

TROPICAL CYCLONE PRECAUTIONS

WHY IS A CYCLONE DANGEROUS?

Tropical cyclones threaten lives and property because of their high winds, associated storm surges, excessive rain and flooding. As the strong winds blow across an ocean surface, they create a large dome of water known as the storm surge. The resulting storm surge presents a serious coastal hazard.

At the low end of the scale, trees can be uprooted. At the high end, buildings can be completely destroyed.

WHAT IS A TROPICAL CYCLONE?

A Tropical Cyclone is a low pressure system over tropical seas with maximum winds over 33m/s. Regional names for tropical cyclones are typhoons and hurricanes. Tropical cyclones develop over oceans with sea surface temperature of more than 26.5°C and are confined within 5°N and 5°S.

The tropical cyclone season for PNG begins in October and ends in May each year. PNG receives, on average one tropical cyclone per season.

CYCLONE WARNING

Tracking and naming tropical cyclones as well as providing warning services to the general public are done by the Forecasting and Warning Services of the Papua New Guinea National Weather Service. Similar services are provided by the Australian Bureau of Meteorology's Tropical Cyclone Warning Centre in Brisbane (<http://www.bom.gov.au/weather/qld/cyclone>)

CYCLONE SEVERITY-SAFFIR-SIMPSON HURRICANE SCALE

Category	Wind speed (km/h)	Damage	Storm Surge (m)
1	119-153	Minimal: No real damage to building. Coastal road flooding and minor pier damage.	1.0-1.5
2	154-209	Moderate: Damage to roof, window, door, shrubs damaged, trees felled.	1.5-2.5
3	178-209	Extensive: Structural damage to houses. Shrubs stripped, large trees felled. Coastal evacuation.	2.5-3.5
4	210-249	Extreme: Extensive curtain wall failures, roofing failures on small houses. Extensive damage: doors, windows. Terrain lower than 3m above sea level may	3.5-5.5

		flood. Massive evacuation up to 10km inland.	
5	>250	Catastrophic: Complete roof failure, some complete building failures, utility buildings blown away. Severe and extensive window and door damage. Massive evacuation up to 16km inland.	>5.5

CYCLONE PREPAREDNESS & SAFETY PROCEDURES

1. BEFORE CYCLONE SEASON

Check your house for structural weaknesses.

Identify the safest room in the house.

Clear your property of loose objects/materials that could blow about during extreme winds. Trim tree branches away from windows and power lines.

In case of storm surge warning, know the nearest safe high ground and the safest access route to it.

Prepare an emergency kit for the family containing a portable radio with spare batteries, water containers, canned food with opener, spare clothes, masking tape for windows and plastic bags.

Clear all drains and waterways on the property.

Ensure houses have proper provision for earthing lightning.

2. UPON HEARING A CYCLONE WARNING

Listen to your radio for further information.

Fill water containers and fuel car (if you own one).

Store or tie down all loose objects in the house.

Fix any loose parts of the house.

Close off shutters.

Ensure all the members of your family are present.

If your house is not structurally safe, prepare to move to the nearest evacuation center such as a church or any permanent building.

Collect firewood and keep in a dry place.

3. DURING THE CYCLONE

Disconnect all electrical appliances but listen to your battery radio for further information.

Open louvers on one side away from wind to reduce the pull force of the wind on the roof.

Remain calm, stay indoors but clear of doors and windows. Remain in the strongest part of the building.

Only use the telephone for very urgent calls.

If the building breaks up, protect yourself with rugs or mattresses under a strong table/bench or hold onto a solid fixture (e.g. a water pipe).

4. AFTER THE CYCLONE

Don't go outside until officially advised it is safe.

Do not attempt to drive and don't allow children to roam around the house.

Beware of fallen power lines, damaged buildings, trees or flooded pathways.

Listen to your radio for advice and updates.

Check for gas leaks. Don't use electrical appliances if wet.

Where can I get this INFORMATION?

The main source of tropical cyclone information is the radio and television stations. During a tropical cyclone the radio stations are alerted and some stations retain staff on 24 hour basis to broadcast cyclone information.

The PNG National Weather Service also provides the latest watches, warnings and supporting information through its telephones and faxes. Further preparedness and general information on tropical cyclones can also be obtained from the National Disaster Centre.

INFORMATION FROM THE PNG NATIONAL WEATHER SERVICE

The Assistant Director
Forecasting & Warning Services
PNG National Weather Service
Ph: (675) 324 4583/324 4613
Fax: (675) 325 5201
Email: kmaiwori@pngmet.gov.pg

INFORMATION FROM THE NATIONAL DISASTER CENTRE

The Director
National Disaster Centre
Ph: (675) 301 1053/301 1111
Fax: (675) 325 4186
Email: mmose@pngndc.gov.pg