AUSCYCLING

EXTREME WEATHER POLICY

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Extreme Weather Policy

1.0 Purpose and Objective

AusCycling (AC) recognises the dangers of extreme weather and the need to ensure that there are appropriate policies and procedures in place to mitigate risks to riders, Commissaires, coaches and spectators at all of our activities should an extreme weather event occur.

The objective of the Extreme Weather Policy (Policy) is to:

- protect the health, safety and well-being of persons who participate in cycling activities that are recognised and sanctioned by AusCycling.
- ensure venues are safe places to ride, race, spectate and officiate so far as is reasonably practicable; and
- provide a defined process to any training session or competition on managing extreme weather conditions.

2.0 Scope

This policy applies to all sanctioned AC activities. Certain venues may have additional requirements however AC sanctioned activity shall not occur at a lesser standard than provisioned in this policy.

Policy Statement

In recognition of the risks associated with extreme weather, AC, Event Organisers, clubs and coaches who are responsible for organising cycling activities must at all times place the health, safety and welfare of riders, Commissaires, coaches and workforce staff and ahead of other considerations irrespective of the inconvenience, cost.

One person must be responsible for conducting the activity and must:

- Regularly monitor weather forecasts in the lead up to, and during the period of use activity using the Bureau of Meteorology (BOM) Website (www.bom.com.au); and
- Comply with the specific Extreme Weather Procedures prescribed in this policy.

3.0 Heat

Heat stress is a serious health risk. High intensity exercise in a hot environment, with the associated fluid loss and elevation of body temperature, can lead to dehydration, heat exhaustion and heat stroke (which can be fatal). Children are at greater risk than adults are because their thermoregulation mechanisms are not fully developed. Older members can also be at high risk because of reduced cardiac function.

Organisers (events and training) of any cycling activity have a Duty of Care to monitor environmental conditions and to act to minimise the risk of heat stress to participants.

3.1 Measurement of Heat Stress

Ambient air temperature is an indicator of how comfortable it would feel when riding however the air temperature is only one factor in the assessment of thermal stress.

Other factors, principally humidity, can vary widely day to day and should be considered for a more realistic assessment of comfort. It is useful to condense the extra effects into a single number and use it in a similar way to measurement of air temperature.

The Wet Bulb Globe Temperature (WBGT) is also recognised standard and the measurement which is to be applied by the organiser to determine the base level Thermal Comfort.

3.2 Determining the Thermal Comfort Level for the Location of the Specific Cycling Activity

To ensure all cycling activities are consistent, the 'Thermal Comfort Level' and ambient air temperature must be taken from the BOM website.

The reading shall come from the weather station closest to the location of the event (measured using the shortest path between two points) and always taken from the WGBT Shade column.

For ease of reference, the following Thermal Comfort URL's are provided for each State and Territory:

Australian Capital Territory	http://www.bom.gov.au/products/IDN65179.shtml
New South Wales	http://www.bom.gov.au/products/IDN65179.shtml
Northern Territory	http://www.bom.gov.au/products/IDD65155.shtml
Queensland	http://www.bom.gov.au/products/IDQ65214.shtml
South Australia	http://www.bom.gov.au/products/IDS65004.shtml
Tasmania	http://www.bom.gov.au/products/IDT65050.shtml
Victoria	http://www.bom.gov.au/products/IDV65079.shtml
Western Australia	http://www.bom.gov.au/products/IDW65100.shtm

3.3 Specific Hot Weather Requirements for competition:

Temperatures 30 degrees Celsius or less

- For competitions where the forecast minimum temperature is 30 degrees or below, participants should exercise caution, particularly in endurance events or those that require the participants to remain in direct sunlight for an extended period of time.
- Participants should drink often to remain hydrated.
- No competition modifications are recommended however distance events should be held in the coolest part of the day.

Temperatures between 31 and 37 Celsius degrees (inclusive)

- Participants should exercise caution particularly in road, mountain bike and track endurance events. Events should be scheduled for the coolest part of the day.
- Athletes should carefully consider the number of events they compete in over the course of the competition.
- The event organisers will provide access to water for riders (for purchase), officials and volunteers (free of charge).
- Modification to the program may be considered by the Principle of the Commissaire Panel (PCP).
- Shelter must be provided for any officials who are not shaded.

Temperatures between 38 and 40 degrees Celsius (inclusive)

- Participants should exercise extreme caution.
- Competition schedule and program may be modified with respect to time of day and the duration of the event.
- Endurance events may be cancelled or postponed until later in the day or after sunset All Officials to take a 10-minute break each hour.
- Promoter to provide access to water for participants, officials and volunteers. Shelter must be provided for officials who are not shaded.

Temperature 41 degrees and above

- All competition will be postponed until the temperature is below 41 degrees Celsius.

3.4 **Discretionary Cancellation**

AC reserves the right to cancel any competition at its absolute discretion if it is deemed that the prevailing or predicted environmental conditions, such as (but not limited to) extreme heat / humidity present a serious health risk to athletes or officials.

Under the AusCycling and UCI Regulations the PCP has the power to suspend racing or postpone any race on account of the weather conditions if they believe there is real danger to the competitors' health.

In considering the suitability of participation the PCP must consider:

- Fitness level
- Athletic ability
- Age
- Level of acclimatisation

3.5 **Requirements of Principal of the Commissaire Panel**

The PCP must have on site access to the BOM Thermal Comfort temperatures.

- The PCP must review the situation every 30 minutes when the temperature is over 31 degrees.
- Cold drinking water must be made available.
- Ice should be made available for heat stress emergencies.
- The PCP must have access to a person with a current Senior First Aid Certificate.
- Ready access to medical assistance.
- Information about the nearest medical assistance should be on display in a prominent location.

4.0 Rain, Flood and Hail

Rainstorms, flooding and hail have the potential to create dangerous conditions for riders Commissaires and spectators. The relevant PCP, and Event or Training Organiser must ensure the health, safety and well-being of players, officials and spectators as the overriding priority.

Where rain, flood and hail create an unacceptable risk, the PCP in consultation with the Race Director (or coach in the case of training) must postpone or cancel the competition if it is unlikely to be safe.

5.0 Thunderstorms and Lightning

The definition of a thunderstorm is where lightning can be seen and/or thunder can be heard. Any storm which produces thunder means lightning is always present, even if it is obscured by cloud (it is the lightning which produces the thunder).

The simplest and most effective way to assess this distance of lightening is the 30-second rule. If there is less than 30 seconds between the lightning and thunder, then the lightning is within 10 km of the listener. (30 seconds at the speed of sound is 10.2km). When a lightning strike is within 10km of the event must suspended and all patrons are encouraged to seek appropriate cover.

An event or training can resume once the threat of lightening has passed, which is measured by the lightning and thunder being greater than 30 seconds apart

6.0 Air Quality

Any situation in which the air quality is compromised presents a risk to riders, Commissaires and spectators, especially if they have a pre-existing medical condition.

Airborne contaminates can come in many forms, but the most common are sand, dust or smoke.

The organiser and Commissaires must ensure the health, safety and well-being of riders, officials and spectators as the overriding priority and where the air quality conditions create an unacceptable risk, have the authority under this Policy to suspend activities.

6.1 Air Quality What is the Air Quality Index

The Air Quality Index (AQI) is an index for reporting daily and hourly air quality.

The AQI is a quick and easy tool to inform you about:

- Air pollution levels at your nearest monitoring site or region.
- Specific information for people more at risk from exposure to short-term air pollution.
- Simple steps to take to protect yourself.

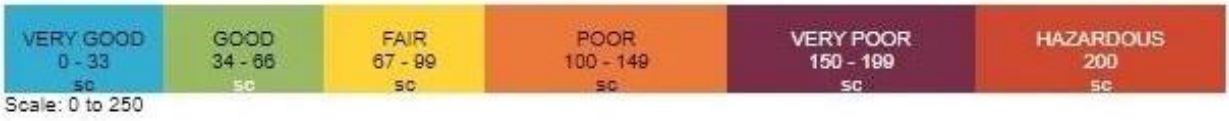
The AQI does not provide guidance on the effects of long-term exposure to air pollution.

The following links will be useful in helping you determine your region's air quality:

Australian Capital Territory	https://www.health.act.gov.au/about-our-health-system/population- health/environmental-monitoring/monitoring-and-regulating-air-0
New South Wales	https://www.dpie.nsw.gov.au/air-quality/current-air-quality
Northern Territory	http://ntepa.webhop.net/NTEPA/Default.ltr.aspx
Queensland	https://apps.des.qld.gov.au/air-quality/
South Australia	https://www.epa.sa.gov.au/data_and_publications/air_quality_monitoring
Tasmania	https://epa.tas.gov.au/epa/air/monitoring-air-pollution/real-time-air-quality-data-for- tasmania
Victoria	https://www.epa.vic.gov.au/for-community/airwatch
Western Australia	https://www.der.wa.gov.au/your-environment/air/air-quality-index

6.2 What the air quality index means

When reviewing the AQI at your nearest monitoring site or in your region, you will see the display of a colour depending on the air quality measured, as per the table below.



The AQI is based on the amount of fine particulate matter (PM 2.5) levels in the air. Tiny particles in the air reduce visibility and cause the air to appear hazy, but based on exposure to these particles, it can cause short-term health effects.

The AQI helps participants understand the current level of air quality and provide information on how to reduce your risk of exposure to air pollution if necessary.

6.3 Major Causes of Poor Air Quality

Bush fire smoke and dust storms are the two main environmental conditions for which you may need to consider the air quality to determine if a ride or race should be revised, postponed, or cancelled.

6.4 Bushfire Smoke

Smoke from bushfires is made up of small particles, gases, and water vapour. The particles are very small - up to 1/30th the diameter of an average human hair - and are not visible to the human eye.

The gases in bushfire smoke include carbon monoxide, carbon dioxide, nitrogen oxides and volatile organic compounds.

6.5 Dust Storms

Dust storms are natural events and are common in parts of the world with dryland areas. Periods of severe and widespread drought can dramatically increase the likelihood of major dust storms, particularly during the summer months.

Dust storms reduce air quality and visibility, and may have adverse effects on health, particularly for people who already have breathing-related problems. Dust particles vary in size from coarse (non- inhalable), to fine (inhalable), to very fine (respirable). Obviously, these smaller particles have a greater potential to cause serious harm to your health.

6.6 Exposure and health effects

Fine smoke particles are known to affect the human breathing system. The smaller or finer the particles, the deeper they go into the lungs.

These particles can cause a variety of health problems, such as itchy or burning eyes, throat irritation, runny nose and illnesses such as bronchitis. The smoke particles can also aggravate existing lung conditions, such as chronic bronchitis, emphysema and asthma.

The most common symptoms experienced during a dust storm are irritation to the eyes and upper airways. People who may be more vulnerable than others are:

- infants, children and adolescents
- the elderly
- people with respiratory conditions, such as asthma, bronchitis and emphysema
- people with heart disease
- people with diabetes

For these people, exposure to a dust storm may:

- trigger allergic reactions and asthma attacks
- cause serious breathing-related problems
- contribute to cardiovascular or heart disease
- contribute to reduced life span

Prolonged exposure to airborne dust can lead to chronic breathing and lung problems, and possibly heart disease.

6.7 Actions based on the air quality category

The following table outlines the actions that should be taken for any event (ride or race) based on the air quality index.

AQI	Category	Action
0-66	Very Good/Good	• Business as usual
67-99	Fair	• For most people there will be no noticeable symptoms of exposure • People who are sensitive to air pollution should take some precautions and/or consult their health practitioner before participating • Racing/Training to continue as planned
100-149	Poor	• Regular messaging to participants, staff, volunteers, officials and team staff regarding hydration, general health awareness and the potential risk to personal health • For sensitive groups (and symptomatic athletes) they should consider their participation • For asymptomatic athletes, they should reduce the amount they are training • Any club or junior event should be cancelled • Elite events/training may continue but options around start time and reducing race/training distances should be reviewed if there is the possibility to shift the event to better conditions
150 – 200	Very Poor	• Regular messaging to participants, coaches and officials regarding hydration, general health awareness and the potential risk to personal health • For sensitive groups (and symptomatic athletes) they should consider their participation in the event • For asymptomatic athletes, they should reduce the amount they are training • To consider modification of course/start time and communicate accordingly, in order to try and find a more suitable time and/or duration for the event • All non-elite training and competition should be cancelled
200+	Hazardous	• Cancellation of all events

6.8 AIS Exercise Guidelines

The Australian Institute of Sport has published the following guidelines taking into account the activity guidelines as they relate to the AQI (https://ais.gov.au/position_statements#smoke_pollution_and_exercise).

7.0 Low Visibility

Low visibility is generally caused by fog/mist or smoke. No event or training can commence unless there is at least 100m visibility at all positions on the course.

8.0 Bushfire

Some AusCycling activities can takes place in a natural bushland environment and often in remote locations.

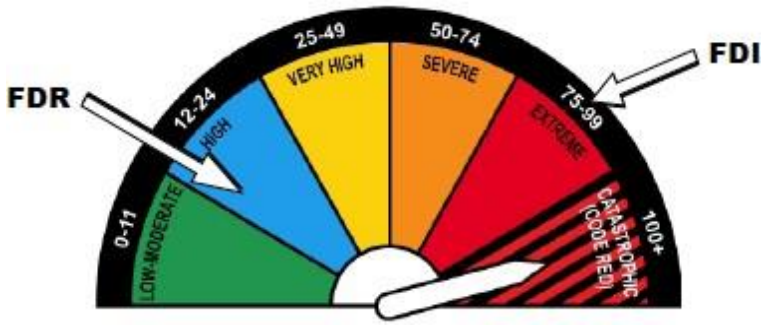
8.1 Fire Danger Rating

Emergency Service Organisations accredited with a combat role for fire suppression throughout Australia produce a Fire Danger Rating (FDR) for each day during the bushfire season. This rating is based on how a fire is expected to behave if one should start on any given day. The FDR is determined by the Fire Danger Index (FDI) and is a combination of air temperature, relative humidity, and wind speed and drought conditions.

The relationship between the FDR and FDI are represented in the fire danger metre depicted in diagram 1 below.

All state and territories with the exception of Victoria define the most severe FDR as Catastrophic. Victoria use the term Code Red.

Diagram 1: Fire Danger Rating Meter



Refer to Appendix 1 for further information on the FDR including an explanation of fire behaviour.

Implementation

During the bushfire season (September – April) the event or training organiser must follow the steps below. These apply to events held on both private and public land.

- Check the FDR for the area in the days preceding the event. This should include contacting relevant emergency service and/or land custodians to determine if there are any controlled burns planned for the area.
- In the situation of a Catastrophic/Code Red or Extreme FDR for the immediate area, it is mandatory that the event be cancelled. Any decision is to be made in consultation with emergency services.
- In the situation of a Severe FDR the event should be assessed on a case-by-case basis in consultation with relevant emergency services and in consideration of the type of event. However, it is strongly recommended that the event be cancelled. Evacuation routes must be

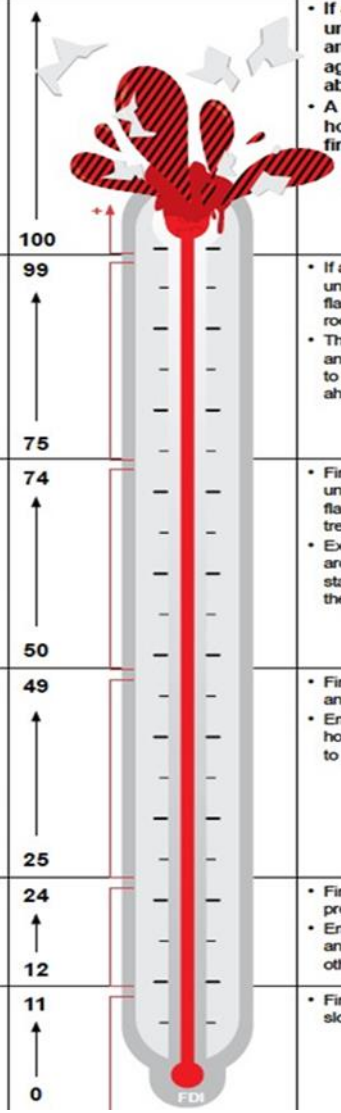
considered as part of the risk management plan, marked accordingly on all event site plans and course maps and event staff briefed on their location.

- If there is a bushfire present in the area or general vicinity of the course (including likely travel routes), the event will be cancelled or postponed immediately.
- If it is deemed safe for an event to proceed a risk assessment will be conducted and significant risk minimisation, safety and precautionary strategies will be implemented in consultation with relevant emergency service agencies. These strategies will include identification of emergency meeting points and emergency evacuation routes from the event site. All strategies will be documented in a risk management plan and signed off by relevant authorities.
- Information on cancellations will be communicated to participants, organisers, suppliers, contractors, landowners, and other relevant stakeholders. Where possible, cancellations and communication of such should be made as soon as possible before the event to limit unnecessary travel by participants and others. Where possible, signage should be installed to close access road(s) and/or marshals in place to prevent access to the access to the site.
- If a fire starts during an event, the event will be stopped immediately, the site vacated and emergency services notified and all relevant stakeholders consulted

9.0 Key References

Australian Capital Territory	www.esa.act.gov.au
New South Wales	www.rfs.nsw.gov.au
Northern Territory	www.pfes.nt.gov.au
Queensland	www.ruralfire.qld.gov.au
South Australia	www.cfs.sa.gov.au
Tasmania	www.fire.tas.gov.au
Victoria	www.cfa.vic.gov.au
Western Australia	www.dfes.wa.gov.au

Appendix 1: Summary of Fire Danger Rating

Fire Danger Rating	Fire Danger Index	Fire Behaviour	Impact Potential	What Should I Do?
CATASTROPHIC	CATASTROPHIC  100	• If a fire starts, some fires will be uncontrollable, unpredictable and very fast moving with highly aggressive flames extending high above tree tops and buildings. • A thick river of embers will attack homes violently causing other fires to start rapidly and spread quickly up to 20 km ahead of the main fire.	• Fire will threaten suddenly, without warning and be incredibly hot and windy making it difficult to see, hear or breathe. • Lives will be lost, people injured and homes and business destroyed or damaged. • Even well prepared and constructed homes will not be safe. • Expect power, water and phone networks to fail as severe winds bring down trees, power lines and blow roofs off buildings well ahead of the fire. **DO NOT EXPECT A FIRE TRUCK**	• Ensure that your survival is the primary consideration in any decision. • The safest option is for you and your family to leave early, hours or days before a fire occurs. • Under no circumstances will it be safe to Stay and Defend. • Ensure you stay well informed of current fire activity by monitoring local media and regularly checking for updates on the ESA website www.esa.act.gov.au or by calling Canberra Connect on 13 22 81.
EXTREME	 EXTREME 99 75	• If a fire starts, fires will be uncontrollable, unpredictable and fast moving with flames in the tree tops, and higher than roof tops. • Thousands of embers will be blown into and around homes causing other fires to start and spread quickly up to 6 km ahead of the main fire.	• Fire will threaten suddenly, without warning and be very hot and windy making it difficult to see, hear and breathe. • Lives may be lost and people injured and expect homes and business to be destroyed or damaged. • Only very well prepared, constructed and actively defended homes are likely to offer any degree of safety. • Power, water and phone networks are likely to fail because severe winds will bring down trees, power lines and blow roofs off buildings well ahead of the fire. **DO NOT EXPECT A FIRE TRUCK**	• Ensure that your survival is the primary consideration in any decision. • Leaving early (hours before) will always be the safest option for you and your family • Implement your Bush Fire Survival Plan. • If your Bush Fire Survival Plan includes the decision to Stay and Defend, only do so if your home is well prepared, constructed and you are currently capable of actively defending it. • Stay well informed of current fire activity by monitoring local media and regularly checking for updates on the ESA website www.esa.act.gov.au or by calling Canberra Connect on 13 22 81.
SEVERE	 SEVERE 74 50	• Fires will be difficult to control, unpredictable and fast moving with flames that may reach the tops of the trees and be higher than roof tops. • Expect embers to be blown into and around homes causing other fires to start and spread up to 4 km ahead of the main fire.	• Fire can threaten suddenly, without warning and be hot and windy which at times will make it difficult to see, hear and breathe. • There is a chance lives may be lost and people injured and expect that some homes and business will be destroyed or damaged. • Well prepared, constructed and actively defended homes are likely to offer safety during a fire. • Power, water and phone networks may fail as winds may bring down trees, power lines and blow roofs off buildings ahead of the fire. **DO NOT EXPECT A FIRE TRUCK**	• Ensure that your survival is the primary consideration in any decision. • Leaving early (hours before) is the safest option for you and your family. • Follow your Bush Fire Survival Plan. • Staying and defending is an option if your home is well prepared, constructed and you can actively defend it. • Stay informed of current fire activity by monitoring local media and regularly checking for updates on the ESA website www.esa.act.gov.au or by calling Canberra Connect on 13 22 81.
VERY HIGH	 VERY HIGH 49 25	• Fires can be difficult to control quickly and may be fast moving. • Embers may be blown into and around homes causing other fires to occur up to 2 km ahead of the main fire.	• Fire can threaten suddenly, without warning and it may be hot and windy and at times difficult to see, hear and breathe. • Loss of life and homes is unlikely. • Well prepared and constructed homes that are actively defended can offer safety during a fire. • Power, water and phone networks may fail.	• Ensure that your survival is the primary consideration in any decision. • Leaving early (hours before) is the safest option for you and your family. • Activate your Bush Fire Survival Plan. • Stay informed of current fire activity by monitoring local media and regularly checking for updates on the ESA website www.esa.act.gov.au or by calling Canberra Connect on 13 22 81.
HIGH	 HIGH 24 12	• Fires can be controlled but can still present a threat. • Embers may be blown ahead of the fire and into and around homes causing other fires to occur close to the main fire.	• A fire may threaten suddenly and without warning. • Loss of life and homes is highly unlikely and well prepared homes that are actively defended can offer safety during a fire.	• Ensure your family and home is well prepared for the risk of bush fire. • Review and practice your Bush Fire Survival Plan. • Monitor local media for fire activity and regularly check the ESA website www.esa.act.gov.au or by calling Canberra Connect on 13 22 81.
LOW / MODERATE	 LOW – MODERATE 11 0	• Fires can be easily controlled and are slow moving with low flame heights.	• Little or no risk to life or homes.	• Ensure you have a current Bush Fire Survival Plan. • Ensure your family, home and property is well prepared for the risk of bush fire. • Refer to the ESA website, www.esa.act.gov.au or call Canberra Connect on 13 22 81 for changes in fire activity.

LET'S RIDE TOGETHER