

# AIR QUALITY GUIDELINES



## Air Quality Index

The air quality index (AQI) is an index for reporting daily and hourly air quality levels. It is provided by NSW Office of Environment and Heritage and is an indication of how clean or polluted the air is in areas across NSW.

The AQI provides easy to understand information about:

- Air pollution levels at your nearest suburb or region
- Information for people more at risk from exposure to short-term air pollution
- Steps to take to minimise risk

The AQI website link is: <https://www.dpie.nsw.gov.au/air-quality/current-air-quality>

## What the air quality index means

When you go to the AQI website and look at your nearest suburb or region, you will see a colour and number displayed which indicates the air quality measured, as per the table below. The AQI will help you understand the current level of air quality and provide information on how to reduce your risk of exposure to air pollution if necessary.

| AQI                         | What action should people take?   |
|-----------------------------|---|
| <b>VERY GOOD</b><br>0-33    | Enjoy activities  |
| <b>GOOD</b><br>34-66        | Enjoy activities  |
| <b>FAIR</b><br>67-99        | <b>People unusually sensitive to air pollution:</b><br>Plan strenuous outdoor activities when air quality is better   |
| <b>POOR</b><br>100-149      | <b>AIR POLLUTION HEALTH ALERT</b><br><b>Sensitive Groups:</b> Cut back or reschedule strenuous outdoor activities   |
| <b>VERY POOR</b><br>150-200 | <b>AIR POLLUTION HEALTH ALERT</b><br><b>Sensitive groups:</b> Avoid strenuous outdoor activities<br><b>Everyone:</b> Cut back or reschedule strenuous outdoor activities      |
| <b>HAZARDOUS</b><br>200+    | <b>AIR POLLUTION HEALTH ALERT</b><br><b>Sensitive groups:</b> Avoid all outdoor physical activities<br><b>Everyone:</b> Significantly cut back on outdoor physical activities |

## 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 football game or training, trials or other physical activity should be postponed or cancelled or moved to an indoor venue.

## 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.

## 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.

Smoke contains many microscopic particles that when breathed in through the mouth, nose and lungs, can trigger a range of reactions. In less serious cases, this may result in sore and itchy eyes, a runny nose and coughing, however, when these fine particles penetrate deep into the lungs, the consequences can be more severe and may trigger chronic bronchitis, asthma and other respiratory ailments.

Breathing faster and deeper when air quality is poor exacerbates the issue, results in the above-mentioned symptoms, causes us to be short of breath, impacts our capacity and performance and, in worse case scenarios, may cause serious health issues. In more serious cases, particularly where chronic pre-conditions exist, this can aggravate heart and lung conditions resulting in cardiac arrest or heart failure.

For information about the location of fires in NSW, the NSW Rural Fire Service website lists current fires and incidents - [www.rfs.nsw.gov.au/fire-information/fires-near-me](http://www.rfs.nsw.gov.au/fire-information/fires-near-me)

### **Dust Storms**

Dust storms are natural events and are common in dryland areas. Periods of severe and widespread drought, as experienced in parts Australia can dramatically increase the likelihood of dust storms, particularly during 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 to very fine and obviously, these smaller particles have a greater potential to cause serious harm to your health.

### **Exposure and health effects**

The most common symptoms experienced during a dust storm are irritation to the eyes and upper airways.

People who may be more vulnerable are:

- infants, children and adolescents
- the elderly
- people with respiratory conditions, such as asthma, bronchitis and emphysema
- people with heart disease and/or 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 and/or contribute to reduced life span. Prolonged exposure to airborne dust can lead to chronic breathing and lung problems, and possibly heart disease.

### **Football Tournaments, Games, Training, Trials, Events and other outdoor activities**

To determine if a football game, event or activity should proceed, or if the game or activity should be modified, the club/association or event organiser is responsible for assessing the air quality by referring to the AQI website in conjunction with the Action Table (P1). AQI website <https://www.dpie.nsw.gov.au/air-quality/current-air-quality>  
The AQI website lists the current AQI in a defined region or suburb and is updated on an hourly basis.

In the case of a Football NSW tournament, game, trial or activity, Football NSW will make the determination on whether specific tournaments, games, trials, training or other activities will proceed or be postponed, suspended or cancelled due to air quality. In some cases, Football NSW may also issue an Air Quality Warning notice for the information of all clubs, associations and participants. These notes are also posted on the [FNSW website](#).

### **Recommended Actions**

When the AQI is 'fair' or 'poor', it is recommended that consideration be given to modifying the event or game, however where an event is more strenuous in nature, consideration may be given to postponement until the AQI improves. If a game or event is to proceed, warnings should be issued via the PA system that the conditions may pose a health hazard, particularly to those with respiratory or cardiovascular conditions.

When the AQI level is 'very poor' or 'hazardous', it is recommended that the event be cancelled or suspended.

Further information is available on the NSW Health website: [www.health.nsw.gov.au/environment/air/Pages/aqi.aspx](http://www.health.nsw.gov.au/environment/air/Pages/aqi.aspx)