

Canberra Runners Incorporated

Extreme Weather Policy

Document Control

Document Owner	Jo Legge-Wilkinson
Change Request	Initial set up of Canberra Runners Inc

Document History			
Date	Version	Name	Changes from previous version
13/02/2021	0.1	Rosalie Butler	Initial version
11/04/2021	0.2	Robyn McClelland	Updating, including for SMA Extreme Heat Policy
5/5/2021	0.3	Robyn McClelland	Revised to take into account feedback from YCRC organisers
20/5/2021	0.3		Endorsed by Committee

1. Introduction

Canberra Runners Inc. (Canberra Runners) recognises the potential dangers of extreme weather and the need to ensure that there are appropriate policies and procedures in place to mitigate risks to members, participants, officials, and volunteers at all our events and activities from extreme weather.

The objectives of the Extreme Weather Policy (“Policy”) are to:

- protect the health, safety and well-being of persons who participate in, volunteer, and officiate at events and activities conducted by Canberra Runners
- ensure venues are safe places in which to participate, volunteer, and officiate so far as is reasonably practicable
- provide a defined process for event and activity organisers to rely on during extreme weather conditions.

2. Policy Statement

In recognition of the risks associated with extreme weather, organisers of Canberra Runners’ events and activities (“Organisers”) will, at all times, place the health, safety and welfare of members, participants, officials, and volunteers ahead of the conduct of the event or activity, irrespective of the inconvenience, cost or other considerations.

Canberra Runners reserves the right to cancel or modify any event or activity if it is considered that the environmental conditions, including extreme heat and poor air quality, present a serious health risk to members, participants, officials, and/or volunteers, even if conditions fall within the acceptable levels detailed in this policy.

While cancellation or modification of events or activities is a very rare occurrence (and has only been done on a few occasions in the past 50 years), the safety of participants and officials at Canberra Runners’ events is the major priority.

3. General

Organisers must be aware of weather and air quality forecasts and plan accordingly to minimise the risks affecting members, participants, officials, and volunteers. Organisers, in consultation with relevant Committee members, may cancel or modify events or activities, and communicate with stakeholders about the changes.

When weather or other conditions at an event/ activity may threaten the immediate safety of members, participants, officials, volunteers, or any other persons, Organisers may suspend events/ activities until there are not safety threats.

Particular weather and air quality conditions that may make it unsafe to hold an event are addressed in this policy. Other factors to be taken into account when considering cancellation, modification or postponement of an event or activity include:

- the duration of the event/ activity
- the time of the day for the event/activity
- the nature of the course (eg, exposure, risk of flooding/ fire)
- whether there are inexperienced or vulnerable participants (eg, elderly, young, or those with predisposed medical conditions), and
- the ability to abandon the event/ activity if conditions worsen (eg, a multi-lap or restricted area course).

4. Notification

If sufficient notice is possible when it is necessary to cancel or modify an event or activity, Canberra Runners will communicate the change by any of the following:

- a news item will be placed on the Canberra Runners' website advising of the cancellation or postponement of the event or activity
- an email will be sent to the Canberra Runners database advising all current registered participants and volunteers of the cancellation or postponement
- notification via Canberra Runners' social media channels
- notification to participants/ volunteers by text, phone or email.

Alternatively, participants will be advised when they turn up for the event or activity.

5. Extreme Heat or Cold

Extreme Heat

Heat-related injuries or illness pose a risk to members, participants, officials, and volunteers. Heat illness including heat exhaustion and the more severe heat stroke can occur across all events and activities at temperature levels well below those considered to be a risk. The management of extreme heat at Canberra Runners' events and activities is important for the health, safety and welfare of all involved. When there are high temperatures, there may also be a high risk of fire.

Canberra Runners will not conduct events or activities when the ambient temperature during the event or activity is likely to be above 36°C.

This is a more stringent requirement than the requirements of the Sports Medicine Australia Extreme Heat Policy. Guidance from that policy on determining heat risk and on hydration and cooling strategies, is attached (Attachment A).

Extreme Cold

Conditions are very unlikely to be cold enough in Canberra, even when windy or wet, to prevent conducting events or activities because of a risk of hypothermia, that is, abnormally low body temperature. However, there may be implications for the jogalong and mini-jog, as older adults and young children are at greater risk of hypothermia.

More likely risks in very cold weather are the possibility of icy paths causing slip hazards, particularly on bridges, and fog which may mean that the course is difficult to navigate or to adequately monitor junior runners. Where such conditions apply, participants should be briefed beforehand.

6. Severe Storm Conditions and Strong Winds

Severe storms with lightning, hail or heavy rain and strong winds may present significant risks to members, participants, officials and volunteers.

If these conditions are threatened, the following should occur:

- prior to the event or activity the BOM weather forecast should be monitored
- if a weather warning for severe storms and/ or strong winds is in place or predicted, canceling or postponing the event or activity should be strongly considered
- if a severe storm/ strong winds occurs during the event or activity, if possible, the Organiser will ask all members, participants, officials, and volunteers to immediately leave the area and proceed to a substantial building or a safe place using common sense. (Small outdoor

buildings, rain shelters and sheds are not considered substantial buildings and are not deemed to be a safe area to shelter)

- if a substantial building is not available for shelter, a hard-topped metal vehicle with windows closed may also provide good protection.
- once the severe storm or strong winds have stopped, the Organiser will assess the area for damage before determining whether the event or activity could resume
- no individuals will be permitted to return to the event or activity until the all clear is given by the Organiser.

7. Air Quality

Exercising in conditions where air quality is poor may have detrimental health impacts, particularly among older participants and those with respiratory conditions such as asthma. When air quality is an issue, Organisers should monitor the ACT Health air quality site (see Attachment B). ACT Health uses a five health advisory categories for air quality: . good, fair, poor, very poor, extremely poor. based on the 24-hour rolling average concentrations of PM2.5 $\mu\text{g}/\text{m}^3$ in the air. However, air quality readings can change quite quickly over time/ distance.

Canberra Runners will consider cancelling or postponing events and activities when landmarks are visible for less than about 5 km and the air quality is likely to be poor. It will cancel or postpone events and activities when landmarks are visible for less than about 1.5 km and air quality is likely to be very poor.

Vulnerable people and athletes of lesser fitness will be encouraged to reconsider exercise when the air quality is poor.

Details of ACT Health air quality monitoring and Australian Institute of Sport smoke pollution and exercise guidance, are attached (Attachment B).

8. Individual Responsibility

As running is an individual sport Canberra Runners encourages all members, participants, officials, and volunteers to take a sensible approach to events and activities in hot weather or other extreme weather conditions.

The decision to participate or not in events and activities is one that each member, participant, official, and volunteer must make. Individuals are aware of their own health and fitness and need to ensure that they wear appropriate clothing and maintain appropriate hydration and nutrition.

Officials and volunteers are frequently active for longer periods than participants and therefore, if the Organiser deems that the conditions are too arduous, then that event or activity will no longer be an official event. Each participant must then make a personal decision whether to participate on an unofficial basis.

Heat Risk determination:

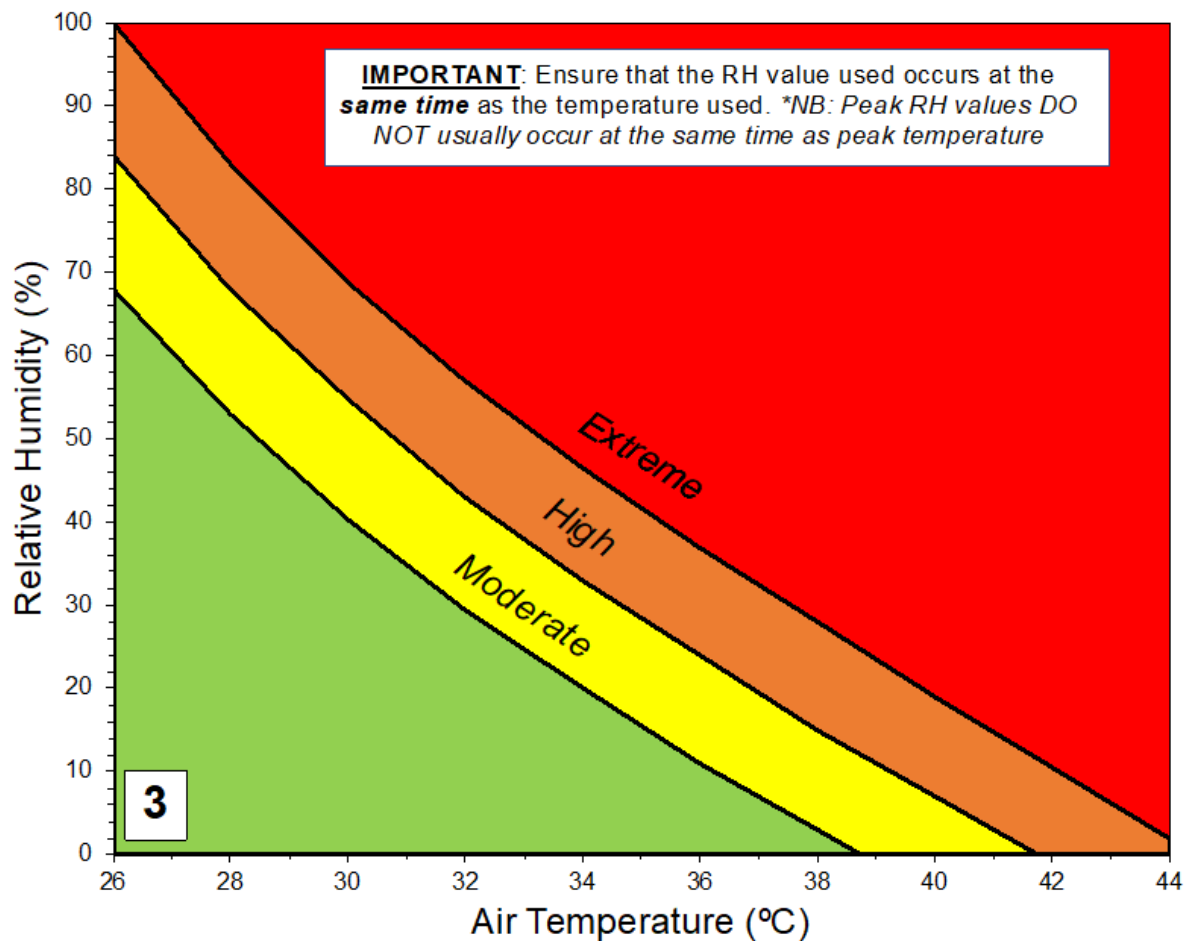
The Sports Medicine Australia 'Extreme Heat Policy' February 2021 (the **SMA policy**) advises that to predict the heat risk associated with sporting participation, the temperature and humidity for the location where events or activities will be taking place needs to be acquired. The **SMA policy** indicates that it is essential that the peak temperature during the event or activity is used with the accompanying relative humidity at that specific time. If the peak relative humidity is used for a particular day, which usually occurs when temperature is lowest, heat stress risk will be over-estimated and competition unnecessarily disrupted or cancelled.

To obtain a forecast of temperature and humidity for the upcoming 72 hours:

1. Visit: <http://www.bom.gov.au/places/> and enter your location/post code.
2. Click on: "DETAILED 3-HOURLY FORECAST"
3. Select the specific day/date of enquiry
4. Identify the column with the nearest time to the planned competition/practice
5. Note the "Air Temperature (°C)" value
6. AND IN THE SAME COLUMN, note the concurrent "Relative Humidity (%)" value found towards the bottom of the entry for that date

NOTE: Reported temperatures and humidity values will only be estimates. The most accurate conditions can be measured locally with devices such as the Environmental Measurement Unit (EMU) from The University of Sydney. The combined Air Temperature (x-axis) and Relative Humidity (y-axis) should then be plotted on the appropriate figure for your specific sport. The figure below is for sports including running. The point of intersection of these two values will subsequently fall in one of 4 coloured zones indicating a given level of heat stress risk:

- GREEN: Low Risk
- YELLOW: Moderate Risk
- ORANGE: High Risk
- RED: Extreme Risk



The SMA Policy requires cancellation or postponement of events for extreme but not for high heat risk.

In high heat conditions, if an event or activity is stopped after starting, the following active cooling strategies are encouraged:

- submerging arms/feet in cold water
- water dousing – wetting skin with cool water using a sponge or a spray bottle to help increase evaporation, which is the most effective cooling mechanism in the heat
- ice packs/towels – placing an ice pack or damp towel filled with crushed ice around the neck
- electric (misting) fans – using outdoor fans if available, especially when combined with a water misting system

NOTE: The application of substances such as menthol to the skin can induce a cool sensation, but they do not physically cool the body and therefore do not lower the risk of heat related illness.

When the heat risk is **moderate** at the start or during the course of the event or activity, to reduce the risk of heat illness, increasing the frequency and/or duration of rest breaks during training sessions and shortening the distance/ duration of events or activities, should be considered.

NOTE: While hats provide UV protection, they provide minimal protection against the heat.

When heat stress risk is low (green area of above figure), everyone is encouraged to maintain hydration through regular fluid consumption and to wear suitable clothing. that is, to:

- select light-weight and breathable clothing with extra ventilation,
- remove unnecessary clothing/equipment and/or excess clothing layers,
- reduce the amount of skin that is covered by clothing (to help increase sweat evaporation to help dissipate heat).

NOTE: Sunscreen does NOT impede sweating or affect heat loss from the skin. Sunscreen should be applied regularly, as per instructions, to avoid sunburn.

During hot periods, everyone is encouraged to:

- drink before, after and often during the events and activities to ensure adequate hydration
- bring personal drink bottles to events and activities
- participate early in the morning or late at night (preferably after sunset) to avoid the hottest part of the day
- consider reducing the intensity and or duration of the event or activity
- take frequent breaks in the shade where possible and complete instructional time and recovery periods in shaded areas where available
- consider moving the event or activity to an alternate, cooler environment
- monitor self and others for signs of heat illness
- discontinue the event or activity and seek medical attention if feeling dizzy, faint and/or nauseous.

Elderly, young children and those with predisposed medical conditions are at a higher risk of heat-related illness and are therefore encouraged to carefully consider their level of participation in the events and activities in hot conditions.

During hot periods, race or event managers should:

- provide fluid replacement before, where possible during, and after events and activities (Note: Drinking cold fluids before exercise commences is more effective for cooling than ingestion during exercise.)
- provide extra temporary shade where possible
- educate participants about the importance of hydration, maintaining fluid levels and drinking before, during and after events and activities
- be aware of anyone with existing medical conditions (e.g. cold, flu, asthma, heart conditions etc)
- remind participants that if they are feeling dizzy, faint or nauseous to discontinue activity and seek medical attention
- remind participants to keep an eye out for anyone looking confused or suffering any loss of endurance or skill level as this can be a sign of heat exhaustion.

Sports Medicine Australia Extreme Heat Policy <https://sma.org.au/sma-site-content/uploads/2021/02/SMA-Extreme-Heat-Policy-2021-Final.pdf>

Act Health

ACT Health uses a system of five health advisory categories for air quality.
<https://www.health.act.gov.au/about-our-health-system/population-health/environmental-monitoring/air-quality-health-advice-portal>

The categories are based on the 24-hour rolling average concentrations of PM2.5 µg/m³ in the air.
<https://www.health.act.gov.au/about-our-health-system/population-health/environmental-monitoring/monitoring-and-regulating-air>

Each category has cautionary health advice that suggests practical ways to reduce exposure to smoke. There are two smart phone applications that provide information on PM2.5 µg/m³ concentrations: [IQ Air Visual App](#) and [AirRater App](#).

In a sudden onset weather or smoke event (for example, a dust storm or significant landscape fire), it is possible that visibility is reduced before there is an increase in the health advisory category based on the 24 hour rolling average concentrations of PM2.5 µg/m³ in the Air Quality Index.

In this scenario, ACT Health undertakes an assessment and publishes a public health alert, if required.

Australian Institute of Sport

The Australian Institute of Sport (AIS) has published guidelines for when to reduce or discontinue exercise, based on PM2.5 µg/m³ **real time** or **hourly** readings. An extract from the AIS guidelines for [Smoke Pollution and Exercise](#) December 2019, is set out in Table 1, with respective PM2.5 µg/m³.

The AIS guidelines advise that the numbers in the table are a guide and should not be taken as absolutes. This is because there is high variability in PM2.5 µg/m³ readings across relatively short distances and quite rapid changes across time. The AIS guidelines advise that visibility guidelines should also be considered. The visibility guidelines in Table 2 are based on those of the Victorian Environment Protection Authority.

Table 1. AIS Guidelines for exercise in smoke affected environments

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 µg/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

<p>Moderate</p> <p>Caution for those who are sensitive to air pollution</p>	<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. 	<p>25-50</p>
<p>Poor conditions for exercise</p>	<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. ● 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"> ● Consider reducing prolonged high intensity endurance activities (e.g. rowing, cycling, long-distance running). ● If you are sensitive to air pollution, avoid prolonged high intensity endurance exercise (e.g. rowing, cycling, long-distance running) or move it indoors. ● Intermittent exercise (e.g. tennis, netball, beach volleyball, cricket) and power activities (e.g. sprint training, javelin training, jump training, rugby skills training) may still be well-tolerated but athletes should be alert to symptoms. ● Increase rest-to-activity ratio for intermittent exercise. 	<p>51-100</p>

<p>Very poor conditions for exercise</p>	<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. ● 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"> ● High intensity endurance activities (e.g. rowing, cycling, long-distance running) should be avoided or moved indoors. ● Intermittent exercise (e.g. tennis, netball, beach volleyball, cricket) and power activities (e.g. sprint training, javelin training, jump training, rugby skills 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. 	<p>101-150</p>
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<p>Likely to be hazardous to exercise outdoors</p>	<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. ● 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"> ● Most individuals should avoid physical activity outdoors. ● 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. 	<p>>150</p>
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Table 2. Activity levels based on visibility

Visible landmark	Air health category	Activity levels – people sensitive to smoke	Activity levels – everyone else
About 20 km	Good	It's a good day to be outside.	It's a good day to be outside.
About 10 km	Moderate	It's okay to be outside but watch for changes in air quality around you.	It's okay to be outside but watch for changes in air quality around you.
About 5 km	Poor	Reduce prolonged or heavy physical activity.	Normal activity, but be alert to changes in air quality
About 1.5 km	Very poor	Avoid physical activity outdoors.	Reduce prolonged or heavy physical activity.
Less than 1.5 km	Hazardous	If you can, stay indoors and keep physical activity levels as low as possible.	Avoid all physical activity outdoors.

AIS Best Practice Guidelines on Smoke Pollution and Exercise
https://www.ais.gov.au/position_statements/best_practice_content/smoke-pollution-and-exercise