbite**

HOW THE BODY TEMPERATURE IS REGULATED

Normal temperature is 37°C (98.6°F)
Heat is produced by

- Breaking down of food during digestion **(Metabolism)**
- Muscular energy (**75% converted to heat**)
- Shivering

Heat loss occurs by

- **Direct contact** with a colder object (**Conduction**)
- **Movement of air** or **water** near to the skin (**Convection**)
- **Infrared energy emissions (Radiation)** which cause approx. 65% of normal heat loss largely from the head and neck area
- **Evaporation** of sweat /**Breathing**

FACTORS WHICH INCREASE INJURY DUE TO THE COLD

- **Inadequate clothing** and insulating from the cold, particularly if wet
- **High wind chill factor /Immersion** in cold water (21°C or less) for longer than 15 – 20 mins
- **Leanness** (the only advantage of obesity)
- **Fatigue** – being tired or exhausted /**Smoking**
- **Poor nutrition /Age** (very young or old)
- **Poor circulation** (arterial disease, tight clothing or shoes)

PREVENTION OF HYPOTHERMIA

The key to management of Hypothermia is PREVENTION

- **Prepare** for the **worst** possible weather conditions
- **Wear appropriate clothing**, dress in layers so that clothing may be adjusted for over-cooling, over heating, perspiration and external moisture
- When your **feel the cold put on your hat** (65% heat loss through the head)
- Wear **dry, windproof**, well insulated clothing that **allows water vapor** (i.e. sweat) **to escape**
- **Stay dry** – clothing saturated with sweat or rain loses its insulating properties
- Ensure **adequate sealing** of clothing around wrists, ankles and the neck where body movement may force cold air beneath clothing
- Remember insulation from the ground – **wear shoes**

MANAGEMENT OF HYPOTHERMIA

- **Remove** cold, wet clothing
- **Protect** from wind and rain
- **Rewarm** (a) using blankets, sleeping bags, body contact
  (b) slowly using a bath (40° – 42°C for the body trunk) but excluding arms and legs
- **Handle gently** (vigorous activity may cause cardiac arrest in extreme cases
- Give **warm, sweet drinks** and provide warm humidified air
- **Continue CPR** when needed until warming has occurred

HOW TO BEST PERFORM IN THE COLD

Physical performance **decreases** if the body core temperature **drops as little as 1°C,** and shivering, may occur.
Shivering **interferes** with coordination and performance of fine movements and also depletes muscle stores of glycogen (a storage form of energy) leading to early fatigue and hypoglycaemia (low blood sugar)

IN SUMMARY

- Wear suitable clothing (this will often include a hat and gloves)
- Warm up prior to exercise
- Replace fluid loss – warm, sweet fluids (e.g. 2 ½ % glucose solution)
- Warm down and rug up following exercise