

Measures against Storm and Flood Disasters

“Storm and flood disasters” refers to the types of natural disasters caused by strong wind, heavy rain, flooding, etc. In recent years, the impact of heavy rain caused by phenomena such as “guerrilla rainstorm” or “training (linear rainband)” are bringing major damage nationwide.

To protect ourselves from such natural disasters, we need to have correct knowledge about various natural phenomena, recognize them as familiar danger to ourselves, and learn the actions to take in the event of disasters at ordinary times.

Types of flooding

Inland flooding

Flooding of buildings, land, roads, etc., in urban areas caused by rainwater overflowing from gutters and drainage channels.

Caution needed since flooding could start soon after the start of rainfall.



River flooding

Inundation caused by river water overflowing from or demolishing embankments, flooding houses, farmland, etc.

When river flooding occurs, a large amount of water flows in and floods a wide area and takes a long time to subside.

About typhoons

Low pressures that are formed on the surface of the ocean in the tropics are referred to as “tropical cyclones”. Among them, ones that exist on the northwestern Pacific or the South China Sea and have the maximum wind velocity (10-minute average) of approximately 17m/s (34 knots, 8 on wind velocity scale) or more within the low-pressure area are called “typhoons”. As a guide to indicate the approximate power of typhoon, the “scale” and “strength” of typhoons are expressed based on its wind velocity (10-minute average). “Scale” is described by the radius of its strong wind area, and “strength” is categorized with the maximum wind velocity.

Classification of scale

Scale	Wind speed over 15 m/s radius
Large (big)	Above 500 km to less than 800 km
Super large (extremely big)	Above 800 km

Classification of strength

Strength	Maximum wind speed
Strong	Above 33 m/s to less than 44 m/s
Very strong	Above 44 m/s to less than 54 m/s
Severe	Above 54 m/s

Evacuation Measures

Moving to shelters and evacuation places is not the only means of evacuation. The means of evacuation could be different depending on the area you reside, the conditions at the time, and who is evacuating. Make sure to decide on how to act on a regular basis.

Evacuation

- To shelters and evacuation areas designated by the municipality.
 - To safer houses of friends and relatives.
 - To safer hotels and accommodations.
- (Regular lodging charges will be required. Confirm the safety on Estimated Inundation Area Map before making reservations.)



Securing indoor safety

It is essential to confirm whether it is safe to stay at home or not on Estimated Inundation Area Map.

- Make sure the house is not included in the zone of possible building destruction and flooding
- Make sure the living quarters are located above the inundation water level
- Make sure you have a sufficient amount of water and food in stock so that you can endure till the water subsides

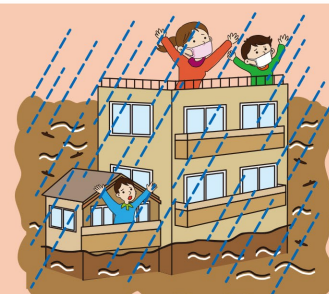


This space will be safe!



Emergency safety assurance

“Emergency safety assurance” is the situation in which the residents, etc. who needed to follow the order of “evacuation” became unable to evacuate because they did not act at the proper timing, etc., being left in the circumstance where they can no longer safely follow the order of “evacuation” due to occurrence/urgency of the disaster, and that they now need to shift their actions from the order of “evacuation” to immediately moving to a relatively safer place than the current location, etc. or take any necessary action to secure the maximum safety to protect themselves from life-threatening danger.



- Move to the highest possible spot in the house
- Move to the highest possible building in the neighborhood

Points to know when evacuating

Evacuate early, before flooding starts.

Flooding water has high velocity and even an adult's knee-high depth of water can make walking difficult. It is dangerous to evacuate outside of your house after it is already flooded. Start evacuation voluntarily when you feel danger.



Do not go near the river or irrigation canals!

Even if the continuous rain made you worry, do not go check on rivers, irrigation canals, or rice paddies and fields. If you must, do not go alone. Do not take the route near rising rivers when evacuating.



Evacuate accordingly to the circumstance.

If the surrounding conditions are too dangerous to move to evacuation places, evacuate to the highest possible floor of your house or sturdy building in the neighborhood. If you felt danger during the move, evacuate to the nearest building.



Evacuate on foot!

Evacuating by car could obstruct the traffic of emergency vehicles. It could also cause a traffic jam; in which case you would not be able to move when flooding starts. Thus, evacuating on foot is essential.



Measures against Earthquake

Earthquake!

1 to 2 minutes

3 minutes

5 minutes

10 minutes

A few hours

3 days

The initial strong shake lasts approx. 1 minute.

- Ensure your own safety.

Once the shaking has stopped:

- Check all possible sources of fire. If fire has started, calm down and conduct initial fire extinguishing procedures.
- Check the safety of your family. Make sure they are not trapped under fallen furniture.
- Put shoes on. The floor of your house may be covered with shattered pieces of glass. Put on shoes or thick slippers.
- Evacuate Be cautious of falling roof tiles, collapsing block fences, toppled vending machines, etc.

Confirm everyone's safety, prevent fire outbreak.

Call out and check on neighbors

- Secure safety of persons requiring care.
- Neighbors assist each other.
- Check for missing persons.
- Check for injured persons.

Prevention of fire outbreak Initial fire extinguishing

- Use fire extinguishers.
- Be cautious of aftershocks.
- Be cautious of electricity and gas leakage. Shut off electricity breakers and close gas taps.

Acquire accurate information from TV, radios, etc.

- Check information provided by the Meteorological Agency, etc.
- Don't be deceived by false rumors.
- Try not to use cars when evacuating.
- Prioritize emergency communications when using the phone.



Be cooperative in fire extinguishing, rescuing and relief activities.

- Provide water and food from your stock pile.
- Do not enter damaged houses.
- Collecting information on the disaster and damage.
- Rescue and aid your neighbors.



If you were indoors

In an ordinary house

- Secure your own safety by taking cover under the desk, etc., as soon as you feel the shake.
- Swiftly check on all possible sources of fire (don't forget circuit breakers and gas taps).
- Secure safety of infants, sick persons, the elderly and other vulnerable persons.
- Do not walk around barefooted (injuries may occur due to broken pieces of glass, etc.).
- Swiftly evacuate to a safe location outdoors.



In an apartment building

- Open doors and windows to secure evacuation routes.
- Never use elevators to evacuate. Use staircases to evacuate, paying attention to flame and smoke (try not to inhale smoke as much as possible, stay low, and cover your mouth with handkerchief, etc., while evacuating).

In you are outdoors

On the street

- Cover your head with bags, etc. to protect from falling objects such as broken window panes and signboards.
- Stay away from buildings and move towards somewhere safer.
- Stay clear of block fences or vending machines.
- Be cautious of tilted telegraph poles or electric wires hanging loose.



When driving

- Hold the steering wheel firmly, gradually decelerate, remember to leave some space for emergency vehicles to pass, park on the left side of the road and shut down the engine.
- Check on the surrounding situation calmly until the shaking stops and collect information on the car radio, etc.
- If you need to evacuate, leave the key in the car and do not lock the door. Be sure to take valuables such as the automobile inspection certificate with you and evacuate on foot.

