



As at 14 January 2020

## Cricket ACT – Air Quality Guidelines

Everyone can be affected by air pollution especially when exposed over prolonged periods of time. However, some groups of people may be more susceptible than others in regard to exposure to air pollution. For the purpose of these guidelines they are described as ‘sensitive groups’.

The following people are more likely to be affected:

- **People with asthma:** exposure to air pollution might worsen your symptoms or trigger asthma attacks. Use your reliever medicine and check you have an up to date asthma action plan.
- **People with lung disease, such as chronic bronchitis (also called chronic obstructive pulmonary disease or COPD):** exposure to air pollution might worsen your symptoms. Use your reliever medicine and see your doctor if symptoms don't resolve.
- **People with cardiovascular (heart) disease:** exposure to air pollution might induce symptoms such as palpitations, chest pain or shortness of breath. If your symptoms persist or are severe, you should seek urgent medical advice from your doctor or nearest Emergency Department.
- **Unborn babies (pregnant women):** exposure to high levels of air pollution over longer time periods (i.e. weeks to months) may be linked to adverse pregnancy outcomes such as reduced birth weight or preterm birth.
- **Children** are likely to be more vulnerable to exposure to air pollution compared to adults for the following reasons:
  - Their lungs are still growing and developing
  - Their immune and metabolic systems are still developing
  - They suffer from frequent respiratory infections
  - They are more active outdoors than adults and therefore breathe in higher doses of outdoor pollutant
- **Older adults:** Older people are more likely to be affected by air pollution, perhaps due to generally weaker immune systems, or undiagnosed respiratory or cardiovascular health conditions. As people age, their bodies are less able to compensate for the effects of environmental hazards. Air pollution can aggravate heart disease and stroke, lung diseases such as chronic bronchitis (also called chronic obstructive pulmonary disease or COPD) and asthma.

Cricket ACT (CACT) has adopted the following air quality measure guidelines for smoky air, to assist in determining the risks of exposure to CACT members, should air quality deteriorate due to smoke and haze. There are a number of measures for air quality with the most common the PM2.5 (number of pollutant particles smaller than 2.5 micrometres) and the Air Quality Index (AQI) which is a measure of a number of different pollutants.

These measures (PM<sub>2.5</sub> & AQI) are published on an hourly or 24-hour rolling average by ACT Health on the link below. Look for the measuring station closest to your venue (see **Appendix 2**). The table below are the health advisory recommendations from the ACT Health Department relating to the PM<sub>2.5</sub> measure. For more information is available at their website:

## [ACT Health Air Quality Measuring Data](#)

Smoky air (PM<sub>2.5</sub>) health advisory categories

Air quality categories	PM <sub>2.5</sub> (24 hour) µg/m <sup>3</sup>	Potential health effects without following advice or actions	Cautionary health advice/actions**
<b>Good</b>	0-8.9	N/A – Below the relevant air quality standard	None
<b>Meets air quality standard</b>	9-25.9	N/A – Meets the relevant air quality standard	No tailored advice necessary
<b>Unhealthy for sensitive groups</b>	26-39.9	Symptoms may occur in sensitive groups	<b>Sensitive groups* should <u>reduce</u> prolonged or heavy physical activity. Where possible, these people in the community should also limit the time spent outdoors</b>  Anyone with a heart or lung condition should take their medication as prescribed by their doctor. People with asthma should follow their asthma action plan. Anyone with concerns about their health should seek medical advice from their doctor. Anyone experiencing wheezing, chest tightness or difficulty breathing should seek urgent medical attention
<b>Unhealthy for all</b>	40-106.9	Increased likelihood of effects for sensitive groups  Symptoms may occur in the general population	<b>Everyone should <u>reduce</u> prolonged or heavy physical activity</b>  <b>Sensitive groups* should <u>avoid</u> prolonged or heavy physical activity altogether</b>  Anyone with a heart or lung condition should take their medication as prescribed by their doctor. People with asthma should follow their asthma action plan. Anyone with concerns about their health should seek medical advice from their doctor. Anyone experiencing wheezing, chest tightness or difficulty breathing should seek urgent medical attention
<b>Very unhealthy for all</b>	107-177.9	Significant likelihood of effects for sensitive groups  Symptoms among general population common	<b>Everyone should <u>avoid</u> prolonged or heavy physical activity</b>  <b>Sensitive groups* should <u>avoid</u> all physical activity outdoors</b>  Anyone with a heart or lung condition should take their medication as prescribed by their doctor. People with asthma should follow their asthma action plan. Anyone with concerns about their health should seek medical advice from their doctor. Anyone experiencing wheezing, chest tightness or difficulty breathing should seek medical attention
<b>Hazardous high</b>	>177.9	Serious likelihood of effects for sensitive groups  Symptoms among general population very common	<b>Everyone should <u>avoid</u> all physical activity outdoors</b>  <b>Sensitive groups* should <u>temporarily relocate</u> to a friend or relative living outside the affected area. If this is not possible, remain indoors and keep activity levels as low as possible</b>  Anyone with a heart or lung condition should take their medication as prescribed by their doctor. People with asthma should follow their asthma action plan. Anyone with concerns about their health should seek medical advice from their doctor. Anyone experiencing wheezing, chest tightness or difficulty breathing should seek medical attention  Anyone experiencing symptoms which may be due to smoke exposure should consider taking a break away from the smoky conditions
<b>Hazardous extreme</b>	> 250	Serious likelihood of effects for sensitive groups  Symptoms among general population very common	<b>Cautionary health advice and actions are the same as for Hazardous high above</b>

\*People over 65, children 14 years and younger, pregnant women and those with existing heart or lung conditions.

Additionally, the Australian Institute of Sport (AIS) have also published a position statement on Smoke Pollution and Exercise ([AIS Position Statement](#)) that includes the table below with suggested risk strategies for different measures of air quality (note this uses AQI not PM2.5).

General population and low intensity exercise		Endurance based and high intensity exercise	
AQI	Action	AQI	Action
<b>VERY GOOD</b> (0-33)	Enjoy activities	<b>VERY GOOD</b> (0-33)	Enjoy activities
<b>GOOD</b> (34-66)	Enjoy activities	<b>GOOD</b> (34-66)	Enjoy activities
<b>FAIR</b> (67-99)	<b>People unusually sensitive to air pollution:</b> Plan strenuous outdoor activities when air quality is better	<b>FAIR</b> (67-99)	<b>Asthmatic athletes:</b> Should have medical review prior to performing high intensity extended training outdoors
<b>POOR</b> (100-149)	<b>AIR POLLUTION HEALTH ALERT</b> <b>Sensitive groups:</b> Avoid strenuous outdoor activities <b>Everyone:</b> Cut back or reschedule strenuous outdoor activities	<b>VERY POOR</b> (100-149)	<b>AIR POLLUTION HEALTH ALERT</b> Asthmatics or symptomatic non-asthmatics should not compete or train outdoors. Minimise asymptomatic athlete exposure
<b>VERY POOR</b> (150-200)	<b>AIR POLLUTION HEALTH ALERT</b> <b>Sensitive groups:</b> Avoid strenuous outdoor activities <b>Everyone:</b> Cut back or reschedule strenuous outdoor activities	<b>HAZARDOUS</b> (150-200)	<b>AIR POLLUTION HEALTH ALERT</b> Outdoor training should be rescheduled indoors, and exposure should be minimised for everyone
<b>HAZARDOUS</b> (>200)	<b>AIR POLLUTION HEALTH ALERT</b> <b>Sensitive groups:</b> Avoid strenuous outdoor activities <b>Everyone:</b> Significantly cut back on outdoor physical activities		

---

With careful consideration of ACT Health’s air pollution recommendations and the AIS guideline for those participating in exercise, Cricket ACT request all officials, coaches and players adhere to the following requirements with regards to training and games should air quality (PM2.5 measure) readings reach the following levels:

PM2.5	Junior Games/Training	Senior Games/Training
0 – 8.9	OK to play	OK to play
9 – 25.9	OK to play	OK to play
26 – 39.9	Advise sensitive groups of risks to health	Advise sensitive groups of risks to health
40 – 106.9	Advise participants of risks to health. Consider postponing training or matches	Advise participants of risks to health. Consider cutting back on training or matches
107 – 177.9	If the PM2.5 reading is trending upwards and above 107, all matches & training are to be suspended until reading is at an acceptable level	If the PM2.5 reading is trending upwards and above 107, all matches & training are to be suspended until reading is at an acceptable level
>178	All matches & training are to be suspended	All matches & training are to be suspended

CACT recommend that the above PM2.5 guidelines are used to determine how to proceed with cricket matches in the ACT, however, it is important to consider that the values recorded are the previous hourly measure and therefore may be over or under estimate of the current air quality. If unsure err on the side of caution and cease playing or training.

To determine whether matches or training should commence, use the PM2.5 measures where possible and relate this to the recommendations in the table above. Allow for discretion with decision making because the values may not be reflective of the current situation (the hourly PM2.5 rating is based on the previous hour). It is therefore important to consider the visibility (similar to bad light) and the smell in the air at the time when determining to go ahead with a game / training. Once matches or training commence, the decision surrounding suitability of air quality to continue becomes the responsibility and discretion of umpires and/or coaches and/or captains with consideration to the above guidelines.

Sensitive individuals should take extra precautions when participating in exercise in smoke affected conditions and consult their medical practitioners for advice on whether it is safe for them to participate and what precautions they need to take. Cricket ACT would like to reinforce for purposes of clarity that players 65 and over, 14 and under, pregnant women or those who possess heart or lung conditions form part of the sensitive individual's component of the guidelines.

**Note:** Where clubs have players within the Sensitive group playing in their teams, it is recommended they are to ensure that their health will not be impacted by playing.

The PM2.5 reading to be adopted is to be the closest air quality station to the ground matches are scheduled for as available from the ACT Health website: (please see **Appendix 1** for how to use the ACT Health Air Quality Measuring Data page)

## [ACT Health Air Quality Measuring Data](#)

Please see **Appendix 2** for air quality stations to be used for each specific ground in the ACT/Queanbeyan

Cricket ACT wish to reinforce the following:

- The intention of the Air Quality Guidelines is to ensure the **health and safety of all players and officials at Cricket ACT** controlled matches. We implore all players and officials to make decisions based on the potential health impacts to players and officials when determining if a match should be suspended or if play should commence. The match situation should never be considered.

**Note:** In matches with officials, the Umpires will determine if play will be suspended or proceed based on consultation with captains. In the event that no umpires are available for a match, both captains must agree for a match to be suspended or proceed.

- The only data source to be used when determining if matches or training should proceed is the **ACT Health Air Quality Measuring Data** site contained within the guidelines. No other data sources are endorsed by Cricket ACT.
- In simplistic terms, the determination of if a match should commence, be suspended or re-commence is similar to a rain delay in a match. In such an event, captains and officials would determine if the pitch/wicket table/outfield are suitable for play to proceed based on the health & safety of players. The same applies in the event that the air quality is trending upwards above 107 PM2.5. When the PM2.5 is well above 107, that is a rain delay. When the PM2.5 is trending downwards towards 107 the decision to commence will be determined by officials in consultation with Captains. Cricket ACT would request officials/captains to make note of the conditions when suspending play as a guide for the commencement of play at a later time.
- In the event that the data from monitoring stations is unavailable or not up-to-date, all officials and players should use personal discretion and utilise a common-sense approach to the health and safety of all officials and players.

**James Allsopp**

CEO

Cricket ACT

## **APPENDIX 1**

- Click on the link to the “ACT Health Air Quality Measuring Data”
- Please scroll down the page until you reach the “PM2.5 hourly or 24 hour rolling average graph.”
- The bar graph outlines the PM2.5 hourly data and the line graph displays the 24-hour rolling average.
- Click on the filters section. Adjust the date to be “today” and adjust the station to your nearest station as per Appendix 2 of the guidelines
- Close down the filters and view the updated graph.
- Please click or hover on the date/time at the bottom of the graph to view a box which displays – date, time, PM2.5 hourly and PM2.5 24 hr rolling data.

### **Please note:**

- The filter defaults back to the “Civic” station after each refresh or when initially opened.
- The time outlined on the graph is Australian Eastern Standard Time (AEST). Therefore, if a reading is sourced at 1pm on the graph it is actually a reading for taken at 2pm Australian Eastern Daylight-Saving Time (AEDST)

## APPENDIX 2

Ground	Location	Closest Monitoring Station
ANU North	Barry Drive & McCaughey Street, TURNER	Civic (1.54km away)
ANU South	Ward Road, ANU, ACTON	Civic (1.71km away)
Aranda	Banambila Street, ARANDA	Florey (4.92km away)
Chisholm 1	Proctor Street, CHISHOLM	Monash (3.49km away)
Chisholm 2	Proctor Street, CHISHOLM	Monash (3.49km away)
Conder	Heidelberg Street, CONDER	Monash (4.36km away)
Deakin West	Makin Place off Dennison Street, DEAKIN	Civic (5.39km away)
Forestry	Banks Street, YARRALUMLA	Civic (4.18km away)
Freebody	Canberra Avenue & Richard Avenue, QUEANBEYAN	Civic (10.26km away)
Harrison 1	Katoomba Street, HARRISON	Civic (9.72km away)
Harrison 2	Katoomba Street, HARRISON	Civic (9.72km away)
Jamison	Catchpole Street, JAMISON	Florey (4.20km away)
Kaleen (Enclosed)	Turon Place off Diamantina Crescent, KALEEN	Florey (5.30km away)
Kingston	Canberra Avenue & Dawes Street, KINGSTON	Civic (4.21km away)
Kippax 1	Ormsby Place, HOLT	Florey (1.93km away)
Kippax 2	Ormsby Place, HOLT	Florey (1.93km away)
Keith Tournier Memorial Oval (Majura)	Angas Street, AINSLIE	Civic (2.24km away)
Manuka	Manuka Circle, MANUKA	Civic (3.92km away)
Mawson	Athlon Drive & Beasley Street, MAWSON	Monash (5.47km away)
Neil Bulger	Canberra Avenue & Richard Avenue, QUEANBEYAN	Civic (10.26km away)
O'Connor	Pedder Street off MacArthur Avenue, O'CONNOR	Civic (2.65km away)
Phillip District	Kitchener Street off Yamba Drive, PHILLIP	Civic (7.27km away)
Phillip Oval	Spoering Street, PHILLIP	Civic (7.57km away)
Reid	Elimatta Street, REID	Civic (1.01km away)
Rockley	Rockley Parade, GOOGONG	Monash (13.07km away)
Stirling	Teesdale Close, STIRLING	Monash (8.50km away)
Town Park (Queanbeyan)	Campbell Street & Lowe Street, QUEANBEYAN	Civic (11.94km away)

Monitoring Station Locations	
Civic	Allara Street, Civic
Florey	Neumann Place, Florey
Monash	Falconer Street, Monash