

Adverse Weather and Thunderstorm Asthma Policy

Last Review: 5/9/2024	Constructed / Reviewed by:
Next Review: 4/9/2025	Approval Required:
	Board Sign Off Date: 5/9/2024

1. Context

- 1.1 Adverse weather conditions may have significant health implications upon the health and wellbeing of students participating in sports. EISM 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 EISM oversees competition in a range of sports at a range of venues. Each organisation has in place a considered management structure for overseeing inter-school 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 the Greater Melbourne area as provided by the Bureau of Meteorology (BoM) is 40°C or above then the EISM Office 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 EISM Office.

4.2 On the day of the competition and or event

4.2.1 Heat:

- (a) At 31°C (ambient temperature) Heads of Sport 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) When the ambient temperature is 35°C or above during any part of the competition or training time, then the competition or training must be suspended (pool venues excluded). If the temperature does not fall below 35°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 Head of Sport* or their delegated representative to monitor the BoM Website to determine **local** temperatures.

Indoors:

- It is the responsibility of the *Home School Head of Sport* 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**, Heads of Sport 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 Head of Sport* or their delegated representative to monitor the AirVisual App to determine local air quality.

Indoors:

- It is the responsibility of the *Home School Head of Sport* 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. EISM Member Schools must:
- (i) 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 EISM 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 EISM Athletics Carnivals and Gala Days, these events may continue when it is safe to proceed in whole or part at the discretion of the EISM Office and in conjunction with the EISM Executive Officer.

5. Communication

5.1 This policy will be communicated by EISM to:

- 5.1.1 The Principals of EISM Schools
- 5.1.2 Heads of Sport of EISM Schools

- 5.2 The Principals and other relevant staff will have the responsibility of communicating the Policy to staff within their Schools.
- 5.3 Any public statements regarding the policy should be made only by the Principals of EISM Schools.
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6. Implications for Practice

6.1 At Board Level

6.1.1 To properly implement this Policy, EISM 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 EISM's record of current policies;
- (d) ensure that this Policy is incorporated into EISM'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; and
- (e) ensure that this Policy is accessible to the public (including children and parents) as published on the EISM website.

6.2 At Other Levels

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

6.3 At EISM Member School level

6.3.1 EISM 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 air-conditioning 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

Appendix 2 - Air Quality Index Ratings

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 $\mu\text{g}/\text{m}^3$
Good to exercise	<ul style="list-style-type: none"> It is a good day to be outside 	<ul style="list-style-type: none"> All forms of exercise are encouraged. 	<25
Moderate Caution for those who are sensitive to air pollution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Consider reducing prolonged high intensity endurance activities (e.g. cycling, triathlon, long-distance running). 	51-100

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 $\mu\text{g}/\text{m}^3$
	<ul style="list-style-type: none"> Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> High intensity endurance activities (e.g. cycling, long-distance running) should be 	101-150

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 $\mu\text{g}/\text{m}^3$
	<p>or dust and follow your treatment plan.</p> <ul style="list-style-type: none"> 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. 	<p>avoided or moved indoors.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The air is probably extremely smoky. Everyone will be at risk of experiencing symptoms like coughing or shortness of breath. 	<ul style="list-style-type: none"> Most individuals should avoid physical activity outdoors. 	>150

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 $\mu\text{g}/\text{m}^3$
	<ul style="list-style-type: none"> • Listen to your local emergency radio station or visit your State Emergency Agency for advice. • Stay indoors away from smoke and dust. • 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. 	<ul style="list-style-type: none"> • Where there is an intention to play organised high level sport and there are 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 EISM provides this document outlining the policy requirement as a framework for its member schools.

2. Aim

- 2.1 To raise awareness amongst EISM 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 epidemic thunderstorm asthma forecast 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 [VicEmergency warning platform](#). For up-to-date pollen levels in each state, check the website [here](#) or visit the relevant site: Victoria: [AusPollen website](#) 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. EISM 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 EISM 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 EISM 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 EISM 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 EISM representative teams.

6. Implications for practice

- 6.1 EISM Member Schools should be aware of this Thunderstorm Asthma General Framework.
- 6.2 EISM 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 EISM will monitor the 'public information' relevant to the General Framework and advise Member Schools accordingly.
- 6.4 EISM Member Schools will also monitor the public information and amend their own policies consistent with any changes.