



# PAYONG PAGASA

TROPICAL CYCLONE  
WARNING SYSTEM

(Gabay sa Bagyo)

DOST



**PAGASA**

The Weather and Climate Authority

# WHAT IS A TROPICAL CYCLONE?

- AN **INTENSE LOW PRESSURE SYSTEM OF AT LEAST 30 KPH MAXIMUM SUSTAINED WINDS**
- ALSO KNOWN AS **"BAGYO"**

## DID YOU KNOW



About 20 tropical cyclones enter the Philippine Area of Responsibility (PAR) each year.

90% of these affect the country.

## IMPACTS



Damage to buildings and settlements caused by strong winds



Casualties from storm surge, inland flooding and landslide

## CLASSIFICATION OF TROPICAL CYCLONES

A tropical cyclone is classified according to its strength and grouped according to the maximum sustained winds near the center.

TROPICAL DEPRESSION

61 KPH OR LESS

TROPICAL STORM

62-88 KPH

SEVERE TROPICAL STORM

89-117 KPH

TYPHOON

118-220 KPH

SUPER TYPHOON

MORE THAN 220 KPH

## BASIC TROPICAL CYCLONE STRUCTURE



# TROPICAL CYCLONE WARNING SYSTEM SIGNALS (TCWS)



## TCWS NO. 1

**WIND IMPACT**  
No damage to very light damage

### LEAD TIME

*since first issuance*  
Expect the impact of 30-60 kph winds in  
**36**  
hours

**OPEN SEA CONDITION** **WAVE HEIGHT**  
**1.25-4.0**  
meters



### WHAT TO DO

- Check the stability of your home and reinforce it if necessary.
- Tune in to the radio for weather news.
- Monitor PAGASA's latest Severe Weather Bulletin.

## TCWS NO. 2

**WIND IMPACT**  
Light to moderate damage

### LEAD TIME

*since first issuance*  
Expect the impact of 61-120 kph winds in  
**24**  
hours

**OPEN SEA CONDITION** **WAVE HEIGHT**  
**4.1-14.0**  
meters



### WHAT TO DO

- Stock up on food, water and batteries for wireless radios and flashlights.
- Stay inside a concrete structure.
- Make sure cell phones are fully charged.

## TCWS NO. 3

**WIND IMPACT**  
Moderate to heavy damage

### LEAD TIME

*since first issuance*  
Expect the impact of 121-170 kph winds in  
**18**  
hours

**OPEN SEA CONDITION** **WAVE HEIGHT**  
more than **14.0**  
meters



### WHAT TO DO

- Evacuate from low-lying areas to higher ground.
- Get updated on the latest tropical cyclone development.
- Everybody is advised to stay in safe and sturdy houses.
- Stay away from coasts and riverbanks.

## TCWS NO. 4

**WIND IMPACT**  
Heavy to very heavy damage

### LEAD TIME

*since first issuance*  
Expect the impact of 171-220 kph winds in  
**12**  
hours

**OPEN SEA CONDITION** **WAVE HEIGHT**  
more than **14.0**  
meters



### WHAT TO DO

- Stay in safe houses or evacuation centers.
- Cancel travels and outdoor activities.
- Keep listening to news about the typhoon.

## TCWS NO. 5

**WIND IMPACT**  
Very heavy and widespread damage, phenomenal

### LEAD TIME

*since first issuance*  
Expect the impact of more than 220 kph winds in  
**12**  
hours

**OPEN SEA CONDITION** **WAVE HEIGHT**  
more than **14.0**  
meters



### WHAT TO DO

- Cancel travels and outdoor activities.
- Stay in safe houses or evacuation centers.

## THE HAZARDS OF TROPICAL CYCLONES

### HEAVY RAINS / FLOODS

- HEAVY RAIN CAN CAUSE FLOODING AND DAMAGE TO AGRICULTURE.
- DRINKING WATER MAY BE CONTAMINATED. THIS MAY LEAD TO THE OUTBREAK OF DISEASES.

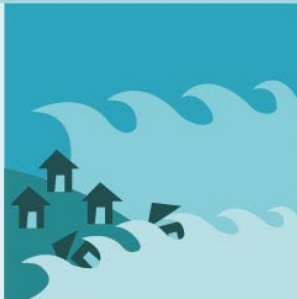


### STRONG WINDS

- WIND SPEED MAY EXCEED 250 KPH.
- ITS FORCE WILL CAUSE SEVERE STRUCTURAL DAMAGE.

### STORM SURGE / COASTAL FLOODING

- STORM SURGES CAN FLOOD LOW-LYING COASTAL COMMUNITIES.
- THESE CAN DESTROY NATURAL AND MAN-MADE STRUCTURES, ESPECIALLY WHEN IT IS HIGH TIDE.



### LANDSLIDES / MUDFLOWS

- MOUNTAINOUS AREAS, ESPECIALLY THE STEEP SLOPES, ARE PRONE TO LANDSLIDES.
- LANDSLIDES AND MUDFLOWS CAN BURY PEOPLE ALIVE AND DESTROY PROPERTIES.

## PAGASA REGIONAL SERVICES DIVISION

REGION	OFFICE ADDRESS	AREA CODE	TEL. NO.
NATIONAL CAPITAL REGION	Science Garden, Agham Road, Diliman, Quezon City	02	433-1456
NORTHERN LUZON	Capitol Hills, Tuguegarao City, Cagayan	078	884-1994
SOUTHERN LUZON	Airport, 4500, Legazpi City	052	481-4471
VISAYAS	Airport Road, Pusok, 6015, Lapu-Lapu City, Mactan, Cebu	032	340-4143 340-1868
MINDANAO	Molugan, El Salvador, Misamis Oriental	0882	274-5164 555-0485

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