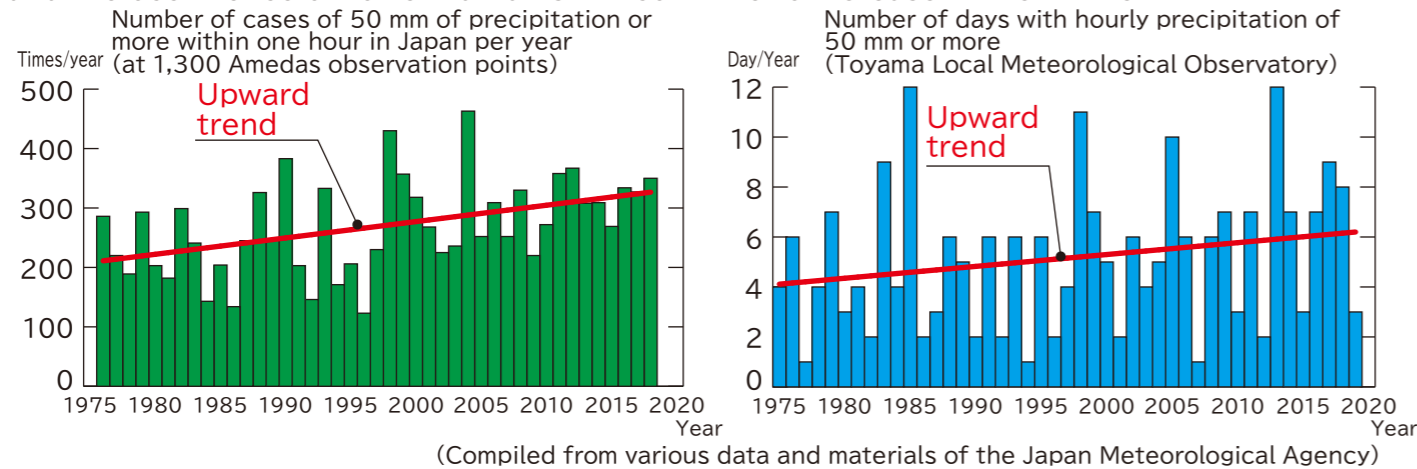


# Knowing about Floods for Safe Evacuation

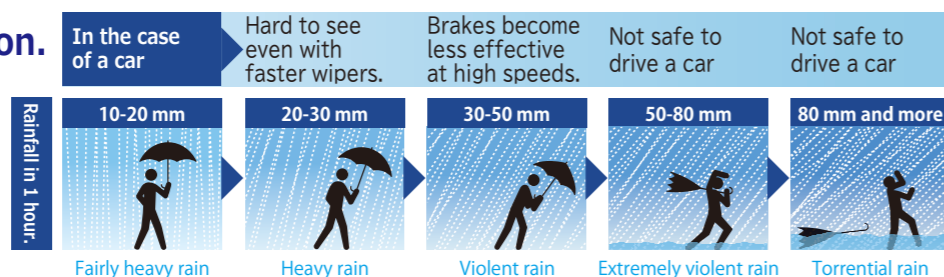
## Extremely violent rainstorms have been increasing in frequency in recent years.

It is believed that this is due to climate change caused by global warming and other factors, and the occurrence of torrential rains will continue to increase in the future.



### Be aware of 1-hour precipitation.

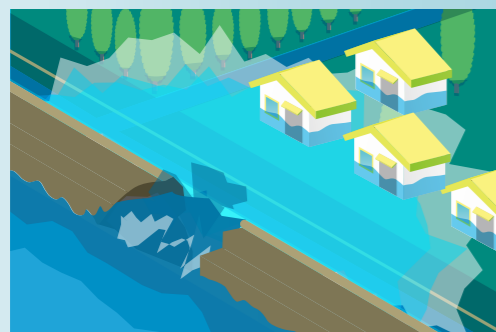
Be prepared by paying attention to weather and evacuation information in advance so that you can take evacuation action at the appropriate time.



If the hourly rainfall exceeds 30mm, roads can become like rivers. 50mm is like a waterfall and umbrellas are useless. Evacuating in this kind of rain can be dangerous, so consider staying indoors for safety.

### There are two types of flood.

#### flooding (river flooding) is a danger to life



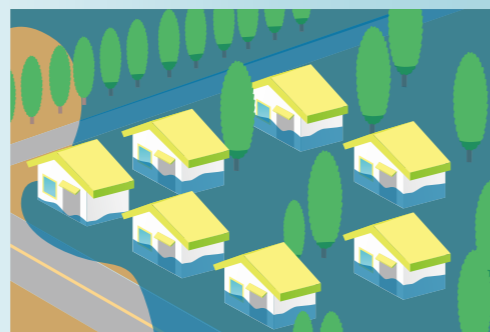
When rain falls in large amounts over a wide area, such as from typhoons or stagnant fronts, it flows into rivers, causing them to swell and rush downstream in violent flows.

This can lead to flooding (river flooding) by eroding and breaking levees or overflowing them.

If you are in an area that requires early evacuation, evacuate as soon as possible. (See page 4)

These are the areas indicated on the Flooding Hazard Maps

#### Inland water overflow (Flood from inland waters) is a danger when evacuating.



Inland flooding occurs when too much rainfall on a city area cannot be drained away due to heavy rainfall or a rise in the water level of the river to which it drains.

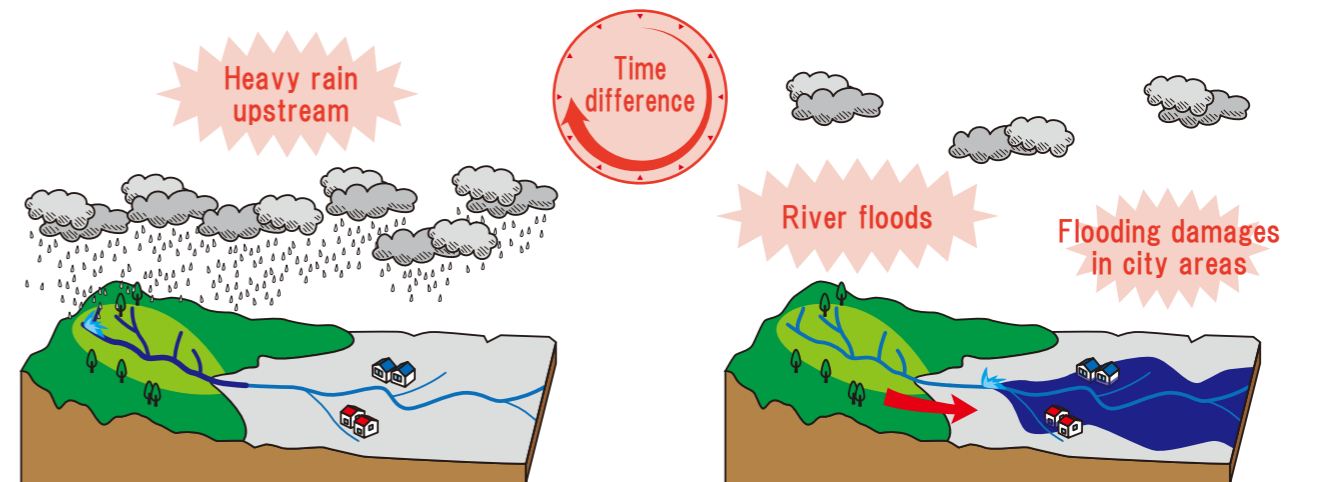
When evacuating from a flood, it may be difficult to evacuate safely because the road surface is under muddy water and cannot be seen properly due to inland water flooding. Check for hazards beforehand, when roads are not flooded.

Useful information to decide when to evacuate and how to choose an evacuation route.



### Floods do not always occur at the peak of heavy rainfall. Watch out for time-varying water level rise!

In the Jinzu River, it sometimes takes time for rainfall in the upper stream area (Gifu Prefecture) to reach the middle and lower stream areas (urban areas). In the lower stream areas, just when you start to feel relieved after the peak of rain, the water level may rise suddenly, and the river may flood.



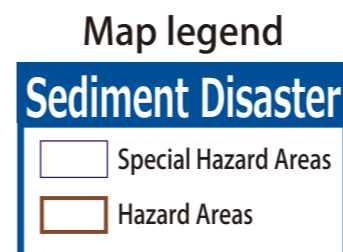
### The risk of landslides may become high as precipitation increases, be careful of landslides while seeking an evacuation shelter from flooding!

Since rain can cause landslides as well as flooding, the map is marked to show areas where vigilance is required. Those who live in these areas should pay very close attention to landslide alert information.

When evacuating from a flood, take safety precautions to avoid passing through areas with a high risk of landslides as much as possible.

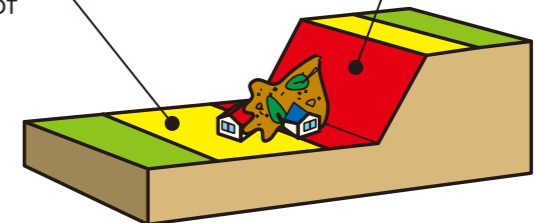
#### Sediment Disaster Special Hazard Areas

Landslides may cause damage to buildings, resulting in serious harm to life or body.



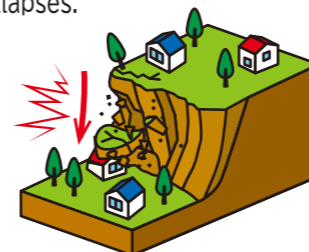
#### Sediment Disaster Hazard Areas

There is a risk of danger to life or body due to landslides.



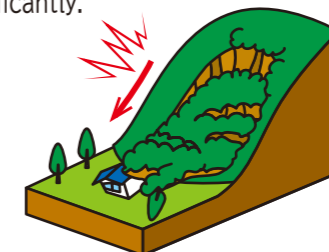
#### Landslip (collapse of land on steep slopes)

This is a phenomenon in which the ground loses its stability due to heavy rainfall and the slope suddenly collapses.



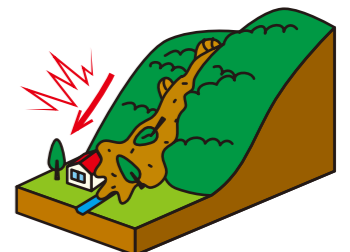
#### Landslide

This is a phenomenon in which a slope slides due to the influence of groundwater and other factors, causing it to move downward significantly.



#### Mudslide

This is a phenomenon in which stones and sediment on mountainsides or river bottoms are swept downstream by heavy rain.



Flood hazard maps do not distinguish between the above three phenomena. See "Toyama City Landslide Hazard Maps" for more details.