

AFL LIGHTNING GUIDELINES

1. Introduction

A new AS1768-2007 Lightning Protection Standard was published on 10 January 2007.

Section 1.2 of the Standard states, "Compliance with the recommendations contained in this Standard will not necessarily prevent damage or personal injury due to lightning, but will reduce the probability of such damage or injury occurring".

Section 3.3.1, 'Precautions and Personal Safety' states, "In the absence of specific information from weather radar, a lightning location system, or a specialized warning device then, the 30/30 safety guideline should be used."

2. Procedures

When lightning is considered to be a possible or actual threat to an AFL match the following procedures apply:

(a) Access to Bureau of Meteorology

(i) Lead Up Prior to Match Day

The proactive plan should commence in the days before the activity, when weather forecasts provide important warnings of possible thunderstorm activity.

The AFL Queensland administration, if deemed necessary, will monitor weather forecasts commencing Thursday prior to schedule matches using the Bureau of Meteorology (BOM) website. Note should be taken of any warnings posted.

The AFL Queensland administration will continue to monitor the BOM site in the days leading up to scheduled matches.

On the day prior to match, if any threat of lightning is predicted, the Match Day Manager and/or Competition Manager should contact the Weather Bureau and request a verbal update.

(ii) Match Day/Training

Increased awareness of lightning risk should continue on Match Day until the game/training has finished.

If the threat continues into the game the Match Day Manager/Field Umpire should contact or meet the Ground Manager/Home Club Team Manager to discuss the situation.

They should check the Weather Bureau updates then contact the Competition Manager to advise and discuss possible action.

The competing AFL Club Team Managers should be contacted to explain the situation.

Regular updates must be sought from the Weather Bureau in the period leading

up to the match commencement time. Umpires and club officials are to be informed of any significant information/warnings.

Teams and officials should proceed to the venue unless otherwise directed.

If lightning is predicted within less than 10km of the match venue at the scheduled starting time the game commencement time may be delayed by up to 60 minutes.

This decision to **delay or suspend** play as well as **resume** play will be based on information obtained from the Weather Bureau. The Competition Manager – Football Operations must be contacted to discuss possible actions. At all times club officials, umpires and match managers are to be informed.

(b) No access to Weather Bureau (30 / 30 Rule)

The most basic level of warning involves observation of the weather in the local area.

Match Day/Training

The “**30/30**” rule is recommended for lightning safety and serves as a guide for the suspension and subsequent resumption of activities. The overall principle is to seek shelter when the lightning activity is too close.

The observation of approaching storm clouds, the first flash of lightning or clap of thunder, no matter how far away should heighten lightning awareness. The level of risk depends on one’s location (direction and distance) relative to the storm cell and the direction in which the storm system is travelling.

A simple method of determining the distance to the storm cell is to measure the time elapsed from when the lightning flash is observed and when the associated clap of thunder is heard.

Light travels faster than sound. Assuming that the light from the flash reaches the observer instantaneously, and knowing that sound takes approximately three (3) seconds to travel one (1) kilometre, the distance can be determined by using the following rule:

Distance (in Km) = Time from observing the flash to hearing thunder (in seconds) divided by 3

It is important to remember that lightning may be obscured by clouds so it must be assumed that when thunder is heard, lightning is in the vicinity. In such cases, careful judgment must be used to determine whether a threat exists.

The first part of the “30/30” rule is a guide to the **postponement** or **suspension** of activities.

Most experts agree that the accepted ‘safe’ distance from lightning is greater than 10km. This means that as **the time interval between observing the flash and**

hearing the thunder approaches 30 seconds, all those in exposed areas should be seeking or already inside safe shelters. A storm cell with lightning activity within 10km constitutes a threat.

The second part of the 30/30 rule provides the criteria for the *resumption* of activity. It is recommended that people **wait a minimum of 30 minutes after the last sighting of lightning or sound of thunder**. This figure is based on the observation that the typical storm moves at about 40km/h. Thus, waiting 30 minutes allows the thunderstorm to be about 20km away, minimising the likelihood of a nearby lightning strike.

Note: 60 minutes is the maximum delay time.

It is important to emphasize that blue skies and lack of rainfall are not adequate reasons to breach the 30 minute minimum return-to-activity rule.