

Adverse Weather and Thunderstorm Asthma Policy

Last Review: N/A	Constructed / Reviewed by: Clayton Utz	
Next Review: March 2026	Approval Required: Yes	
	Board Sign Off Date: Monday 26 th October 2024	

1. Context

- 1.1 Adverse weather conditions may have significant health implications upon the health and wellbeing of students participating in sports. GISSA representatives must ensure that these weather-related health risks, including thunderstorm asthma, are sufficiently mitigated in accordance with this Policy and the relevant Appendices.
- 1.2 GISSA oversees competition in a range of sports at a range of venues. Each organisation has in place a considered management structure for overseeing interschool sporting competition.

2. The Function of the Policy

2.1 This is a general policy designed to draw attention to the general risks of heat-related illness, thunderstorm asthma or injury in sport and provide precise guidelines for conduct of sporting activities in hot weather and in instances of lightning strikes or hail.

3. Supporting Documentation

3.1 Documentation which should be read in conjunction with the policy is provided within the appendices.

4. Policy Detail

4.1 Prior to the Competition

- 4.1.1 If at 9.00am. on the day prior to the competition the predicted temperature in Geelong as provided by the Bureau of Meteorology (BoM) is 40°C or above then the Executive Officer in conjunction with the Heads of Sport will by 10.00am. on the day prior cancel all sport (for the sake of clarity this includes indoor and outdoor sport).
- 4.1.2 Prior to the competition, the monitoring of the predicted temperature will be the responsibility of the GISSA Sports Office.



4.2 On the day of the competition and or event

4.2.1 Heat:

- (a) At 31°C (ambient temperature) Directors of Sport, Sport Coordinators and Coaches must consider and implement where appropriate management procedures consistent with the advice provided in Appendix 1 which will attempt to ensure that environmental and risk factors relevant to heat stress are minimised.
- (b) Once the ambient temperature is 36°C or above, then the competition or training must be suspended (pool venues excluded). If the temperature does not fall below 36°C during the subsequent 30 minute period then the competition or training must be cancelled.
- (c) On the day of the competition or training, the responsibility for monitoring temperatures is as described below:

Outdoors:

 It is the responsibility of the Home School Sports Coordinator or their delegated representative to monitor the BoM Website to determine local temperatures.

Indoors:

• It is the responsibility of the *Home School Sports Coordinator* or their delegated representative to use a thermometer to gauge the temperature.

4.2.2 Air Quality:

- (a) When the Air Quality Index (AQI) reading reaches **51+ PM2.5,** Directors of Sport, Sport Coordinators and Coaches, where appropriate, must consider and implement management procedures consistent with the advice provided in Appendix 2 which will attempt to ensure that environmental and risk factors relevant for respiratory issues/stress are minimised.
- (b) Once the AQI reading reaches **100 PM2.5** or above, then the game/training must be suspended. If the AQI reading does not fall below 100 PM2.5 during the subsequent 60 minute period then the game/training must be cancelled.



(c) On the day of the *Competition and or Training*, the responsibility for monitoring air quality is as described below:

Outdoors:

 It is the responsibility of the Home School Sports Coordinator or their delegated representative to monitor the AirVisual App to determine local air quality.

Indoors:

• It is the responsibility of the *Home School Sports Coordinator* or their delegated representative to use an air quality detector to measure the air quality.

4.2.3 Thunderstorm Asthma

- (a) During grass pollen season (indicatively 1 October to 31 December) people may notice an increase in asthma and/or hay fever symptoms. Grass pollen season increases the chance of epidemic thunderstorm asthma. GISSA Member Schools must:
 - develop a school Thunderstorm Asthma Policy and sign an annual attestation that the policy complies with Thunderstorm Asthma Policy Requirement - General Framework at Appendix 3;
 - (ii) ensure that any internal school policies reflect the requirement of GISSA as outlined in Thunderstorm Asthma Policy Requirement General Framework at Appendix 3; and
 - (iii) monitor the public information and amend their own policies consistent with any changes.

4.2.4 Electrical storms/ Lightning:

- (a) In the event of electrical/ thunderstorms, (especially if the time delay between thunder and the flash is less than 30 seconds) players, coaches and officials should seek urgent safe shelter. Play should only restart if at least 20 minutes has passed since the last sound of thunder and coaches and officials are confident of player safety.
- (b) Severe Hail

When safety is compromised by severe hail, coaches and officials should agree to abandon play and seek immediate shelter until the hail stops and it is safe to restart play.

4.3 **Major Events:**

In the event of an imposed delay or cancellation due to adverse weather for major titles, these events may continue when it is safe to proceed in whole or part at the discretion of the GISSA Executive Officer.



5. Communication

- 5.1 This policy will be communicated by GISSA to:
 - 5.1.1 The Principals of GISSA Schools
 - 5.1.2 Heads of Sport of GISSA Schools
- 5.2 The Principals and other relevant staff will have the responsibility of communicating the Policy to Sports Coordinators within their Schools.
- 5.3 Any public statements regarding the policy should be made only by the Principals of GISSA Schools.

6. Implications for Practice

6.1 At Board Level

- 6.1.1 To properly implement this Policy, GISSA must:
 - (a) ensure that this Policy is endorsed on an annual basis and following significant incidents if they occur;
 - (b) ensure that copies of this Policy are made available to all staff;
 - (c) ensure that this Policy is incorporated into GISSA's record of current policies;
 - (d) ensure that this Policy is incorporated into GISSA's induction program, to ensure that all staff are aware of the Policy, have read and understood the Policy, and acknowledge their commitment to comply with the Policy;
 - (e) ensure that this Policy is accessible to the public (including children and parents) as published on the GISSA website.

6.2 At Other Levels

6.2.1 To properly implement this Policy, all GISSA staff must ensure that they abide by this Policy and the Guidelines and assist GISSA in the implementation of the Policy and Guidelines.

6.3 At GISSA Member School level

6.3.1 GISSA will require Member Schools to sign an annual attestation of compliance with this policy.



Sport Adverse Weather Policy

Appendix 1 - Heat Policy

1. Context

- 1.1 Heat related illness and injury consequent upon exercise can be severe and in some cases fatal. The danger of heat related illness and injury must never be underestimated. Heat stress during exercise needs to be carefully managed.
- 1.2 The management of exercise during extreme heat is particularly important in the case of children and young adults (referred to as "children" throughout the policy and supporting documentation)
- 1.3 The management of elderly personnel who may be acting as officials is also particularly important.

2. Detail

- 2.1 Environments to which competitors are exposed will vary as will individual responses to heat stress on the individual. It should be noted that there is a risk of heat related illness or injury at all temperatures, however, the risk is much greater at 30°C or above.
- 2.2 It is important to understand the factors that may contribute to heat stress. What constitutes extreme conditions will vary depending upon:

2.2.1 Environmental Factors

- (a) The type of sport e.g. fitness based vs. skill based
- (b) The venue utilised by the sport e.g. water based vs. field based or indoor vs. outdoor
- (c) The duration and intensity of the activity
- (d) The time of day during which the activity takes place
- (e) Humidity of the immediate environment
- (f) Exposure to Solar Radiation

2.2.2 Individual Risk Factors

- (a) Fitness levels of the athlete / official
- (b) Age of the athlete / official
- (c) Acclimatisation
- (d) Hydration levels
- (e) Past history of heat stress (genetic factors)

It is difficult to predict precisely how an individual will respond to heat stress and how likely heat stress is to cause illness or injury in a particular sport. Where there is any doubt, on the basis of medical information provided by



parents/carers in relation to a particular individual, specialised medical advice should be sought.

2.2.3 Management of Environmental and Individual Risk Factors

Where possible, the factors contributing to heat stress should be managed by attending to:

- (a) Event timing altering the time of the event to take in the cooler part of the day (e.g. early morning)
- (b) Reduce the length of the game
- (c) Ensure all players are well hydrated, prior to and during the event
- (d) Player rest and rotation
- (e) Pre-cooling
- (f) Appropriate clothing
- (g) Use of shade, fans, ice, water etc.
- (h) Acclimatisation to heat through appropriate training

2.2.4 Signs of Heat-Related Illness or Injury

- (a) Common symptoms of heat-related illness or injury include (but are not limited to) fatigue, nausea, headache, confusion, light headedness, high heart rate, collapse, dry skin and/or pale skin colour (pale skin colour may occur with or without dry skin).
- (b) If a child complains of feeling unwell during exercise or experiences any of the above symptoms, the child should **immediately** cease activity and steps should be taken to assist the child to cool down (removal of unnecessary clothing, provision of drinks, move to a cool area with airconditioning or a fan, spray with water, application of wrapped ice packs to the child's armpits and/or groin area). **Under no circumstances** should a child be permitted or encouraged to continue exercise.
- (c) Medical advice should be sought promptly if the symptoms do not improve rapidly.
- (d) Medical advice should **always** be sought **immediately** if a child collapses.
- (e) If a child suffers heart-related illness or injury, a record should be maintained to assist in treatment and immediate and future management of the condition.



2.2.5 **Guidelines for Avoiding Dehydration (Sports Medicine Australia)**

(a) General

Dehydration can occur in the winter months, however, the importance of addressing hydration is underlined in extreme heat.

- Children should not wait to feel thirsty as thirst may not be a reliable indication of fluid needs
- Cool fluids may be absorbed more rapidly than warmer fluids
- Children must avoid starting exercise when dehydrated they should drink plenty of fluids prior to exercise
- If children do not like the taste of water they may well favour flavoured drinks such as "sports drinks" and low concentration cordial
- If children are well hydrated they should be able to pass a good volume of clear urine in the hour before exercise

(b) Specific

- Encourage children to have their own water bottle that they are able to regularly refill to remind them of the need to drink regularly
- A reasonable guideline is the intake of 500ml an hour before exercise
- A reasonable guideline is the intake of 150ml every 15 minutes during exercise
- Children must be actively encouraged to take advantage of all breaks in play to take in fluids
- Students should be encouraged to drink liberally after exercise to ensure full rehydration



Sport Adverse Weather Policy

Appendix 2 - Air Quality Index Ratings

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 μg/m³
Good to exercise	It is a good day to be outside	All forms of exercise are encouraged.	<25
Moderate Caution for those who are sensitive to air pollution	 The air is probably smoky. Sensitive groups may experience symptoms like coughing or shortness of breath. If you are sensitive to air pollution, spend less time outside in the smoke or dust and follow your treatment plan. If you are worried about your symptoms, seek medical advice. 	 If you are sensitive to air pollution, you may need to reduce prolonged high intensity endurance exercise (e.g. rowing, cycling, long-distance running). Most individuals will tolerate exercise as normal, without symptoms. 	25-50
Poor conditions for exercise	 The air is probably very smoky. Sensitive groups and/or others may experience symptoms like coughing or shortness of breath. If you are sensitive to air pollution, spend less time outside in the smoke or dust and follow your treatment plan. If you are worried about your symptoms, seek medical advice. 	Consider reducing prolonged high intensity endurance activities (e.g. cycling, triathlon, longdistance running).	51-100



Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 μg/m³
	Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance.	 If you are sensitive to air pollution, avoid prolonged high intensity endurance exercise (e.g., cycling, long-distance running) or move it indoors. Intermittent exercise (e.g. tennis, netball, volleyball, cricket, basketball) and power activities (e.g. sprint training, javelin training, jump training) may still be well-tolerated but athletes should be alert to symptoms. Increase rest-to-activity ratio for intermittent exercise. 	
Very poor conditions for exercise	 The air is probably very smoky. Sensitive groups and/or others may experience symptoms like coughing or shortness of breath. If you are sensitive to air pollution, spend less time outside in the smoke or dust and follow your treatment plan. 	High intensity endurance activities (e.g. cycling, long-distance running) should be avoided or moved indoors.	101-150



Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 μg/m³
	 If you are worried about your symptoms, seek medical advice. Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance. 	 Intermittent exercise (e.g. tennis, netball, volleyball, cricket, basketball) and power activities (e.g. sprint training, javelin training, jump training) may still be well-tolerated but athletes should be alert to symptoms. Increase rest-to-activity ratio for intermittent exercise. Any individual may be affected by exercising in smoky air at these levels. If symptoms develop, cease exercise and move indoors. 	
Likely to be hazardous to exercise outdoors	 The air is probably extremely smoky. Everyone will be at risk of experiencing symptoms like coughing or shortness of breath. Listen to your local emergency radio station or visit your State Emergency Agency for advice. Stay indoors away from smoke and dust. 	 Most individuals should avoid physical activity outdoors. Where there is an intention to play organised high level sport and there are 	>150



Exercise	General Recommendations	Exercise-specific	PM2.5
Category		Recommendations	μg/m³
	 If you are sensitive to air pollution, follow your treatment plan. Close your windows and doors to keep smoke and dust out of your home. If you think the air in your home is uncomfortable, consider going to an air-conditioned building like a library or shopping centre for a break if it's safe to do so. If you are worried about your symptoms, seek medical advice. Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance. 	medical staff on site to advise, these levels of pollution should trigger a discussion between medical staff and officials about the advisability or otherwise of proceeding with the event.	



Appendix 3 - Thunderstorm Asthma Policy Requirement - General Framework

1. Context

- 1.1 The following information has been obtained from publicly available websites which are 'authoritative'.
- 1.2 During grass pollen season (indicatively 1 October to 31 December) people may notice an increase in asthma and/or hay fever symptoms. Grass pollen season increases the chance of **epidemic thunderstorm asthma**. Thunderstorm asthma **is thought to be** triggered by a unique combination of high amounts of grass pollen in the air and a certain type of thunderstorm. For people who are known to be prone to asthma or hay fever and for some people who are not known to be prone, this can trigger severe asthma symptoms. When a large number of people develop asthma symptoms over a short period of time, related to high grass pollen and a certain type of thunderstorm, it is known as epidemic thunderstorm asthma.
- 1.3 GISSA provides this document outlining the policy requirement as a framework for its member schools.

2. Aim

2.1 To raise awareness amongst GISSA Member Schools of the **requirement** to comply with this General Framework on epidemic Thunderstorm Asthma.

3. Reference Points / Background Papers

- 3.1 Epidemic Thunderstorm Asthma Guidelines for Victoria;
- 3.2 https://www.education.vic.gov.au/childhood/earlychildhoodupdate/Pages/ecupdate_prepare_your_early_childhood_education_service.aspx;
- 3.3 http://emergency.vic.gov.au/prepare/#thunderstorm-asthma/preparing-for-thunderstorm-asthma;
- 3.4 https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/thunderstorm-asthma;
- 3.5 https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/thunderstorm-asthma/forecasting; and
- 3.6 App. https://apps.apple.com/au/app/vicemergency/id356559665.

4. Background information

- 4.1 This background information is provided on an 'as is' basis and reflects the current community information available. Schools are urged to regularly monitor any updates of this community information as part of their normal processes.
- 4.2 The <u>epidemic thunderstorm asthma forecast</u> operates indicatively between 1 October and 31 December. It combines the forecasting of a certain uncommon type of thunderstorm and grass pollen counts across Victoria. The forecast spans three days (today, tomorrow and the day after) and uses a colour-coded scale from low to high risk: green (low), orange (moderate) and red (high).



- 4.2.1 A **low risk** (green) forecast means that the elements necessary for an epidemic thunderstorm asthma event are not expected and an event is unlikely.
- 4.2.2 A **moderate risk** (orange) forecast means that one of the elements necessary for an event may be present (i.e. a high pollen forecast or a severe thunderstorm storm with strong winds) and there is a moderate chance of an epidemic thunderstorm asthma event occurring.
- 4.2.3 A **high risk** (red) forecast means that a high pollen forecast and severe thunderstorm(s) with strong winds are likely to be present increasing the risk of an epidemic thunderstorm asthma event occurring.
- 4.3 Forecasts **are not** a formal 'warning' and are designed to **inform people at risk**, in the first instance and others, that they should be prepared. The forecast only indicates whether the chance of an epidemic thunderstorm asthma event occurring is increased a higher forecast does not mean that an event is certain to happen, nor does a lower forecast mean that an event will not happen. The forecasting system is not designed to forecast the risk of individual's experiencing asthma and hay fever symptoms, which occur every year during the grass pollen season.
- 4.4 On a day of high risk the relevant authorities will issue up-to-date relevant advice and warnings on the <u>VicEmergency warning platform</u>. For up-to-date pollen levels in each state, check the website <u>here</u> or visit the relevant site: Victoria: <u>AusPollen website</u> or app.
- 4.5 Vic Emergency advises **that everyone in the community should know the signs and symptoms of asthma**, and know the four steps of **asthma first aid** so they know what to do if they or someone is having an asthma attack. GISSA assumes that member schools will provide that training to staff as part of their student management processes.
- 4.6 Thunderstorm asthma can affect those with asthma or hay fever especially people who experience wheezing or coughing with their hay fever. All people at increased risk of thunderstorm asthma and those **who have duty of care** for them should:
 - 4.6.1 learn about epidemic thunderstorm asthma and what they can do to help protect themselves and those in their care during the grass pollen season;
 - 4.6.2 check the epidemic thunderstorm asthma forecast daily;
 - 4.6.3 where possible, ensure that individuals who are prone to asthma attempt to avoid being outside during thunderstorms from October through December especially in the wind gusts that come before the storm. (Individuals prone to asthma should go inside and close the doors and windows, and if they have their air conditioner on, turn it to 'recirculate');
 - 4.6.4 ensure they have an up to date asthma action plan (if they have asthma) and have practical knowledge of the four steps of asthma first aid;
 - 4.6.5 have reliever medication appropriately available in grass pollen season and be aware of how to use it (ideally with a spacer);
 - 4.6.6 be alert to and act on the development of asthma symptoms as explained in their asthma action plan (if they have one), or if they don't, use asthma first aid; and
 - 4.6.7 ensure those who have asthma symptoms see their doctor for advice.



5. Policy Details

- 5.1 All GISSA Member Schools are required to develop and maintain a Thunderstorm Asthma Policy that complies with the General Framework provided here. Asthma registers must be an integral component of the school policy. These must be kept by GISSA Member Schools, allowing them to identify and communicate with students/parents regarding Thunderstorm Asthma risk.
- 5.2 If and when required, Member Schools must inform GISSA about students who require a management plan when Thunderstorm Asthma warnings are forecast. This would include but not only, when students from Member Schools are part of GISSA representative teams.

6. Implications for practice

- 6.1 GISSA Member Schools should be aware of this Thunderstorm Asthma General Framework.
- 6.2 GISSA Member Schools must develop and enforce a school Thunderstorm Asthma Policy and sign an annual attestation that the policy complies with this General Framework.
- 6.3 GISSA will monitor the 'public information' relevant to the General Framework and advise Member Schools accordingly.
- 6.4 GISSA Member Schools will also monitor the public information and amend their own policies consistent with any changes.

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