# Cyclone Awareness, Preparation and Response



Preparation and action required before, during and after a tropical cyclone

## What is a cyclone?

A cyclone is a violent storm characterised by strong winds rotating around a calm center. It can produce destructive winds and bring heavy rain causing flooding and, in some events, cause a storm surge (i.e. a rapid rise in sea level).

>26.5°

Sea surface temperature rise above 26.5°, to a depth of a few hundred meters.

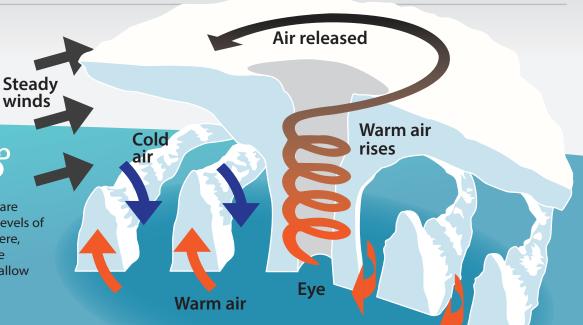
Cluster of thunderstorms develop in an unstable atmosphere.



Cluster grows and gains rotation from the spin of the planet, forming a cyclone.



When winds are steady at all levels of the atmosphere, they steer the cyclone and allow it to grow.



### **Cyclone season: November - April**



#### **Tropical Cyclone Anthony**

Impacting the Queensland coast during January 2011, Anthony initially developed as a tropical low over the Coral Sea, then strengthened into a Category 1 cyclone and remained at this

strength and moved east for a couple of days. Changing direction, Anthony moved west, intensifying to a marginal Category 2 system in the last 6 hours before making landfall.

Upon coastal crossing, Anthony produced wind gusts of up to structural damage, toppled trees, heavy rainfall with minor flooding, and power loss.

- Negligible house damage
- Craft may drag moorings

- Minor house damage
- Significant damage to signs, trees and caravans
- Risk of power failure
- Small craft may break moorings

### **CATEGORIES: SEVERE TROPICAL CYCLONES**

- Some roof and structural damage
- Some caravans destroyed
- Power failures likely

- Significant roofing loss and structural damage
- Dangerous airborne debris
- Widespread power failures
- Extremely dangerous
- Widespread destruction



**90-124** km/hr



**125-164** km/hr



**165-224** km/hr





### **Preseason preparation**

The risk of danger and damage can be minimised if you take proactive response to protecting yourself and preparing your surroundings.

#### **PREPARE** - General checklist

- Check that walls, roofs and eaves are secure
- Trim treetops and branches well clear of any structures
- Preferably fit shutters/metal screens to all glass areas
- Clear the property of loose material that could blow about and possibly cause injury or damage

### **BE AWARE** - Know your surroundings

- In case of storm surge/tide, or other flooding, know your nearest safe high ground and the safest access routes Emergency
- Keep a list of emergency phone numbers on display
- Check with local authorities and/or management for evacuation procedures

### **EMERGENCY KIT** - Keep somewhere safe

- Portable battery radio
- Torch and spare batteries
- Water containers, dried or canned food & can opener
- Matches, fuel lamp, portable stove, cooking and eating equipment
- First aid kit and manual, tape & waterproof bags

### What to do during the cyclone threat



Stay



prepared



Listen to local radio and TV for further info

### WHEN A **CYCLONE WATCH IS ISSUED**



### Gales

expected within

48hrs

but more then 24hrs

While the threat remains, a tropical cyclone watch will be issued every six hours.

- Re-check the property for any loose material and tie down (or fill with water) all large, relatively light items such as boats and rubbish bins.
- Fill vehicles' fuel tanks. Check your emergency kit and fill water containers.
- Ensure you know where the strongest part of the building is and what to do in the event of a cyclone warning or an evacuation.

### **WHEN A CYCLONE WARNING IS ISSUED**



Gales expected within

24hrs

or already occurring

Depending on official advice provided by your local authorities; the following actions may be warranted:

- Park vehicles under solid shelter (hand brake on and in gear).
- Put loose outdoor items inside.
- Close shutters or board-up or heavily tape all windows. Draw curtains and lock doors.
- Pack an evacuation kit of warm clothes, essential medications, valuables and important papers (as well as your emergency kit).
- Remain indoors.

### WHEN THE **CYCLONE STRIKES**

### **Listen to news** Stay inside Stay calm

- Disconnect all electrical appliances. Listen to your battery radio for updates.
- Stay inside and shelter (well clear of windows) in the strongest part of the building, i.e. cellar, internal hallway or bathroom. Keep evacuation and emergency kits with you.
- · If the building starts to break up, protect yourself with mattresses, rugs or blankets under a strong table or bench or hold onto a solid fixture, e.g. a water pipe.



- is over; violent winds will soon resume from another direction. Wait for the official 'all clear'.
- If driving, stop (handbrake on and in gear) - but well away from the sea and clear of trees, power lines and streams. Stay in the vehicle.

#### **AFTER THE CYCLONE PASSES**

### Wait for the official all-clear

- · Don't go outside until officially advised it is safe
- Check for gas leaks. Don't use electrical appliances if wet
- If you have to evacuate, or did so earlier, don't return until advised. Use a recommended route and don't rush
- · Beware of damaged power lines, bridges, buildings, trees, and don't enter floodwaters
- Heed all warnings and don't go sightseeing
- Don't make unnecessary telephone calls

