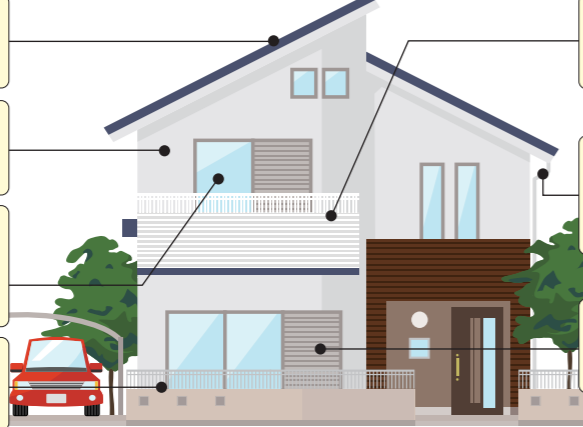


Preparing for Storm and Flood Damage

Is your house prepared for typhoons, heavy rain, and strong winds?
Check your house and surroundings.

Safety measures for outside of your home



- Roof**
Make sure that there are no cracks, flakes, gaps, turned-up pieces, or torn-off pieces in roof tiles or corrugated iron sheets.
- Outer walls**
Fix them if there are cracks in mortar walls or corroded or loose sections in wooden walls.
- Glass windows**
Check for cracks on glass windows and for loose window frames. Board them up from the outside to prepare for flying objects that are propelled by strong winds.
- Walls and gate-pillars**
Fix or strengthen cracked or damaged areas.
- Balcony**
Bring indoors potted plants, laundry poles, and other items at high risk of flying off.
- Rain gutters**
Check for clogged leaves and sand, dislodged piping, peeling paint, and decayed parts.
- Sliding shutters**
Check for rattling or loose sliding shutters.

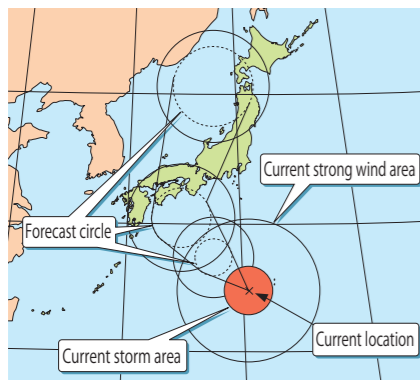
Safety measures inside your home

- Gather the latest information on TV, radio, and the Internet.
- Do not go out of the house unnecessarily.
- Prepare emergency items to take with you, such as valuables, in case of evacuation.
- Prepare a flashlight and portable radio in case of power outages.
- Prepare drinking water in case the water supply is disrupted.
- Where there is a risk of flooding, move household goods, food, clothing, bed, and other household items to a higher area.
- The elderly, the sick, persons with disability, and others needing special care should evacuate early to a safe location.



Typhoons

There are about 26 typhoons on average per year around Japan, and Beppu City is also hit by several typhoons every year. When typhoons approach or land, strong winds and heavy rainfall often cause serious damage. Typhoons can be predicted to some extent in terms of their timing, size, and path. Please obtain the latest information and prepare your surroundings to minimize damage.



Wind blow intensity and damages

Average wind speed: (m/s)	Expected conditions and damages
10~15m	Difficult to walk against the wind. Unable to hold an umbrella.
15~20m	Impossible to walk against the wind. Some may fall.
20~25m	You may fall unless holding on to something tightly. Some roof tiles may fly off.
25~30m	You cannot remain standing. It's dangerous to be outdoors. Signs fall or fly off. Trees begin to fall.
30m以上	Some roofs fly off, and some houses collapse.

*Reference from the Japan Meteorological Agency

Disaster Victim Certificate (earthquake, storm, and flood)

* Fire damage certificates are issued by the Fire Control Division of the Fire Defense Headquarters.

A Disaster Victim Certificate is issued after an investigation of the damage caused by natural disasters such as earthquakes, tsunamis, storms, and floods. Online application for issuance is now available (My Number Card is required).

For applications and inquiries: Disaster Prevention and Crisis Management Division ☎ 0977-21-2255



For more information ↑

Localized Torrential Rain

Localized torrential rain is heavy rainfall that occurs in one specific area for a short period of time, and it is frequently observed toward the end of rainy seasons. Predicting their occurrence is relatively difficult, for it occurs suddenly over a small specific area. Severe damages are expected due to flooding of small-to-medium-sized rivers, landslide disasters, and other disasters. It's important to pay close attention to the weather forecast and to take appropriate preventive measures, such as an early evacuation.



Rainfall Intensity and Damage

Rainfall per hour (mm)	Possible Condition and Damage
10 ~ 20mm	The sound of the rainfall makes it difficult for conversations to be heard. Be careful even with this level of rain if it continues for a long period of time.
20 ~ 30mm	The downpour causes road gutters and sewage to overflow, small rivers to flood, and small-scale slope failures to be induced.
30 ~ 50mm	Extremely heavy rain will fall. Residents in hazardous areas need to prepare to evacuate, as mountain and slope failures easily occur.
50 ~ 80mm	Rain falls in torrents, and water gushes out of maintenance holes. Mudslides and other disasters are likely to occur.
80 mm or more	The strength and the pressure of the rain may cause people to experience difficulty breathing. There is a high possibility for a large-scale disaster to occur, and extreme caution is required.

Source: Japan Meteorological Agency Website

Landslide Disasters

Landslide disasters are disasters that include slope failures, mudslides, and landslides that are often caused by an earthquake or rainfall, affecting the lives and property of residents. Check hazardous locations and signs where landslide disasters may occur. If you feel that your safety is threatened, evacuate immediately.

[Slope Failure]

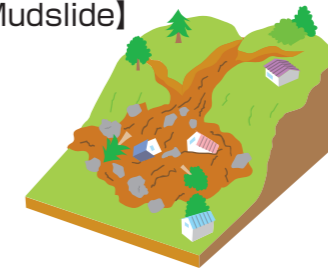


Steep slope loosens and suddenly collapses due to heavy or prolonged rainfall. As it occurs suddenly, evacuations tend to delay.

■Precursory Phenomena

- Water gushes out from the cliff.
- Cracks appear on the cliff.
- Small rocks fall.

[Mudslide]

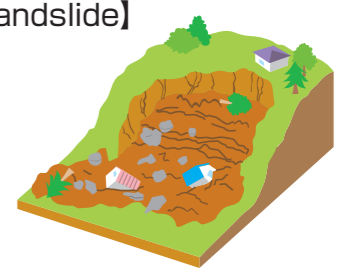


Mudflows containing soil, stones, and trees are swept downstream at once from a valley or mountain stream. The flow travels at high speed with great destructive force.

■Precursory Phenomena

- Mountain makes a rumbling sound.
- River level decreases even though it's still raining.
- River water becomes murky and driftwood appears.

[Landslide]



The ground over a large area slowly moves downstream. It may be slow-moving. However, once it occurs, the damage can be very severe.

■Precursory Phenomena

- The ground may crack or collapse.
- Water in streams and wells becomes murky.
- Water gushes out from the slopes.

Designation of Landslide Disaster Hazard Areas and Landslide Disaster Special Hazard Areas (by Oita Prefecture)

Landslide Disaster Hazard Areas

Areas designated by the prefectural government as hazardous areas where landslide disasters could pose a danger to the health and life of residents.

Landslide Disaster Special Hazard Areas

Areas designated by the prefectural government as hazardous areas where landslide disasters can destroy or damage buildings and could pose a danger to the health and life of residents. Permits are required for certain development activities and structural regulations for buildings are enforced.

Early Evacuation and Daily Preparations

- Be familiar with your residential area on a daily basis and evacuate early to protect your life.
- Be prepared for emergencies by checking nearby evacuation shelters and knowing safe evacuation routes.

*As a result of amendments to the Flood Control Act, it has become an obligation for facilities with people requiring special care to prepare a safe evacuation plan.