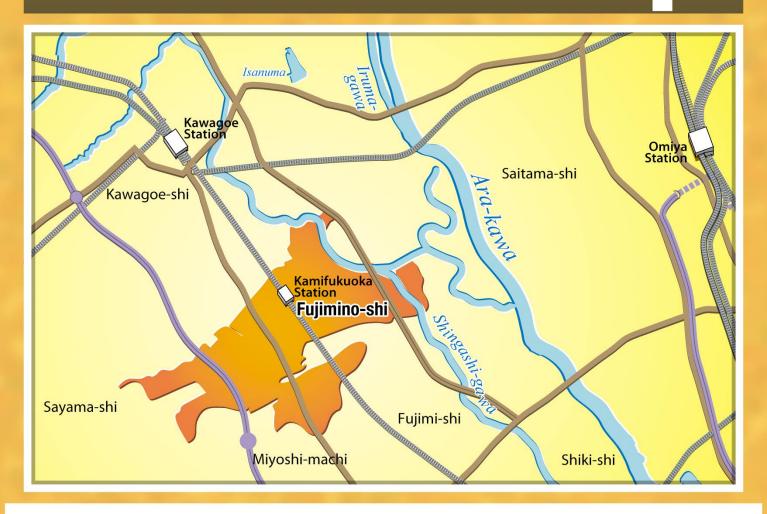
Save this pamphlet at hand for emergencies



Earth Clarke Building collapse risk Possibility of liquefaction

Likeliness to shake **Possibility of liquefaction**

Hazard Map



Fujimino City Office

https://www.citv.fujimino.sajtama.jp/

Saitama, Fujimino-shi, Fukuoka 1-1-1 356-8501 Tel. 049-261-2611 Revised July 2023

Relationship between magnitude and seismic intensity

The relationship between magnitude and seismic intensity can be linked to the relationship between the brightness of a light bulb and the brightness on a desk. Even if the light is from the same light bulb, the brightness on the desk will be different depending on the position of the desk. Similarly, even if the earthquakes have the same magnitude, the seismic intensity will be smaller if the hypocenter is far away and seismic intensity will be large if the hypocenter is close.



Magnitude (hereinafter referred to as M) is a unit that expresses the magnitude of an earthquake. The largest earthquake in the history of Japanese observation was the Great East Japan Earthquake, which was M9.0. When M increases by 0.2, the energy scale of the earthquake doubles, and when M increases by 1, it increases by about 32 times.

Seismic intensity represents the magnitude of shaking at each point during an earthquake. How a certain point shakes depends not only on the energy scale of the earthquake, but also on the distance from the hypocenter to that point, the ground conditions, and so on.

Behavior in the event of a large earthquake

When a big earthquake occurs, it is rather dangerous to act in a hurry. When you hear the Earthquake Early Warning alert, take immediate action to protect yourself. Get the right information from the press and act calmly.



If you are at home

If you feel shaking

Safety behavior!

"Three safe actions" to protect yourself from the shaking of an earthquake







DROP!

COVER!

First, protect your head

Take the utmost safety measures that can be taken at the "moment of an earthquake".

Most people are frightened when an earthquake with a seismic intensity of 5- occur. If the seismic intensity is higher than this, you may not be able to perform normal movements due to wobbling of your feet, due to shaking or rigidity of your body, or due to fear.

Even if the seismic intensity is low, people with weak legs, such as children and the elderly, may be injured.

※上イラスト提供:効果的な防災訓練と防災啓発提唱会議



The time of strong shaking is about 20 seconds to 1 minute.

When the shaking subsides

Prepare for aftershocks (next earthquake)

Extinguish the fire and secure an evacuation route

Safety confirmation / evacuation preparation

- Check the source of the fire
- Open the front door and windows because the doors and windows may be distorted by the earthquake. Put something nearby in the door so that it does not close again.
- Call out to confirm the safety of your



Situation confirmation / disaster mitigation activities

- Check the condition of neighbors and buildings
- Check the correct information
- When evacuating close the main gas valve. Turn off the electric breaker.
- Participate in rescue and fire extinguishing activities.





When you are out

If you feel shaking

- Stay away from things that can fall
- Be careful of falling objects and protect your head with a bag, etc.
- Evacuate in a large park or a highly earthquake- resistant building.

When the shaking subsides

Downtown arge building

Roads/alleys

- Move away from product shelves and move near pillars and walls.
- Be careful of falling objects and protect your head with a bag, etc.
- At the store, follow the on-site broadcast and the instructions of the staff. The latest buildings are highly earthquake resistant, so don't rush outside.

shopping mall

- Stay away from things that can fall
- Underground Move near pillars and walls.
 - ■Be careful of falling objects such as lighting, and protect your head with a bag, etc.



- Follow the on-site broadcast and the instructions of the staff and go outside without rushing to one emergency exit.
- When the light goes out, do not move unnecessarily until the emergency light turns on.

Inside the

- Press the button of all floors and get off immediately at the stopped
- Get off the elevator as soon as the elevator stops, and the door opens.
- Underground shopping mall is relatively safe if there is no fire. If you are trapped, report it with the intercom and wait for rescue.
- Even if there is a power outage, the emergency lighting will turn on immediately, so don't panic.

elevator

Depending on the situation some people may feel shaking from a seismic intensity of 4.

Turn off the engine and stay in the car until the shaking subsides.

- Slow down gradually and stop on the left side of the road.
- When evacuating, keep the car key on, close the window and do not lock the door.

During driving

In trains and

bus

- Prepare for emergency stops and sudden braking.
- If you are sitting in a seat, take a low position to protect your head.
- If you are standing, hold onto the straps and railings.



- After the train/bus stops, follow the crew's instruction.
- Do not go out of the train/bus without instructions

Precautions when evacuating

In Fujimino City, there are 21 regional disaster prevention bases (designated evacuation shelters) such as elementary and junior high schools in case of a disaster. (One of them is only for in case of flood). Check the evacuation center with your family and neighbors, and talk to each other when evacuating for safety.

Let's prepare daily

Hold a family meeting

Hold family meetings on a regular basis to check how to contact your family when they are away separately and decide a meeting place or shelter.



Check evacuation shelters and evacuation routes

Check the evacuation route from your home, school, or office to the evacuation center. Make sure that you can walk and pass the route safely in normal times.



Prepare for emergency listing

Minimize your luggage when evacuating and choose retort pouches or ready-to-eat foods that do not require much cooking effort or water. Don't forget the spare batteries.



People who have difficulty evacuating by themselves

For those who have difficulty in evacuating on their own in case of disaster occurred, Fujimino-shi has created a "list of people requiring evacuation action". You can get support when you register. Local associations should create a system to support evacuation.



Prepare for the difficulty in returning home

When a big earthquake occurs transportation will be cut off and it will be difficult to return home. Memorize the townscape to return home by walking or bus in normal times. Keep sneakers, maps portable food, etc. at your workplace.



Let's help each other in the evacuation life

Evacuation life can last for several days or more. At the evacuation center, you will live together with many people, so follow the rules and cooperate with each other. At the evacuation center, you will live together with many people, so follow the rules and cooperate with each other.

If you live at home without going to a shelter, help each other with your neighbors.

In evacuation life, consideration must be given to personal privacy, the elderly, people with disabilities, women, children, and the lives peculiar to foreigners.

If you are a pet owner, please consider about other evacuees.

When evacuating

Let's help each other with the neighbors

When there is a need to evacuate or there is a call for evacuation due to an earthquake, etc., help each other with your neighbors and evacuate immediately.



Close the main valve of electricity and gas

When evacuating, turn off the power breaker and close the gas main valve. There is a risk of fire when electricity and gas are restored. Also put the telephone handset back on.



Cooperate with initial fire extinguishing

If the fire is small before it burns to the ceiling, let the people around you know and help each other to extinguish the fire using fire extinguisher or the remaining water in the bath.



Support for people requiring special attention

Elderly people, people with physical disabilities, and people injured by the earthquake are often placed in difficult situations due to evacuation in the event of a disaster so please support and help them if you are around them.



When returning home on foot

If a big earthquake occurs when you are out, you should not move unnecessarily basically. If you have to walk home, please take appropriate actions based on the following knowledge.

7 tips for returning home on foot	
To stay	Discuss family contact methods in advance
INCOMPANS.	Prepare spare batteries for mobile phones and radios
To know	Simulate route to return home on a daily basis
	Find out the location of "Support Station to Return Home"
	Put your backpack and sneakers in your work locker.
To go home	Check the situation before you go home.

Help each other and encourage each other and go home on foot.

Communicate safety information.

Tell your family and relatives about your safety and evacuation destination by payphone or FAX. NTT's disaster message dial "171" can convey recorded messages to family members and relatives. It is used to tell that you are safe and where you are evacuating.

You can also use the mobile phone disaster message service.

https://www.ntt-east.co.jp/en/saigai/voice171/(English version)





What is an earthquake hazard map?

An earthquake hazard map aims to raise awareness of disaster prevention daily and minimize damage when emergency occur by providing citizens with information on earthquake disasters and evacuation methods.



About this earthquake hazard map

This earthquake hazard map shows the "likeliness to shake", "risk of building collapse" and "possibility of liquefaction" when earthquake occurs.

Likeliness to shake

"Likeliness to shake" represents the seismic intensity of each region when earthquake occurs.

The likeliness of shake is calculated based on the "distance from the epicenter" and "condition of the surface layer of the area". The map is divided into 50m grid and the predicted values are displayed.

Risk of building collapse

"Risk of building collapse" represents the total destruction ate of buildings in each area as damage caused by "shaking" when earthquake occurs.

The total building destruction rate is calculated based on the "seismic intensity" and "regional building data (building structure, year of construction)".

The map is divided into 50m grid and the predicted values are displayed.

Possibility of liquefaction

"Possibility of liquefaction" indicates the potential for liquefaction in each area when earthquake occurs.

Possibility of liquefaction is calculated based on "topographical conditions" and "earthquake motion on the ground surface".

The map is divided into 250m grid and the predicted values are displayed.



About the targeted earthquake

Of the five earthquakes estimated in the "Saitama Prefecture Earthquake Damage Estimate Survey" conducted by Saitama Prefecture in 2012 and 2013, the target is the relatively urgent "Northern Tokyo Bay Earthquake" and the "Kanto Plain Northwestern Margin Fault Zone Earthquake (Center of the rupture starting point)", which may cause great damage to Fujimino City.

Saitama prefecture earthquake damage estimate survey (Earthquake targeted by this Earthquake Hazard Map)

Northern Tokyo Bay Earthquake

[Trench Earthquake Magnitude 7.3]

- Probability of an M7 class earthquake in the South Kanto region within the next 30 years: 70%
- Assumed seismic intensity of Fujimino City: Most seismic intensity 5+, some 6-.

Kanto Plain Northwestern Edge Fault Zone Earthquake

[Active Vault Type Earthquake Magnitude 8.1]

- Earthquake probability within the next 30 years: 0.008% or less
- Assumed seismic intensity of Fujimino City: Most seismic intensity 6-, some 6+.



Earthquakes other than the above based on the Saitama Prefecture Earthquake Damage Estimate Survey

Ibaraki Prefecture Southern Earthquake

[Trench earthquake magnitude 7.3]

- Probability of an M7 class earthquake in the South Kanto region within the next 30 years:70%
- Maximum seismic intensity of Fujimino City: Seismic intensity 5+

Preparation for my home

Earthquake countermeasures cannot be done only by the government. To protect the lives and property of individuals, it is necessary that every one of you or your family to work together to prepare for an earthquake.



Inspection point

Tall furniture such as chests of drawers should be fixed with a tension rod.

In order to prevent "energized fire" that occurs if the breaker is not turned off when the electricity is restored, install a seismic breaker that automatically stops electricity when it senses the shaking of an earthquake.



Put a shatterproof film on the entire surface of flat glass such as

window.

The curtain should be flame-proof.

The stove should have an automatic fire extinguishing function. When using, do not place flammable materials nearby.

For your safety, the followings are also important.

- Try to put large furniture together in a room with few people.
- Do not leave furniture or luggage in the entrance or hallway (It gets in the way when evacuating.)
- Do not place furniture that can easily fall over in rooms or bedrooms with elderly people or children.
- Check for anything that might fall such as a flowerpot or clothesline on the balcony.
- Do not put bicycles or strollers in the aisles or doorways as they will interfere with evacuation.

Keep slippers close to you to prevent injuries caused by broken glass.



Fujimino City will provide subsides for seismic diagnosis fees and seismic repair work cost as part of earthquake countermeasure.

- Target housing: Among the buildings in the city that have obtained building confirmation and started construction before May 31, 1981, it should not be clearly a violation, and should be detached house or a condominium and a tenement house. In case of wooden buildings, it should be built by the conventional method.
- Target person: A person who owns a building to be subsides, should have an address in the city, and does not delinquent city tax.

*For details such as the amount of subsidy and application procedure:

ふじみ野市 建築課 建築指導係 Fujimino-shi Kenchiku-ka, Kenchiku-gakari

Tel: 049-220-2069

Preparation for my home (fixing and arranging furniture)

In a large earthquake, even if there is no special damage to the building, furniture may fall or scatter, resulting in delayed escape or injury indoors. Check the furniture in your house for safety and fix or rearrange the furniture.

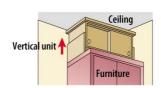
How to fix large furniture

It is dangerous to use the tension rod type if the ceiling does not have enough bearing capacity to support the furniture. Even the ceiling is solid, the gap between the ceiling and the furniture has to be small and the furniture should have enough depth, to expect a big effect.

Set the tension rod at the back of the furniture



Install a top-mounted gap filling storage unit that adjusts the height and supports the ceiling and furniture.

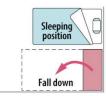


Devise the arrangement of furniture

Arrange the furniture in the room from the viewpoint of safety so that you are not seriously injured or trapped in the room if it falls over due to a big shake.

A safe sleeping position is on the side of the furniture. If you sleep in front of the furniture, keep a sufficient distance more than the height of the furniture. Bookshelves with slide racks are not stable, so it is safer to keep them away from your bed as far as possible.

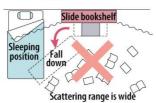
The sleeping position is better on the side of the furniture



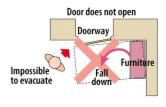
If the sleeping position is in the front side, keep a sufficient distance more than the height of the furniture.



It is dangerous if the sleeping position is not sufficiently far from the bookshelf.



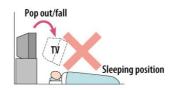
If furniture is placed near the doorway of a room the evacuation route may be blocked due to movement or tipping of furniture, scattering of contents, etc., so you had better not to place there.



The piano has casters, so do not put it in the bedroom unless it is securely protected from movement.

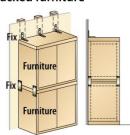


Be careful of the sleeping position especially the position of the pillow, as the TV or computer placed on the table may pop out.



•How to fix stacked furniture

There is also a way to fix it inside the furniture.



引用:地震による家具の転倒を防ぐには(家具の転倒防止対策に関する検討委員会作成)

Information gathering

It is necessary to collect accurate information to respond appropriately to an earthquake. Gather the latest weather information, disaster information and evacuation information by paying attention to the Earthquake Early Warnings and calls from the city hall.



How to collect information

Home page

Fujimino City

https://www.city.fujimino.saitama.jp/

Japan Meteorological Agency

https://www.jma.go.jp/jma/kokusai/multi.html



Convenient apps and websites (multilingual) in the event of a disaster

https://www.bousai.go.jp/kokusai/web/index.html





Use of Earthquake Early Warning

Earthquake Early Warning will notify areas where The Japan Meteorological Agency has predicted that there will be shaking with a seismic intensity of 4 or higher, a few seconds to several tens of seconds before a strong shaking comes. If the epicenter is near the warning may not be in time for the big shake. In addition, there is an error of about ± 1 in the predicted seismic intensity.

