



# EXTREME WEATHER POLICY

**NATIONAL RIFLE ASSOCIATION OF AUSTRALIA  
LIMITED**

<b>Policy Name:</b>	<b>Extreme Weather Policy</b>
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<b>Policy Coverage:</b>	Extreme weather impacts and actions

## Contents

<b>1. Introduction</b>	<b>13</b>
<b>2. Policy Statement</b> Error! Bookmark not defined.	
<b>3. Heat Risk</b> Error! Bookmark not defined.	
<b>4. Cold</b> .....	<b>8</b>
<b>5. Wind</b> Error! Bookmark not defined.	
<b>6. Rain, Flood, Hail</b> .....	<b>9</b>
<b>7. Thunderstorms and Lightning</b> .....	<b>9</b>
<b>8. Low Visibility</b> .....	<b>10</b>
<b>9. Bushfire</b> .....	<b>10</b>
<b>10. Discretionary Cancellation</b> .....	<b>11</b>
<b>11. Requirements of Competition Director</b> .....	<b>11</b>
<b>12. Removal of Distressed Shooter from Competition</b> .....	<b>12</b>
<b>13. Decision Making Process</b> .....	<b>12</b>

## 1. Introduction

National Rifle Association of Australia (NRAA) recognises the dangers of extreme weather and the need to ensure there are appropriate policies and procedures in place to mitigate risks to all participants (shooters, officials, volunteers) in NRAA activities, should an extreme weather event occur.

National Rifle Association also always encourages everyone involved in the sport to be conscious of their own personal health and safety.

The objectives of the NRAA Extreme Weather Policy are to:

- protect the health, safety and well-being of persons who participate in the activities of the NRAA
- provide a process to manage extreme weather conditions

This policy applies to all NRAA members, officials, coaches, shooters and visitors at a NRAA activities.

## 2. Policy Statement

In recognition of the risks associated with extreme weather, NRAA, its event Organisers and Committees, Range Officers, and others who are involved in the organisation and control of shooting activities and events must always place the health, safety, and welfare of participants ahead of other considerations.

The chance of a person being exposed to extreme weather conditions during a Long Range Target Shooting activity or event is potentially high because it is an outdoor activity.

Persons or Committees responsible for conducting the activity or event must:

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

Specific strategies should be implemented once all available information has been considered including regional weather conditions, age and skill level of event entrants and availability of mitigating resources.

## 3. Heat Risk

### 3.1 Heat Related Illness

Heat illness in sport presents as heat exhaustion or the more severe heat stroke.

Hot weather can cause heatstroke, a life-threatening condition in which a person can no longer regulate their own body temperature. If left untreated, heatstroke can lead to complications, such as organ failure, brain damage and death. Heat-related illness can arise following:

- Exposure to high temperatures;
- Exposure to high thermal radiation, eg on the firing line; and /or
- Exposure to high levels of humidity.

The following groups are more likely to experience heat-related illness such as heatstroke:

- elderly people aged over 75 years;
- women who are pregnant or breastfeeding;
- people with a chronic illness, such as heart disease, diabetes, kidney disease, cancer, dementia, alcoholism, mental illness or high blood pressure;
- people with an acute illness such as an infection with a fever or gastroenteritis;
- people who are obese;
- people who are taking certain prescription medicines; and
- Volunteers. Officials and participants who may be affected by drugs or alcohol are to be excluded from shooting activities.

Dehydration and heat exhaustion, while less serious, are also examples of heat-related illness.

### **3.2 On Range Heat Management**

When it is forecast that the activity or event environment is likely to be subjected to extreme heat conditions, the responsible officials should ensure all available physical heat management solutions are in place. They might also mandate rest periods during the scheduled activity particularly when minimal shade is available to all participants.

Further, the responsible officials should be aware of the relative humidity and temperature readings and use the Heat Table Calculator to guide their decisions as to whether the activity or event can safely continue as scheduled/programmed. (see Section 3.8)

### **3.3 Heat Exhaustion**

- Characterised by a high heart rate, dizziness, headache, loss of endurance/skill/confusion and nausea.
- The skin may still be cool/sweating, but there will be signs of developing vasoconstriction (eg, pale colour).
- The rectal temperature may be up to 40°C and the shooter may collapse on stopping activity. *Note: Rectal temperature should only be measured by a medical practitioner or nurse.*

To avoid heat exhaustion, if people feel unwell during an activity or event they should immediately cease activity and rest. Further benefit comes if the rest is in a shaded area with some passing breeze (from a fan if necessary) and the person takes extra hydration. Misting or spraying with water can also help.

### **3.4 Heat Stroke**

- Characteristics are similar to heat exhaustion but with a dry skin, confusion, and collapse.
- Heat stroke may arise in a participant (shooter, volunteer, official) who has not been identified as suffering from heat exhaustion and has persisted in further activity.
- Core temperature measured in the rectum is the only reliable diagnosis of a collapsed athlete to determine heat stroke.
- Heat stroke is similar to other cerebrovascular strokes and presents with similar physiological signs and symptoms.

Heat stroke is a potentially fatal condition and must be treated immediately. It should be assumed that any collapsed athlete is at danger of heat stroke. The best first aid measures are “Strip/Soak/Fan”:

- strip off any excess clothing;

- soak with water;
- fan; and
- ice placed in groin and armpits is also helpful.

**DO NOT** immerse the person entirely in a cold-water bath. This could cause cardiac arrest and circulatory shutdown. The aim is to reduce body temperature as quickly as possible. The athlete should immediately be referred for treatment by a medical professional.

**Important:** heat exhaustion/stroke can still occur even in the presence of good hydration.

### 3.5 Dehydration

Dehydration is fluid loss which occurs during exercise, mainly due to perspiration and respiration. It makes participants more susceptible to fatigue and muscle cramps.

Inadequate fluid replacement before, during and after exercise will lead to excessive dehydration and may lead to heat exhaustion and heat stroke.

To avoid dehydration, NRAA recommends that:

- participants drink approximately 500 mls (2 glasses) in the 2 hours prior to exercise;
- during exercise longer than 60 minutes, 2-3 cups (500-700ml) of cool water or sports drink are sufficient for most sports.
- after exercise replenish your fluid deficit to ensure full hydration but not over-hydration.

### 3.6 Recommended Guidelines and Actions for Competition

It is vital to realise that the effects of heat results from a combination of temperature **AND** humidity.

For example: A low temperature day would have a higher impact if the humidity levels were high.

It should be noted when making decisions that the thermoregulation of children pre-puberty is not as well developed as adult males and females. Decisions made on adolescent shooting events need to take this physiological difference into account.

Similarly, adults above the age of 80 have decreased thermoregulatory functionality. Again, decisions on the whether an event proceeds should be based on the age of the shooter involved as well as temperature and humidity.

The guidelines for the cancellation or postponement of an event are therefore based on a combination of temperature and humidity. Recommended guidelines for both parameters are summarised below:

### 3.7 Temperature

#### 3.7.1 Temperature 30 degrees Celsius or less:

- Participants – shooters, officials and volunteers should remain hydrated during the activity or event by drinking water often.

- Modifications to the timetable of activity or events are not required, however consideration can be given to earlier start times to maximise activity in the coolest part of the day.

### 3.7.2 Temperature 31 - 36 degrees Celsius

- Participants – shooters, officials and volunteers should remain hydrated during the activity or event by drinking water often, with consumption of hydrolytes or sports drinks.  
Volume to drink circa of:
  - 600ml per hour while on the Range
  - Approximating to 3 litres in 5 hours
- Participants – shooters, officials and volunteers should exercise caution particularly when required to remain in direct sunlight for an extended period of time.
- Members, officials, coaches, shooters and visitors of the Club should carefully consider their individual circumstances and ability to withstand the effects of high temperatures.
- Shelter will be made available for shooters, officials and volunteers behind the firing line, subject to not inhibiting line of sight for Range Officials.
- Activities and events should be scheduled for the coolest part of the day where possible.
- Modifications to the timetable or individual activities/events may be considered by the Competition Committee.

### 3.7.3 Temperature 37 - 40 degrees Celsius

- Participants – shooters, officials and volunteers should remain hydrated during the activity or event by drinking water often, or with consumption of hydrolytes or sports drinks on a regular basis.

This advice should not be used if the individual has been placed on a fluid restriction by their doctor. Dehydration is best determined by change in weight, however, this is not practical on a rifle range.

A practical approach is:

- Ensure that the day prior to shooting you have hydrated well approximately 3 litres intake across the day prior to shooting
- Prior to starting the shooting day drink 600 mls of water ensure this is done greater than 2 hours prior to your string or detail
- Drink 600mls between strings acknowledging that this time should be about an hour between strings/details
- Drinking should not make you feel uncomfortable/ bloated
- In days low wind sipping 60 mls aliquots in addition is advisable to aid in heat regulation including when on firing point
- These recommendations are a guide only the actual amount needed will depend on temperature, wind and sun/radiation exposure as well as wind speed and clothing worn
- It is advised that weighing oneself before a day on the range and at the end of a day will give a more accurate indication of dehydration 1Kg =1000mls of water
- Lack of thirst is not a good indicator of hydration
- Sports drinks may have some benefit but mostly are encouraging the individual to drink a more palatable fluid than water

- Participants - shooters, officials and volunteers should exercise extreme caution.
- Members, officials, coaches, shooters and visitors of the Club should carefully consider their individual circumstances and ability to withstand the effects of high temperatures.
- Shelter will be provided for all shooters, officials and volunteers both on and back from the firing line enabling shooters to shoot from a shaded position.
- Drinking water and ice packs will be made available to shooters, officials and volunteers on the Range as required.
- Competition timetable may be modified with respect to the time of day and length of the activity or event.

#### **3.7.4 Temperature 40 degrees and above**

- All competition will be postponed until the temperature falls below the 40 degrees Celsius.

### **3.8 Heat Index & Actions**


The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature.

**The maximum heat index for NRAA competitions shall be 40 degrees Celsius (40°C).**

The table below outlines the relative humidity percentage per temperature level at which all competition is to be postponed eg at 31°C and a relative humidity percentage of 78% the heat index exceeds 40°C.

### Template: Heat Index Table

		temperature (°C)																
		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Relative Humidity (%)	40	27	28	29	30	31	32	34	35	37	39	41	43	46	48	51	54	57
	45	27	28	29	30	32	33	35	37	39	41	43	46	49	51	54	57	
	50	27	28	30	31	33	34	36	38	41	43	46	49	52	55	58		
	55	28	29	30	32	34	36	38	40	43	46	48	52	55	59			
	60	28	29	31	33	35	37	40	42	45	48	51	55	59				
	65	28	30	32	34	36	39	41	44	48	51	55	59					
	70	29	31	33	35	38	40	43	47	50	54	58						
	75	29	31	34	36	39	42	46	49	53	58							
	80	30	32	35	38	41	44	48	52	57								
	85	30	33	36	39	43	47	51	55									
	90	31	34	37	41	45	49	54										
	95	31	35	38	42	47	51	57										
	100	32	36	40	44	49	54											

-  Caution
-  Extreme Caution
-  Danger
-  Extreme Danger

When the readings via the Heat Table Template reach the **Extreme Caution** range, the responsible Competition Committee might consider some or all of the following:

- If physical heat management solutions are in place, continue until, in their reasonable judgement, the activity should cease until the conditions return to the Caution range.
- If no physical heat management solutions are available and in place, cease the activity until the conditions return to the Caution range.
- Reduce the length of the activity by either shortening the matches from 15 shots to 10 shots or cancelling a distance scheduled for that day.



## 4.0 Cold

Cold weather exposure can be a serious health risk. Exposure to cold can be uncomfortable, can impact performance and may lead to higher risk of injury. Cold temperatures can negatively affect the body's regulatory system. Exposure to these conditions could lead to 'cold stress.'

Early signs and symptoms of 'cold stress' include but not limited to shivering, fatigue, confusion, headaches, slurred speech and numbness, pain or burning sensations at the distal extremities. Children are at a greater risk than adults as they lose body heat more easily.

### 4.1 Wind Chill

Wind Chill temperature is how cold someone feels when outside. Wind makes it feel significantly colder and poses a more significant threat to the body. When wind increases, it extracts heat from the body, pushing down skin temperature and as a result the internal body temperature will begin to decrease.

### 4.2 Cold Weather Considerations

While Cold Weather is not an overly significant issue in Australia event organisers should consider several actions where the weather is cold (under 5 degrees).

Events and Activities should be scheduled for warmer parts of the day.

- Participants should exercise caution
- Shooters, Officials, Volunteers should wear warmer clothing.
- Modification to the program may be considered by the Competitions Committee.

## 5.0 Wind

Wind Gusts (short acceleration of wind lasting between 10-30 seconds), crosswinds and consistent strong winds create an associated risk for accidents, falling debris and potential hazards (e.g. furniture, tents, barricades, advertising mesh/material) moving onto the Range and associated areas.

Some venues are especially vulnerable to this when the wind is blowing from a particular direction or intensity.

### 5.1 Pre-Competition Considerations

Should the forecast on the day of competition be for winds likely to exceed 40 kph participants, volunteers and officials should be advised as soon as possible before the event or activity, of the increased hazards by the Competition Committee.

The scheduled event or activity will not commence or will be either postponed or suspended if dangerous winds are predicted or imminent, making conditions dangerous.

When undertaking this decision, the strength, direction, and impacts of the wind, and the ability of the individual or individuals to manage the conditions need to be considered. This review will need to be undertaken prior to activity and at regular intervals throughout activity.

### 5.2 Cyclone Season

Cyclone season occurs during December to July. At event locations which are located in cyclone identified areas, the impact of rain events, flooding, strong winds with tree and tree branches falling must be considered when determining if an event should proceed.

## 6.0 Rain, Flood and Hail

Rainstorms, flooding and hail have the potential to create dangerous conditions for athletes, officials, volunteers and spectators.

The Competition Director for the event, in consultation with the Competition Committee, must ensure the health, safety and well-being of athletes, officials, volunteers and spectators as the overriding priority.

Where rain, flood and hail create an unacceptable risk, the event or activity should be postponed or cancelled, if holding it is likely to be unsafe.

## 7.0 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 thunder). The simplest and most effective way to assess this distance of lightning is the 30-30 second rule. If there is 30 seconds or less between the lightning and thunder, then all activity must stop and all individuals are to be inside a safe structure.

At least 30 minutes after the last sound (thunder) must pass and conditions are completely safe before leaving shelter to resume activities. Each time thunder is heard, the 30-minute clock must be re-started.

### 7.1 Lightning Safety

- Avoid isolated trees or other tall objects, it is better to seek shelter under a thick growth of relatively small trees
- Stay away from water - rain
- Avoid any metal objects - tent poles
- Spread out and do not stay in a group
- Never lie flat of the ground
- As a last resort, assume the lightning-safe position – if you feel your hair stand on end, your skin tingle or you hear cracking noises, crouch on the ground with your weight on the balls of your feet, your feet together, your head lowered, and your ears covered.

### 7.2 Requirements of Competition Committee, Competition Director and Chief Range Officer

- Must check and monitor the forecast, keeping an eye on the skies
- Ensure all personnel seek shelter when required.
- Ensure all officials and volunteers are aware of lightning safety, should they get caught in the storm.
- Ensure the event or activities do not re-commence until the storm has cleared.

## 8.0 Low Visibility

Low visibility is generally caused by fog/mist or smoke.

If there is anticipated poor visibility because of inclement weather which could impact the safety of participants a decision will need to be made by the Competition Committee/Director.

Based on the outcome of a review, a variety of actions can be determined ie modification of start time, using an alternative Range if possible, changing the distances of the match, or if required cancelation.

A final decision is guided by the concern to ensure the safety of all participants.

## 9.0 BUSHFIRE

NRAA events and activities can takes place in a natural bushland environment and in regional locations.

### 9.1 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 meter depicted in diagram 1 below. All states and territories except for Victoria define the most severe FDR as Catastrophic. Victoria uses the term Code Red.

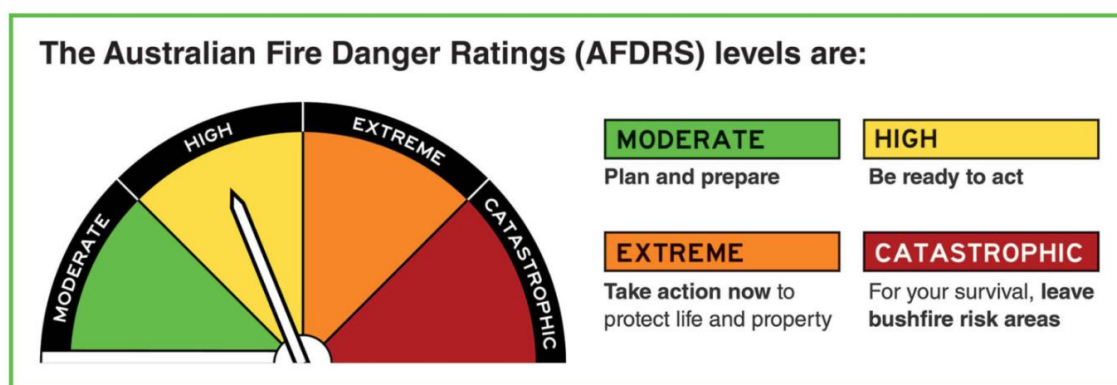


Diagram Link: <https://afdrs.com.au/>

**Diagram 1: Fire Danger Rating Meter**

### Implementation

During the bushfire season for each State and Territory the Competitor Director must follow the steps below.

- Check the FDR for the area in the days preceding the event or activity. 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 FDR for the immediate area, it is mandatory that the event or activity be cancelled.
- In the situation of an Extreme 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 or activity be cancelled.

Evacuation routes must be considered as part of the risk management plan, marked accordingly on all competition site plans. Event or Activity management personnel are to be briefed on their location.

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

#### Other Extreme conditions

An NRAA Competition Committee reserves the right to postpone events, cancel events or to introduce measures, at any time, to address risks associated with extreme weather events to ensure the safety of shooters, officials, volunteers, spectators and others attending the event or activity.

## **10.0 Discretionary Cancellation**

- NRAA or its delegated Competition Committee, reserves the right to cancel an event or activity if they deem that the predicted environmental conditions present a serious health risk to athletes, officials, volunteers and others in attendance.
- Air quality will be taken into consideration when a discretionary decision is made to cancel an event or activity.

## **11.0 Requirements of Match Director**

The Match Director (or delegate) must have capacity to measure temperature and humidity at all meets conducted by NRAA.

Use of an instrument or App such as the ACCuWeather, which measures temperature, and humidity should be considered to measure the heat conditions at an event or activity.

- Temperature and humidity must be measured “range-side” and not in direct sunlight
- Monitor every 60 minutes
- Ice and drinking water must be available onsite
- Ensure enough first aid staff are on site

- Ensure all officials and volunteers are briefed in sun smart procedures (hat, sunscreen, sunglasses, hydration, long sleeve breathable clothing) prior to the commencement of the Competition.
- Ensure announcements are made throughout the day reminding athletes and officials of the sun smart procedures.
- Have signs in competition areas and competition registration areas.

## **12.0 Removal of Distressed Shooter from Competition**

Athletes who are clearly in distress may be removed from the mound / range by the following officials:

- Medical Delegate/Officer
- Range Officer
- Competition Committee member
- Match Director

## **13.0 Decision Making Process**

The decision to cancel, suspend or modify events and activities will be the responsibility of the Match Director in consultation with the Competition Committee.

Requests and information from interested parties may be considered but those interested parties will NOT be involved in the decision-making process – which is designed to be speedily and efficiently made and immediately acted upon.

In all cases relating to the management of risk associated with extreme weather events, the NRAA's Competition Committee's decision is final and is not open to appeal.