











Chapter 21: Tropical Cyclone and Rainstorm Warnings

Tropical cyclone warning signals

In Hong Kong, tropical cyclones normally occur during the months from May to November. Tropical cyclone warning signals are to warn the public of the threat of winds associated with a tropical cyclone. The weather in different parts of Hong Kong cannot be simply inferred from the signal issued. Simply knowing what signal is issued is not enough. You should take note of the latest tropical cyclone information and related announcements broadcast on radio and TV, given in the Hong Kong Observatory's Internet website (www.hko.gov.hk and www.weather.gov.hk), Dial-a-Weather system (Tel: **1878-200**) and mobile App "MyObservatory" to decide on the actions to take in response to the signal issued. The following table indicates the meaning of tropical cyclone warning signals:

Signal	Symbol	Meaning
1		Standby signal
3		Strong winds
8 NW		Gale or storm force winds from the northwest
8 SW		Gale or storm force winds from the southwest
8 NE		Gale or storm force winds from the northeast
8 SE		Gale or storm force winds from the southeast
9		Increasing gale or storm force winds
10		Hurricane force winds

Important points to note:

- Owing to local topographical conditions or the presence of buildings nearby, winds at your locality may be substantially different from the general wind strength over Hong Kong. Winds are often stronger over offshore waters and on high ground.
- The Hong Kong Observatory provides to the public detailed information on regional wind and rain through a diversity of channels, especially the Internet. Members of the public should consider their own circumstances and level of acceptable risk when taking precautions in response to warnings.
- When the No. 1 signal is issued, you should take the existence of the tropical cyclone into account in planning your activities and beware that strong winds may occur over offshore waters.
- When the No. 3 signal is issued, secure all loose objects, particularly on balconies and roof tops. Secure hoardings, scaffoldings and temporary structures. Winds over offshore waters and on high ground may reach gale force.
- When the No. 8 signal is issued, complete all precautions before gales commence.
- When the No. 9 or No. 10 signal is issued, all precautions should be completed. Stay indoors and away from exposed windows and doors to avoid flying debris.
- Information on other hazards associated with the tropical cyclone, such as storm surge, flooding, etc. may be included in warning bulletins as necessary.
- Although the tropical cyclone has moved away from Hong Kong, it may bring different degrees of damages to Hong Kong. There may be hidden danger. Members of the public should remain on the alert for assurance of personal safety.

Rainstorm warning signals

There are three levels of warning: amber, red and black.

The amber signal gives alert about potential heavy rain that may develop into red or black signal situations. There will be flooding in some low-lying and poorly drained areas. Heavy rain may also bring about flash flood.

The red or black signals warn that heavy rain is likely to cause serious road flooding and traffic congestion.

Amber rainstorm warning signal

Heavy rain has fallen or is expected to fall generally over Hong Kong, exceeding 30 millimetres in an hour, and is likely to continue.

Action:

- Heavy rain may bring about flash floods. People should stay away from watercourses. People who are likely to be affected by flooding should take necessary precautions to avoid losses.
- Listen to radio or television announcements on the weather, road and traffic conditions.

Red rainstorm warning signal

Heavy rain has fallen or is expected to fall generally over Hong Kong, exceeding 50 millimetres in an hour, and is likely to continue.

Action:

- Employees working outdoors in areas exposed to rain should suspend outdoor duties if weather conditions in those areas so warrant.
- People who have to travel should carefully consider weather and road conditions.
- Heavy rain will bring flash floods, and flooding is occurring or is expected to occur in watercourses. People should stay away from watercourses. Residents living in close proximity to rivers should stay alert to weather conditions and should consider evacuation if their homes may become flooded.
- If the red signal is issued before working hours, employees should report for duty as usual, provided that transport services are available. Supervisors are encouraged to adopt a flexible attitude in case their staff have genuine difficulties in arriving at work on time.
- If the red signal is issued during office hours, employees working indoors should remain on duty as usual unless it is dangerous to do so. Employees in areas where transport services are about to be suspended can be exceptionally released at the discretion of the supervisor. In exercising their discretion, supervisors should take into account the weather and road conditions.

Black rainstorm warning signal

Very heavy rain has fallen or is expected to fall generally over Hong Kong, exceeding 70 millimetres in an hour, and is likely to continue.

Action:

- Stay indoors or take shelter in a safe place until the heavy rain has passed.
- Heavy rain will bring flash floods, and flooding is occurring or is expected to occur in watercourses. People should stay away from watercourses. Residents living in close proximity to rivers should stay alert to weather conditions and should consider evacuation if their homes may become flooded.
- Employees working outdoors in exposed areas should stop work and take shelter.
- Employers are advised not to require their employees to go to work unless prior agreement on work arrangements during rainstorms has been made.
- People who are already at work should stay where they are unless it is dangerous to do so.

Landslip warning

The Hong Kong Observatory will issue the landslip warning in conjunction with the Geotechnical Engineering Office when there is a high risk of many landslips as a result of persistent heavy rain. If you have received a notice to evacuate because of landslip danger, or if you believe that your home is endangered by an unstable slope or retaining wall, or overhanging boulders, you should make immediate arrangements to move to a safe shelter.

Special Announcement on Flooding in the northern New Territories

A Special Announcement on Flooding in the northern New Territories will be issued by the Hong Kong Observatory whenever heavy rain affects the area and flooding is expected to occur or is occurring in the low-lying plains of the northern New Territories. The special announcement is intended to prompt the public to take precautionary measures against flooding and to alert farmers, fish farm operators, engineers, contractors and others who are likely to suffer losses from flooding. The announcement also alerts the relevant government departments and organisations to take appropriate actions, such as opening of temporary shelters, search and rescue operations, closure of individual schools and relief work. It is issued irrespective of whether other severe weather

warnings, e.g. tropical cyclone signals or rainstorm warning signals, are in force.

Localised Heavy Rain Advisory

By making reference to the operation of Special Announcement on Flooding in the northern New Territories, the issuance of the Localised Heavy Rain Advisory is based on the recorded and forecast regional rainfall amount, for example, when more than 70 millimetres of rainfall has fallen or is expected to fall in an hour in individual districts of Hong Kong, which may bring serious flooding and risks to the districts. If heavy rain at that time does not extend generally over Hong Kong and does not reach the criteria for a Red or Black Rainstorm Warning Signal, the Observatory will issue the Localised Heavy Rain Advisory, indicating the affected districts and the respective recorded or expected rainfall, to alert the public of potential flooding due to heavy rain in the districts, so as to take precautionary measures. The advisory also reminds relevant government departments to take appropriate responsive actions, such as emergency measures to alleviate the impact of flooding in concerned districts.

Ways to obtain weather information

Dial-a-weather System

1878-200

Hong Kong Observatory's Website

www.hko.gov.hk

www.weather.gov.hk

Mobile App "MyObservatory"

www.hko.gov.hk/myobservatory_e.htm

or scan the QR code below



iPhone



Android



Windows
Phone

Home Affairs Department (HAD) Emergency Relief Services

In the event that tropical cyclone warning signal No.8 or above, landslip warning or red/black rainstorm warning is in force, the Home Affairs Department's Emergency Co-ordination Centre with the emergency hotline

will be activated round-the-clock to answer relevant enquiries and provide assistance to members of the public.

Temporary shelters

At time of emergencies, suitable temporary shelter(s) will be open as and when needed at the discretion of District Officer(s) for providing temporary accommodation to evacuees and other displaced persons.

We also open temporary cold shelters or temporary heat shelters to people taking refuge during cold spells or oppressively hot weather. Where appropriate, blankets and mattresses will be provided to shelter users.

Emergency Coordination Centres

The Home Affairs Department's Emergency Co-ordination Centre works with other departments and agencies to ensure that their activities are properly co-ordinated in providing emergency relief, and to arrange temporary accommodation for members of the public affected by natural disasters.

Inter-departmental Help Desk(s) will also be set up at the scene or in hospitals during major emergency incidents such as outbreak of a No.3 or higher alarm fire to co-ordinate emergency relief efforts.