

Further Information

● Official shelter areas

Maps of shelter sites are available at your local ward office or on the Nagoya City website at <https://www.city.nagoya.jp/en/category/199-4-0-0-0-0-0-0-0.htm>

● Emergency kit

Valuables : passports, cash(small change), bankbook, health insurance passbook, licenses / certificates.

Emergency food : pack 7 days worth of food (canned food, etc., 10 days if possible) and drinking water (3 liters per day).

Medical supplies : first-aid kit, medicines, etc.

Emergency equipment : portable radio, flashlight, batteries.

Clothing : long-sleeved top, rain gear, underwear, blanket, sleeping bag, spare glasses, gloves, etc.

Other necessary items for babies, elders, sick persons and those who need constant care.

● Confirm how to contact in an emergency

In the event of a major disaster, it is very important to get in touch with family, friends and the university. It is very difficult to connect by ordinary phones and mobile phones (voice). In that case, use the NTT

Disaster Emergency Message Dial 171 or the Mobile phone disaster message board service of your mobile phone vendor. Use the Safety Confirmation System (ANPIC) to contact the university.

● NTT Disaster Emergency Message Dial (171) and Disaster emergency message board (web171)

This service is available when earthquake and other natural disasters occur. Information on using this service is provided at

<https://www.ntt-west.co.jp/dengon/english/> or <https://www.ntt-west.co.jp/dengon/web171/english/>

● Mobile phone disaster message board service

This service enables users in the disaster area to register messages via the network access functions of their mobile phones.

Message boards in English (Instructions are also available.):

DoCoMo :

https://www.nttdocomo.co.jp/english/info/disaster/disaster_board/

au :

https://www.au.com/english/mobile/anti-disaster/sai_gai-dengon/sp-usage/

SoftBank:

<https://www.softbank.jp/en/mobile/service/dengon/>

② Receiving Email from ANPIC

After a disaster (or during disaster drills held twice a year), an email will be sent to you from ANPIC (no-reply@jecc.jp). ANPIC is also available on LINE or Application.

③ Enter your safety information

Please follow the instructions contained in the safety confirmation request email sent from ANPIC to fill in your safety confirmation.

For more information, please refer to the manual or NU portal:<https://portal.nagoya-u.ac.jp/app/group/faculty/business/disaster-prevention> (Japanese version only).

2022 Nagoya University Students' Guide for Natural Disaster Preparedness

What is an earthquake?

An earthquake is a phenomenon in which the ground shakes violently for up to several minutes. During a severe earthquake, houses and buildings may collapse. Earthquakes occur frequently in Japan. Although earthquakes of Seismic Intensity 3 (Japanese Scale) or below occur several times a year in Nagoya City, there is no need to worry about such small earthquakes. This guide explains the precautions to be taken in case of a major earthquake of Seismic Intensity 5 or more. Such earthquakes occur approximately once every 100 to 150 years in this region.

Are large earthquakes predicted for this region?

Nankai Trough Huge Earthquakes

In the area of the Nankai Trough along pacific coast of south-west Japan, large earthquakes have occurred approximately once a century. The latest earthquakes are the Tonankai Earthquake in 1944 and the Nankai Earthquake 1946. The government estimates that the probability of a recurrence over the next three decades is 70 to 80 percent. If the biggest earthquake occurs in this region, violent tremor of Seismic Intensity 6 to 7 and a big Tsunami wave of over 10m high will hit a large area of the south-west Japan.

What could happen during and after severe shaking?

Houses and Buildings may collapse

Older and weaker houses and buildings might collapse during strong shaking. It is advisable to live in houses that are recently built or have been reinforced.

Furniture and other items may fall over

Many people might be injured or killed by falling furniture and household items as well as flying glass fragments. Take measures to prevent furniture and elevated furnishings from toppling over or falling down.



Outbreak of fires

Fire is major hazard associated with earthquakes. Extinguish any open flames immediately and switch off the circuit breaker in your house before evacuating after an earthquake is over.

Tsunami

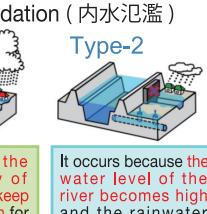
Tsunami can be an extremely destructive hazard for coastal areas. Tsunami originates when ocean water is displaced vertically during a large earthquake. If you are close to the coast and feel a strong earthquake or a weak but prolonged tremor, you must move to higher ground as quickly as possible.

Damage caused by heavy rains and storms

When heavy rain continues for a long time and the amount of rain exceeds the drainage capacity of sewers, inland inundation (内水氾濫 : Naisui Hanran) will occur. On the other hand, when the water level of a river rises and the water overflows over the embankment or the embankment breaks and the river water and sediment flow out, inundation by river water (外水氾濫 : Gaisui Hanran) will occur. In either case, there is a warning period before actual occurrence, so it is important to ensure early safety. Also, in very strong winds with an average wind speed of over 20 m/s, you may not be able to walk unless you are holding on to something, or you may be injured by flying objects. It is important to refrain from going out as much as possible when the possibility of flooding is high.



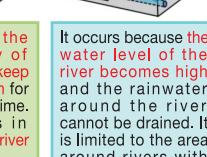
Type-1
Inland Inundation (内水氾濫)



Type-2
Inundation by river water (外水氾濫)



Very strong winds (an average wind speed $\geq 20\text{m/s}$)
(Quoted from JMA)



When the river water level rises, water flows out from the embankment by crossing the embankment or breaking the embankment.
Not due to river flooding
Due to river flooding

Before and During an Earthquake Disaster

When a large earthquake occurs,

The first 3 seconds

Stay Calm, protect yourself from falling objects, extinguish any flames (if possible) and open a door to provide a safe exit. Blindly rushing outside may result in unnecessary injury.



A table crushed by fallen books

After 2-3 minutes

After the shaking subsides, evacuate from dangerous places. Turn off any heaters and stoves, stop any experiments in your laboratory, and check the safety of family members and others around you. When evacuating, be calm, watch for dangerous objects, and do not use elevators. If in class, follow the instructions of your faculty members.



After 5-10 minutes

Once evacuated to a safe place, obtain information to prevent any further danger.

After 1 hour

Assist in putting out fires and rescue people if necessary, after first ensuring your own safety. Be prepared for aftershocks.

1 day

Report your situation to your school / university / laboratory. You must find out how to make contact in case of an emergency.

1 week

You may have to live in an Emergency Shelter. Make advance arrangements for emergency food and water.

Outdoors

Stay calm and keep away from falling glass and buildings that are in danger of collapsing. Brick walls are also dangerous. Move to an open area such as a park.



Collapsed stone wall

In a bus or train

Follow the instructions of the staff. If you cannot understand the instructions, ask someone close to you for help.

In a elevator

Press the buttons on all floors. If you are trapped, please press the intercom etc. and notify the management center or persons inside the building. If an emergency equipment box is installed, use it to wait for rescue and recovery.

Earthquake Early Warning(緊急地震速報 : Kinkyu Jishin Sokuho)

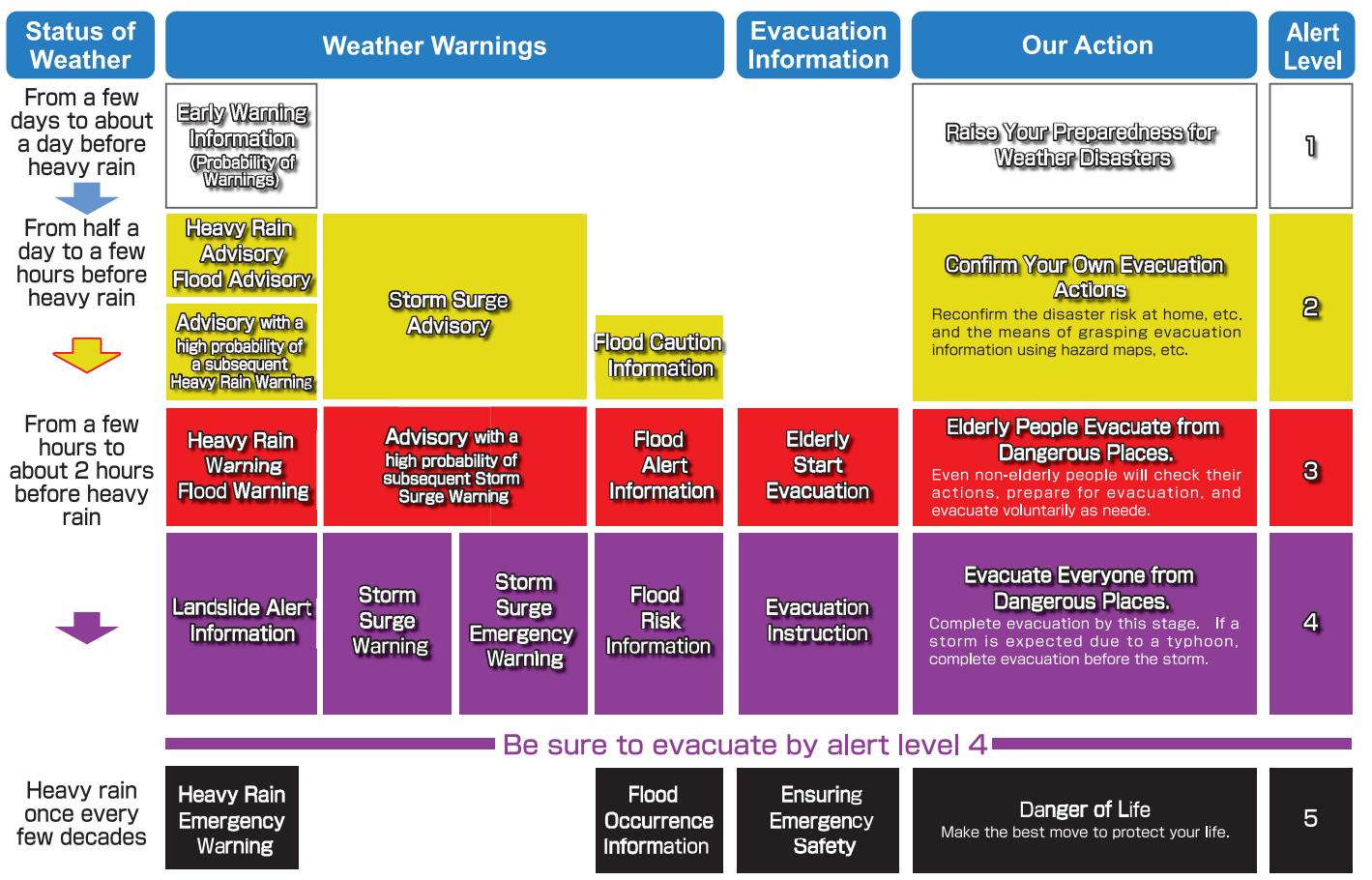
The Earthquake Early Warning system provides advance announcement of the estimated seismic intensities and expected arrival time of principal motion. These estimations are based on prompt analysis of the focus and magnitude of the earthquake using wave form data observed by seismographs near the epicenter. The Earthquake Early Warning is aimed at mitigating earthquake-related damage by allowing countermeasures such as promptly slowing down trains, controlling elevators to avoid danger and enabling people to quickly protect themselves in various environments such as factories, offices, houses and near cliffs.

(<https://www.jma.go.jp/jma/en/Activities/eew.html>)

When an earthquake early warning is issued, do not start running and not panic, and calm down and look for a safe place.

Disaster prevention weather information announced by the Japan Meteorological Agency (JMA) and actions you should take

The Japan Meteorological Agency publishes disaster prevention weather information such as emergency warnings, warnings, advisories and early warning information in order to prevent and mitigate weather disasters, and calls for caution and caution in stages. Please be prepared on a daily basis so that you can make an appropriate decision on the action to be taken by referring to the timing and contents of the announcement of each information and the response of municipalities, illustrated below.



Advisory : 注意報 (Chuiho)、Warning : 警報 (Keihō)、Alert Information : 警戒情報 (Keikai Joho)、Emergency Warning : 特別警報 (Tokubetsu Keihō)
Heavy Rain : 大雨 (Oame)、Flood : 洪水 (Kozui)・はん濫 (Hanran)、Storm Surge : 高潮 (Takashio)、Landslide : 土砂災害 (dosha-saigai)

Gathering information on wind/flood disaster

Portal site (Hazard maps, etc.)

Emergencies (Nagoya City)

<https://www.city.nagoya.jp/en/category/199-0-0-0-0-0-0-0-0.html>

Disaster Information for River

(Ministry of Land, Infrastructure, Transport and Tourism)

<https://www.river.go.jp/index>

The Outlines of Landform Classification Map for Flood Control

(Geospatial Information Authority of Japan)

<https://www.gsi.go.jp/bousaichiri/bousaichiri41045.html>

River water level information

Road / river Monitoring Information System
(道路・河川等監視情報システム)

http://www.rdcamimage.city.nagoya.jp/public_html/

Weather information

JMA Official Website
<https://www.jma.go.jp/jma/index.html>

Information for Evacuation

Nagoya City Official Website
<https://www.city.nagoya.jp/>

Evacuation due to flooding

Put on athletic shoes

Boots become difficult to walk when water gets inside, so wear comfortable lace shoes. Keep your hands free by carrying the emergency carry-out bag on your back. In principle, it is desirable not to evacuate once inundation begins.

If the inundation depth is over your knee level,

Evacuation is dangerous, so do not overdo it and evacuate to a safer building in the vicinity.

Contact with family, friends and university office for safety confirmation

Contact each other by a predetermined method. Use the safety confirmation system (ANPIC) to inform the university of your place and safety condition.

Keep in mind false rumors

If you are off campus, follow the instructions of the local government, fire department, police agency, etc. and collect information from the radio, TV, public relations vehicle, etc.

Confirmation of evacuation place and route

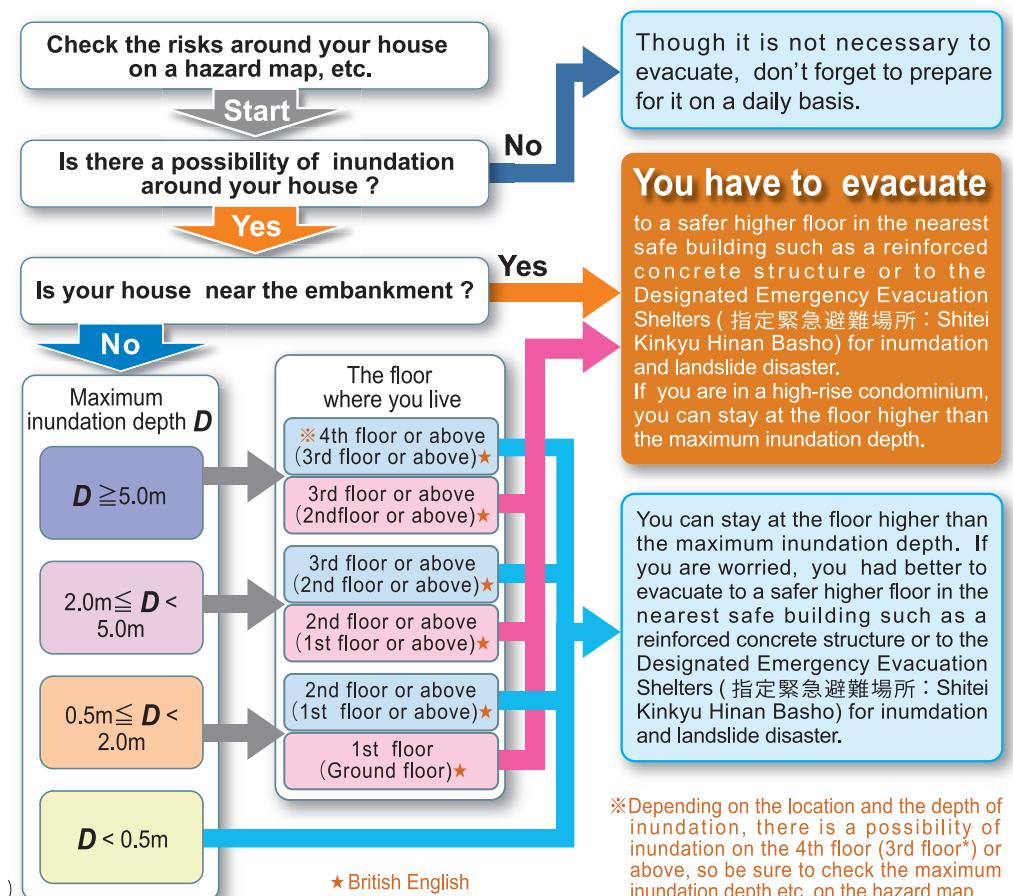
Primary evacuation areas and evacuation routes near each building have been specified. Check in advance so that you can evacuate smoothly. Also, do not store goods near exits and passageways.

Help each other in the neighborhood

Encourage your neighbors to evacuate, and if they are sick or have difficulty walking, carry them on your back and evacuate.

Evacuation guideline

If heavy rains are likely to occur in areas at risk of inundation, check the flow chart on the right and take action to ensure safety yourself before floods occur.



(Modified with reference to Nagoya City's Homepage)

University classes and exams at the time of weather warning information

At Nagoya University, if various emergency warnings or storm warnings are issued at the place where classes and regular examinations are held, the classes that start after the announcement will be canceled (except for online lessons using ICT, etc.). For details, please check the Nagoya University portal site.

Safety in Laboratories

Secure dangerous objects

Tall, heavy, or dangerous furniture and equipment (e.g., lockers, book shelves, TV, PC, experimental facilities, facilities with casters, glass objects) should be secured to prevent movement during an earthquake.

Experiments

Safety measures should be taken for experiment equipment, chemicals and gas. It is important to prevent fires and explosions. Stop any experiments in case of an earthquake, check that flames are extinguished, check for accident prevention, then evacuate quickly and safely.



Shelves which will block the aisle when they fall
(in Nagoya Univ.)



Traces of a fire of a chemical laboratory due to the shaking (in Tohoku Univ.)

Safe evacuation

Do not store goods near exits and passageways. Watch for areas of danger (e.g., damaged buildings and falling objects) on your way to the evacuation site.

Preparedness

Please discuss earthquake safety with your supervising professor and fellow laboratory members.

Nankai Trough Earthquake Extra Information (南海トラフ地震臨時情報 : Rinji Joho)

It has been decided that Nankai Trough Earthquake Extra Information will be made starting May 31, 2019. Depending on the situation, "under Investigation (調査中 : Chosachu)", "Major Earthquake Warning (巨大地震警戒 : Kyodai Jishin Keikai)", "Major Earthquake Advisory (巨大地震注意 : Kyodai Jishin Chui)" and "Completion of Investigation (調査終了 : Chosa Syuryo)" are assumed. If it is determined that a major earthquake is imminent, "Major Earthquake Warning" will be announced. You should reconfirm the daily preparations for disasters and the risk of a tsunami for about a week after the announcement. Prior evacuation is required in some areas. (The area subject to pre-evacuation in Nagoya City is designated as an area where inundation of 30 cm or more occurs within 30 minutes from the occurrence of the earthquake.) Also, you should follow the instructions of the university regarding the organization of classes, returning home, etc., while also ensuring your safety by staying abreast of the situation.

Preparing for disasters

Making your house safer

Collapsing buildings and falling furniture result in many fatalities during a large earthquake. Prevent heavy furniture from toppling over or falling down. Furniture should be securely fastened using appropriate means.

Prepare emergency items

Assemble valuable (passport, cash), food and water, a first-aid kit, a radio, clothing, etc. Pack these items together so they are ready to take with you at any time.

Know your evacuation site and escape route

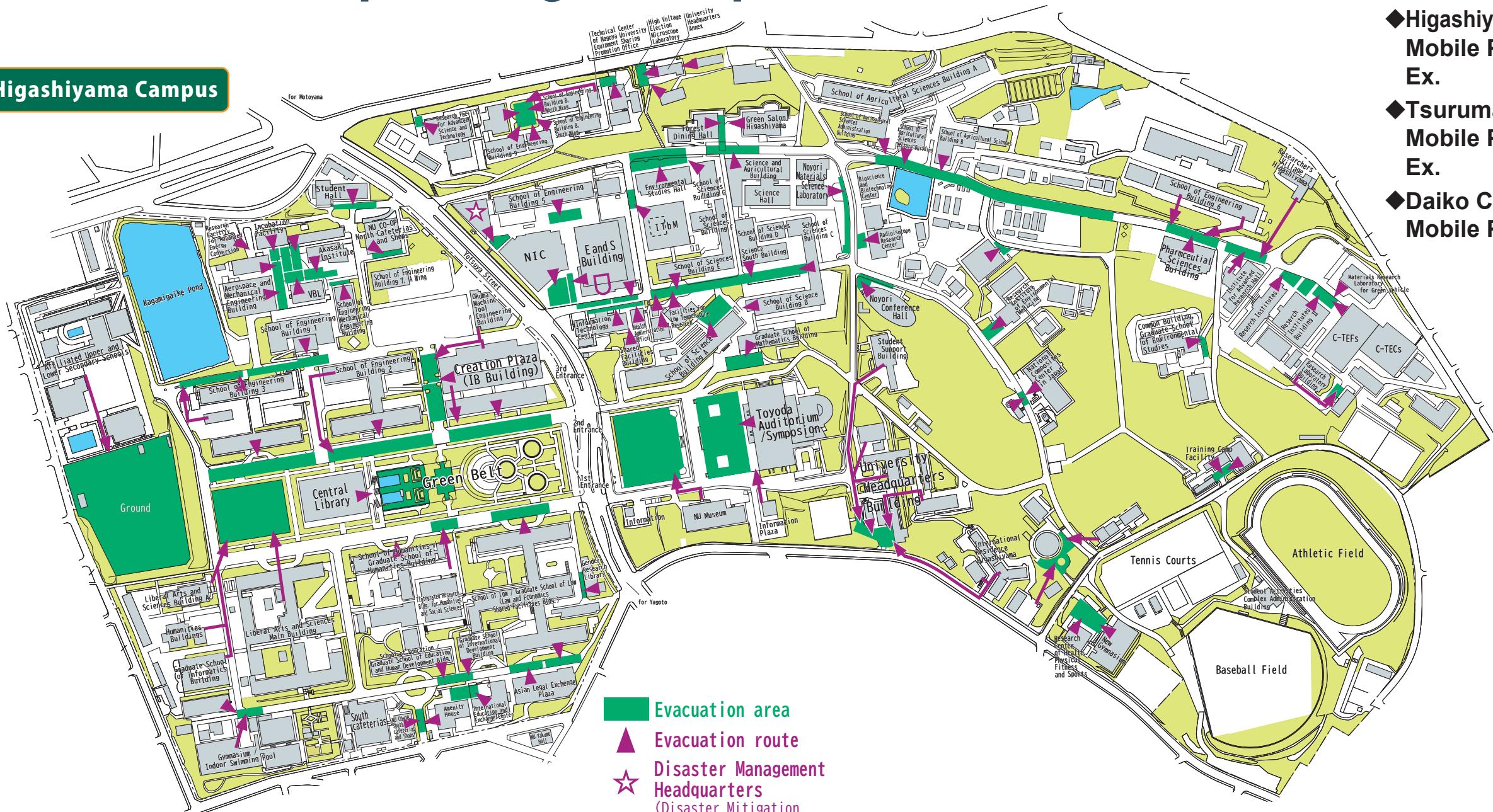
As you may need to use the Emergency Shelter in your community it is important to know if language support is available.

Learn about disasters in Japan

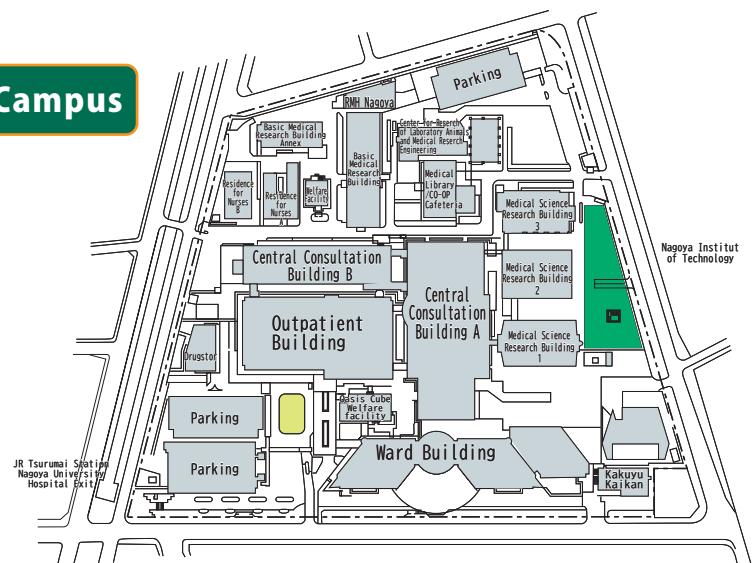
Natural disasters frequently occur in Japan. Check the website of the Cabinet Office, Government of Japan. <http://www.bousai.go.jp/index-e.html>

Evacuation Area Map for Large Earthquake

Higashiyama Campus



Tsurumai Campus



Evacuation area

Evacuation route

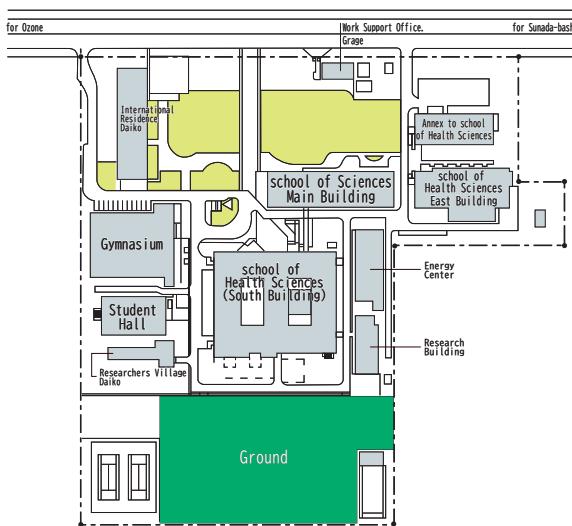
Disaster Management Headquarters

(Disaster Mitigation Research Building/
Disaster Management Office)

The First-aid station

The Evacuation area is a temporary evacuation site near buildings for use during major earthquakes.
Wait here for instructions to be issued by Nagoya University.

Daiko Campus



Contact in case of emergency

◆Higashiyama Campus (in Japanese)
Mobile Phone 052-789-2111
Ex. 110、119

◆Tsurumai Campus (in Japanese)
Mobile Phone 052-744-2939
Ex. 5555

◆Daiko Campus (in Japanese)
Mobile Phone 052-719-1518