



Tokyo Metropolitan Government Disaster Prevention Guide Book



The Disaster Preparedness Tokyo character
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TOKYO
METROPOLITAN
GOVERNMENT

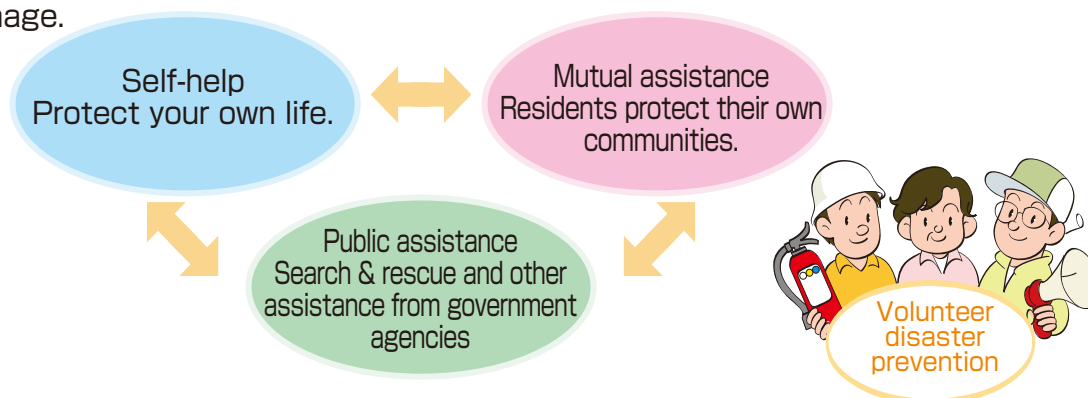
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Section 1 Introduction

Tokyo faces a wide variety of potential threats, from natural disasters like an earthquake directly hitting Tokyo or typhoons to terrorism, large-scale accidents, or outbreak of disease. This guide book has been published in order to inform you of the various efforts that the Tokyo Metropolitan Government (TMG) is making toward disaster prevention.

Importance of self-help, mutual assistance, and public assistance

Self-help, mutual assistance, and public assistance are important for improving the ability to respond and cooperate in the event of a disaster in order to minimize the disaster damage.



Section 2 Preparation for Natural Disasters

1. Natural Disaster Risks

(1) Earthquakes

Earthquakes that Could Foreseeably Strike Metropolitan Tokyo

Tokyo in the past has been much damaged by large earthquakes such as the Great Kanto Earthquake. Further, the Great East Japan Earthquake demonstrated that there are some earthquakes that even though remote can cause chain-reaction damage.

Geographic Characteristics of Tokyo

Directly beneath metropolitan Tokyo, the Pacific plate from the east and the Philippine Sea plate from the south are pushing under the side of the continental plate.

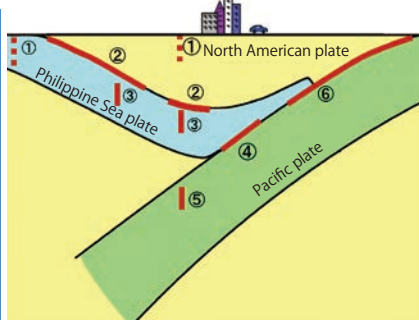
When the edge of a plate at this plate boundary springs up, it can cause an M8 Class submarine trench earthquake. In the southern Kanto area, it is assumed that the direct hit of an M7 class earthquake occurs several times between the earthquakes of the Great Kanto Earthquake class which occur at intervals of 200 to 400 years.

In addition to the electricity that powers its urban functions, Tokyo also depends on other regions for many materials such as food and daily necessities, so even earthquakes outside of the metropolitan area can affect the city, such as cutting off the power supply or disrupting distribution.

[Plate boundaries in the Kanto area]



[Types of earthquakes that occur in the southern Kanto area]
(Source: Cabinet Office website)



Epicenters of earthquakes that occur in the southern Kanto area

- ① Earthquake shallow in the Earth's crust
- ② Earthquake at the boundary between the Philippine Sea plate and the North American plate
- ③ Earthquake within the Philippine Sea plate
- ④ Earthquake at the boundary between the Philippine Sea plate and the Pacific plate
- ⑤ Earthquake within the Pacific plate
- ⑥ Earthquake at the boundary between the Philippine Sea Plate and North American Plate and Pacific Plate

Examples of possible earthquakes (from Damage Estimates in Tokyo due to an Earthquake directly hitting Tokyo (April 2012))

In the case of an earthquake (M7.3) in the northern part of Tokyo Bay that causes maximum damage in Tokyo, it is expected that some areas will experience seismic intensity level 7, while approximately 70% of the Tokyo ward area will experience seismic intensity level 6-upper or higher. In addition to building damage and loss of life caused by the tremors and fires primarily in areas of the city where there are closely packed wooden houses, there are also expected to be many stranded persons who are unable to return home due to the interruption of public transportation, traffic congestion, and other problems. An earthquake that would produce the largest tsunami along the Tokyo coast would be a Genroku type Kanto Earthquake (M8.2) which would produce a T.P.* +2.61 meter tsunami at high tide.

* Tokyo Bay mean sea level

Estimated Damage to Tokyo

① Earthquake directly hitting Tokyo

(A) Damage Estimation

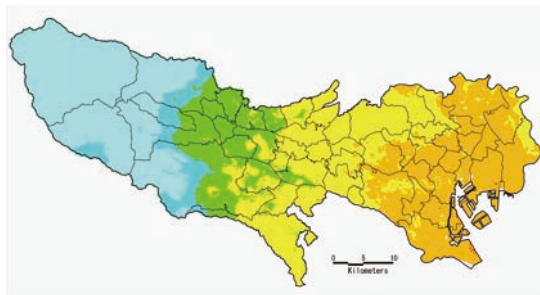
According to the Headquarters for Earthquake Research Promotion, within the next 30 years, there is a 70% chance of a large inland earthquake hitting the southern Kanto area, with an epicenter directly below the metropolitan area.

In the wake of the Great East Japan Earthquake, TMG made a sweeping review of the damage estimate officially announced in May 2006 and officially announced the "Damage Estimates in Tokyo due to an Earthquake directly hitting Tokyo" in April 2012. Its summary is as follows.

			(Earthquake directly hitting Tokyo)		(Submarine trench earthquake)	(Earthquake occurring in an active fault)
			Tokyo Bay North Area Earthquake (M7.3)	Earthquake beneath Tama (M7.3)	Genroku Type Kanto Earthquake (M8.2)	Tachikawa Fault Zone Earthquake (M7.4)
Casualties	By cause	Total Deaths	approx. 9,700	approx. 4,700	approx. 5,900	approx. 2,600
		Quake	approx. 5,600	approx. 3,400	approx. 3,500	approx. 1,500
		Fire	approx. 4,100	approx. 1,300	approx. 2,400	approx. 1,100
	By cause	Total Injured	approx. 147,600	approx. 101,100	approx. 108,300	approx. 31,700
		Severely injured	(approx. 21,900)	(approx. 10,900)	(approx. 12,900)	(approx. 4,700)
		Quake	approx. 129,900	approx. 96,500	approx. 98,500	approx. 27,800
		Fire	approx. 17,700	approx. 4,600	approx. 9,800	approx. 3,900
	Property Damage	By cause	Total Buildings Damaged	approx. 304,300	approx. 139,500	approx. 184,600
Quake			approx. 116,200	approx. 75,700	approx. 76,500	approx. 35,400
Fire			approx. 188,100	approx. 63,800	approx. 108,100	approx. 50,300
Evacuees (Peak: the following day)		approx. 3,390,000	approx. 2,760,000	approx. 3,200,000	approx. 1,010,000	

Stranded persons	approx. 5,170,000
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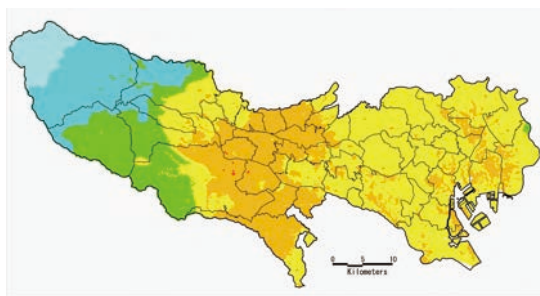
(B) Distribution of seismic intensities



Earthquake directly hitting Tokyo

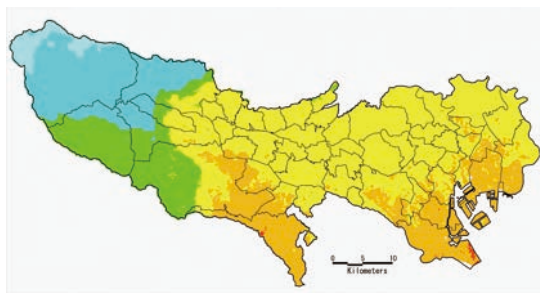
Tokyo Bay North Area Earthquake (M7.3)

The predicted surface seismic intensities are higher than in past estimates because it was discovered that the position of the Philippine Sea Plate is shallower than previously thought. This means that areas of seismic intensity level 7 are expected and approximately 70% of the Tokyo ward area is expected to experience a seismic intensity of 6-upper or higher.



Earthquake beneath Tama (M7.3)

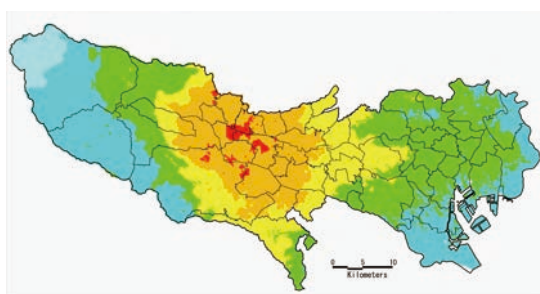
This estimate expects primarily a seismic intensity level of 6-upper because it was discovered that the position of the Philippine Sea Plate is shallower than previously thought. This means that some areas of seismic intensity level 7 are expected and approximately 40% of the Tama area is expected to experience a seismic intensity of 6-upper or higher.



Submarine trench earthquake

Genroku Type Kanto Earthquake (M8.2)

The surface intensity will be greatest on the south side of Tokyo, with Shinagawa Ward, Ota Ward, and Machida City mostly experiencing a seismic intensity level of 6-upper, although some level 7 areas are expected.



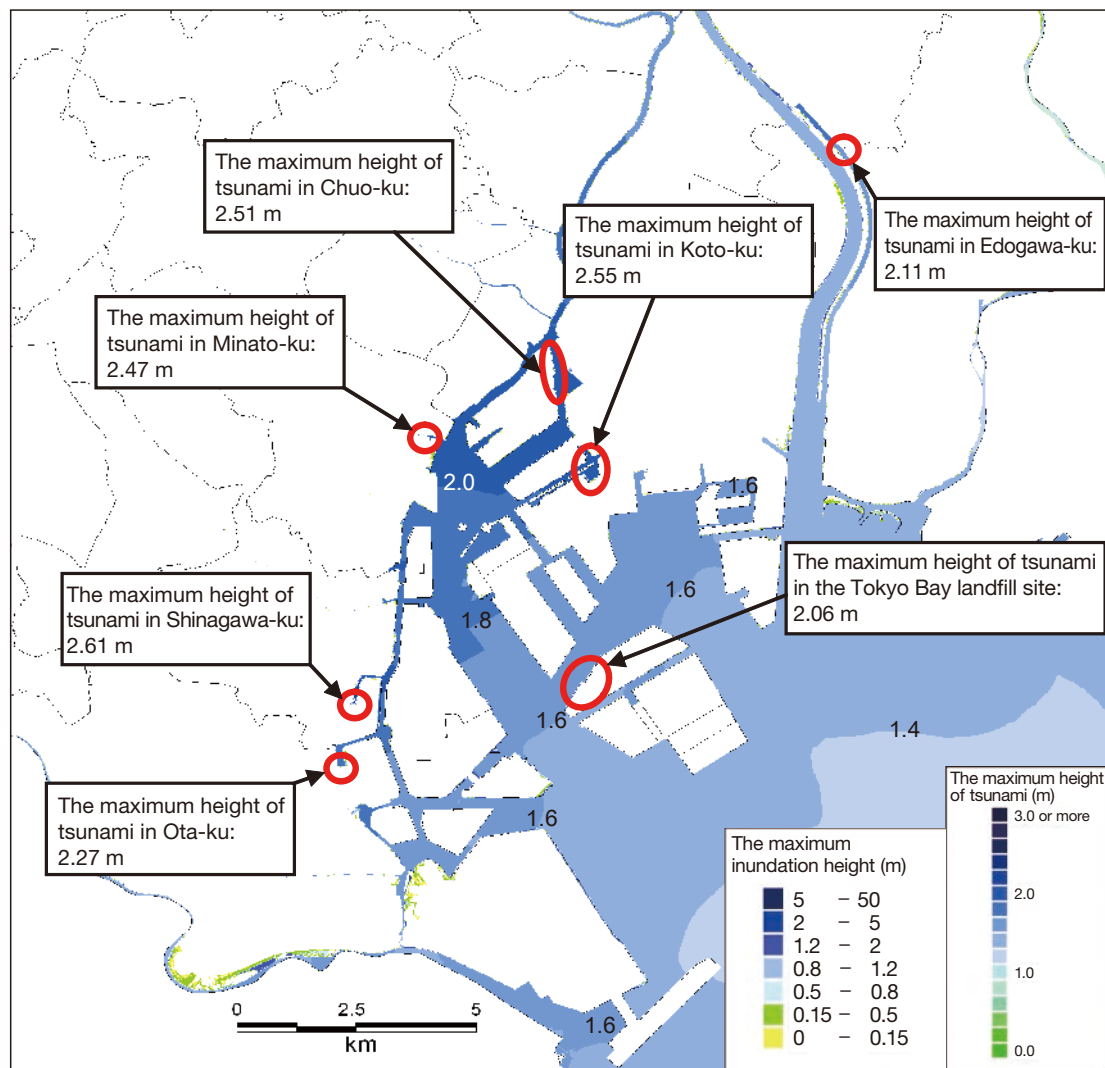
Earthquake occurring in an active fault

Tachikawa Fault Zone Earthquake (M7.4)

The surface seismic intensity level is expected to be 7 in the area centered on Tachikawa City. The Tama area will experience level 6-upper over a wide area, however most areas in the Tokyo wards will experience level 5-upper.

(C) Tsunami Damage Estimate due to the Genroku Type Kanto Earthquake

The simulation results of a tsunami caused by a Genroku Type Kanto Earthquake show the maximum height of a tsunami in the Tokyo Bay coastal areas is T.P. +1.9 m to +2.6 m in which the crustal movement was taken into consideration. The arrival time of the maximum wave height is about 2 hours and 20 minutes at the earliest. The area inundated with water in the entirety of Tokyo when floodgates are closed is small as it is approximately 4.8 km² and the main inundated locations will be waterside river beds.



Genroku Type Kanto Earthquake (M8.2) (A model by Namegaya et al. (2011))/The Maximum Height of Tsunami and the Maximum Inundation Height when Floodgates are Closed

② Major Nankai Trough Earthquake

(A) Damage Estimate

Japan recognizes the importance of specific preparations for a major Nankai Trough earthquake, and in particular of rapidly reinforcing the possible preparations centered on tsunami countermeasures. Based on this recognition, damage estimate results were announced in August 2012.

Tokyo conducted a detailed damage estimate for the minor islands which were expected to suffer severe damage in the national damage estimate results, and this estimate was announced in May 2013. A summary of the estimate results is shown below.

Summary of seismic damage

			Major Nankai Trough earthquake (*)		Genroku type Kanto earthquake (M8.2)	
			Winter, daytime	Winter, nighttime	Winter, daytime	Winter, nighttime
Casualties	By cause	Total deaths by cause	1,332	1,774	90	165
		Quake-related shaking	9	10	9	10
		Tsunami	1,323	1,764	81	155
	By cause	Total Injured	63	90	78	100
		(Severely injured)	(19)	(29)	(8)	(11)
		Quake-related shaking	20	25	74	90
		Tsunami	43	65	4	10
Property Damage	By cause	Total Buildings Damaged	1,282		294	
		Quake-related shaking	122		171	
		Tsunami	1,160		123	

* A major Nankai Trough earthquake is one which would cause maximum damage to Tokyo. The surface seismic intensity estimate is for M9.0 and the tsunami estimate is for M9.1.

(B) Distribution of Seismic Intensities

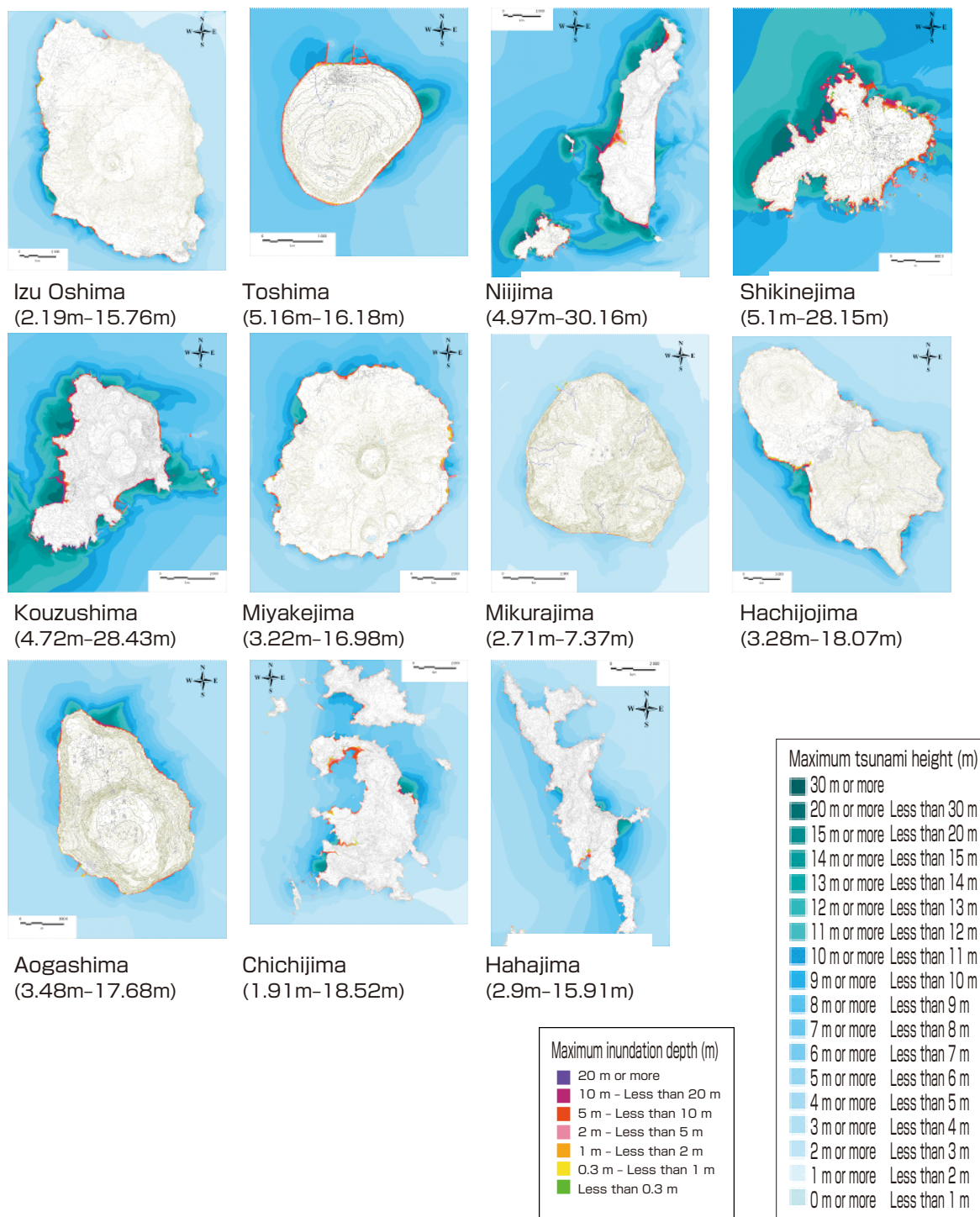
The following explains the distribution of seismic intensity during a Nankai megathrust earthquake. Some parts of the Izu Islands are expected to experience seismic intensity of 6-lower, while nearly all other areas should experience between a 3 and 5-upper. Seismic intensity in the Ogasawara Islands is expected to be less than 1.

In nearly all parts of the Tokyo wards and Tama area, the seismic intensity is expected to be from 5-upper to 5-lower, and the intensity is expected overall to be less than in the case of an earthquake directly hitting Tokyo.

(C) Tsunami Damage Estimate Due to a Major Nankai Trough Earthquake

The results from a simulation of the tsunami caused by a major Nankai Trough earthquake show that severe damage is expected, including a maximum tsunami height of T.P. +30.16 meters in the minor islands estimated with consideration for movement of the Earth's crust. In order to reduce the damage, it will be necessary to evacuate rapidly following the earthquake.

The maximum tsunami height at the Tokyo coast is expected to be T.P. +2.48 meters smaller than in the case of a Genroku type Kanto earthquake. The measures taken to prepare for other earthquakes will also serve as preparation for a major Nankai Trough earthquake.

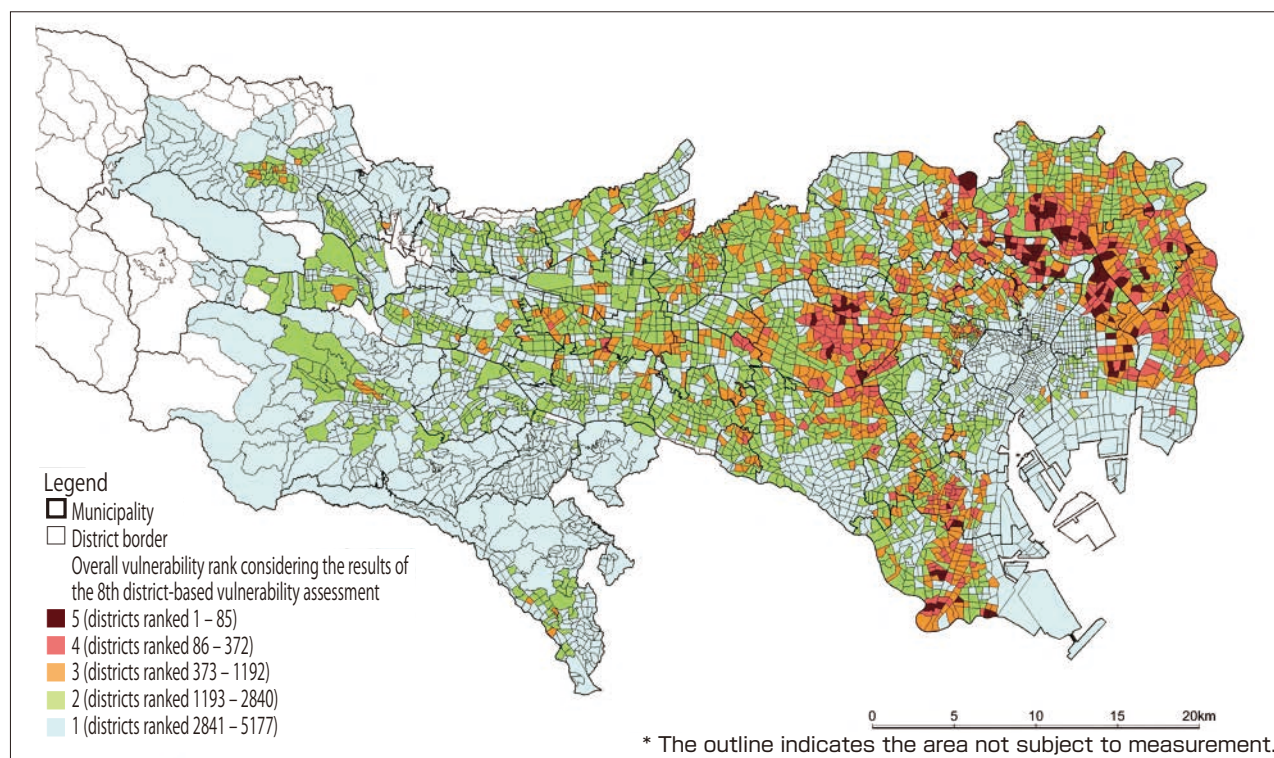


* Figures in parentheses indicate the maximum tsunami height at that island.

District-Based Earthquake Vulnerability Assessments

In accordance with “the Metropolitan Earthquake Disaster Prevention Ordinance (currently the Metropolitan Earthquake Disaster Management Ordinance),” TMG has conducted a series of district-based earthquake vulnerability assessments about every 5 years, since November 1975, when the first assessment result which covered the wards was published. The results of the eighth report were published in February 2018. In the assessment, 3 types of vulnerabilities are measured: structural vulnerability, fire vulnerability, and general vulnerability; and on a scale of 1 to 5, each of Tokyo's small community units is evaluated.

The overall danger level is assessed based on the degree of difficulty of carrying out activities following an earthquake .



Relationship Between Damage Estimation and District-Based Vulnerability

Damage Estimate in Tokyo Due to an Earthquake Directly Hitting Tokyo	District-Based Vulnerability
Damage is estimated under hypothesized conditions such as the most frequent earthquake type and the most vulnerable season, time, and weather.	Rather than focusing on a single region, the vulnerability of all of Tokyo's small community units are compared, if equally hit by an earthquake of a particular size.

For details, please look at https://www.toshiseibi.metro.tokyo.lg.jp/bosai/chousa_6/home.htm

Tokyo Liquefaction Hazard Map

The Tokyo Liquefaction Hazard Map which was created in FY1986 had been reviewed since FY2011, and a new hazard map was released in March 2013.

You can look at the Tokyo's Liquefaction Hazard Map from the following address.

<https://www.kensetsu.metro.tokyo.lg.jp/jigyo/tech/start/O3-jyouhou/ekijyouka/index.html>

The Tokyo Liquefaction Hazard Map was a guide created with the aim of indicating the probability of the occurrence of ground liquefaction and it is different from those that estimated the damage caused by specific earthquakes.

(2) Damage Caused by Wind and Rain

Current Situation

We have experienced every year natural disasters along with unprecedented heavy rain and typhoons all over the country possibly due to the effect of global climate change.

The Tokyo Metropolitan Government has steadily reduced flood damage by taking comprehensive measures through construction of river walls resistant to the rainfall of 50 mm per hour and upgrades to sewers as well as by city development. However, the number of times we experience rainfall over 50 mm per hour has been increasing in recent years. These torrential rains and typhoons have caused flood disasters.

Damage by Torrential Rain

In September 2005, Typhoon No. 14 and the autumn rain front caused torrential rain with precipitation of 100 mm/hr. in the western wards area. The Kanda River, the Myoshoji River, and the Zenpukuji River flooded, causing damage to about 6000 buildings in Suginami-ku, Nakano-ku, etc.; the Disaster Relief Act was applied.

Damage Caused by Typhoons

In October 2013, as Typhoon No. 26 approached, Moto-machi in the Oshima-machi district experienced torrential rain of 122.5 mm per hour and 24-hour rainfall of 824.0 mm, both of which are the highest figures ever recorded in the history of observation.

This rainfall caused large-scale landslides in the Moto-machi, Senzu, Okada, and other areas, causing a large number of casualties. Extensive damage was also caused to buildings, roads, lifelines, and other structures. Casualties in the Tokyo area caused by this typhoon were 40 persons dead or missing and 25 persons injured.

In October 2019, as Typhoon No. 19 approached, the west area of Tama experienced a record rainfall of 650 mm from 11 to 13 of October, and a special heavy rain warning was issued in 25 municipalities including the Tama area. In the Tokyo metropolitan area, 7 rivers such as Aki River flooded, while river walls of 4 rivers including Asa River collapsed at 10 different sites. About 850 houses were flooded above or below floor level in the Tokyo metropolitan area due to this Typhoon.



Prefectural Road Okutama-Akiruno Line
Left bank of Hirai River (Hinode Town)



Akigawa Yamada area (Akiruno-shi)



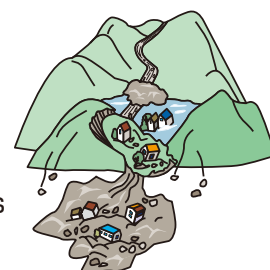
East Japan
Typhoon 2019 (Hagibis)

- **Typhoon:** A typhoon is a tropical low-pressure system of which the maximum wind speed is about 17 m/s or more among the tropical low-pressure systems developing in the north-western Pacific Ocean or the South China Sea.
- **Storm surge:** An offshore rise of water due to a typhoon or a strong wind. When the water level rises above the floodwalls, coastal areas and downriver lowlands may be flooded.
- **Torrential rain:** Concentrated heavy rain for several hours in the same location, resulting in a rainfall of 100 mm to several hundred millimeters, often involving heavy rain and thunder, lasting for many hours at any time of the day.

Disaster-Prone Locations

Caution is required in the following areas of Tokyo.

- For storm surges: Lands near a shoaling beach, at the end of a bay, or at the mouth of a river, coastal lands near sea level
- For floods: Alluvial (low-lying) plains and riverbanks
- For landslides: Reconstructed lands, alluvial fans, mountainous regions



(3) Volcanic Eruptions

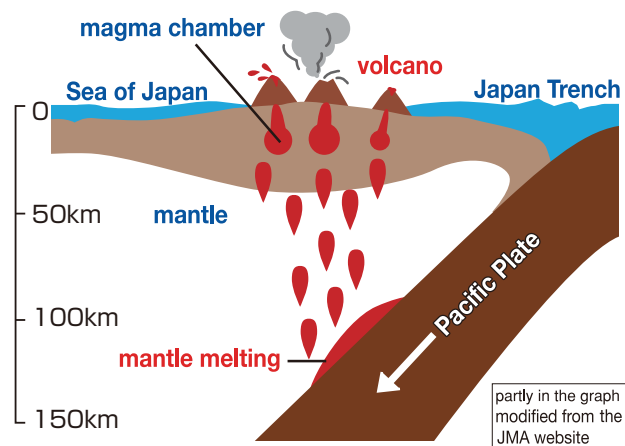
Mechanism of Volcanic Eruptions

A volcanic eruption, like an earthquake, occurs as a result of tectonic plate and mantle activities of the earth.

Volcanoes are generally found near tectonic plate boundaries (along a submarine trench, ridge, etc.), and at hotspots* in the interior of plates. For volcanoes in Japan, magma reaches the surface as rocks from the upper mantle, molten by fluids from the subducted oceanic plate, and rises and collects in magma chambers.

An eruption occurs when the volcanic crater opens and the gas pressure of the magma decreases, in turn producing gas bubbles and increasing the volume of the magma, which is forced to gush out. When the amount of gas bubbles is small, the magma gushes out as a lava flow.

*Places scattered inside the plates where magma springs up from the Earth's deep mantle.



Volcanoes in Tokyo

There are 21 volcanoes in Tokyo, out of the 111 nationwide. All of them are located on its islands; there are 8 volcanic islands which are inhabited. (Izu Oshima, Toshima, Niijima, Kouzushima, Miyakejima, Mikurajima, Hachiojima, Aogashima)

The most active among them in particular are Izu Oshima and Miyakejima. In the past 100 years, Izu Oshima has had three eruptions, at 36- to 38-year intervals, and Miyakejima has had four eruptions, at 17- to 22-year intervals. Cinders, volcanic ash, lava flows, and volcanic gases have caused direct and indirect damage, often necessitating evacuation.



Izu Oshima Eruption, 1986, photographed by Katsumasa Abe, University of Tokyo

Erupted year/month	Location	Summary
Nov. 1986	Izu Oshima	<ol style="list-style-type: none"> 1. A volcanic tremor was detected in the summer. 2. A flow of lava occurred from the crater at the peak to the bottom of the caldera. 3. Fissure eruption, lava fountain, and lava flow occurred on the caldera floor. Fissure eruption also occurred outside the outer rim and the stream of lava flowed into the area close to the inhabited area. 4. All residents (approx 10,000 people) were evacuated out of the island for about a month.
Jul.-Aug. 2000	Miyakejima	<ol style="list-style-type: none"> 1. There was an eruption from the peak; a caldera formed. 2. Cinders and ash were produced. 3. A low temperature pyroclastic flow was generated. 4. A large amount of volcanic gases was emitted. 5. All residents (approx 3,800 people) were evacuated out of the island for about 4 and half years.



Miyakejima Eruption, 2000, photographed by Keiji Takeiri

2. Routine Preparations

(1) Preparation at Home

In order to save your family's and your own life in the event of an earthquake, it is important to make the buildings quake resistant, to secure safety inside buildings, and to take appropriate action.

To do so, it is important that you acquire correct knowledge on earthquakes and make various preparations on a regular basis.

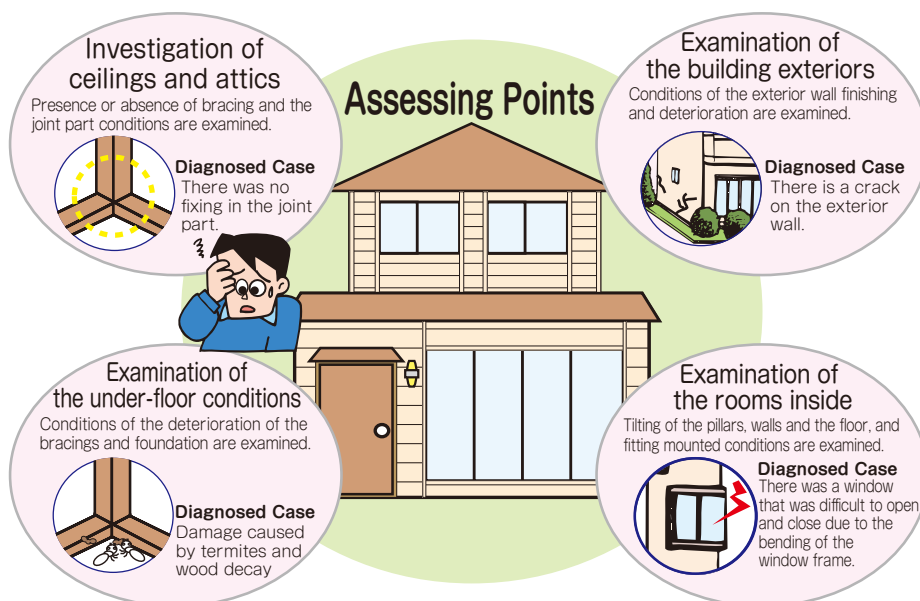
1. Conduct a safety check of your house

Approximately 90% of the deaths that occurred in the Great Hanshin-Awaji Earthquake were due to being crushed in building collapses.

Structures built before the introduction of new earthquake-resistance standards in the Building Standards Act (that took effect on June 1, 1981) are said to be less safe in the event of major earthquakes.

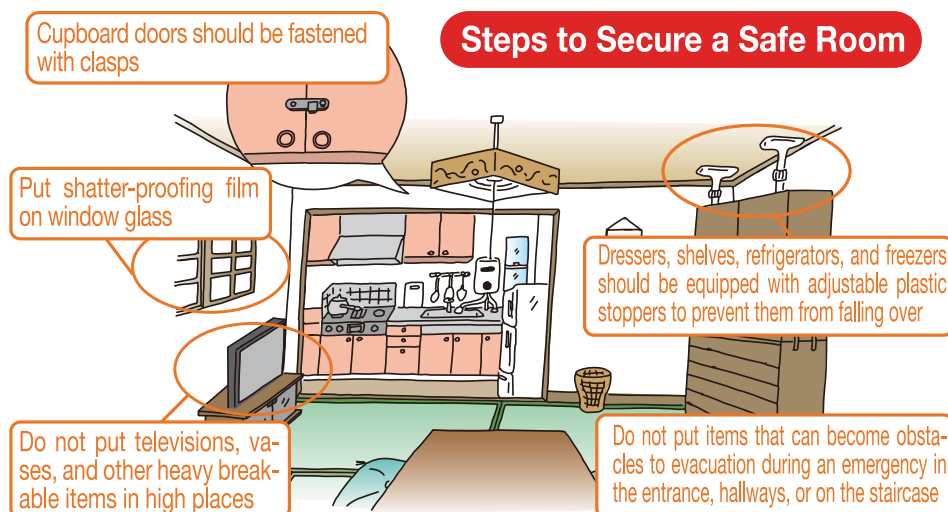
To check your building's seismic resistance, a seismic diagnosis is in order, followed by seismic repairs if necessary.

[Earthquake resistance assessment]



2. Conduct a safety check of rooms

- (1) Secure furniture and home appliances that could fall over or move around.
- (2) In storage closets, put heavy items on the bottom, light items on the top, and fasten the doors with a latch.
- (3) Apply shatter-prevention film to glass panels.
- (4) Keep slippers, exercise shoes, and work gloves close at hand in case you must walk through shattered objects.
- (5) Always keep doorways and exits free of clutter.



- (6) If you live high off the ground (about the 10th floor and above), take measures to prevent furniture from being moved by long-period ground motion and measures against large, slow swaying.

Some local governments provide assistance with earthquake resistance assessment and earthquake resistance reinforcement and introducing and installing devices to prevent furniture and appliances from falling over. For the municipal government contact information, please refer to page 63.

3. Please decide several ways to confirm safety

(Please refer to page 23 for details).

4. Prepare a stockpile of daily necessities

In the event of a large-scale disaster, take refuge at home if you are able to continue living in your home. To do so, it is useful to keep a “daily stockpile” by regularly stockpiling a little extra food and daily necessities for life during emergencies. The number of items and quantities you prepare should be based on the members of your household. (Please see page 48 for details.)



5. Always keep your car's fuel tank full.

In the event of a large-scale disaster, such as an earthquake directly below Tokyo, you may not be able to refuel your car. If you have a car, keep the following 3 things in mind in case of a disaster. Preparation may save your life.

- (a) Always be aware of what to do when a disaster occurs.
- (b) You may not always be able to refuel your car during a disaster.
- (c) Refuel before your fuel tank is less than 1/2 full.



6. Prepare an emergency bag

Prepare an emergency bag containing the minimum necessities you will need when staying at an evacuation center and keep the bag in a place that is easy to take with you at any time. In case you need assistance when evacuating, keep your emergency bag in a place that is easy to find by anyone assisting or rescuing you.

Emergency Bag Checklist

<input type="checkbox"/> Water, water bottles	<input type="checkbox"/> First aid kit	<input type="checkbox"/> Portable toilet	<input type="checkbox"/> Lighter
<input type="checkbox"/> Food	<input type="checkbox"/> Toothbrush	<input type="checkbox"/> Map	<input type="checkbox"/> Candles
<input type="checkbox"/> Emergency set, blanket		<input type="checkbox"/> Baby bottles	
<input type="checkbox"/> Clothing	<input type="checkbox"/> Flashlight	<input type="checkbox"/> Batteries	<input type="checkbox"/> Whistle
<input type="checkbox"/> Cash (small change)	<input type="checkbox"/> Portable radio	<input type="checkbox"/> Mobile phone charger	
<input type="checkbox"/> Savings bankbook	<input type="checkbox"/> Helmet, disaster prevention hood		
<input type="checkbox"/> Seal	<input type="checkbox"/> Work gloves	<input type="checkbox"/> Knife, can opener	

Check for these items!

7. Create and check an evacuation route map

- (1) Check where the evacuation areas and centers are located.
- (2) Actually walk to the evacuation area or center.
- (3) Narrow roads might become impassable due to being blocked by falling debris, so select wide roads. You might also want to prepare multiple routes.
- (4) Check the areas that could be dangerous, such as concrete block walls, bridges, stairways, etc.
- (5) Check the important facilities, such as the police box, government office, fire department, and hospitals.

Emergency power supply during a power outage

○Residential photovoltaic system (solar panels)

If you have solar panels installed on the roof of your home, you can use this electricity as an emergency power supply during a power outage.

The method for each system may vary depending on the manufacturer and model. Be sure to read the user manual or contact your installer or the system's manufacturer.



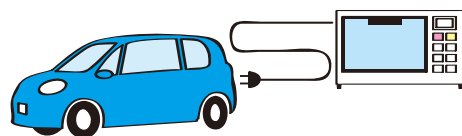
Electrical outlet supplied from solar panel (courtesy of NPO PV-Net)

○Electric vehicles, etc.

During a power outage, an electric vehicle (EV), fuel cell vehicle (FCV), or plug-in hybrid vehicle (PHV) can be used as an emergency power supply.

The method for each may vary depending on the make and model of the vehicle. In some instances, a special adapter may be needed. Be sure to check with a dealership or on the manufacturer's website.

(Tokyo Metropolitan Government provides a subsidy to defray the cost of purchasing an EV, FCV, or PHV.)



(Sample image)

8. Prepare fire extinguishers

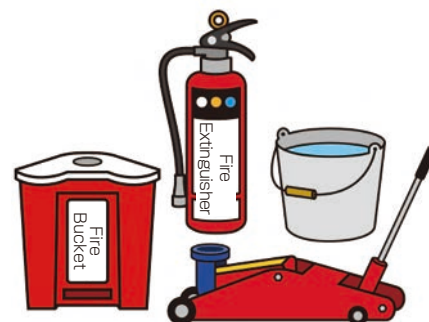
These are vital to prevent the outbreak and stop the spread of fires. As a result, make sure you have a fire extinguisher and smoke detectors, earth leakage circuit breaker, earthquake-detecting circuit breaker, etc. in your home.

Additionally, when evacuating, make sure to shut off your gas valve and turn off your circuit breaker.

- Fire extinguisher • Smoke detector • Earth leakage circuit breaker
- Earthquake-detecting circuit breaker, etc.* • Fire bucket
- Leave water in the bathtub • Jack and other tools.

*Earthquake-detecting circuit breakers are devices designed to shut off the electricity when they detect strong motion from earthquakes.

Using one alongside an earth leakage circuit breaker and having a fire extinguisher ready, helps reduce the likelihood of electric fire outbreak. They are available in multiple varieties, including outlet, circuit-breaker, simple types, etc. Different types include different points to keep in mind for use, such as ensuring that lights are kept on when the electricity is shut off, or for operation and maintenance, etc. When purchasing and installing one, be sure to select the right type for your living environment after fully understanding the features of the device.



9. Create emergency contact cards

Because conditions when a disaster occurs will be chaotic and it will be difficult to calmly take action, you should create cards with the necessary information for an emergency in advance (information such as contact information and telephone numbers of family members, and types, doses, and dosing methods of any medication which you take regularly).

10. Outline of Earthquake Insurance

Earthquake insurance is dedicated insurance aimed at compensating damage arising from fire, collapse, burial or destruction caused by an earthquake, eruption or resulting tsunami. An earthquake insurance policy is separate from fire insurance.

11. Liquid milk for infants

Breast milk is the basic nutrition source during infancy, but when it is not enough, or when breastfeeding is not possible, breast milk substitutes (powdered milk, liquid milk) can be used as a supplement.

For powdered milk during a disaster, you may find it difficult to secure water to prepare the milk and a heat source to boil it. On the other hand, liquid milk is useful during disasters because it does not need to be prepared, is sterilized and ready to use, and can be stored at room temperature (generally below 25°C).



(2) Preparation at Work

The “TMG ordinance covering measures for stranded persons” was enacted in April 2013.

TMG would like business establishments to store water and food for three days in order for the employees to stay in the facilities and to try to protect users at stations and customer facilities.

For more details about the ordinance, please refer to page 40.

Disaster Management Plan for Your Business

Regardless of their usage or scale, all business premises in Tokyo must have an independent disaster preparedness plan according to the Metropolitan Disaster Management Ordinance. For details on how to prepare a business premises disaster preparedness plan and so on, contact your local fire station.

Type of Workplace			Workplace Disaster Preparedness Plan Creation Instructions	Notification to fire department
Ordinance Article 10 Affected Workplace	General workplace	Workplaces stipulated in Article 36 of the Fire Service Act, which are required to select a disaster preparedness manager	Determine the required items from the items that should be prescribed in the workplace disaster preparedness plan that is part of the fire prevention plan related to disaster preparedness management.	Required
		Workplaces stipulated in Article 8 of the Fire Service Act and Article 55-3 of the Fire Prevention Ordinance, which are required to select a fire prevention manager	Determine the items that should be prescribed in the workplace disaster preparedness plan that is part of the fire prevention plan related to disaster preparedness management.	Required
		Workplace other than the above (small-scale workplace)	Create an independent workplace disaster preparedness plan.	Not Required
	Workplace containing hazardous materials	Dangerous facilities stipulated in Article 14-2 of the Fire Service Act, which are required to create preventative rules	Determine the items that should be prescribed in the workplace disaster preparedness plan that is part of the preventative rules.	Required
		Dangerous facilities other than the above	Create an independent workplace disaster preparedness plan.	Not Required
Article 11 Affected Workplaces	Business premises that are required to appoint a disaster prevention manager should create a fire defense plan that combines those relating to disaster management and fire management, and this should stipulate the items that need to be prescribed in the business premises disaster preparedness plan.		Determine the items that should be prescribed in the workplace disaster preparedness plan as a designated public institution.	Required

* Business premises that are required to appoint a disaster prevention manager should create a fire defense plan that combines those relating to disaster management and fire management, and this should stipulate the items that need to be prescribed in the business premises disaster preparedness plan.

* Business premises that need to prepare both a fire defense plan and preparedness regulations should prescribe the items that need to be covered by the disaster preparedness plan in the fire defense plan and preparedness regulations.

In accord with the fact that there were many stranded people at the time of the Great East Japan Earthquake, please determine the countermeasures for stranded persons in your workplace disaster preparedness plan.

Business operators should stipulate the control of employees returning home all together, ensuring of lines of communication for safety confirmations, storing a three day supply, rules on returning home during a disaster and so on, in the workplace disaster preparedness plan and be prepared for the an earthquake directly hitting Tokyo.



(3) Local Area Preparation

Lessons Learned from the Great East Japan Earthquake

Just as the self-help and mutual assistance provided by the people living in the area affected by the Great East Japan Earthquake were a great force for good during the disaster, it is important for people close by to help each other and for the nearest neighbors to help each other.

For this reason, let's make preparations in advance and conduct training on a routine basis so that the disaster preparedness related departments in the TMG and the local governments, volunteer fire companies, citizens disaster response team (volunteer disaster preparedness organizations), and other groups involved with local disaster preparedness can strengthen their mutual cooperation system to smoothly conduct the initial firefighting, rescue, relief, and evacuation activities during a disaster.



Routine Preparation

1. Strengthen interaction with the local community

- (1) Strengthen interaction with the local community by actively participating in the activities of the neighborhood association and training by citizens disaster response teams.
- (2) Having the elderly and disabled regularly participate in disaster preparedness activities helps the people in the local community understand that these people are limited in what they can do for themselves, and thus build the relationships necessary to provide aid to these people in an emergency.



2. Let's activate Disaster Preparedness Civic Organizations

Disaster preparedness civic organizations are organizations for systematically taking disaster preparedness measures for their local communities to "protect our community ourselves" through the mutual cooperation of local people.

Let's invite not only local residents but also local businesses, and participate in a variety of activities in the local community to involve in activities and utilize the organizational capabilities and power of businesses to improve the disaster preparedness of neighborhood organizations which are responsible for mutual assistance within the community, and increase our capability for self-help and mutual assistance.



Activity examples: Workshop on disaster prevention information, disaster prevention patrol and inspection, holding disaster drills, check of actions at the time of disaster: (PR, firefighting, rescue, evacuation guidance, food and water distribution, etc.)

* In addition to the above, Citizen Organizations for Disaster Prevention can make a plan for local districts to deal with a disaster according to their actual circumstances, and suggest implementation to local governments. Make disaster response plans in order to enhance the abilities of communities to respond with mutual support.

3. Volunteer fire companies

In the event of fire, civilian firefighters are those who volunteer to take part in fire fighting activities with a mission to "protect my city with my own hands" in cooperation with the firefighting department while engaging in work, study, housework, etc. In addition to firefighting, they will also be involved in lifesaving and rescue activities in the event of a disaster.



At normal times, the volunteer fire company members conduct firefighting and disaster prevention drills in their local communities to increase disaster prevention capabilities, including disseminating information on first-response fire fighting and first aid. For this reason, in addition to the male membership, many female volunteer fire company members play active roles.

In addition to being paid as part-time specialist local civil servants, members may also receive compensation for uniforms, any injuries incurred during their activities in public disasters, as well as through various award programs.

Volunteer fire companies comprise individuals of both genders, various ages and different occupations, such as company employees, self-employed persons, students and homemakers. Anyone living or working in the volunteer fire company's jurisdiction that is age 18 or older is eligible to join.

(Entry qualifications vary depending on the ward or municipality.)

3. Response During a Disaster

When an earthquake occurs, the most important objective is protecting your own life. Next, avoiding injury is important.

When you feel the tremors of an earthquake, your first priority is your own safety.

10 Tips for Earthquake Safety

10 Tips for Earthquake Safety

When you Feel A Quake Or Hear The Emergency Earthquake Warning...

1. Quake! Protect Yourself First!

- Be prepared and protect yourself from an earthquake when you hear an earthquake warning announcement or feel a quake.
- Stay under a large table until the quake has stopped.
Keep yourself safe from falling or moving objects during a quake.

High-rise Buildings with 10 or more floors

- Upper floors may be shaken for several minutes.
- Large, slow shakes may cause the furniture fall down or move across the room.



Right After An Earthquake

2. Keep Calm. Check All Fire Sources. Put Out Fires Quickly.

3. Keep Calm, Panic May Cause You Injuries.

- Be careful of furniture which has tipped over or fallen indoors, and also of glass shards and similar dangers.
- Do not rush outside, as roof tiles, window glass, signs, and other objects will be falling.



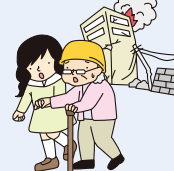
4. Make Sure You Have Ways Out: Open Doors And Windows

5. Keep Away from Gateposts and Walls.

After An Earthquake

6. Stay Away From Fire And Tsunami

- Take refuge in a temporary assembly spot or an evacuation area when a fire may threaten your life in the community.
- Leave the coast as soon as possible for a higher, safer place when you are hit by a big quake or hear a tsunami warning at the seaside.



7. Get The Right Information. Take The Right Action.

8. Make Sure Your Family And Neighbors Are Safe.

9. Work Together On Rescue And First Aid.

10. Make Sure Electricity And Gas Are Off Before Evacuation.

* Based on "10 Tips for Earthquake Safety," issued by the Tokyo Fire Department

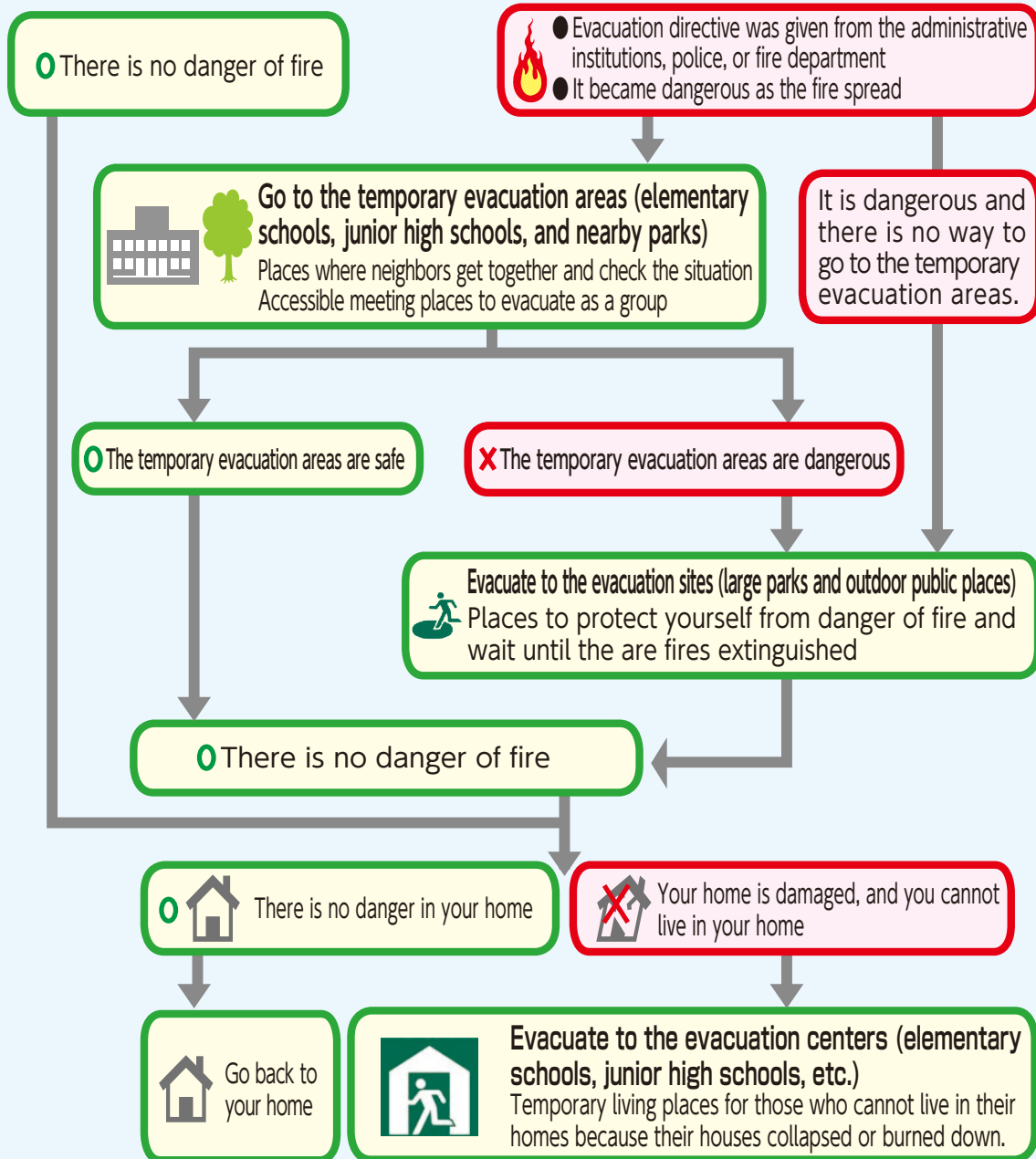
Reference Seismic intensity and human experience and behavior

Seismic intensity level	Human perception and reaction
4	Most people are startled. Felt by most people walking. Most people are awoken.
5 lower	Most people are frightened and feel the need to hold onto something stable.
5 upper	Many people find it hard to move; walking is difficult without holding onto something stable.
6 lower	It is difficult to remain standing.
6 upper	It is impossible to remain standing or move without crawling. People may be thrown through the air.
7	

* From "Tables explaining the JIMA Seismic Intensity Scale," Japan Meteorological Agency

Evacuation Flow When Earthquake Occurs

A large earthquake occurred



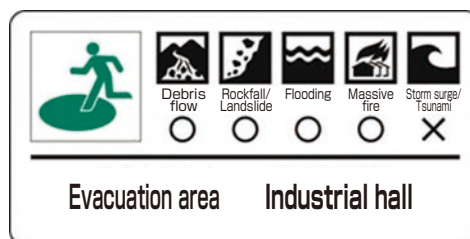
The evacuation methods vary depending on the municipality.
Please contact the section in charge of disaster preparedness in the municipality where you live (p.63).

Temporary evacuation areas

This is a place where neighborhood evacuees temporarily gather to check the conditions and form temporary evacuation groups before evacuating to the evacuation area. It is generally the grounds of a school, nearby park, or similar location where there is sufficient space to ensure the safety of the persons gathering there.

Evacuation area

This is a facility or open space such as a large park or public square that residents can evacuate to immediately in order to protect their lives from fires in the wake of an earthquake, inundation caused by storm and flood damage, and other such dangers. Designated evacuation areas are to be specified by disaster type, such as earthquake, tsunami, inland flooding, etc. by the municipal authorities. The above is a description of designated emergency evacuation sites based on the Basic Act on Disaster Management



<Reference: Hazard Specific Evacuation Guidance Sign System (JIS Z 9098)>
Evacuation Area Sign Description Examples

You can check the locations of designated evacuation areas on the Tokyo Disaster Prevention Maps on the websites of each ward or municipality or on the Tokyo Disaster Prevention website. See more about the Tokyo Disaster Prevention Maps on page 24.

The TMG has designated evacuation sites in the wards to safely protect residents from fires that could spread when an earthquake occurs, based on the Tokyo Metropolitan Ordinance for Earthquake Disaster Measures.

Please refer to the website of the Tokyo Metropolitan Government Bureau of Urban Development for more information on designated evacuation sites during fires caused by earthquakes.

Evacuation Center

1. What is an evacuation center?

- (1) It is a place to temporarily accept and protect the affected citizens whose homes collapsed or burned down due to an earthquake or the citizens who may actually suffer damage, and public facilities, etc., are designated as evacuation centers by the municipal authorities.
- (2) Often, the neighborhood elementary schools and junior high schools are designated as an evacuation center.
- (3) Medical care stations are set up in evacuation centers above a set number of people in size (about 500 or more people).
- (4) Evacuation center medical care stations have doctors, nurses, and others on standby to provide medical consultation, first aid, and simple medical care.
- (5) When the medical need exceeds the capability of the medical care stations, the person is relocated to a medical organization that can provide the needed care.
- (6) Public health nurses and others will make rounds visiting the evacuation centers to offer health consultations.

2. What is a social welfare institution evacuation shelter?

- (1) It is a social welfare facility or other facility that was designated in advance for temporarily accepting and protecting persons who require special assistance with living at home or in an evacuation center.
- (2) A social welfare institution evacuation shelter refers to a building that is not only earthquake and fire resistant and steel framed, but also one with a barrier free design taking into account the needs of vulnerable people.

Disaster prevention parks

These are municipal parks designated as an activity base for countermeasures against large earthquakes, and are used as evacuation areas and for rescue and relief units. Disaster prevention parks are equipped with lighting power sources such as solar power generation, disaster toilets connecting to underground toilet tanks, and wide roads to enable easy access by emergency vehicles.



3. To check the location of evacuation centers:

You can check the location of evacuation centers on the Disaster Prevention Map on the respective municipal websites and the TMG Disaster Prevention website. For details of the Tokyo Disaster Prevention Map, please refer to page 24.

4. Let's help each other while living in the evacuation center.

- (1) Life in the evacuation center is jointly run by the staff and the self-governing evacuees.
- (2) Let's follow the rules, divide up duties as much as possible, and help each other while living there.

4. Support for Persons Requiring Special Assistance

Persons who require special assistance are persons who are unable to smoothly and quickly carry out activities such as obtaining information, evacuating, and securing the means of living in the event of a disaster. There is also a risk that social assistance and other services which these persons previously used may be limited during the period of recovery after a disaster.

Therefore it is important to keep the principles of self-help and mutual assistance in mind, and to sufficiently prepare in advance according to the circumstances of each individual. This will reduce fear in the event of a disaster, and also prepare the conditions which will allow assistance to be more easily obtained.

Term Persons requiring special assistance during a disaster

This includes the elderly, disabled, seriously ill, infants, pregnant women and foreigners among others.



Routine Preparation

1. The elderly, physically disabled, infants and pregnant women, sick and injured people

- (1) Ensuring safety when a disaster occurs
e.g. Ensure rooms are safe, prevent furniture from falling over, prevent glass from shattering, etc.
- (2) Evacuation locations and evacuation methods
e.g. Check in advance by holding disaster preparedness training with your family and neighbors. Decide the methods to check on people's safety.
- (3) Secure the minimum required items for living in an evacuation center or living with assistance, etc.
e.g. Stockpile of emergency items and medicine (3 days' worth; recommended 1 weeks' worth. These items may be difficult to obtain.)

2. Persons with visual impairments

- (1) Preparation for when the familiar road textured block tiles or guidance equipment is damaged
e.g. Check multiple evacuation routes in advance. Ask family members or surrounding people for guidance when affected by a disaster.
- (2) Information gathering method when the usual means, such as television, telephone, radio, or the Internet cannot be used.
e.g. Ask in advance for help from people in the local community and have them check on how you are doing. When a disaster occurs, notify others about visual impairments, and ask surrounding people for information.
- (3) How to seek help if trapped inside your house.
e.g. Carry a whistle, anti-crime buzzer, etc., to call a person outside for help.

3. For people with hearing disabilities and intellectual disabilities

- (1) Countermeasures for the cases when communication cannot be smoothly conducted and requests cannot be informed
e.g. Prepare help cards and emergency contact cards explaining the details of support required in advance and plan necessary matters to deal with.

Cover: Tokyo Metropolitan Government standard format



Backside: Reference format

Please notify the persons below.
My name

- (A) Contact telephone No.
Contact organization name (if a company, organization, or similar body)
Name of the individual to contact
(B) Contact telephone No.
Contact organization name (if a company, organization, or similar body)
Name of the individual to contact

- (2) Actions to take when struck by a disaster when away from home, such as at work or school
e.g. Designate a meeting place in advance.

4. For foreigners

Prepare for situations in which there is trouble with communication and clearly stating needs is difficult by having "Help Cards for Foreign Residents", a handbook for foreign residents made by the Bureau of Citizens and Cultural Affairs, available for use.



5 types in 12 languages

- Japanese, English, Chinese, South-Korean and North-Korean (written in parallel)
- Japanese, Vietnamese, Tagalog (written in parallel)
- Japanese, Thai, Nepalese (written in parallel)
- Japanese, French, Burmese (written in parallel)
- Japanese, Spanish, Portuguese (written in parallel)

5. People with mental disorders

Mental disorders vary according to people; therefore, prepare to have the person with a mental disorder and his/her supporters tell the symptoms to others.

6. People with internal impediments

Since it is difficult to identify that the person has a disability, make preparations so the person can inform their medical care and nursing care needs to others.

7. People using artificial respirators at homes

- (1) Securing of items needed for treatment to be prepared for disasters and even electric outage

Assume that the treatment is to be continued at home and secure backup power for the medical device, a resuscitator bag, medical goods, care items, etc. in case of blackout (basically for seven days.).

- (2) Preparations in case evacuation or medical consultation is needed

Decide where to evacuate in advance such as facilities or a house of relatives/friends where there is emergency power system and secure supporters (two or more people) and measures for transportation.

Also, discuss with supporters (a primary doctor, home visiting nurse, health nurse, etc.) who to consult in case home care becomes difficult due to deteriorated physical conditions.

- (3) Confirmation of actions to be taken during a disaster

Discuss well and often with supporters on a regular basis about the response during a disaster and confirm each person's ability to take specific actions during a disaster.

- References: 1. "Guidelines for Manuals for Aiding People that Require Assistance During a Disaster"
2. What You Can Do for Children Before an Earthquake Strikes (For infant guardians)
3. Guidelines for Supporting People Using Artificial Respirators at Homes in Metropolitan Tokyo During a Disaster

(Prepared by the TMG Bureau of Social Welfare and Public Health)

Local Area Disaster Preparedness Measures

1. People requiring assistance

Actively work to create a place where you can meet your neighbors, so that they can learn about any assistance you may need.

You can also expand the circle of cooperation in your area by participating in disaster drills.

2. For neighbors and other people in the local community

Proactively interact on a regular basis with people in your local community who are elderly, have disabilities, or have other difficulties; accurately gather necessary information in advance; and prepare a support structure so that people with difficulties like these will not hesitate to ask for assistance in the event of an emergency.

Please strive to take these people's varying needs into consideration and regularly talk with them, offering them assistance.

Some people with invisible or difficult-to-notice disabilities or difficulties may wear a "Help Mark" or a "Maternity Mark" on their bodies to let others around them know of their condition. Please give consideration to people wearing these marks.



Maternity Mark Help Mark

5. Information for Use in Emergencies

(1) How to Check that Family Members and Others are Safe

In a disaster, ordinary telephones will be overwhelmed and it will be difficult to make a call. You should prepare multiple means of checking on the safety of family members and others in advance.

Trial experience is available!

- 1st and 15th of each month ● January 1st to 3rd
- Disaster Preparedness Week
(August 30th to September 5th)
- Disaster Preparedness and Volunteers' Week
(January 15th to 21st)

Leave or Listen to voice messages over the phone

Disaster Emergency Message Dial (171)

1. Dial 171
2. Press 1 for recording and 2 for playing
3. Press the destination telephone number from the area code
4. Record or play message

Disaster Voice Message Service

When you enter the mobile phone number of your family member from your mobile phone, smartphone, etc. the message you recorded will be transmitted to the mobile phone of your family. (Method of use is specific to each mobile phone carrier.)

If you want to transmit and check written messages;

Disaster message boards web 171

1. Access "web 171" on the Internet.
2. Input phone numbers (land-line phone, IP phone and mobile phone numbers) decided in advance, and register/confirm safety check message.

SNS (Social Network Services)

You can let your family and friends know you are safe just by posting your status (I'm safe!) on SNS including Twitter, Facebook, and LINE.

Disaster Message boards by mobile phone carriers

A disaster message board service is provided by mobile phone carriers. Messages can be registered from the site of your mobile phone carrier. Messages of other carrier's numbers can be also searched and checked.

Smartphone Apps Useful in Times of Disaster

Download them and get used to using them.



NTT docomo



au



softbank

Google Person Finder

1. Access "Google Person Finder" on the internet.
2. After entering the name, you can register and search for safety information.

J-anpi

You can collectively search for safety information provided by various disaster message boards, news media and companies.

1. Access "J-anpi" on the Internet.
2. Search with a phone number and a name.

(2) Obtaining Information After a Disaster

Tokyo Metropolitan Government Disaster Prevention Website

Provides information such as how to prepare in advance for a disaster and the damage which is expected to result from a disaster.

* Access by reading the QR code (right) with your mobile phone.



<https://www.bousai.metro.tokyo.lg.jp/>

Tokyo Metropolitan Government Disaster Prevention Twitter Account

In the event of a disaster, city evacuation information and information about facilities providing assistance for persons returning home, and other information will be tweeted in real time. If you have an account, follow us to be prepared for a disaster.



User name: @tokyo_bousai



Follow me!
Twitter @tokyo_bousai

Disaster Prevention Map

This disaster prevention map on the homepage of the Tokyo Metropolitan Government Disaster Prevention Homepage allows users to search for and display information about the locations of disaster preparedness facilities, information about the facilities, support stations for those attempting to return home during a disaster, and other information.

<https://map.bosai.metro.tokyo.lg.jp/>



Gas stations



Convenience stores, family restaurants, etc.



The sticker at left indicates shops which have concluded a cooperation agreement.



Icon	Facility name	Example	Function
	Temporary shelter	Tokyo Metropolitan Government facilities	Facility which temporarily accommodates stranded persons
	Evacuation center	Elementary schools, junior high schools, community centers, etc.	Places where persons who have lost their homes can live temporarily
	Evacuation areas	Parks, housing developments, universities, etc.	Places where people can evacuate to in order to escape from the danger of fire
	Support stations for those attempting to return home during a disaster	Convenience stores, fast food restaurants, family restaurants, etc.	Locations where tap water and toilets are available and where people can get information
	Disaster support stations	Gas stations	

(4) List of Emergency Water Supply Stations

To prepare in case of a long-term water outage due to the waterworks facilities being damaged by an earthquake or suffering from a power outage TMG has established emergency water supply stations at about 2 kilometer radius intervals. These emergency water supply stations consist of water purification plants, water supply stations, and emergency water tanks (facilities to provide drinking water after an earthquake), and emergency water tanks will be placed in parks, TMG school grounds, and other locations that are serving as evacuation area. For details, please refer to the Bureau of Waterworks website.

<https://www.waterworks.metro.tokyo.jp/kurashi/shinsai/ichiran.html>



This mark indicates a water station accessible during a disaster.

List of Emergency Water Supply Stations (Water Supply Points)

Current as of April 1, 2021

1. Water supply points in 23 wards of Tokyo (emergency water storage tanks, purification plants, water supply stations, etc.)

[Established by Bureau of Waterworks] (m³)			
No.	Municipality	Facilities	Reserved water volume
1	Chiyoda-ku	Togo Gensui Memorial Park ★	1,500
2		Hibiya Park ★	1,500
3		Tokyo Metropolitan Hitotsubashi High School ☆	100
4	Chuo-ku	Harumi Water Supply Station	1,300
5		Akatsuki Park ★	1,500
6		Horidome Children's Park ☆	100
7	Minato-ku	Shiba Water Supply Station	26,600
8		Aoyama Park ★	1,500
9		City Heights Katsurazaka (Minato-ku Disaster Prevention Activity Base) ☆	100
10	Shinjuku-ku	Yodobashi Water Supply Station	24,000
11		Tsurumaki Minami Park ★	1,500
12		Hyakunincho Fureai Park ★	1,500
13	Bunkyo-ku	Hongo Water Supply Station	20,000
14		Kyoikunomori Park ★	1,500
15		Ueno Park ★	1,500
16	Taito-ku	Sanyabori Hiroba in Sumida Park ☆	100
17		Bunka Park ★	1,500
18		Ryogoku Park ☆	100
19	Koto-ku	Kameido Water Supply Station	20,000
20		Toyoumami Water Supply Station	13,300
21		Koto Water Supply Station	22,000
22	Shinagawa-ku	Ariake Water Supply Station	6,600
23		Minamisuna 3-chome Park ★	1,500
24		Tatsuminomori Seaside Park ★	1,500
25	Meguro-ku	Togoshi Park ★	1,500
26		Shioji Park ★	1,500
27		Tokyo Metropolitan Yashio High School ☆	100
28	Ota-ku	Yakumo Water Supply Station	16,600
29		Rinshinomori Park ★	1,500
30		Magome Water Supply Station	12,080
31	Setagaya-ku	Kami-ikedai Water Supply Station	11,000
32		Tokai Water Supply Station	13,300
33		Nishiokugo 3-chome Park ★	1,500
34	Shibuya-ku	Haginaka Park ★	1,500
35		Tobori Park ★	1,500
36		Shimomaruko Park ★	1,500
37	Nakano-ku	Onnazuka-nakayoshi Park ☆	100
38		Kinuta Purification Plant	8,300
39		Kinutashimo Purification Plant	700
40	Suginami-ku	Wadabori Water Supply Station	20,300
41		Tamagawa Water Supply Station	20,000
42		Okura Water Supply Station	13,300
43	Suginami-ku	Komazawa Water Supply Station	3,200
44		Kodomonohiroba Park ★	1,500
45		Yoshine Park ★	1,500
46	Suginami-ku	Soshigaya Park ★	1,500
47		Nakamachi 2-chome Park ☆	100
48		Yoyogi Park ★	1,500
49	Suginami-ku	Tokyo Metropolitan First Commercial High School ☆	100
50		Kageoka Park ☆	100
51		Yayoi Park ☆	100
52	Suginami-ku	Egotanomori Park ☆	100
53		Mizunoto Park ☆	100
54		Suginami Purification Plant (Note 1)	0

(Note 1) The operation of Suginami Purification Plant has been suspended since December 28, 2016.

[Established by Bureau of Waterworks] (m³)			
No.	Municipality	Facilities	Reserved water volume
55	Suginami-ku	Izumi Water Pressure Regulating Place	2-5-23 Izumi 16,600
56		Kami-igusa Water Supply Station	3-22-12 Kami-igusa 60,000
57		Wadabori Park ★	2-26 Omiya 1,500
58	Suginami-ku	Sanshinomori Park ★	3-55 Wada 1,500
59		Shoei Park ★	1-12 Takaido-nishi 1,500
60		Igusamori Park ★	4-12-1 Igusa 1,500
61	Toshima-ku	Mabashi Park ☆	4-35-5 Koenji-kita 100
62		Zenpukuji River Green Space ☆	3-14 Narita-nishi 100
63		Nishi-Ikebukuro Park ★	3-20-1 Nishiikebukuro 1,500
64	Kita-ku	Tokyo Metropolitan Bunkyo High School ☆	1-1-5 Nishisugamo 100
65		Kirigaoka Central Park ★	1-8 Kirigaoka 1,500
66		Takinogawa Park ★	2-1 Nishigahara 1,500
67	Arakawa-ku	Kita Athletic Park ★	2-47-6 Kamiya 1,500
68		Minami-senju Water Supply Station	8-2-6 Minami-senju 33,300
69		Nippori Minami Park ★	5-19-1 Higashi-nippori 1,500
70	Itabashi-ku	Misono Purification Plant	2-10-1 Misono 15,600
71		Itabashi Water Supply Station	1-17-1 Kaga 26,600
72		Oyaguchi Water Supply Station	1-4 Oyaguchi 11,600
73	Nerima-ku	Johoku Central Park ★	1-1 Sakuragawa 1,500
74		Johoku Park ★	2-19-1 Sakashita 1,500
75		Tokyo Metropolitan Itabashi High School ☆	1-54-1 Oyaguchi 100
76	Nerima-ku	Akatsuka Park ☆	3-1 Takashimadaira 100
77		Nishitoku-daini Park ☆	3-42-1 Nishidai 100
78		Nerima Water Supply Station	2-4-1 Hikarigaoka 66,600
79	Nerima-ku	Oizumi Park ★	6-25 Oizumi-gakuencho 1,500
80		Gakuden Park ★	3-32 Toyotama-minami 1,500
81		Hayaichi Park ☆	1-47-11 Hayamiya 100
82	Adachi-ku	Minnano Hiroba Park ☆	8-41 Shakujimachi 100
83		Koemon Water Supply Station	3-8-1 Chuo Honcho 16,600
84		Adachi General Sports Center ★	2-27-1 Higashi-hokima 1,500
85	Adachi-ku	Senju Sports Park ★	2-1-1 Senju Midoricho 1,500
86		Suwagi-Higashi Park ★	3-25 Nishiarai 1,500
87		Oyata-Minami Park ★	4-42-1 Nakagawa 1,500
88	Katsushika-ku	Kita-Shikahama Park ★	3-26 Shikahama 1,500
89		Toneri Park ☆	1-1 Toneri Koen 100
90		Kita-Miyagicho Park ☆	2-37-1 Ogi 100
91	Katsushika-ku	Kohoku Water Supply Station	5-5 Kohoku 16,600
92		Kanamachi Purification Plant	1-1 Kanamachi-josuijo 48,700
93		Mizumoto Water Supply Station (Jiyu Hiroba in Mizumoto Park)	4 Mizumoto Koen 33,300
94	Edogawa-ku	Kami-chiba Park ★	3-25-1 Higashi-horikiri 1,500
95		Shinkoiwa Park ★	1-1-3 Nishi-shinkoiwa 1,500
96		Shibue Higashi Park ☆	2-15 Higashi-yotsugi 100
97	Edogawa-ku	Nishi-mizue Water Supply Station	1-26-2 Higashi-mizue 6,600
98		Kasai Water Supply Station	3-9 Kita-kasai 13,300
99		Shinozaki Park ★	1-25 Kami-shinozaki 1,500
100	Edogawa-ku	Ukita Central Park ★	4-15 Kita-kasai 1,500
101		Koiwa Park ★	6-43 Kita-koiwa 1,500
102		Ojima Komatsugawa Park ★	1-7 Komatsugawa 1,500
103	Edogawa-ku	Tokyo Metropolitan Kasai Minami High School ☆	1-1-1-1 Minami-kasai 100
104		Tentative name: Ichinoe 5-chome Park ☆	5-14 Ichinoe 100

Subtotal of reserved water volume in 23 wards [Established by Bureau of Waterworks] (104 places) 689,580

★ : Emergency water storage tank (1,500m³ tank)
☆ : Small-sized emergency water storage tank (100m³ tank)

[Under the jurisdiction of Urban Development Bureau, etc.]

No.	Municipality	Facilities	Address	Reserved water volume
105	Sumida-ku	Shirahige Higashi District Disaster Relief Facility	2 Tsutsumidori	2,700

※ The existing water storage tank in Shirahige Higashi District Disaster Relief Facility serves as a water supply point.

Total volume of reserved water in 23 wards (105 places)	692,280
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List of Emergency Water Supply Stations (Water Supply Points)

Current as of April 1, 2021

2. Water supply points in Tama District (emergency water storage tanks, purification plants, water supply stations, etc.)

[Established by Bureau of Waterworks]

(m³)

No.	Municipality	Facilities	Address	Reserved water volume
1		Yarimizu Water Supply Station	401 Yarimizu	1,660
2		Nishi-terakata Water Supply Station	1006-167 Nishi-terakatamachi	1,660
3		Hazama Water Supply Station	1994-478 Hazamamachi	5,000
4		Inume Daini Water Supply Station	710 Inumemachi	1,760
5		Takatsuki Water Supply Station	2240 Takatsukimachi	5,000
6		Sanda Water Supply Station	2240 Takatsukimachi	6,660
7		Higashi-asakawa Water Supply Station	674 Higashi-asakawamachi	4,330
8		Terada Water Supply Station	1359-4 Teradamachi	330
9		Motohachioji Water Supply Station	3-2750-487 Motohachiojimachi	150
10	Hachioji-shi	Kitano Water Supply Station	595-3 Kitanomachi	5,280
11		Nanyodai Water Supply Station	3-5-1 Nanyodai	330
12		Narahara Water Supply Station	1294-3 Naraharamachi	13,330
13		Akatsukicho Water Supply Station	3-3-1 Akatsukicho	830
14		Kuboyama Water Supply Station	2-15-1 Kuboyamacho	730
15		Ofuna Water Supply Station	3-56-1 Nanakuni	7,330
16		Yarimizu Oyama Water Supply Station	2-92 Yarimizu	23,330
17		Minami-osawa Water Supply Station	4-25 Minami-osawa	4,950
18		Ryonan Park	1572 Nagabusamachi	1,500
19		Kunugida Pump Station	545 Kunugidamachi	440
20		Shibasaki-cho Purification Plant	1-1-41 Shibasakicho	1,500
21		Sunagawa Central Purification Plant (Note 1)	3-11-7 Sunagawacho	0
22	Tachikawa-shi	Tachikawa Sakaecho Purification Plant	5-38-5 Sakaecho	330
23		Nishisuna Daiichi Purification Plant (Note 1)	2-53-14 Nishisunacho	0
24		Tachikawa Sunagawa Purification Plant	6-41-1 Sunagawacho	5,100
25		Matsunaka Park	1-19-12 Nishisunacho	100
26	Mitaka-shi	Kamirenjaku Purification Plant (West Water Distribution Station)	9-41-4 Kamirenjaku	5,430
27		Mitaka Shinkawa Purification Plant (East Water Distribution Station)	2-1-15 Shinkawa	3,330
28		Hinatawada Purification Plant	2-370 Hinatawada	880
29		Chigase Daini Purification Plant	1-69-1 Chigasemachi	200
30		Mitakesan Daiichi Water Supply Station	170-3 Mitakesan	70
31	Ome-shi	Nariki Water Supply Station	8-690-3 Nariki	30
32		Shinmachi Water Supply Station	5-24-1 Shinmachi	2,330
33		Futamatao Water Supply Station	5-107-2 Futamatao	70
34		Shiroyama Water Supply Station	6-95-1 Higashiome	1,440
35		Beigo Water Supply Station	2-578-1 Wadamachi	1,330
36		Fuchu Musashidai Purification Plant and Fuchu Musashidai Pump Station	2-7 Musashidai and 1-25 Musashidai	3,730
37	Fuchu-shi	Wakamatsu Water Station	4-10 Wakamatsucho	1,760
38		Saiwaicho Water Station (Note 2)	2-24 Saiwaicho	1,140
39		Fuchu Minami-cho Water Station	1-50 Minamicho	1,660
40		Musashino Park	3-2 Tamacho	1,500
41		Kami-Ishihara Purification Plant	1-34-7 Kami-ishiwa	1,120
42	Chofu-shi	Sengawa Purification Plant	3-6-27 Sengawacho	320
43		Jindaiji Purification Plant	5-56-1 Jindaiji Minamimachi	9,900
44		Chofu Nishimachi Water Supply Station	717 Nishimachi	6,660
45		Onoji Water Supply Station	2637-1 Onojimachi	6,330
46		Haramachida Purification Plant	5-13-3 Haramachida	520
47		Takinosawa Purification Plant	2-7-7 Asahimachi	1,880
48		Nozuta Purification Plant	3398 Nozutamachi	1,000
49	Machida-shi	Tsukushino Central Park	3-19 Tsukushino	1,500
50		Tsurukawa Central Park	6-6 Tsurukawa	100
51		Naruse Community Center	2-49-1 Nishinaruse	100
52		Tadao Park	1-3 Tadao	100
53		Miwa Central Park	3-21 Miwa Midoriyama	100
54		Onoji Water Supply Station	5-10-33 Kajinocho	1,300
55	Koganei-shi	Josui-minami Purification Plant	3-12-36 Josui Minamicho, Kodaira-shi	11,660
56	Kodaira-shi	Ogawa Purification Plant	1-847 Ogawacho	6,580
57		Tsuda Second Water Resource	3-39-3 Tsudamachi	1,200
58		Osakaue Purification Plant	1-17-11 Osakaue	650
59		Tamadaira Purification Plant	2-7-2 Tamadaira	3,660
60	Hino-shi	Hodokubo Water Supply Station	5-10-1 Hodokubo	6,700
61		Misawa Water Supply Station	905-2 Misawa	1,490
62		Hino Asahigaoka Water Supply Station	2-42-2 Asahigaoka	1,660

(Note 1) Sunagawa Central Purification Plant and Nishisuna Daiichi Purification Plant have ceased operation since August 14, 2002

(Note 2) Operation of the Saiwai-cho Purification Plant will be suspended until the end of March 2022 due to construction work.

(Note 3) Operation of the Misumi Water Supply will be suspended until September 2022 due to construction work.

(Note 4) Kiyose Asahigaoka Purification Plant has ceased operation since June 24, 2005.

(Note 5) Water transport supply base (water supply facility for vehicles such as water trucks)
The municipal elementary and junior high schools and evacuation areas will supply emergency water to individuals

[Established by Bureau of Waterworks]

(m³)

No.	Municipality	Facilities	Address	Reserved water volume
63		Yasaka Water Supply Station	5-4-46 Fujimicho	20,000
64	Higashi-murayama-shi	Higashi-murayama Purification Plant	2-20-236 Misumicho	36,000
65		Misumi Water Supply Station (Note 3)	2-13-4 Misumicho	2,020
66		Higashimurayama City Athletic Park	1-9-5 Ontacho	1,500
67		Akitsu Elementary School	3-48-1 Akitsucho	100
68		Higashi-koigakubo Purification Plant	2-5-8 Higashi-koigakubo	1,220
69	Kokubunji-shi	Kokubunji Kita-machi Second Purification Plant	4-1-5 Kitamachi	5,800
70	Kunitachi-shi	Kunitachi Naka Purification Plant	3-8-1 Naka	2,000
71		Yaho Purification Plant	1462-1 Yaho	2,000
72		Shibakubo Purification Plant	5-9-1 Shibakubocho	6,030
73	Nishitokyo-shi	Hoya-cho Purification Plant	1-5-24 Hoyacho	2,910
74		Nishitokyo Sakae-cho Purification Plant	2-7-6 Sakaecho	1,000
75	Fussa-shi	Fussa Musashinodai Purification Plant	2-32 Musashinodai	2,540
76		Myojinshita Park	1-12-1 Minami-den-en	1,500
77	Komae-shi	Izumi Honcho Purification Plant	4-6-1 Izumi Honcho	2,260
78		Kamikitadai Purification Plant	1-801-1 Kamikitadai	5,330
79	Higashiyamato-shi	Higashi-yamato Water Supply Station	3-44 Sakuragaoka	26,660
80		Kiyose Moto-machi Purification Plant	2-27-12 Motomachi	600
81	Kiyose-shi	Kiyose Asahigaoka Purification Plant (Note 4)	2-5-5 Asahigaoka	0
82		Kiyose City Third Nursery School	3-755-1 Asahigaoka	100
83	Higashiyamato-shi	Minamisawa Purification Plant	3-9-21 Minamisawa	3,330
84		Takiyama Purification Plant	6-1-1 Takiyama	1,960
85		Gakuen Water Supply Station	1-5-7 Gakuen	1,460
86	Musashinogawa-shi	Nakato Water Supply Station	2-1-3 Nakato	950
87		Nakahara Park	2-21-4 Nakahara	1,500
88		Sakuragaoka Purification Plant	4-10 Sakuragaoka	1,500
89		Ochiai Purification Plant	1-12 Nakazawa	100
90	Tama-shi	Atago Water Supply Station	2-51 Atago	1,140
91		Minamino Water Supply Station	2-16 Minamino	3,360
92		Hijirigaoka Water Supply Station	4-1 Hijirigaoka	14,000
93		Namiki Park	1551-1 Wada	1,500
94		Sakahama Purification Plant	816 Sakahama	1,510
95	Inagi-shi	Koyodai Water Supply Station	6-16 Koyodai	2,000
96		Wakabada Water Supply Station	1-19 Wakabada	2,160
97		Akirudai Water Supply Station	3-2-10 Akigawa	2,000
98		Sugao Water Supply Station	683 Sugao	2,000
99		Kamiyotsugi Purification Plant	407 Kamiyotsugi	200
100	Akiruno-shi	Tokura Water Supply Station	348-1 Tokura	1,660
101		Kominedai Water Supply Station	40 Kominedai	160
102		Ina Water Supply Station	372-3 Ina	130
103	Mizuho-machi	Ishihata Water Supply Station	2301 Ishihata	10,000
104	Hinode-machi	Bunkanomori Water Supply Station	3075 Hirai	2,000
Subtotal of reserved water volume in Tama District [Municipalities supplied by Bureau of Waterworks] (104 places)				355,250

[Municipalities not supplied by Bureau of Waterworks]

No.	Municipality	Facilities	Address	Reserved water volume
1	Musashino-shi	Daiichi Purification Plant (Note 5)	4-11-46 Kichioji Kitamachi	0
2		Daini Purification Plant (Note 5)	1-6-6 Sakurazutsumi	0
3	Akishima-shi	Western Water Supply Station	2-17-16 Midoricho	2,780
4		Eastern Water Supply Station	4-23 Asahicho	2,160
5	Hamura-shi	Daiichi Water Supply Station	2-18-5 Midorigaoka	2,060
6		Ozaku Purification Plant	4-2-1 Ozakudai	14,260
Subtotal of reserved water volume in Tama District [Municipalities not supplied by Bureau of Waterworks] (6 places)				21,260

Total volume of reserved water in Tama District (110 places) 376,510

★:Emergency water storage tank (1,500m³ tank)

☆:Small-sized emergency water storage tank (100m³ tank)

(5) List of Tokyo Disaster Base Hospitals

A Tokyo Disaster Base Hospital is a hospital that will provide hospitalization and treatment to mainly people who are seriously injured. A total of 84 hospitals have received this designation to ensure people who are seriously injured during a disaster can receive appropriate medical treatment.

As of April 1, 2021

Secondary Medical Care Zone	Facility Name	Location	Telephone Number	Number of Hospital Beds	Tertiary Emergency	Heliport	Tokyo DMAT
Central	Nihon University Hospital	1-6 Surugadai, Kanda, Chiyoda-ku	03 - 3293 - 1711	320	○		○
	Mitsui Memorial Hospital	1 Kanda-Izumi-cho, Chiyoda-ku	03 - 3862 - 9111	482			
	St Luke's International Hospital	9-1 Akashi-cho, Chuo-ku	03 - 3541 - 5151	520	○		○
	Tokyo Saiseikai Central Hospital	1-4-17 Mita, Minato-ku	03 - 3451 - 8211	535	○		
	The Jikei University Hospital	3-19-18 Nishishinbashi, Minato-ku	03 - 3433 - 1111	1,074			
	Kitasato University Kitasato Institute Hospital	5-9-1 Shiragane, Minato-ku	03 - 3444 - 6161	329			
	Toranomon Hospital	2-2-2 Toranomon, Minato-ku	03 - 3588 - 1111	819			
	☆ Nippon Medical School Hospital	1-1-5 Sendagi, Bunkyo-ku	03 - 3822 - 2131	877	○	○	○
	Metropolitan Komagome Hospital	3-18-22 Honkomagome, Bunkyo-ku	03 - 3823 - 2101	815			
	Juntendo University Hospital	3-1-3 Hongou, Bunkyo-ku	03 - 3813 - 3111	1,051		○	
	Tokyo Medical and Dental University Medical Hospital	1-5-45 Yushima, Bunkyo-ku	03 - 3813 - 6111	753	○	○	○
	The University of Tokyo Hospital	7-3-1 Hongou, Bunkyo-ku	03 - 3815 - 5411	1,226	○	○	
	Eiju General Hospital	2-23-16 Higashiueno, Taitou-ku	03 - 3833 - 8381	400		○	
Central South	Showa University Hospital	1-5-8 Hatanodai, Shinagawa-ku	03 - 3784 - 8000	815	○		○
	NTT Medical Center Tokyo	5-9-22 Higashigotanda, Shinagawa-ku	03 - 3448 - 6111	594			
	☆ Toho University Omori Medical Center	6-11-1 Omorinishi, Ota-ku	03 - 3762 - 4151	916	○		○
	Omori Red Cross Hospital	4-30-1 Chuo, Ota-ku	03 - 3775 - 3111	344		○	
	Ebara Hospital, Tokyo Metropolitan Health and Hospitals Corporation	4-5-10 Higashiyukigaya, Ota-ku	03 - 5734 - 8000	461		○	
	Tokyo Rosai Hospital	4-13-21 Omori-minami, Ota-ku	03 - 3742 - 7301	400		○	
Central South-West	Ikegami General Hospital	6-1-19 Ikegami, Ota-ku	03 - 3752 - 3151	384			
	Tokyo Medical Center	2-5-1 Higashigaoka, Meguro-ku	03 - 3411 - 0111	688	○		○
	Shiseikai Daini Hospital	5-19-1 Kamisoshigaya, Setagaya-ku	03 - 3300 - 0366	301			
	Kanto Central Hospital of the Mutual Aid Association of Public School Teachers	6-25-1 Kamiyoga, Setagaya-ku	03 - 3429 - 1171	403			
	Tokyo Metropolitan Matsuzawa Hospital	2-1-1 Kamikitazawa, Setagaya-ku	03 - 3303 - 7211	898		○	
	Nissan Tamagawa Hospital	4-8-1 Seta, Setagaya-ku	03 - 6432 - 7428	381			
	★ Tokyo Metropolitan Hiroo Hospital	2-34-10 Ebisu, Shibuya-ku	03 - 3444 - 1181	426	○	○	○
Central West	Japanese Red Cross Medical Center	4-1-22 Hiroo, Shibuya-ku	03 - 3400 - 1311	701	○	○	○
	☆ Tokyo Medical University Hospital	6-7-1 Nishishinjuku, Shinjuku-ku	03 - 3342 - 6111	904	○		○
	Keio University Hospital	35 Shinanomachi, Shinjuku-ku	03 - 3353 - 1211	946			
	Tokyo Women's Medical University Hospital	8-1 Kawada-cho, Shinjuku-ku	03 - 3353 - 8111	1,193	○	○	○
	Ohkubo Hospital, Tokyo Metropolitan Health and Hospitals Corporation	2-44-1 Kabuki-cho, Shinjuku-ku	03 - 5273 - 7711	304			
	Center Hospital of the National Center for Global Health and Medicine	1-21-1 Toyama, Shinjuku-ku	03 - 3202 - 7181	763	○		
	Tokyo Yamate Medical Center	3-22-1 Hyakunin-cho, Shinjuku-ku	03 - 3364 - 0251	418			
	Tokyo Shinjuku Medical Center	5-1 Tsukudo-cho, Shinjuku-ku	03 - 3269 - 8111	520			
	Nakano General Hospital	4-59-16 Chuo, Nakano-ku	03 - 3382 - 1231	296			
	Tokyo Metropolitan Police Hospital	4-22-1 Nakano, Nakano-ku	03 - 5343 - 5611	415			
Central North-West	Ogikubo Hospital	3-1-24 Imagawa, Suginami-ku	03 - 3399 - 1101	252		○	
	Kosei Hospital	2-25-1 Wada, Suginami-ku	03 - 3383 - 1281	340			
	Tokyo Metropolitan Ohtsuka Hospital	2-8-1 Minamiohtsuka, Toshima-ku	03 - 3941 - 3211	508			
	Tokyo-Kita Medical Center	4-17-56 Akabane-dai, Kita-ku	03 - 5963 - 3311	343			
	Nihon University Itabashi Hospital	30-1 Oyaguchikami-cho, Itabashi-ku	03 - 3972 - 8111	1,025	○		○
	☆ Teikyo University Hospital	2-11-1 Kaga, Itabashi-ku	03 - 3964 - 1211	1,078	○	○	○
	Tokyo Metropolitan Geriatric Hospital and Institute of Gerontology	35-2 Sakae-cho, Itabashi-ku	03 - 3964 - 1141	550			
	Toshima Hospital, Tokyo Metropolitan Health and Hospitals Corporation	33-1 Sakae-cho, Itabashi-ku	03 - 5375 - 1234	438			
	Nerima Hikarigaoka Hospital	2-11-1 Hikarigaoka, Nerima-ku	03 - 3979 - 3611	342			
Central North-West	Juntendo University Nerima Hospital	3-1-10 Takanodai, Nerima-ku	03 - 5923 - 3111	490			

Secondary Medical Care Zone		Facility Name	Location	Telephone Number	Number of Hospital Beds	Tertiary Emergency	Heliport	Tokyo DMAT
Central North-East	☆	Tokyo Women's Medical University Medical Center East	2-1-10 Nishioku, Arakawa-ku	03 - 3810 - 1111	450	○		○
		Nishiarai Hospital	1-12-12 Nishiaraihoncho, Adachi-ku	03 - 5647 - 1700	196			
		Sonoda Daiichi Hospital	4-1-12 Takenotsuka, Adachi-ku	03 - 3850 - 5721	221			
		Hakujikai Memorial Hospital	5-11-1 Shikahama, Adachi-ku	03 - 3899 - 1311	306			
		Jikei University School of Medicine Aoto Hospital	6-41-2 Aoto, Katsushika-ku	03 - 3603 - 2111	369			
		Tobu Chiiki Hospital, Tokyo Metropolitan Health and Hospitals Corporation	5-14-1 Kameari, Katsushika-ku	03 - 5682 - 5111	314			
		Heisei Tateishi Hospital	5-1-9 Tateishi, Katsushika-ku	03 - 3692 - 2121	203			
Central East	☆	Tokyo Metropolitan Bokutoh Hospital	4-23-15 Kotobashi, Sumida-ku	03 - 3633 - 6151	765	○	○	○
		Tokyo Hikifune Hospital	2-27-1 Higashimukojima, Sumida-ku	03 - 5655 - 1120	200			○
		Koto Hospital	6-8-5 Oshima, Koto-ku	03 - 3685 - 2166	286			
		Juntendo Tokyo Koto Geriatric Medical Center	3-3-20 Shinsuna, Koto-ku	03 - 5632 - 3111	404			
		The Cancer Institute Hospital of JFCR	3-8-31 Ariake, Koto-ku	03 - 3520 - 0111	686		○	
		Showa University Koto Toyosu Hospital	5-1-38 Toyosu, Koto-ku	03 - 6204 - 6000	400			
		Tokyo Rinkai Hospital	1-4-2 Rinkai-cho, Edogawa-ku	03 - 5605 - 8811	400			
		Edogawa Hospital	2-24-18 Higashikoiwa, Edogawa-ku	03 - 3673 - 1221	418			
		Moriyama Memorial Hospital	4-3-1 Kitakasai, Edogawa-ku	03 - 5679 - 1211	293			
Tama West	☆	Ome Municipal General Hospital	4-16-5 Higashiome, Ome-shi	0428 - 22 - 3191	529	○	○	○
		Akiru Municipal Medical Center	78-1 Hikida, Akiruno-shi	042 - 558 - 0321	305			
		Fussa Hospital	1-6-1 Kamidaira, Fussa-shi	042 - 551 - 1111	316			
Tama South	☆	Tokyo Medical University Hachioji Medical Center	1163 Tatemachi, Hachioji-shi	042 - 665 - 5611	610	○	○	○
		Tokai University Hachioji Hospital	1838 Ishikawa-cho, Hachioji-shi	042 - 639 - 1111	500		○	○
		Nippon Medical School Tama Nagayama Hospital	1-7-1 Nagayama, Tama-shi	042 - 371 - 2111	405	○		○
		Tama-Nambu Chiiki Hospital, Tokyo Metropolitan Health and Hospitals Corporation	2-1-2 Nakazawa, Tama-shi	042 - 338 - 5111	287			
		Inagi Municipal Hospital	1171 Oamaru, Inage-shi	042 - 377 - 0931	290			
		Machida Municipal Hospital	2-15-41 Asahimachi, Machida-shi	042 - 722 - 2230	447			
		Minami-Machida Hospital	4-4-1 Tsuruma, Machida-shi	042 - 799 - 6161	222			
		Hino Municipal Hospital	4-3-1 Tamahira, Hino-shi	042 - 581 - 2677	300			
Kita-Tama West	★	Disaster Medical Center	3256 Midori-cho, Tachikawa-shi	042 - 526 - 5511	455	○	○	○
		Tachikawa Hospital	4-2-22 Nishikicho, Tachikawa City	042 - 523 - 3131	450			
		Higashiyamato Hospital	1-13-12 Minamimachi, Higashiyamato-shi	042 - 562 - 1411	284			
Kita-Tama South		Japanese Red Cross Musashino Hospital	1-26-1 Kyonan-cho, Musashino-shi	0422 - 32 - 3111	611	○	○	○
	☆	Tokyo Metropolitan Tama Medical Center	2-8-29 Musashinodai Fuchu-shi	Main : 042 - 323 - 5111	889	○	○	○
				Infant : 042 - 300 - 5111	561			
		Kyorin University Hospital	6-20-2 Shinkawa, Mitaka-shi	0422 - 47 - 5511	1,153	○	○	○
		Jikei University School of Medicine Daisan Hospital	4-11-1 Izumihoncho, Komae-shi	03 - 3480 - 1151	581			
Kita-Tama North	☆	Showa General Hospital	8-1-1 Hanakoganei, Kodaira-shi	042 - 461 - 0052	485	○		○
		Sassa General Hospital	4-24-15 Tanashi-cho, Nishitokyo-shi	042 - 461 - 1535	183			
		Tama-Hokubu Medical Center, Tokyo Metropolitan Health and Medical Treatment Corporation	1-7-1 Aoba-cho, Higashimurayama-shi	042 - 396 - 3811	337			
		Tokyo National Hospital	3-1-1 Takeoka Kiyose-shi	042 - 491 - 2111	522			
Total		Total of 84 facilities			43,426	26	23	25

The ★ symbol shows core disaster medical hospitals and ☆ symbol indicates that it is a local core disaster base medical center.

"Tertiary emergency" means a critical care center or other facility that provides tertiary emergency care.

"Heliport" means an emergency landing place for a helicopter.

Tokyo DMAT refers to Tokyo DMAT designated hospitals.

6. Primary Measures Taken by the Tokyo Metropolitan Government

(1) Promotion of Earthquake-Resistant Structures

TMG Plan for Promotion of Renovation for Earthquake-Resistant Structures

“The TMG Plan for Promotion of Renovation for Earthquake-Resistant Structures” is being developed based on the laws relating to the promotion of renovation for earthquake-resistant structures of buildings with the aim of protecting the lives and properties of Tokyo citizens, systematically and comprehensively promoting quake-resilience inspections and quake-resistant renovation of homes and buildings, and creating a Tokyo that is resistant to disasters.

Type of Building	Current Status *1	Target
Designated Buildings Along Emergency Transportation Roads	December 2020 : 91.6%	End of FY2025 *2
Buildings Along Emergency Transportation Roads	June 2020 : 84.1%	End of FY2025 Quake-resistance rate: 90% *3
Housing	March 2020 : 92.0%	End of FY2025 Insufficient earthquake resistance in housing largely eliminated
Apartment Buildings	March 2020 : 94.4%	End of FY2025 Insufficient earthquake resistance in apartment buildings largely eliminated
Main Public Housing	March 2020 : 91.9%	End of FY2025 Insufficient earthquake resistance in housing largely eliminated
Tokyo Public Housing	March 2020 : 95.9%	End of FY2025 Quake-resistance rate: 100%
Designated Buildings	March 2020 : 88.4%	End of FY2025 Quake-resistance rate: 95% *4
Large-scale buildings requiring emergency safety confirmation	March 2020 : 94.0%	End of FY2025 Insufficient earthquake resistance in buildings largely eliminated
Public Buildings Important for Disaster Prevention	March 2020 : 98.5%	100% (To be completed as soon as possible)
TMG-owned buildings	March 2020 : 99.9%	End of FY2022 Quake-resistance rate: 100%
Tokyo Disaster Base Hospitals *5	September 2019 : 96.3%	End of FY2025 Quake-resistance rate: 100%
Private Social Welfare Facility *6	March 2018 : 91.3%	End of FY2030 Insufficient earthquake resistance in buildings largely eliminated (quake-resistance rate of owned buildings: 100%)
Nursery Center	March 2018 : 98.7%	
Private Schools *7	April 2020 : 95.8%	100% (To be completed as soon as possible)
Masonry Walls *8		End of FY2025 Insufficient earthquake resistance largely eliminated

(According to the Tokyo Earthquake-Resistance Promotion Plan, partially revised March. 2021)

*1 The current figures show the overall achievement rate for buildings along designated emergency transport roads, and the quake-resistance rate for other buildings.

*2 We aim to achieve an overall reach rate of 99% and to eliminate areas whose regional reach rate is under 95%, thereby achieving a comprehensive reach rate of 100% by 2035.

*3 The goal is to achieve 100% earthquake resistance after the end of FY2025, and the specific target year and values will be determined in the next revision of the plan.

*4 Targets for specific buildings after the end of FY2025 will be determined at the next revision of the plan.

*5 The number of base disaster hospital (including metropolitan and public hospitals) buildings that are earthquake-resistant is the number of medical institutions that have started earthquake-proofing all buildings used by patients (as of September 1, 2019)

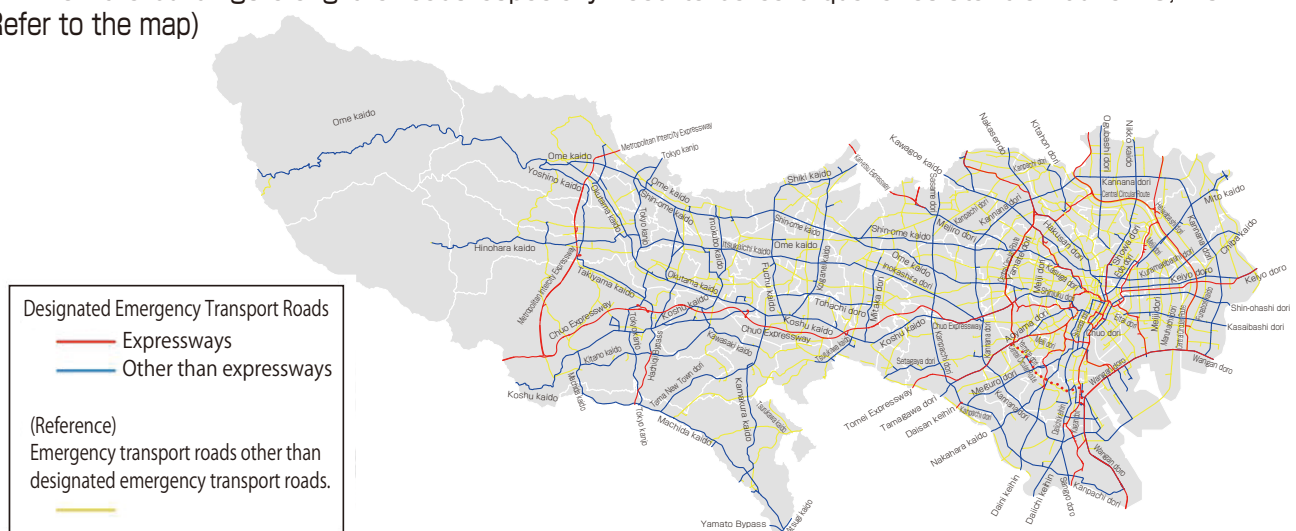
*6 The current quake-resistance rate of private social welfare facilities, etc. and nursery centers is as of March 31, 2019 (calculated by the TMG based on the number of valid responses to a survey conducted by the Ministry of Health, Labour and Welfare), and owned means that the building is owned by the facility operator.

*7 The earthquake-resistance status of private schools is the total of high schools, elementary schools, junior high schools, special-needs schools, kindergartens, and certified child-care centers (as of April 1, 2020).

*8 Masonry walls that obstruct traffic

Securing Functions of Designated Emergency Transport Roads

In order to prevent the buildings along the emergency transportation roads from collapsing due to an earthquake and blocking the roads and to secure the function of the roads, which are essential for the rescue work during an earthquake disaster and reconstruction, TMG enforced the “Ordinance to Promote Renovation for Earthquake Resistant Structure of the Buildings Along the Emergency Transportation Roads in Tokyo” in April 2011 and designated the roads (Designated Emergency Transportation Roads) for which the buildings along the roads especially need to be earthquake-resistant on June 28, 2011. (Refer to the map)



Total length of Designated Emergency Transport Roads: Approx. 1,000 km
Total buildings along Designated Emergency Transport Roads: Approx. 5,000

Owners of buildings along designated emergency transport roads are required to have earthquake resistance assessments made of their buildings

Since the emergency transport roads are the main arteries for rescue and relief, firefighting activities, materials transport, and restoration and recovery, it is very important to prevent them from being blocked by collapsed buildings to protect the lives and property of citizens and to keep metropolitan Tokyo functioning. For this reason, TMG has designated particular important roads as “designated emergency transport roads” and requires that all buildings along roads to which the set conditions apply (designated road buildings) be given earthquake resistance assessments and is providing financial assistance for this.



Ordinance to Promote Earthquake Proofing of Buildings Along Emergency Transport Roads in Tokyo

June 28, 2011 Public notice of designation of designated emergency transport roads
 October 1, 2011 Start of requirement to report earthquake resistance status
 April 1, 2012 Start of requirement to conduct earthquake resistance assessment
 February 6, 2015 Began publishing buildings yet to undergo earthquake resistance diagnosis
 March 29, 2018 Published results of earthquake resistance diagnosis

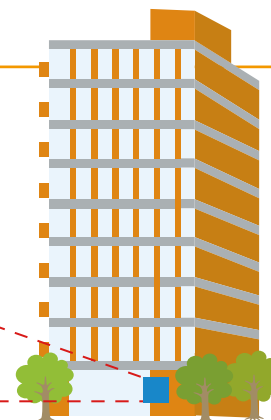
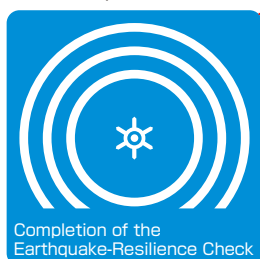
TMG Earthquake Resistant Mark Indication System

In order for the information on the earthquake-resistance of buildings to be widely distributed and enable Tokyo Metropolitan citizens to use buildings with peace of mind, we implement “the TMG Earthquake-Resistant Mark Indication System.”

Under this system, “the TMG Earthquake Resistant Mark” is provided free of charge to all buildings in the Tokyo Metropolitan Area which have been verified as conforming to earthquake-resistance standards, and is placed at the building entrance.

TMG Earthquake-Resistant Mark Indication System

TMG Earthquake-Resistant Mark



*It will be described as Conforming to New Earthquake-Resistance Standards for buildings with new earthquake-resistance standards, Completion of the Earthquake-Resilience Check for buildings with old earthquake-resistance standards but their conformity to the earthquake-resistance standards has been confirmed, and Completion of the Renovation for Earthquake-Resistant Structures for buildings with old earthquake-resistance standards and their conformity to the earthquake-resistance standards has been confirmed by the renovation for earthquake-resistant structure.

(2) Measures for Areas with Close-Set Wooden Houses

Tokyo Metropolitan Regional Disaster Prevention Plan

In developing districts that are expected to suffer particularly great damage in the event of a disaster, TMG along with the wards are promoting construction of roads and advancing the construction of fireproof and earthquake-resistant structures that can serve as fire breaks, based on the Urban Development Plan for Disaster Resistance.

In the prevention plan, the basic policy, which defines measures, policies, and targets for building disaster-resistant cities, was revised in March 2020, and the development program, which defines specific development plans based on the basic policy, was revised in March 2021.

In development areas, we will continue to strongly promote fireproofing by extending the use of the fireproof special zone system and the efforts to develop specified implementation lines for five years until 2025.

In addition, even in urban areas other than development areas, for example, “areas with agricultural land expected to be converted to residential land in the future” will be extracted to form safe and good living environments, and to promote the revitalization of residential areas with attractive cityscapes through creativity and ingenuity according to the characteristics of the area.

The development program stipulates the measures to be taken in each area in order to systematically promote the improvement of development areas, and newly includes measures to maintain and improve disaster resistance in areas with densely-built wooden housing, etc., to promote the measures taken by each ward and city. The development program is updated once a year if there are any additions to the efforts.

Areas with agricultural land that should have improved disaster preparedness

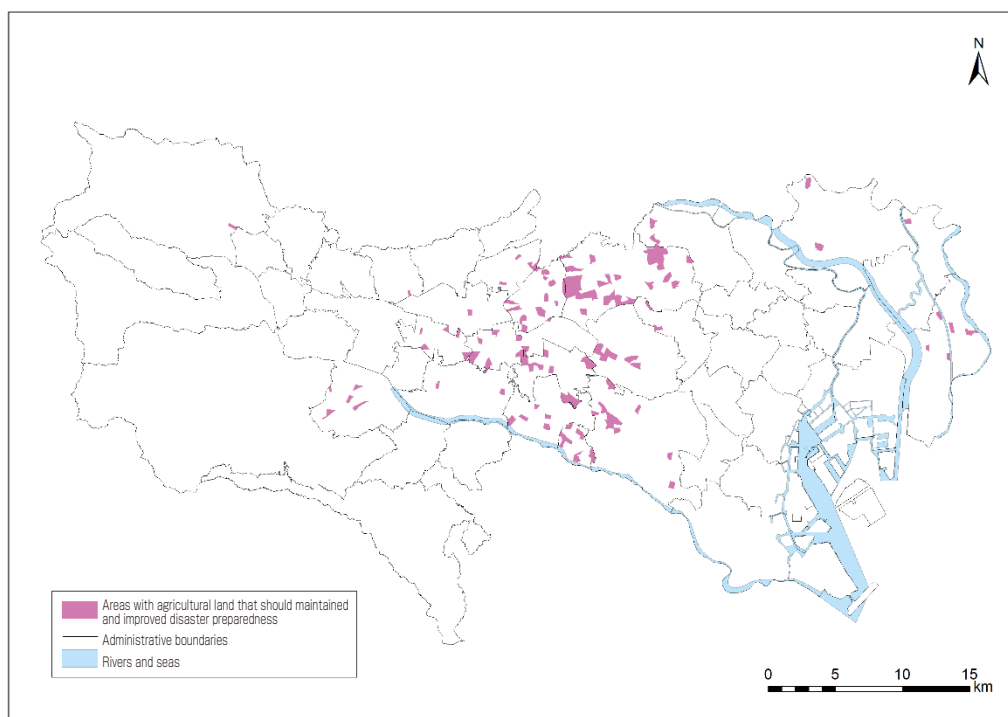


Image of measures



Efforts in the Fireproof Special Zone System and Specified Implementation Lines

The following efforts will be made to turn areas with densely-built wooden housing into those where fires do not spread and are fireproof by implementing focused and intensive efforts until 2025 for development areas.

Fireproof Special Zone System

Areas that require priority and intensive improvement have been designated as fireproof zones, based on the development program proposed by cities that are going the extra distance in their initiatives, including actively working to raise awareness among local residents. Within these areas, renovation subsidies are provided, and property tax and city planning tax exemptions are offered, to promote the fireproofing of buildings. Moreover, fireproofing of urban areas is strongly promoted by supporting city initiatives for system enhancements and provision of know-how. Efforts are underway in 52 zones, covering approximately 3,350 hectares (as of April 2021), with the goal of increasing the noncombustible area ratio (*) to at least 50% and 70% in all development areas by FY2025 and FY2030, respectively.

Upgrades of Major City-Planned Roads Forming Firebreak Belts

In order to create “communities where fires will not spread” within redeveloped areas, in 2012 Tokyo Metropolitan Government selected city planning roads effective toward improving disaster preparedness in terms of fire blocking, evacuations, and relief as designated routes for improvement. Currently, work is underway spanning 25 km across 28 zones.

During the redevelopment, hotlines operated by private sector businesses have been set up to support livelihood restoration closely in tune with the needs of relevant rights holders, including providing information on possible resettlement sites or proposing plans for the reconstruction of buildings.

We are promoting the development of all specified implementation lines by 2025.

Creating an Atmosphere Conducive to Building Disaster-Resistant Communities

This activity will create an atmosphere for building disaster-resistant neighborhoods as part of the local community through awareness programs directed at the residents of areas with close-set wooden houses to communicate the dangers of earthquakes, the importance of self-help and mutual assistance, and to promote a shared sense of awareness.

* Indicator of fire-resistance in urban areas. When the fire-resistant area ratio exceeds 70%, the ratio of fire destruction in the urban area becomes almost zero, as calculated from the state of building fireproofing and open spaces such as roads and parks.

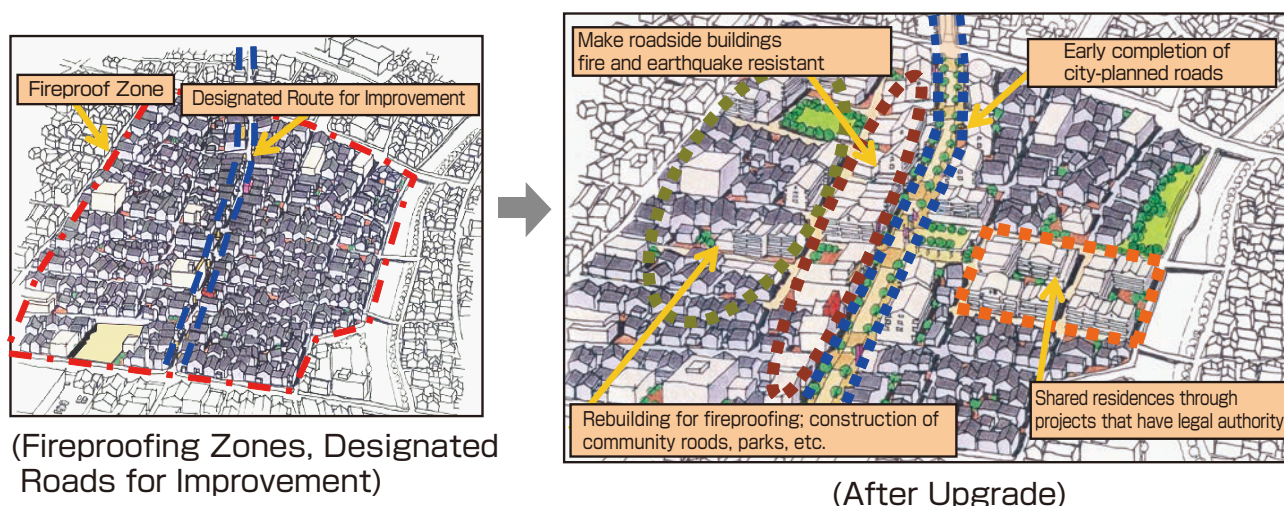
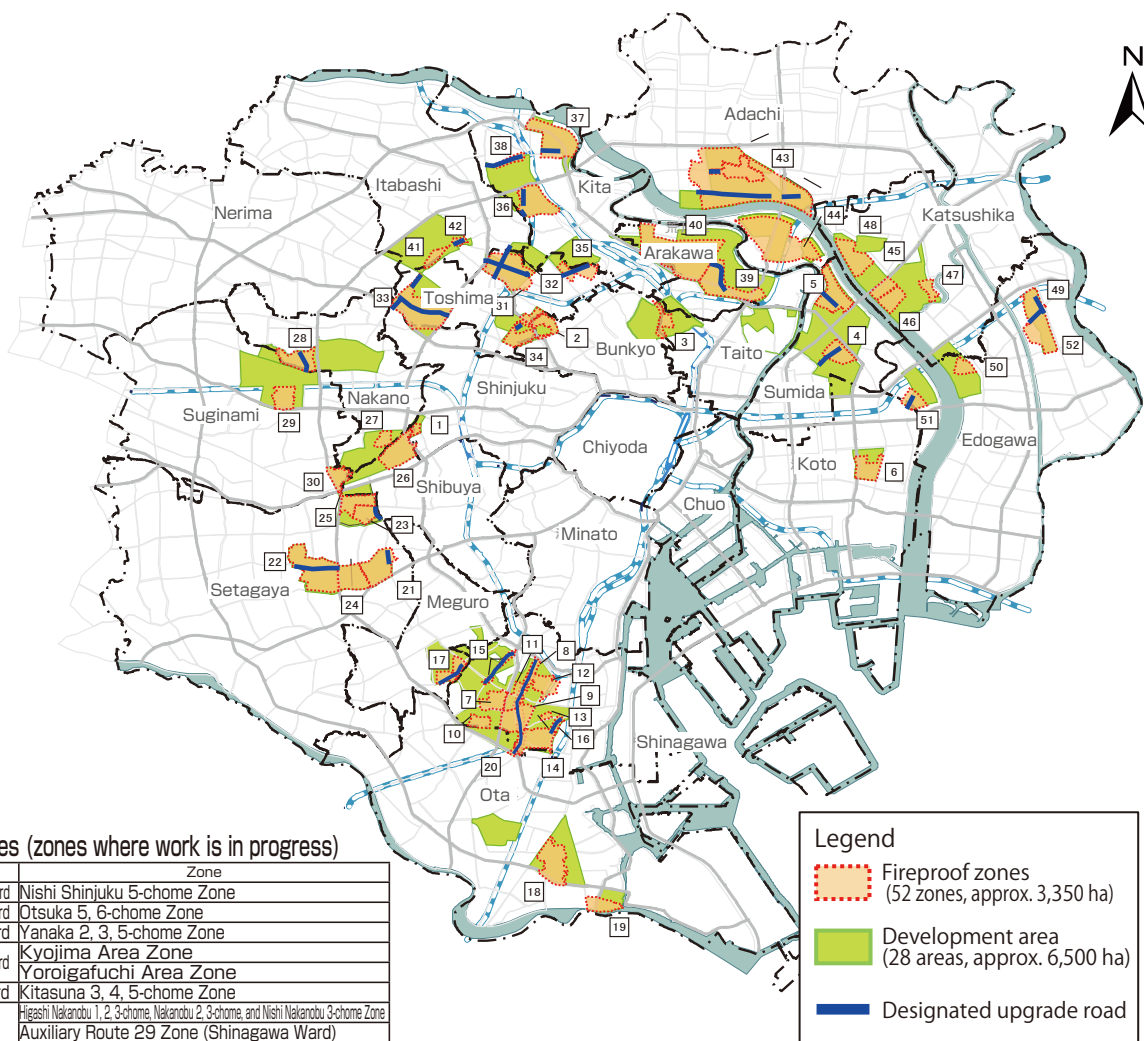


Illustration of preparations

Fireproof zones (total 52 zones in 19 wards) (current as of April 2021) and designed routes for improvement, city-planned roads (28 sections, total length 25 km)



Fireproof Zones (zones where work is in progress)

No.	Ward	Zone
1	Shinjuku Ward	Nishi Shinjuku 5-chome Zone
2	Bunkyo Ward	Otsuka 5, 6-chome Zone
3	Taito Ward	Yanaka 2, 3, 5-chome Zone
4	Sumida Ward	Kyojima Area Zone
5		Yoroigafuchi Area Zone
6	Koto Ward	Kitasuna 3, 4, 5-chome Zone
7		Higashi Nakanobu 1, 2, 3-chome, Nakanobu 2, 3-chome, and Nishi Nakanobu 3-chome Zone
8		Auxiliary Route 29 Zone (Shinagawa Ward)
9		Yutaka-machi 4, 5, 6-chome, Futaba 3, 4-chome, and Nishi-Oi 6-chome Zone
10		Hatanodai 4-chome and Nakanobu 5-chome Zone
11	Shinagawa Ward	Togoshi 2, 4, 5, 6-chome Zone
12		Nishi Shinagawa 1, 2, 3-chome Zone
13		Oi 5, 7-chome, Nishi Oi 2, 3, 4-chome Zone
14		Radial Route 2 Zone
15		Auxiliary Routes 28 Zone
16		Oi 2-chome Zone
17	Meguro Ward	Meguro Honmachi 5-6 chome, Haramachi 1-chome, and Senzoku 1-chome Zone
18		Omori Naka (Nishi Sakuradani, Higashi Kamata, Omori Naka) Zone
19	Ota Ward	Haneda 2, 3, 6-chome Zone
20		Auxiliary Routes 29 Zone (Ota Ward)
21		Taishido Mishuku Zone
22	Setagaya Ward	Ward Office Area Zone
23		Kitazawa 3, 4-chome Zone
24		Taishido, Wakabayashi Zone
25		Kitazawa 5-chome Ohara 1-chome Zone
26	Shibuya Ward	Motomachi 2 6-chome Zone
27		Yayoi-machi 3-chome Area Zone
28	Nakano Ward	Yamato Cho Zone
29	Suginami Ward	Suginami Dairoku Elementary School Area Zone
30		Honan 1-chome Zone
31		Higashi Ikebukuro 4, 5-chome Zone
32	Toshima Ward	Ikebukuro Honcho and Kami-Ikebukuro Zone
33		Auxiliary Routes 26, 172 Zone
34		Zoshigaya, Minami Ikebukuro Zone
35	Toshima Ward - Kita Ward	Auxiliary Route 81 Zone
36		Jujo Station West Zone
37	Kita Ward	Shimo and Iwabuchi Zone
38		Akabane Nishi Auxiliary Routes 86 Zone
39	Arakawa Ward	Arakawa and Minami Senju Zone
40		Machiya and Ogu Zone
41		Oyaguchi 1-chome Area Zone
42	Itabashi Ward	Oyama Station Area West Zone
43	Adachi Ward	Nishi Arai Station West Exit Area Zone
44		Adachi Ward Central and South Zone
45		Yotsugi 1, 2-chome Zone
46	Katsushika Ward	Higashi Yotsugi Zone
47		Higashi Tateishi 4-chome Zone
48		Horikiri 2-chome Area and 4-chome Zone
49		Minami Koiwa 7, 8-chome Area Zone
50	Edogawa Ward	Matsushima 3-chome Zone
51		Hirai 2-chome Area Zone
52		Minami Koiwa, Higashi Matsumoto Zone

Designated Routes

	Road name	Location	Total length (m)
1	Radial Route 2	Nishi Gotanda 7-chome - Nishi Nakanobu 1-chome	1,255
2	Auxiliary Route 28	Oi 4-chome area, Shinagawa-ku	520
3	Auxiliary Route 29	Shinagawa Osaki 3-chome - Higashi Magome 2-chome	3,445
4	Auxiliary Route 46	Meguro Honcho 5-chome area	510
5	Auxiliary Route 26	Meguro Honcho 5-chome area - Senzoku 1-chome	550
6	Auxiliary Route 52	Mishuku 2-chome - Ikejiri 4-chome	440
7	Auxiliary Route 26	Wakabayashi 5-chome - Gotokuji 2-chome	1,310
8	Auxiliary Route 26	Meguro Komaba 4-chome - Shibuya Oyama-cho	550
9	Auxiliary Route 227	Yamato-cho 1-chome - 4-chome	710
10	Auxiliary Route 26	Minami Nagasaki 6-chome - Nagasaki 5-chome	320
11	Auxiliary Route 26	Chihaya 4-chome - Kaname-cho 3-chome	460
12	Auxiliary Route 172	Nagasaki 1-chome - Nagasaki 5-chome	1,620
13	Auxiliary Route 81	Minami Ikebukuro 2-chome - 4-chome	260
14	Auxiliary Route 73	Toshima Ikebukuro 2-chome - Itabashi 1-chome	1,070
15	Auxiliary Route 82	Toshima Kami-Ikebukuro 3-chome - Oyama Kanai-cho	1,130
16	Auxiliary Route 26	Oyama-cho area, Itabashi-ku	375
17	Auxiliary Route 81	Toshima Sugamo 4-chome - Kita Nishigahara 3-chome	930
18	Auxiliary Route 73	Kamijyo 2-chome - Jujo Nakahara 2-chome	895
19	Auxiliary Route 86	Akabane Nishi 5-chome - 1-chome	1,150
20	Auxiliary Route 86	Shimo 1-chome area, Kita-ku	620
21	Auxiliary Route 90	Machiya 1-chome - Arakawa 1-chome	1,230
22	Auxiliary Route 136	Ogi 1-chome - Umeda 3-chome	1,910
23	Auxiliary Route 138	Okino 1-chome - Motoki 2-chome	350
24	Auxiliary Route 136	Adachi 1-chome - 3-chome	630
25	Auxiliary Route 32	Oshiage 3-chome - Kyojima 3-chome	860
26	Auxiliary Route 120	Sumida 2-chome - 3-chome	530
27	Auxiliary Route 144	Hirai 2-chome area	490
28	Auxiliary Route 142	Minami Koiwa 4-chome - Higashi Koiwa 4-chome	560
29	Auxiliary Route 143	Minami Koiwa 8-chome area, Edogawa-ku	620

(3) Earthquake Disaster Prevention Measures for Lifelines

Earthquake disaster prevention measures for lifelines such as water, sewerage, etc.

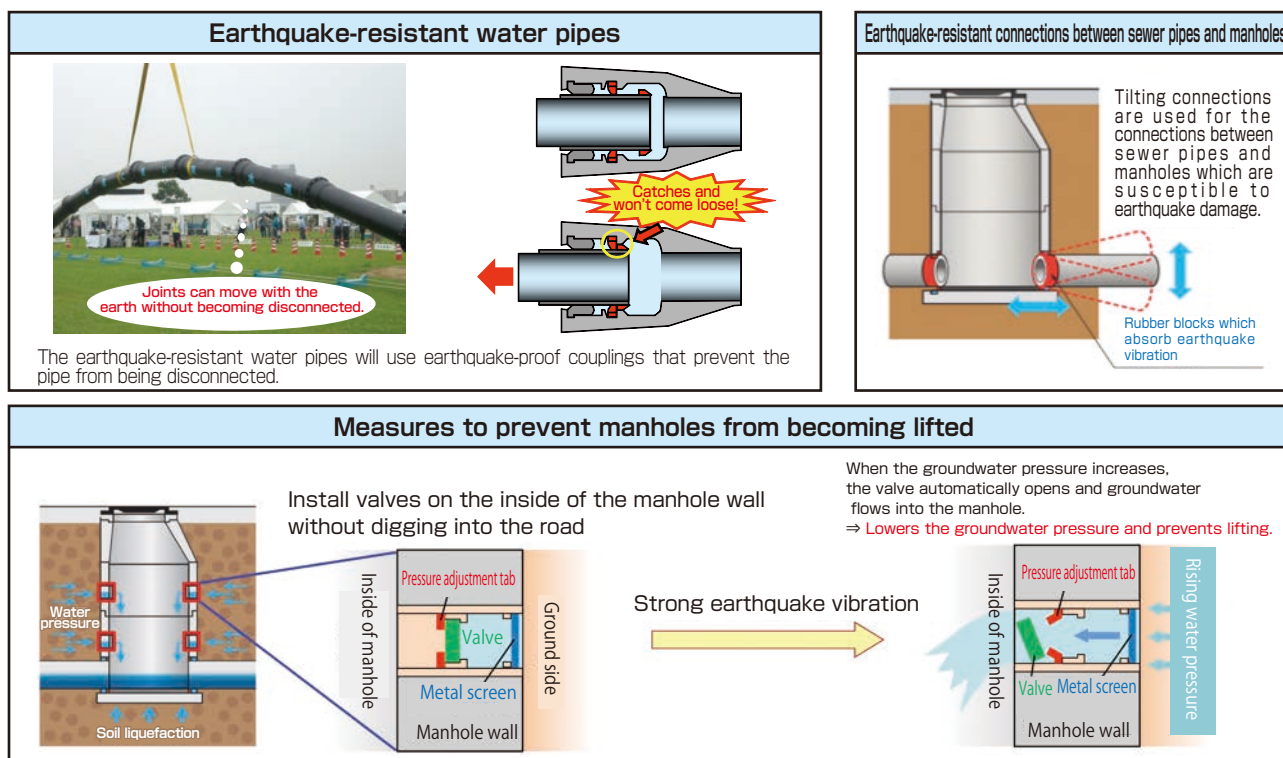
When an earthquake disaster occurs, the lifelines, such as water and sewerage, electricity, gas, and telecommunications, will be affected.

The TMG has developed “TMG Plan for Local Disaster Preparedness Measures” and set goals to restore lifelines within specific periods: 30 days for water and sewerage, 7 days for electricity, 60 days for gas, and 14 days for telecommunications.

In order to minimize damage during a disaster, the following preventive measures have been taken for water and sewerage.

If water and sewage pipes are damaged by a large-scale earthquake, not only will it be difficult to obtain drinking water, but toilets and baths will be unavailable, and leakage of water pipes and sewage can damage people's houses, force a stop to business activities, and in other ways have a severe effect on residents' lives and property. Road collapses caused by leaking water or lifting of manholes by liquids can obstruct vehicle traffic and otherwise interfere with emergency response activities.

In order to avoid such a situation, we are taking measures to make earthquake-resistant water pipes, earthquake-resistant connections between sewer pipes and manholes, and to prevent manholes from becoming lifted in areas where liquefaction is likely to happen.



Elimination of utility poles

During a disaster, events like fallen utility poles, road closures and severed power lines can impede evacuations, relief activities and the transportation of supplies, as well as interfere with the stable supply of power and telecommunication services. Therefore, TMG has set a target of completing 50% of utility pole eliminations for primary emergency transportation routes by the end of 2024, and 100% of Loop 7, which will become a boundary for the restricted access area unavailable to regular vehicles in the event of an earthquake.

In addition, we are also providing financial as well as technical support to municipalities in promoting the elimination of utility poles across the entire Tokyo Metropolis, thereby enhancing our urban disaster preparedness capabilities.

In order to further promote the elimination of utility poles, TMG became the first prefecture in 2017 to establish the first Ordinance for the Promotion of the Elimination of Utility Poles, and formulated the Utility Pole Less Tokyo Plan, which sets policies and targets for the next 10 years based on this ordinance.

In February 2021, in order to prepare for natural disasters, which have become increasingly severe in recent years, and to accelerate efforts to eliminate utility poles on prefectural roads, waterfront roads, and municipal roads, including those on islands, we formulated the Utility Pole Elimination Acceleration Strategy, which consists of seven strategies, including speeding up the removal of utility poles on prefectural roads.

Furthermore, in FY2021, based on this strategy, TMG plans to revise the Utility Pole Less Tokyo Plan based on the ordinance, which clearly states the basic policies and targets for the elimination of utility poles in the 2040s, as well as the areas and extensions to be improved in the next five years.

In the future, based on TMG's revised plan to eliminate utility poles, we will steadily promote their elimination on prefectural roads in order to achieve our targets, and we will actively promote the elimination of utility poles while gaining the understanding and sympathy of the people of Tokyo through educational events.



Example of upgrade by elimination of utility poles
Yaenkaido (Koyasu-cho, Hachioji-shi)
(top: before upgrade, bottom: after upgrade)

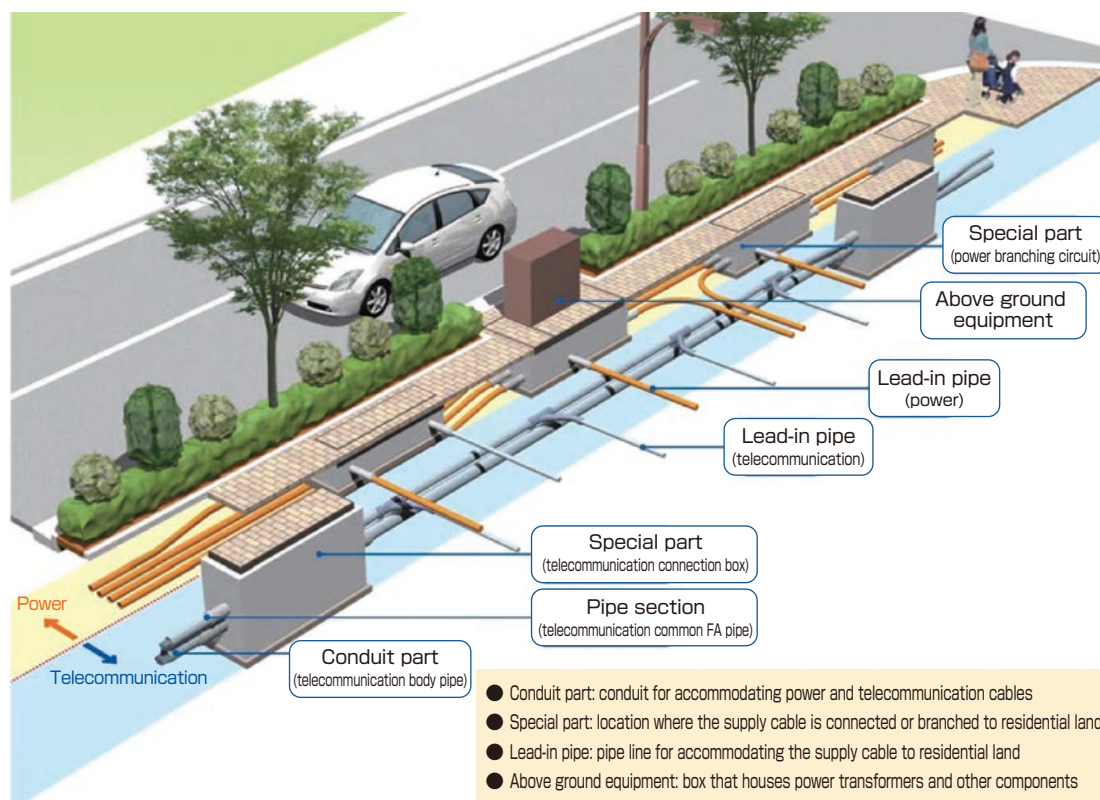


Illustration of distribution upgrade with elimination of utility poles
(power cable multipurpose underground utility conduit system)

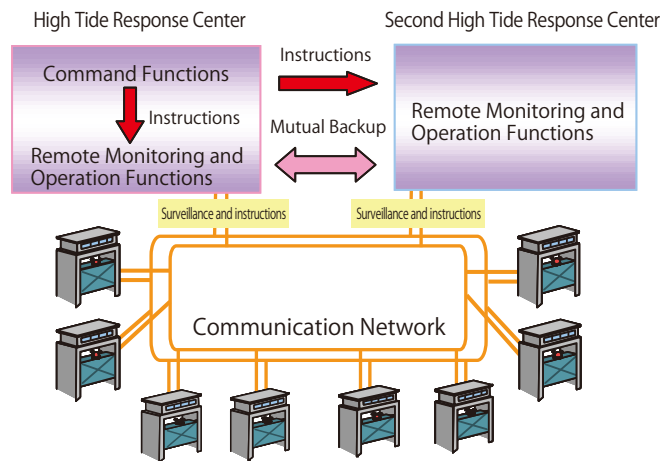
(4) Measures for High Tides and Tsunami

Shore protection facilities

To protect the people of Tokyo from tsunami and storm surge, coastal protection facilities such as seawalls, water gates, and more are being upgraded in Tokyo Bay. The seawalls are installed 4.6 to 8.0 meters about the low tide water levels. The water gates have been installed in canals, and are closed off when there is a risk of flooding due to rising tides.

To ensure rapid response to emergency situations such as earthquakes, tsunami, and high tides, the High Tide Response Center was established to unify control of Tokyo Bay water gates and more. With the phased establishment of the Remote Control System starting in 1979, TMG has worked to centralize management of information, unifying supervision and the line of command, as well as to accelerate the operation of water gates. In order to further improve the crisis management system, a second High Tide Response Center has been established. In addition to consolidating the functions of the conventional substations, the two High Tide Response Centers form a setup whereby they can conduct mutual backup.

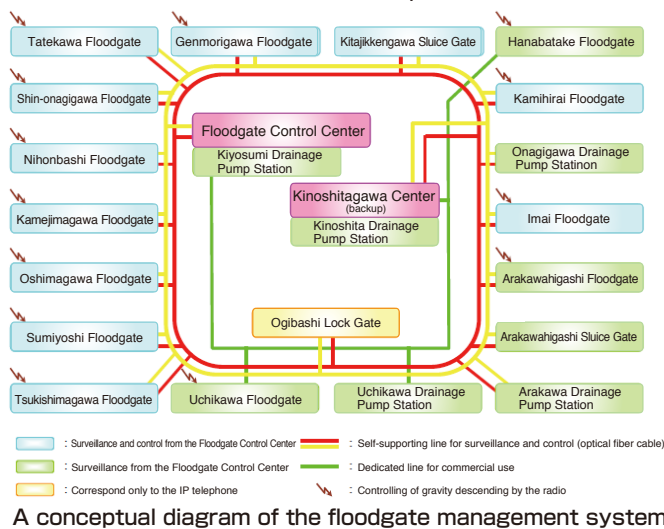
Formation of 2 bases of a High Tide Response Center



River Facilities

Floodgates have been installed at the mouths of rivers in the eastern low-lying areas. These floodgates can be closed when high tides or tsunami occur, joining the gates to the surrounding seawalls to protect the area. Drainage pumps have been installed in preparation for rising water levels on the inside of the floodgates due to rainfall or other factors, and these pumps operate automatically to discharge the water to the outside of the floodgates when the water level rises.

In order to improve the efficiency in operating each facility of floodgates, a floodgate control system was built utilizing various ICT, such as optical communications, wireless telecommunications, and remote surveillance and control are being conducted in the Floodgate Control Center for 24 hours a day and 365 days a year. The system's reliability is enhanced by the backup in Kinoshitagawa Center that has functions that are equivalent to the Control Center's functions and double looping of the communication cables. Closing the floodgates by the wireless telecommunications is also possible.



Imai Floodgate in normal open position



Imai Floodgate closed in preparation for high tides

In addition, in light of the Great East Japan Earthquake, earthquake-resistance and flood-resistance measures are being taken for rivers in the eastern low-lying areas to ensure that seawalls and floodgates will continue to function and prevent flooding causes by tsunamis, etc. in the event of an earthquake with the maximum strength considered possible in the future.

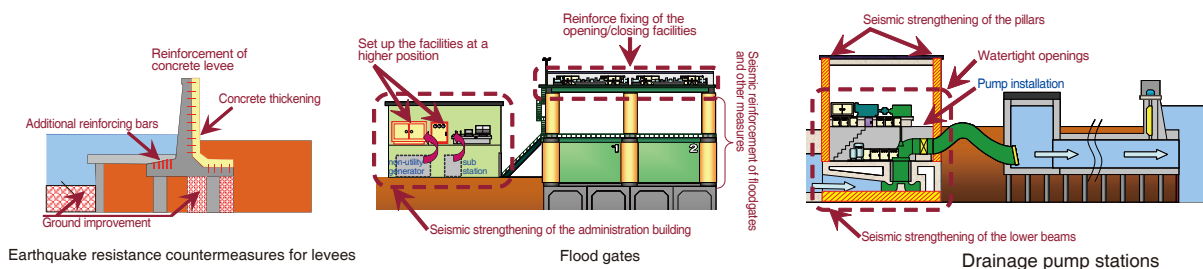


Illustration of earthquake and flood resistance countermeasures

Countermeasures for tsunami in islands

We are promoting comprehensive countermeasures from both the hardware and software sides, such as creating TMG's own damage assessments due to a massive Nankai Trough earthquake and a tsunami flooding hazard map for a tsunami that could cause enormous damage like that from the Great East Japan Earthquake.

(5) Promoting Local Resilience-Building

Background and significance

In order to save as many lives as possible in the event of a disaster, it is important for each person to protect himself or herself, that is "self-help", and that everyone help the people who are around them, that is "cooperation". However, there are issues that must be solved, such as nonparticipation of younger generations in the disaster preparedness activities in Tokyo, people without a close connection with neighbors, and the opinion of women not being adequately heard in evacuation center operations due to few women involved in disaster prevention.

This is why TMG is supporting efforts to train human resources in local disaster prevention, in cooperation with municipalities and related agencies, and providing support to disaster preparedness civic organizations with a view to improving local disaster resilience by nurturing female disaster prevention personnel who can play an active role in evacuation/rescue activities in the event of a disaster.



Main efforts

1. Implementation of "Citizen Organizations for Disaster Prevention Leader Training" and "Tokyo Disaster Management Seminars"

Training workshops have been held for leaders of disaster preparedness citizens' organizations, while disaster prevention experts have been dispatched to conduct seminars for improving disaster management capabilities in local communities.

2. Implementation of "Women's Disaster Preparedness Seminar" and "Disaster Prevention Coordinator Training"

We are training female disaster prevention personnel by launching seminars on basic knowledge with a female perspective expected to be the foundation for expanding the base of female human resources in disasters and emergencies as well as workshops for fostering women who can play an active role in preventing disasters of the community and workplaces when they occur.

3. "On-site Disaster Prevention Class for Parents"

We are training disaster prevention coordinators by launching seminars expected to be the foundation for expanding the base of female human resources in disasters and emergencies as well as workshops for fostering women who can play an active role in preventing disasters of the community and workplaces when they occur.



(6) Measures for Stranded Persons

Background of Measures for Stranded People

According to the damage estimates announced by the Tokyo Metropolitan Government in April 2012, a large-scale earthquake is expected to result in approximately 5.17 million stranded people who are unable to return home in Tokyo.

The metropolitan government encourages people to avoid moving around unnecessarily but rather remain at their workplace, school and so on for three days in order to alleviate mass movements of people returning home in the event of earthquake disaster. However, it is still estimated that there will be approximately 920,000 people who cannot get home, such as shoppers, and people who do not have a place to take refuge at their workplace or school.

Do not move about or go home unnecessarily

If the immense number of persons stranded by a large-scale earthquake all try to return home at once, the streets and pedestrian paths will be filled with people, producing mass congestion. This may prevent vehicles of the police, fire department, and Self Defense Forces from immediately reaching the affected areas, and may interfere with search & rescue activities during the first 72 hours that are critical to saving lives.

There is also the possibility of encountering secondary injury caused by aftershocks or other causes while walking home, and attempting to return home immediately after a large-scale earthquake is extremely dangerous.

When a large-scale earthquake occurs, remain at your office, travel destination, or other safe location and avoid moving about unnecessarily.



Roads around Shinagawa Station
(March 11, 2011)

TMG Ordinance Covering Measures for Stranded Persons Enacted

TMG has established measures promoting restraint of all people trying to return home all at once, checking that family members and others are safe, providing information, securing temporary shelter, and support for returning home as the main pillars of "the TMG Ordinance Covering Measures for Stranded Persons." The measures for stranded persons are not limited to public rescue and assistance, but include independent rescue and assistance efforts by individuals and businesses, because of the need for society-wide measures.

1. Preventing people from heading home all at once Recommendations for citizens

- Refrain from heading home all at once.
- Prepare multiple methods of contacting family members.
- Check routes in advance and prepare comfortable walking shoes at your workplace in preparation for walking home after safety has been secured.

Recommendations for employers

- Prevent employees from heading home all at once.
- Stockpile three days' worth of drinking water, food, and other necessities.
- Prepare means of communicating with employees.
- Provide protection of users at railway stations and commercial facilities.

Recommendations for schools

- Keep students, children, and others in the school and ensure their safety.

Stockpile Guidelines

Regardless of the type of employment (regular or non-regular), prepare a stockpile so that all employees working in the office can stay there for the 3 days' rescue and life-saving activities take place.

<Example of Stockpile Items>

Drinking water, food, blankets, thermal blankets, portable toilets, sanitary goods (toilet paper, etc.), mats (plastic sheets, etc.), portable radio, flashlights, batteries, first aid kit

* In addition to the above items, consider necessary stockpile items for your office taking into account elements of business continuity.

* Encourage employees and others to make their own stockpile. (athletic shoes, household medicine, mobile battery recharger for mobile phones)

2. How to check that family members and others are safe and information provision

- Establishment of a system to provide disaster-related information in cooperation with each municipality and disaster prevention organizations.
- Awareness-raising on measures for checking if family members and others are safe and provision of disaster-related information.

3. Securing of temporary shelter

- Designate the Tokyo metropolitan facilities as temporary shelter.
- Request cooperation for securing temporary shelter from the national, municipal governments, and private business operators.

4. Support Returning Home

- Securing of support stations for those attempting to return home during a disaster
- Securing of alternative transportation such as buses, ships, etc.



The sticker shown on the left is affixed to the premises cooperating as support stations for returning home during a disaster.

People can use water and bathrooms, and receive information during a disaster.

Securing Temporary Shelters

1. What is a Temporary Shelter?

This is a facility that can accept stranded persons who have nowhere to go, usually for a period of three days. To date, TMG facilities have been designated as temporary stay facilities. They are equipped with enough drinking water and food to last for three days, portable toilets, and other supplies.

Temporary Shelters should whenever possible provide the following assistance.

- After the safety of the facility has been confirmed, accept stranded persons who have nowhere to go.
- Distribute water, food, blankets, and other aid supplies.
- Maintain the facility sanitation including toilets and trash.
- Collect information such as the damage conditions of surrounding areas and roads and train operating conditions, and provide information to the persons staying at the facility.

2. Cooperation is sought from private business owners in order to secure temporary shelters.

In the past, TMG has designated municipal facilities as Temporary Shelters. However, "public assistance" provided by government institutions is limited in order to accommodate expected stranded persons. For this reason, TMG has cooperated with both the national government and local governments with the goal of securing the cooperation of privately owned businesses as Temporary Shelters. TMG is providing financial support to privately owned businesses willing to take in stranded persons, in order to help offset the costs of stockpiling items to be used by stranded persons and costs associated with maintaining facilities able to take in stranded persons, etc.

3. Vigorously cooperate with operation of Temporary Shelters

Temporary Shelters are secured through the cooperation of private operators. When stranded persons need to stay in such facilities, try to actively cooperate with running the facilities through helping with the reception of evacuees and distribution of supplies and so on.

Measures for Stranded Persons Training

Every year, TMG holds measures for stranded persons training, centered around the main stations. The training session includes training in protection of railway users on the premises, training in opening Temporary Shelters, training in transportation of persons needing assistance, and other practical training.



Protection of railway users by station operators



Transportation of persons requiring special assistance

(7) Storm and Flood Damage

Precautions

1. Flow control of rivers

To cope with increasingly severe and frequent heavy rains, we are proceeding with measures such as river widening, and constructing retention ponds for temporary flood storage.

2. Upgrade to Sewers

We will focus on areas with a high risk of flooding to enable handling rainfall of up to 50 mm/hour. In addition to steadily promoting the construction of trunk lines and storage facilities, measures will be strengthened in areas where widespread flooding above floor level is expected, such as the construction of sewerage facilities capable of handling rainfall of up to 75 mm/hour.

3. Support for the Preparation of Flooding Hazard Maps

The municipalities are making easy-to-read flooding hazard maps, which indicate flood damage estimation and evacuation methods. TMG, together with relevant organizations, supports the municipalities in the preparation and release of these maps.

4. “Tokyo My Timeline”

This is a toolkit to prompt awareness of flood evacuation on a daily basis in order to help city residents correctly understand weather information and enable them to take evacuation measures that suit their environment and the characteristics of their region.

The “Tokyo My Timeline” toolkit has been published on the Tokyo Disaster Preparedness’s website, and a form allowing you to create and save My Timeline on your computer, etc. and videos supporting its creation are also available.

5. “Flooding Risk Map”

By implementing the “Flooding Risk Map” function in the “Tokyo Disaster Preparedness App,” you are able to visually check and follow the flood risk forecast in Tokyo, such as the status of floods occurring in big, small and medium-sized rivers, floods caused by storm surges, and sediment disasters.

You can now check the current status of flood risk in conjunction with the GPS function.

6. TOKYO VIRTUAL HAZARD - Storm and flood damage

A virtual movie which allows viewers to simulate storm and flood threats and learn how to react in the event of emergency is available on Tokyo Disaster Preparedness’s website and Tokyo Movie.

7. Subway Flooding Countermeasures

In order to prevent flooding from entrances/exits of subways, disaster prevention doors and watertight doors have been installed. Watertight doors have also been installed in tunnels in order to help limit damage in the event of flooding.

8. Measures for debris flow

Sediment control dams and other structures have been constructed at places where debris flow is likely to occur or debris disaster actually happened in the past. Moreover, we consider a necessity of measures for evacuation shelters difficult to be relocated and facilities for persons who require special assistance and have established facilities as necessary.



flip-up flood barriers

Measures for Heavy Rainfall

1. Flood Prevention Headquarters

When a heavy rain warning is announced in the Tokyo area, a flood prevention management center will be established, and in order to prevent and minimize losses and damages caused by floods, storm surges, etc., the level of rainfall and river water will be monitored. In cooperation with the Japan Meteorological Agency, a disaster prevention weather forecast will be announced and transmitted to related organizations such as local governors (flood prevention management organizations).

2. Establishment of Disaster Response Headquarters

When torrential rains or other warnings are announced in Tokyo, we take a stance of focusing on communicating information, and communicate and coordinate with the wards and municipalities. We set up a disaster response measures headquarters as necessary, and have a unified and flexible system.

3. Information Sharing by Municipalities with a Common River System

Municipalities with a common river system, sphere or watershed have a high chance of being flooded simultaneously due to an increased water level or flood caused by torrential rain; hence useful information regarding evacuation information for municipalities is shared with each other.

4. Wide area evacuation measures

In June 2018, Tokyo Metropolitan Government and the Cabinet Office together established the Review Committee on Wide Area Evacuations in Case of a Major Flood in the Capital Region. It is comprised of members from relevant organizations including the national government, municipalities within Tokyo Metropolis, neighboring prefectures, and transportation companies. The committee is responsible for holding discussions on realizing specific wide area evacuation in the event of a major flood in the Tokyo Metropolitan Area.

5. Informing the Residents

○TMG Disaster Prevention Website and Disaster Prevention on Twitter

Through the TMG disaster prevention website and disaster preparedness on Twitter, damage information, train situations, traffic information, etc., are provided to Tokyo metropolitan residents and we support an initial prompt response in the event of a disaster and also support those who are outside and returning home.

○Communication of information on evacuation

We provide information on evacuation to Tokyo residents by utilizing broadcast media under agreement with the media when a disaster is to possibly happen.

○Tokyo Metropolitan Government General Flood Prevention Information System and Flood Prevention on Twitter

Flood related information such as levels of rainfall and rivers measured in Tokyo, river monitoring video, weather forecast such as heavy rain warnings, flood forecast and sediment disaster warning, etc. are published in English, Chinese (simplified version), and Korean and updated in real time.

[Tokyo Metropolitan Government General Flood Prevention Information System]

[Version for PC] <https://www.kasen-suibo.metro.tokyo.lg.jp/im/uryosui/tsim0102g.html>

[Version for Smart Phone] <https://www.kasen-suibo.metro.tokyo.lg.jp/s/tsim0401g.html>

[Mobile phone version] <https://www.kasen-suibo.metro.tokyo.lg.jp/im/i/tsim0201g.html>

[Tokyo Flood Prevention Twitter Account] https://twitter.com/tokyo_suibo



(PC)



(Smart Phone)



(Mobile phone)



(Twitter)

○Video streaming of river surveillance cameras

We have been streaming videos on YouTube in real time since June 1, 2021 of the rivers in Tokyo where water levels rise rapidly due to heavy rains.

[Tokyo Flood Prevention YouTube Channel]

<https://www.youtube.com/channel/UCaydvLwWthLMbfKLEQSY2UQ>



○Landslide Countermeasures (Information countermeasures)

Work being done to ensure smooth evacuations for citizens includes designation of areas with a risk of landslides as Landslide Watch Districts, assisting local administrative bodies in making landslide hazard maps, releasing landslide alert information, which will be one judgment for measurement of evacuation.

In addition, many landslides have occurred recently in various parts of Japan due to abnormal weather conditions and other factors. As part of our efforts to raise awareness of landslide disaster prevention, we are conducting lectures on the theme of "Preparing for Landslides" at local community associations and volunteer disaster prevention groups.

[Preparedness for Landslide: Landslide countermeasures in Tokyo prefecture]

https://www.kensetsu.metro.tokyo.lg.jp/jigyo/river/dosha_saigai/map/dosha_r.html



○Tokyo Metropolitan Government General Storm Surge Disaster Prevention Information System (English Chinese (simplified version), Korean)

We provides real-time information on weather and oceanographic conditions, such as water levels observed by TMG, live images of the sea surface (via YouTube), and the opening status of floodgates.

[Tokyo Metropolitan Government Storm Surge Disaster Prevention Comprehensive Information System]

[PC version] <https://www.takashio-bosai.metro.tokyo.lg.jp/im/tkim0101g.html>

[Smartphone website] <https://www.takashio-bosai.metro.tokyo.lg.jp/s/tkim0201g.html>

[Tokyo Metropolitan Government Storm Surge Disaster Prevention YouTube Channel]

<https://www.youtube.com/channel/UHHasOi3-m3lgOy00Bvm85qA>



(PC)



(Smart Phone)



(Tokyo Metropolitan Government Storm Surge Disaster Prevention Channel)

○Tokyo Amesh rainfall information system web site, created by the TMG Bureau of Sewerage

Weather radar is used to colorize the images of rain falling in and around Tokyo and provide rainfall information in real time. With the smartphone version, you can register your current location and any desired location using GPS.

[Smartphone/PC version] <https://tokyo-ame2.jwa.or.jp/>

<https://tokyo-ame.jwa.or.jp/>



Evacuation Measures

In light of the spread of COVID-19, take appropriate evacuation measures during typhoons and heavy rain. There are various kinds of measures, and going to a shelter is not the only one. Consider appropriate measures, including sheltering at home or voluntarily evacuating to a relative's or acquaintance's home.

(8) Measures for Volcanic Eruptions

In regard to Tokyo Metropolitan Government's volcanic disaster prevention measures, the Tokyo Metropolitan Regional Disaster Prevention Plan (Volcanoes), which is based on discussions by the Volcanic Disaster Prevention Committee as well as experiences from past volcanic disasters, establishes the following disaster prevention measures based on the characteristics of an offshore island.

Early preparation

We plan to take urgent actions such as the construction of provisional dams when volcanic eruptions occur with the aim of protecting human life from landslide disasters along with volcanic eruptions. We have produced and stored concrete blocks used for provisional dams as "preparations at normal times" in order to efficiently take urgent measures.

Observation System for the Izu Islands

TMG has set up an observation system which includes seismographs and inclinometers on each of the Izu Islands (except for Izu Oshima) to monitor volcanic activities.

Izu Oshima is monitored by the national authorities through an extensive observation network. Data are shared by TMG, the Japan Meteorological Agency, the national authorities, and other research institutes.

Disaster Preparedness Training

In anticipation of volcanic eruptions, earthquakes, tsunami, etc., TMG jointly conducts general disaster preparedness training with the island municipalities.

2002: Oshima-machi
2004: Kozushima-mura
2006: Oshima-machi
2008: Hachijo-machi
Aogashima-mura
2010: Niijima-mura
2012: Kozushima-mura
2013: Niijima-mura
2015: Miyake-mura
Mikura jima-mura
2016: Oshima-machi,
Toshima-mura
2017: Hachijo-machi,
Aogashima-mura
FY2018: Ogasawara Village
2019: On-map training at
all islands



2018: Joint general disaster preparedness training between TMG and Ogasawara Village

Eruption Alarms and Forecasts

The Japan Meteorological Agency publishes various information based on volcanic activities. For particularly active volcanos, it has established an eruption warning level that provides information about evacuations. The six targeted volcanoes in Tokyo have been forecast as follows: Izu Oshima in December 2007, Miyakejima in March 2008, Hachijojima and Aogashima in May 2018, Niijima and Kozushima in July, 2019. Based on these eruption alert levels shown in the table, the disaster preparedness measures will be planned. (Updated in September 2021: six targeted volcanoes: Level 1)

The detailed scope of regulations for each level is determined by the regional disaster preparedness plan of each municipality.

(Volcanic eruption alert level of six targeted volcanoes)

Type	Name	Applicable Range	Level (Keyword)	Volcanic Activity State	Actions to be Taken by Residents and Measures for People On and Around the Volcano
Special warning	Eruption warning (Residential area)	Residential areas and the nearby side of the crater	5 (Evacuate)	Eruptions that could have a large effect on residential areas are occurring or are getting ready to occur.	People must be evacuated from residential areas at risk.
			4 (Evacuation Preparation)	Eruptions that could have a large effect on residential areas are forecast to occur (The possibility is increasing).	For residential areas requiring a warning, make evacuation preparations and people requiring assistance during a disaster need to be evacuated.
Warning	Eruption warning (Near the crater)	Wide area around crater from crater to residential	3 (Mountain restricted)	A volcanic eruption has occurred or is expected to occur which will seriously impact areas close to residential communities (entering this vicinity will endanger one's life).	Hiking ban, restricted hiking access, and restricted access to summit and dangerous areas. Depending on the condition, those requiring assistance during an evacuation may need to prepare for evacuation. Residents live their normal lives.
		From crater to nearby crater vicinity	2 (Crater vicinity restricted)	A volcanic eruption has occurred or is expected to occur which will seriously impact the crater area (entering this area will endanger one's life).	Access restrictions, etc. surrounding the crater. Residents live their normal lives.
Forecast	Eruption Forecast	Inside crater	1 (Bear in mind that it is an active volcano)	[Izu Oshima, Miyakejima, Hachijojima] Volcanic activity is calm. Depending on the condition of volcanic activities, an eruption of volcanic ash may be seen within the crater. (entering this vicinity will endanger one's life) [Aogashima] Volcanic activity is calm.	Access restrictions, etc. within the summit crater and its vicinity depending on the situation.

*The level changes depending on the activity state of the volcano.

Evacuation System

Quick and appropriate evacuation measures are crucial at times of volcanic eruptions, since cinders, lapilli, and lava flows can cause damage to wide areas and endanger lives. In case of an evacuation out of the island, it is important to secure boats through cooperation with relevant organizations and by requisition.

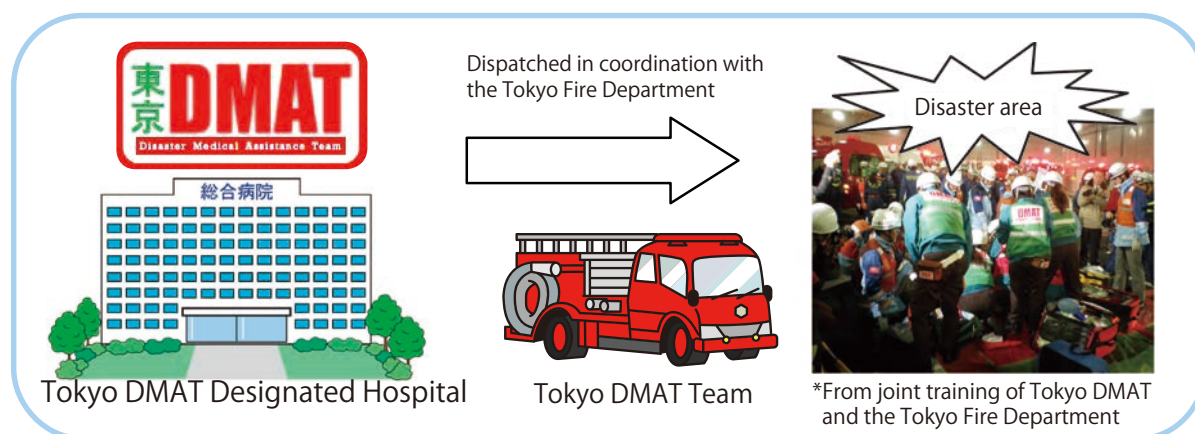
(9) Medical Relief Measures

So that it is possible to provide rapid and appropriate medical care to injured persons following a major earthquake or other disaster, TMG has constructed an information and communication system centered on the Tokyo Disaster Medical Assistance Teams (DMAT), Disaster Base Hospitals, and Disaster Medical Care Coordinators.

Tokyo DMAT

Tokyo DMAT are specially trained medical teams that are dispatched to disaster locations such as natural disasters and large traffic accidents in cooperation with the Tokyo Fire Department to provide emergency medical care as soon as possible.

To expand and strengthen the first response medical system, 25 hospitals in metropolitan Tokyo have been designated as Tokyo DMAT hospitals and approximately 1,100 team members have been trained. (As of April, 2020)



Disaster Base Hospitals

A system for disaster medical care has been constructed, with 84 hospitals designated (as of April 2021) as Disaster Base Hospitals that primarily accept and treat severely injured persons following a disaster. For the list of disaster base hospitals, see pages 28 and 29.

Disaster Medical Care Coordinator

In order to efficiently and effectively manage the limited medical resources based on the lessons learned from the Great East Japan Earthquake, TMG Disaster Medical Care Coordinators and Local Disaster Medical Care Coordinators who make adjustments in the entire Tokyo metropolitan areas and in the local areas have been appointed.

○TMG Disaster Medical Care Coordinator

Specific duties

- Provide advice regarding the effective allocation of Tokyo DMAT and medical aid teams
- Provide advice regarding TMG disaster medical care measures at normal times

○Local Disaster Medical Care Coordinators

Specific duties

- Collect and centralize medical information within the Tokyo Metropolitan Area following a disaster, and control and coordinate medical aid activities and other activities.
- Carry out the central responsibilities of the Local Disaster Medical Care Coordination Committee, which studies specific policies to suit local conditions, and construct a system for coordination with related institutions.

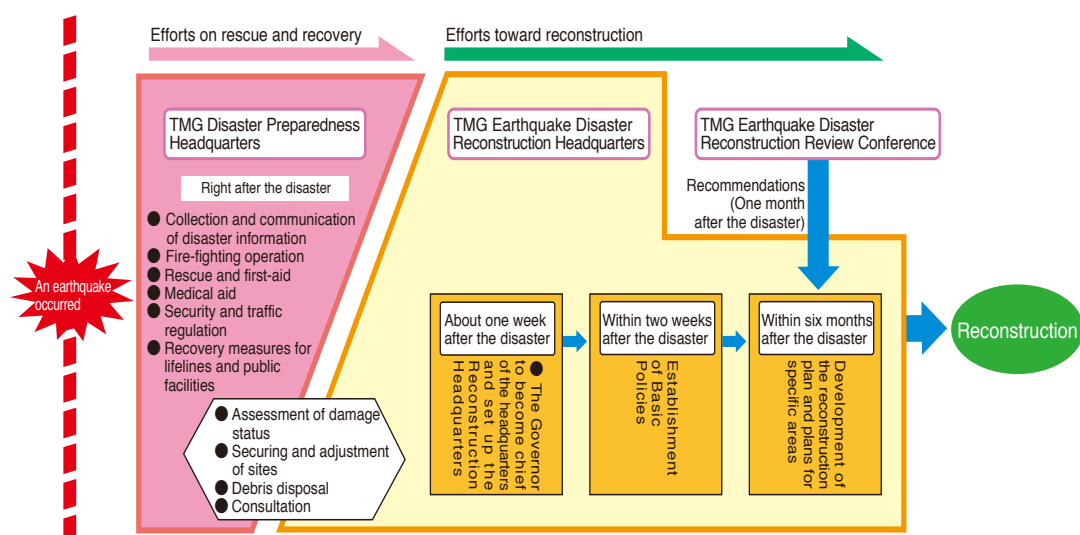
(10) Earthquake Disaster Reconstruction Measures

Earthquake Disaster Reconstruction and TMG Efforts

In the case of the Great Hanshin-Awaji Earthquake, some of the affected people could not return to normal life because they suffered significant mental and physical injury and their properties were significantly damaged. Also, a number of problems associated with the life of affected people occurred, such as housing, social and health services, environment, employment, and industry.

Based on the verification results of the Great Hanshin-Awaji Earthquake, TMG recognized that a mechanism of mutual assistance is important for the reconstruction and created the “TMG Earthquake Disaster Reconstruction Manual” (March, 2003) to propose a mechanism for new mutual assistance.

The manual consists of a “Reconstruction Policies and Measures Version,” which is a guidebook for the practical reconstruction operations for the responsible persons in administrative authorities and a “Reconstruction Process Version” in which various mechanisms to carry out the reconstruction by utilizing the strength of communities are proposed in order for the manual to become the affected people's action guideline.



If the affected areas due to an earthquake extend to a substantial radius and it is assumed to take a substantial amount of time to carry out the earthquake disaster reconstruction, TMG will set up the Reconstruction Headquarters.

The headquarters is to be set up early, such as about one week after the disaster. The headquarters will clearly show the vision for metropolitan Tokyo after the earthquake disaster reconstruction, the vision for metropolitan Tokyo citizens, the goals to accomplish in the Earthquake Disaster Reconstruction Plan, project policies, etc., and promote specific earthquake disaster reconstruction projects.

Prompt Issuance of Victim's Certificate

The Victim's Certificate is a certificate issued by the municipal governments and states the confirmed degree of housing damage such as “Completely destroyed, large-scale partial destruction, medium-scale partial destruction, partial destruction, some damage, etc.” after examining the affected houses. This certificate is required when applying for various support systems for affected people, such as monetary donations and the tax allowance.

TMG jointly developed a system to promptly issue Victim's Certificates with Kyoto University in FY2011 and has been supporting the municipal governments in introducing the system.

(11) Spreading Education on Disaster Prevention

“Disaster Preparedness Tokyo,” the Disaster Prevention Book

To promote an awareness of self-help and cooperation among residents and communities, we created a disaster prevention book titled “Disaster Preparedness Tokyo” in FY2005. This book contains such content as early preparation for various disasters, coping methods, and so on. It can be utilized every day in normal times and contains a variety of useful information.

In addition to providing multilingual support, such as publishing English and Chinese versions (Simplified Chinese and Traditional Chinese) and Korean, we have also created audio versions, braille versions, and large type versions and provided them to libraries in Tokyo.



“Disaster Readiness Guide”, A disaster prevention book with a female perspective

In order to encourage women to actively take part in disaster preparedness and to promote the readiness of Tokyo residents to fight a disaster much more seriously, a disaster preparedness book “Living in Tokyo with Disaster Prevention,” composed with a perspective of women, was published. Its distribution started at municipal facilities within Tokyo in 2018.

The booklet provides concise yet easy to understand information about disaster preparedness measures that can be taken in each part of your life as well as life after a disaster, such as preventing crime when living in an evacuation shelter and living with pets, using real life stories from people affected by disasters. In order to make it possible for more people to read, including those with visual impairment, voice recording codes are listed on the lower left of each page, including multilingual support. In addition, we have also created A4-size versions and large type versions and provided them to libraries in Tokyo.



Disaster Preparedness Tokyo App

In order to promote the readiness of Tokyo residents to fight a disaster, “Tokyo Disaster Preparedness App” was released in 2018. Based on the concepts of “play”, “study”, and “use”, it was designed to help build primary knowledge of disaster preparedness while having fun with content which will be useful in a disaster such as disaster prevention maps and push notification of disaster information. It is a convenient application with multilingual versions. You can view such disaster-prevention handbooks as “Tokyo Disaster Preparedness” and “Living in Tokyo with Disaster Prevention” and answer questions about disaster prevention.” It also integrates the “Flooding Risk Map” which visualizes flooding risk in Tokyo. This is an official disaster-prevention app of TMG you can count on at any time including emergency cases.



Disaster Preparedness Notebook -Disasters and Safety-

In order to help children, who will shoulder the next generation, make effective use of “Tokyo Disaster Preparedness,” and incorporate the contents of the “Living in Tokyo with Disaster Prevention,” the “Disaster Preparedness Notebook - Disasters and Safety -” was born as a disaster preparedness manual for children to take actions with their families. The “Disaster Preparedness Notebook - Disasters and Safety -” is delivered to children and students at all schools in Tokyo and leads to better disaster preparedness education that integrates schools, families, and communities.

Along with the “Disaster Preparedness Notebook - Disasters and Safety -”, a “Disaster Preparedness Education Portal” was launched. In addition to downloading “Disaster Preparedness Notebook - Disaster and Safety -”, children can also search for disaster preparedness experience locations, instructional materials for disaster preparedness education, safety education, etc., and view links to related organizations, etc. where they can make use of their learning. This content supports in promotion of disaster preparedness education for children and students at home and schools.



Disaster preparedness education portal

Promotion of a "stockpile of daily necessities" (Citizens' Stockpiling Project)

The TMG is conducting a "Citizens' Stockpiling Project" with the aim of encouraging households to practice "daily stockpiling" in preparation for natural disasters that may occur at any time. The concept of a "daily stockpile" is to prepare a little more food and daily necessities so that they can be used even if lifelines and distribution are disrupted for a certain period of time during a large-scale disaster.

In addition, we have designated November 19 as "Stockpile Day" to encourage families to check their stockpiles once a year.



① Tokyo Stockpile Navi

The "Tokyo Stockpile Navi" website was launched to provide information on the necessary items and quantities of stockpiles for each household, and to facilitate purchases at shopping sites and physical stores by simply answering simple questions such as about your family structure. Please feel free to use it!

○ Website URL <https://www.bichiku.metro.tokyo.lg.jp/>

○ Main website contents

- Displays a list of items and quantities you need to stockpile by answering a few simple questions
- Links to shopping sites for direct purchasing of stockpile items
- Delivers articles useful for disaster prevention and stockpiling
- Obtain hazard maps for your area and other useful information for preparedness

② Daily Stockpile Awareness Video "It's a Daily Stockpile! Kaishain" (Japanese audio with English subtitles)

This video raises awareness about the importance of daily stockpiling, especially among the younger generation, featuring the character "Kaishain." The interactive function that allows users to touch the screen while the video plays allows you to learn about daily stockpiling while answering quiz questions in a game format.

○ Website URL <https://www.bousai.metro.tokyo.lg.jp/kyojyo/1001855/1011811.html>

③ Daily stockpile leaflets and pamphlets

These explain the items that you may need to stockpile in the event of an earthquake directly hitting Tokyo.

○ Leaflet <https://www.bousai.metro.tokyo.lg.jp/kyojyo/1001855/1003554.html>

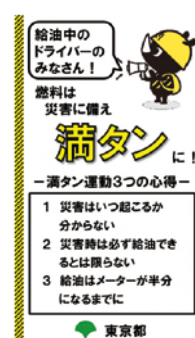
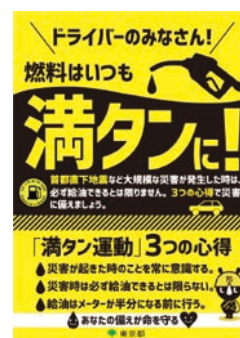
○ Pamphlet <https://www.bousai.metro.tokyo.lg.jp/kyojyo/1001855/1003729.html>



Full Tank Movement

In the event of a large-scale disaster like the 2011 Tohoku Earthquake and Tsunami (Great East Japan Earthquake) or the 2016 Kumamoto Earthquake, long lines were formed at gas stations of people waiting to refuel their vehicles. In particular, during the Great East Japan Earthquake, up to 120 cars were waiting at peak times even at gas stations in Tokyo.

It may not always be possible to refuel your car in the event of a large-scale disaster like an earthquake hitting directly under the Tokyo Metropolitan area. In preparation for dealing with such a situation, this campaign is meant to increase awareness of the importance of frequently filling up the vehicle fuel tank.



Posters and Leaflets to improve awareness Back side of rolled receipt papers

Section 3 Other Crisis Management

1. New Influenza Virus

New Influenza Virus

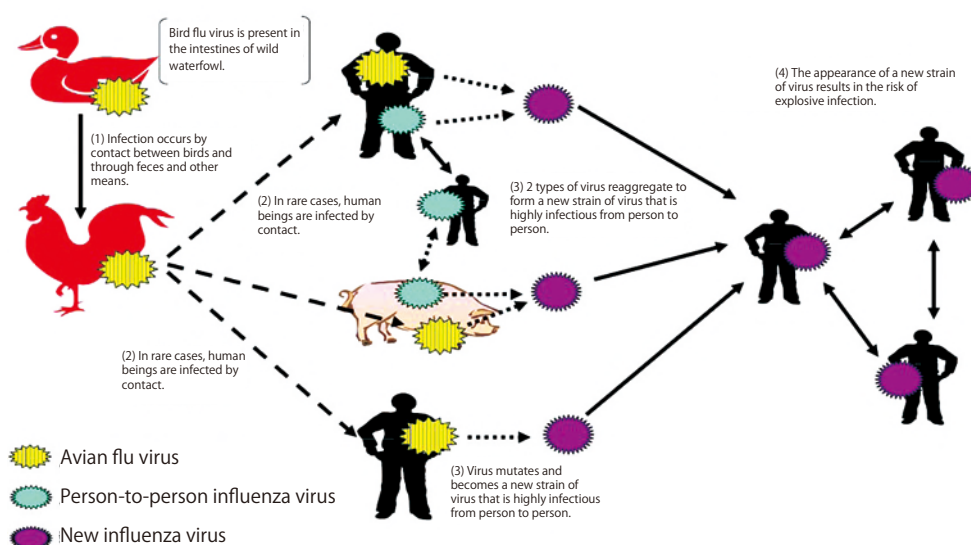
A new type of influenza Virus is that has never been infected by humans in the past. The H1N1 strain of influenza (A/H1N1) that occurred in April 2009 was fortunately not very pathogenic, but shifted to a seasonal influenza at the end of March 2011.

However, overseas infections affecting humans such as avian influenza (A/H5N1, A/H7N9) have been confirmed, and there are concerns that such viruses may mutate into a novel influenza.

Since many humans do not have immunity to the H1N1 influenza, there are concerns that a pandemic could occur around the world, resulting in extensive harm to human life as well as to social and economic activities.

Symptoms

New influenza viruses are thought to basically have similar initial symptoms, i.e. high fever, coughing, etc., as other forms of influenza. However, highly pathogenic strains of new influenza originating out of avian influenza (A/H5N1, A/H7N9) are more likely to cause fatalities, and there is concern over the mass health impact such strains could impart.



Projected damage in case of new influenza epidemic

Name	Tokyo	Japan
Outpatients	3,785,000	approx. 13,000,000 to 25,000,000
Inpatients	291,000	approx. 530,000 to 2,000,000
Deaths	14,000	approx. 170,000 to 640,000

Past Influenza Pandemics

Name	Spanish Flu	Asian Flu	Hong Kong Flu	New Influenza (A/H1N1)
Pandemic dates	1918 – 1920	1957 – 1958	1968 – 1969	From April 2009
Number of deaths worldwide	20 – 50 million	1 – 4 million	1 – 4 million	At least 18,449*
Virus type	A/H1N1	A/H2N2	A/H3N2	A/H1N1

* As of August 1, 2010

Routine Preparation

1. Let's routinely strive to prevent influenza infections

The following are general measures for preventing infections from infectious diseases such as new strains of influenza.

○Practice good cough etiquette.

(1) Put on a mask, when there are symptoms like coughing.

(2) Cover mouth & nose with tissue, when coughing, sneezing.

(3) Turn your face away from the people around you.

○Wash your hands when returning from outside.

○Keep indoor environments at a proper humidity and ventilated.

○Live a healthy lifestyle and get proper rest.

○Eat nutritionally balanced food and drink enough fluids.

○Only go outdoors when necessary and avoid crowds as much as possible.



2. Stockpile supplies

During the peak infection period, it is believed that up to 40% of persons will be forced to take time off work because they have fallen ill or must take care of ill family members. This could potentially reduce the availability of a wide range of services including government services, public transportation, and logistics. As a routine matter, you should stockpile food, masks, and other supplies in addition to making preparations for natural disasters.

If a new strain of influenza occurs

1. In case of an outbreak overseas

- Pay attention to information about outbreaks of new strains of influenza announced by the government and local administrative bodies, and about travel to and return from countries where such an outbreak has occurred.

2. In case of an outbreak in Japan

- Take complete steps to prevent infection and follow the instructions of the government, local administrative bodies, and medical institutions.
- Obtain information from sources such as television, radio, and the websites of the government and local administrative bodies.
- If you think you may be infected (subjective symptoms such as a fever of 38° C or higher or cough), call the health center or other institution in advance and promptly seek examination by a medical institution.
- Anybody may become infected. Do not abuse or slander infected persons.



If the government has declared a state of emergency, the government may request that people refrain from leaving their homes unnecessarily except in emergency, and that operation of theaters, events, etc. be restricted. Please accept and cooperate with these requests.

In case of a new influenza outbreak, the World Health Organization (WHO) will identify the countries with outbreaks, and notify all nations. After the outbreak has been identified, the Japanese government will take measures to prevent the spread of infection by monitoring airport and port facilities for those arriving from areas of outbreak. When a new influenza virus has been confirmed in Japan, hospitalization recommendation measures will be taken and examine at the specialized medical institution in accordance with the Infectious Diseases Control Law. However, if further infection spreads and the number of patients increased, carefully check.

Efforts by TMG

In December 2005, TMG formulated the TMG New Influenza Response Action Plan, and is stockpiling anti-viral drugs and other supplies. Based on the lessons of the new strain of influenza (A/H1N1) that occurred in April 2009, it has also formulated “the TMG BCP (New Influenza Version)” so that the government can continue to operate with limited staff, and has taken other steps in preparation for an outbreak of a new strain of influenza.

“The Act on Special Measures for Pandemic Influenza and New Infectious Diseases” was enacted in April 2013 to further improve the effectiveness of the response to an outbreak. Under this law, when the government has declared a state of emergency during an outbreak, TMG may request that people refrain from leaving their homes, close schools, restrict the use of facilities where people gather, and request the sale of medicines and food to TMG. The law also prescribes vaccine immunizations of residents by local governments.

Following the enactment of the special measures act, the Tokyo Metropolitan Government established the Ordinance on New Type Influenza Response Headquarters in March 2013 and put into place a framework to address outbreaks of new types of influenza. In addition, the city's currently existing action plan, new-type influenza response manual, and municipal government BCP (new-type influenza version) have been integrated, and new items stipulated by an Act on special measures have been added, and the Tokyo Metropolitan Influenza Measures Action Plan was established in November 2013 and partially revised in July 2018.

Primary measures of the Tokyo Metropolitan Plan of Action Against New Strains of Influenza	
1 Surveillance and collection of information	Construct a surveillance system and collect and analyze information. Conduct surveillance as appropriate for the stage of an outbreak.
2 Information provision and sharing	Rapidly provide information to Tokyo residents and companies (Websites, Twitter). Strengthen coordination with local governments, medical institutions, and other related institutions.
3 Consultations for Tokyo residents	Establish a New Influenza Consultation Center. Offer consultation regarding preventing catching the infection and other matters.
4 Preventing wider infection	Enact border measures and measures to prevent infection at facilities where the infection risk is high. Call for individual infection prevention measures and voluntary restrictions on events.
5 Preventive vaccination	Cooperate with businesses and other agents registered by the national government to carry out designated vaccinations. Provide support for vaccinations of residents by local governments.
6 Medical care	Secure medical institutions willing to cooperate in treating infectious diseases, and stockpile drugs and other supplies. Establish Outpatient Specialty Clinics for New influenza.
7 Ensuring stability of Tokyo resident lives and economic activity	Ensure stable supply of food and daily essentials Request for cooperation to assist vulnerable persons sent to municipalities
8 Maintenance of city functions	Maintain lifelines, public transportation, and administrative functions. Secure safety and security for Tokyo residents.

Training in cooperation with related agencies, local governments, and other parties will be conducted, and other efforts made to improve response capabilities, in the future.

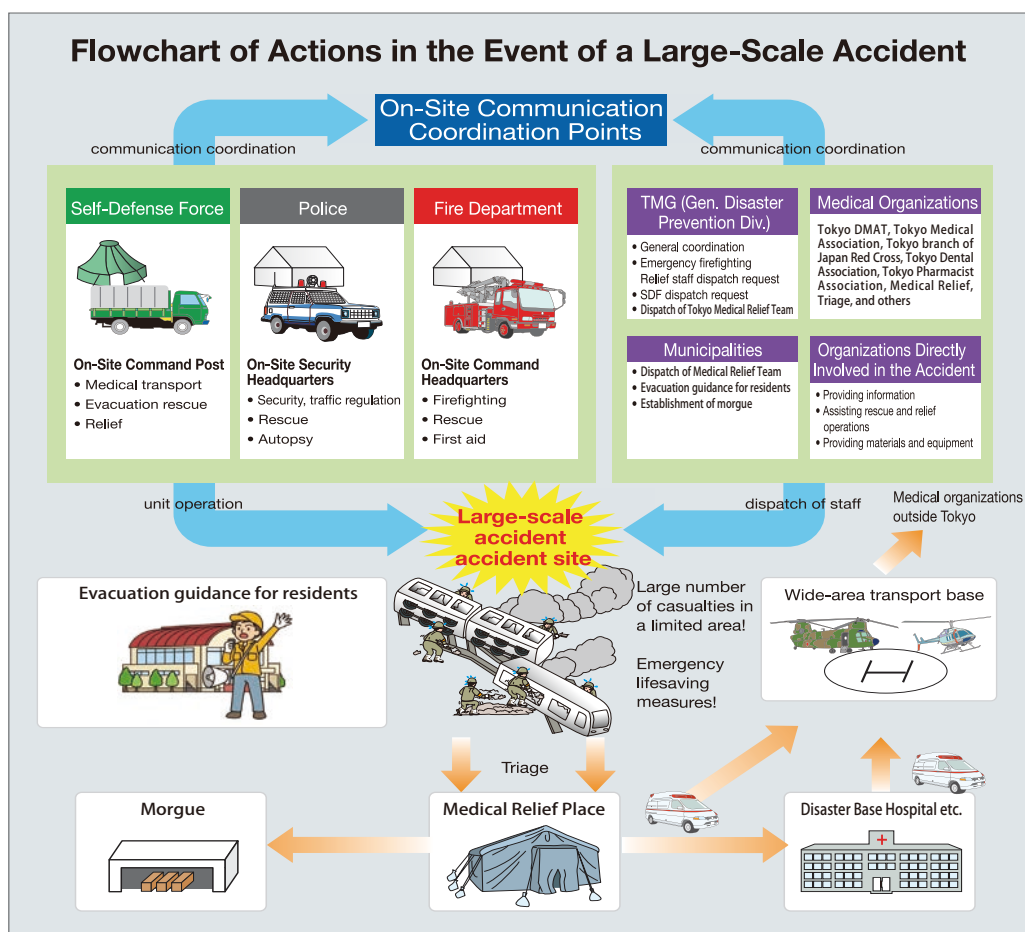


New Strain of Influenza Response Drill

2. Large-Scale Accidents

Large-Scale Accidents

The Tokyo Metropolitan Government has prepared to take actions in case large numbers are killed or injured due to (1) large-scale fires, (2) accidents caused by dangerous materials such as high-pressure gas, and (3) accidents involving transportation such as ships, airplanes, and railways. In the "Tokyo Disaster Prevention Plan (Large-scale accidents)," general measures have been established from prevention to emergency measures and recovery methods.



"Disaster Prevention Measures at Petrochemical Complexes, etc."

At Tokyo International Airport (Haneda Airport), the amount of gasoline stored and handled by operators refueling to aircraft exceeded a certain amount, so in August 2018, the "Tokyo International Airport Area" was designated as a special disaster preparedness area (an petrochemical complex) according to the Disaster Prevention Act for Petrochemical Complexes.

In response, the Tokyo Metropolitan Government established the Tokyo Petrochemical Complex, etc. Disaster Prevention Headquarters based on the "Tokyo Metropolitan Petroleum Complex Disaster Prevention Headquarters Ordinance", which came into effect in October 2018, as well as "Tokyo Metropolitan Petroleum Complex, etc. Disaster Prevention Plans" in December 2019. In addition to preventing the occurrence and spreading of disasters in special disaster preparedness areas, we conduct disaster-prevention activities together with disaster prevention related organizations to protect the lives and properties of the residents in related areas.

Nuclear Disaster Preparedness Measures

In preparation for the occurrence of a nuclear emergency situation at a nuclear power facility near Tokyo, TMG has stipulated countermeasures such as upgrading information provision system in the "TMG plan for Local Disaster Preparedness (Nuclear Disaster Version)."

In November 2012, measures were added based on the lessons learned from the Great East Japan Earthquake, and in January 2021, a revision was made based on national policy by specifying the details of protective measures.

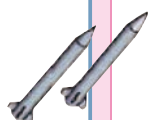
Main Activities

- Measuring air radiation levels and radioactive materials in water, food products, etc., and provision of information
- Establishing health consultation stations and measuring external exposure dose at public health institutes and the Tokyo metropolitan hospitals
- Preventing harmful rumors about agricultural crops, industrial products, etc.

3. Armed Attacks

Definition of Armed Attack

“Armed attack” refers to a military attack by a foreign power (armed attacks) or large-scale terrorist attack (anticipated emergencies) with the potential to cause large damage to the lives and health of many people.



Armed attacks

1. Landing of invading forces
2. Guerrilla or special forces attack
3. Ballistic missile attack
4. Air strike

Anticipated emergencies (Large-scale terrorist attacks)

1. Attacks on facilities where hazardous substances are present (gas storage and other facilities)
2. Attacks on facilities with large crowds (stations, trains, theaters, etc.)
3. Attacks using substances of mass destruction (anthrax, sarin, etc.)
4. Attacks using means of transport (suicide aircraft attacks)



Tokyo Metropolitan Civil Protection Plan

Following the enactment of the Armed Attack Situations Response Act in 2003, the Civil Protection Law was enacted in 2004 and establishes a system for cooperation between the national government and prefectural and local governments to evacuate and assist residents, and take other action to protect the citizens of Japan, in the event of an armed attack by a foreign power, large-scale terrorist attack, or similar event.

In preparation for the possibility of an armed attack by a foreign power, large-scale terrorist attack, or similar event, TMG formulated the Tokyo Civil Protection Plan in 2006 in order to carry out rapid and accurate measures to protect citizens, and is working during ordinary times to collect risk information, to warn, strengthen initial response, and make other improvements. In the event of a terrorist attack, based on the identification of the situation by the national government, TMG will cooperate with local governments, police and fire departments, and other related agencies to evacuate and assist residents.

○ Activities During Ordinary Times

- TMG will monitor for any signs of terrorism, gather crisis information and remain on constant alert.
- TMG will work with municipalities, businesses, and others in conducting role-playing and on-site drills.
- TMG has established the Business Operators Liaison Conference for the Crisis of Terrorism which is to enhance a crisis management system and cooperation, as well as to share information, with businesses managing large-scale customer facilities and has been enhancing cooperation by holding seminars.

○ Measures in case of a Terrorist Attack or Armed Attack

- Municipalities inform warnings to residents through J-ALERT emergency broadcast system and disaster Radio System.
- Related agency and coordination center will be set up on site to respond promptly and accurately according to local conditions.
- TMG will make a cautionary request to lifeline companies and a request for suspension of train operations to prevent the spread of damage.



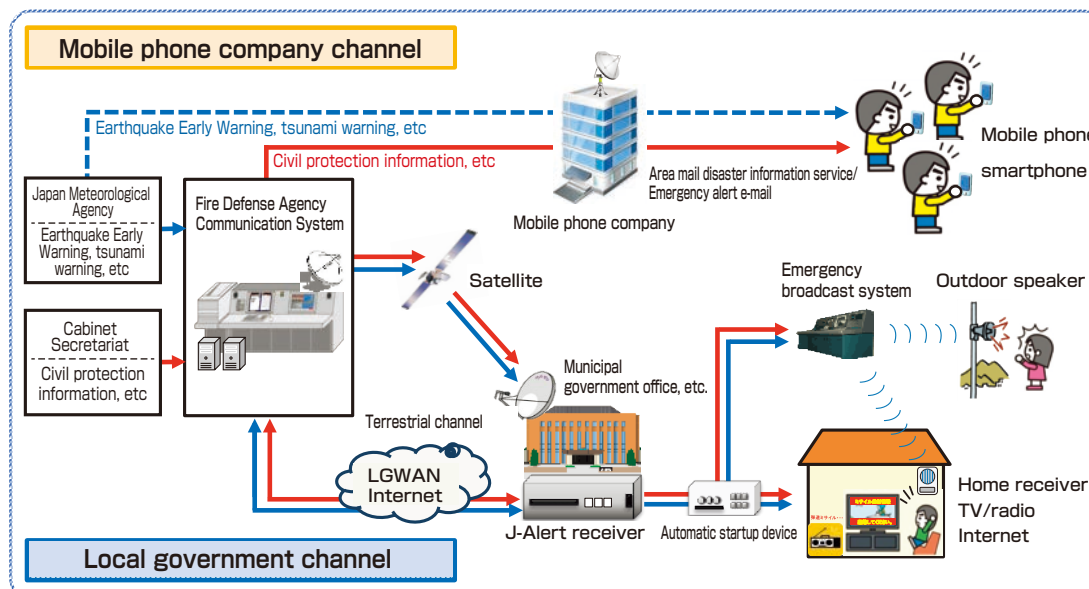
Tokyo Citizens Protection Joint Map Training 2017



Tokyo/Koto-Ward Citizens Protection (Large-Scale Terrorism Disaster Countermeasures) Training 2018

J-Alert nationwide instantaneous warning system

A system that instantaneously delivers information about emergency situations in which time to react is minimal, such as ballistic missile information, Earthquake Early Warnings, and tsunami warnings, from the government to residents by means of municipal emergency broadcast systems or emergency alert e-mails to mobile phones



Source: "Overview of J-Alert," Fire and Disaster Management Agency, Ministry of Internal Affairs and Communications

Evacuation Actions

In addition to ballistic missiles, we must also consider other terrorist attacks that may include the use of bombs to cause explosions or other substances that may cause mass deaths ("NBCR" N: nuclear materials, B: biological agents, C: chemical agents, R: radioactive materials).

In the case of NBCR terrorism in particular, the response to take depends on the substance used for the terrorism act. If an act of terrorism actually occurs, it is important to try to get information from the television, radio, etc., follow the instructions from the government, and to act calmly.

1. In the case of ballistic missiles

If you are outdoors, evacuate to nearby buildings or underground shopping areas. If you are indoors, move away from windows or go into a room without windows.



2. In the case of an explosion

If an explosion occurs, quickly keep low to the ground and hide yourself under a sturdy table. Explosions may occur several times, so evacuate to a safe place.



3. In the case of a nuclear explosion or radioactive contamination

If a nuclear explosion occurs, hide behind something as a shield and evacuate to an underground facility or a sturdy building.

Also, an explosion caused by a so-called dirty bomb can cause radioactive contamination after it lands, so receive an examination from a doctor according to instructions from government agencies.



4. In the case of a chemical or biological agent attack

Cover your mouth and nose with a handkerchief, and move away from the site of the attack immediately. Go to a safe location that is not likely to be contaminated, such as inside a tightly sealed building or an upwind high ground area.



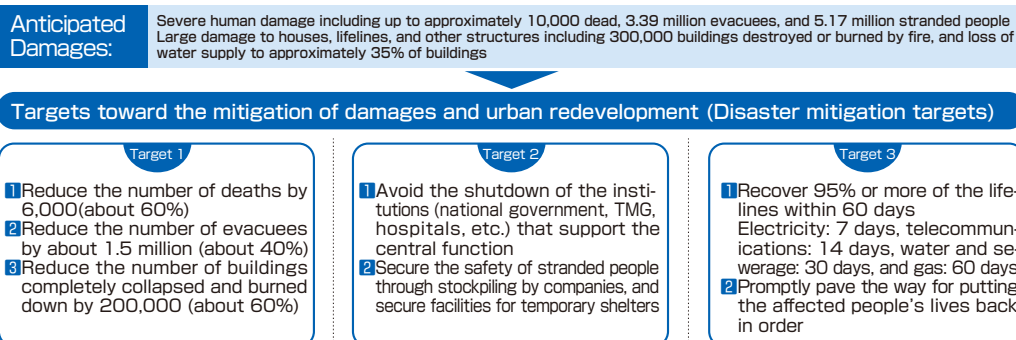
Section 4 Tokyo Metropolitan Government Crisis Management System

1. The TMG Plan for Local Disaster Preparedness Measures

The TMG Plan for Local Disaster Preparedness Measures is a plan that was formulated by the Tokyo Disaster Prevention Committee based on the Disaster Countermeasures Basic Act, containing the Earthquake Version, Storm and Flood Version, Volcano Version, Large-scale Accident Version, and Nuclear Power Disaster Version. The purpose is to protect the lives, health, and properties of Tokyo residents from disasters by implementing preventive measures, emergency and recovery measures, etc. related to earthquakes and other disasters, and the plan is reviewed annually and amended when deemed necessary based on damage estimates, lessons learned from actual large-scale disasters, revisions to related laws and regulations, and trends in the national government.

Most recently, we revised the Earthquake Version in July 2019 based on the lessons learned from the Kumamoto Earthquake, the promotion of disaster prevention measures from the viewpoint of women, the response to the increasing number of foreign visitors to the city, and the progress in disaster prevention urban planning and ICT technology. In addition, we revised the Storm and Flood Versions in January 2021 based on the results of the Large-Scale Flood Disaster Review Meeting that examined the issues revealed by Typhoon Hagibis and other events, and revised the Large-scale Accident Version and Nuclear Power Disaster Version based on the revision of related laws and regulations and the latest trends in the country.

Main Contents of the Tokyo Metropolitan Area Disaster Prevention Plan (Earthquake Version)



2. Tokyo Disaster Prevention Plan

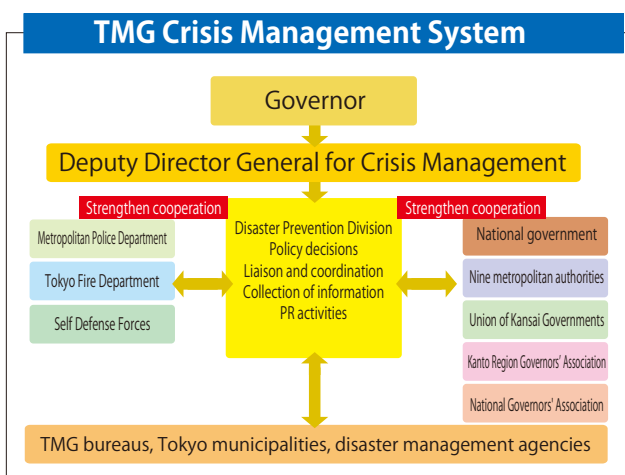
In March 2021, we formulated Tokyo Disaster Prevention Plan 2021 as a project plan leading up to 2023 in order to promptly and systematically promote disaster prevention measures against natural disasters such as earthquakes, strong winds, floods, and volcanic eruptions. The TMG, which is responsible for public assistance and the understanding and cooperation of local communities and businesses, and Tokyo citizens, who are responsible for self help and mutual aid, will work together to promote the initiatives listed in this plan for a safe and secure Tokyo.

3. TMG Crisis Management Systems

TMG Crisis Management System

To protect the lives and properties of metropolitan Tokyo residents from immediate danger, TMG was the first among local governments nationwide to establish a crisis management organization in April 2003 to strengthen its response structure to man-made disasters, such as terrorism, in addition to natural disasters.

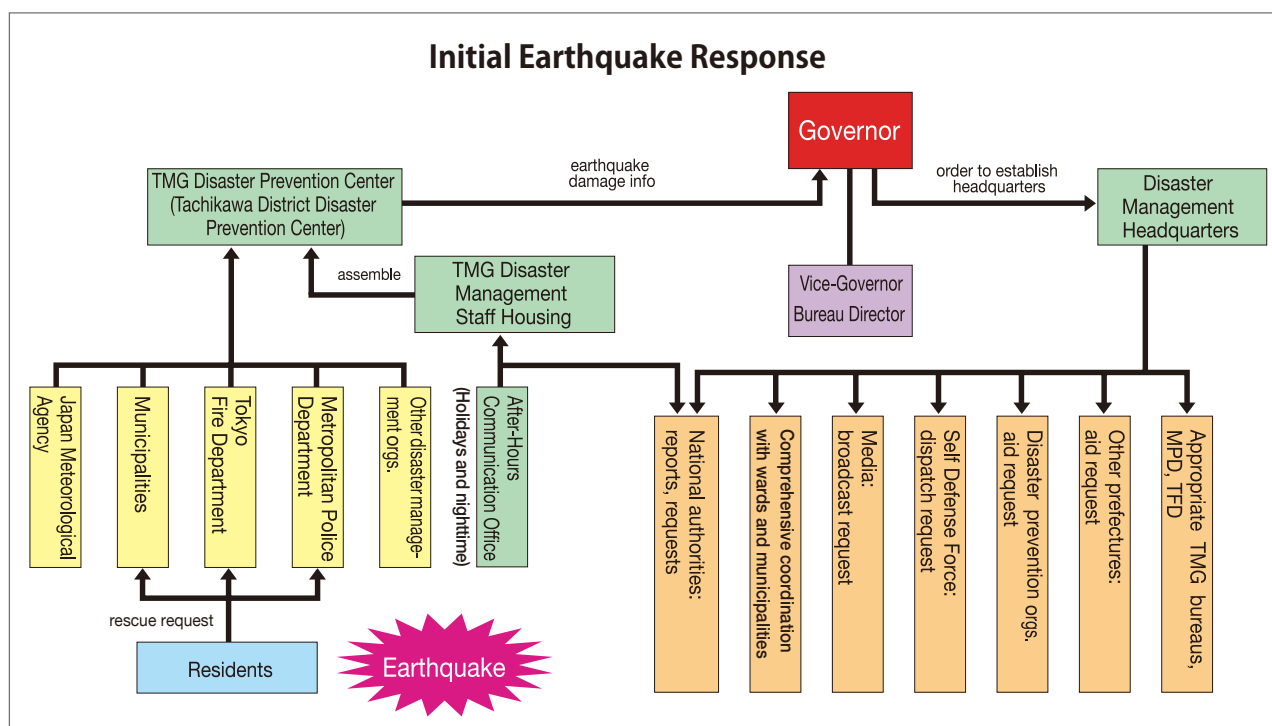
The Deputy Director General for Crisis Management receives instructions directly from the governor when a disaster occurs and correlates with the bureaus in the TMG and shares information with the municipalities and related organizations.



Disaster Management by TMG

In the event of a disaster, TMG staff will take action as first responders in accordance with prearranged standards and quickly assemble in their workplaces, including the Tokyo Disaster Prevention Center.

Priority will be given to humanitarian responses such as gathering and distributing disaster information, firefighting, rescue and first aid, regulating traffic to secure transportation routes, evacuation and protection of residents. TMG will coordinate with government of Japan, municipalities, the Metropolitan Police Department, the Tokyo Fire Department and disaster prevention related organizations to carry out emergency measures. TMG will also request disaster relief from the Japan Self-Defense Forces.



Mutual Support and Cooperation

1. When an earthquake causes extensive damage over a wide area, efforts by TMG organizations alone may not be sufficient. To prepare for such cases, TMG has a mutual support agreement with the neighboring local authorities regarding the distribution of daily necessities such as food and water, as well as provision of medical care.

Nationwide Agreement on Wide-Area Support in Times of Disaster between Prefectures (signed in July 1996)

Agreement on mutual support in large-scale urban disasters (concluded in October 1986)

Agreement on Mutual Support at Times of Disaster between Tokyo and 9 Prefectures (Kanto Region Governors' Association) (signed in June 1977)

9 Metropolitan Authorities Agreement for Mutual Support During Disasters (signed in April 2010)

Agreement between the Union of Kansai Governments and 9 Metropolitan Authorities for mutual support during disasters (Concluded in March 2014.)



9 Metropolitan Authorities Agreement



Union of Kansai Governments

2. Other mutual cooperation systems by TMG include: dispatch of medical staff by the Tokyo Medical Association, and agreements with private-sector organizations for providing daily necessities, building supplies, construction of temporary housing, etc.

4 Disaster Preparedness Training

Significance of Disaster Preparedness Training

In order not to spread damage during a disaster, preparations on a routine basis are important. In the disaster preparedness training conducted by the TMG, we strive to implement practical training with



Scenes from the comprehensive disaster prevention training

emphasis on hands-on training with participation of residents in firefighting and rescue activities, and we aim to improve disaster preparedness capabilities while deepening cooperation with the citizens of Tokyo, municipal governments and the disaster preparedness authorities concerned.

Disaster Preparedness Training Held

Major Training		Achievements
On-Site Training	Storm and flood countermeasure training	General disaster preparedness training General disaster preparedness training on islands The TMG jointly conducted general disaster preparedness training in each fiscal year with the following municipalities: 2006: Adachi-ku and Oshima-machi 2007: the cities of Akishima-shi, Fussa-shi, Musashimurayama-shi, Hamura-shi, and Mizuho-machi 2008: Chuo-ku, Koto-ku, Hachijo-machi, and Aogashima-mura 2009: Setagaya-ku and Chofu-shi 2010: Bunkyo-ku and Nijima-mura 2011: Kodaira-shi, Nishitokyo-shi, Musashino-shi, and Koganei-shi 2012: Meguro-ku and Kozushima-mura 2013: Akiruno-shi and Nijima-mura 2014: Suginami-ku, Miyake-mura and Mikurajima-mura (Canceled) 2015: Tachikawa-shi, Miyake-mura and Mikurajima-mura 2016: Sumida-ku, Katsushika-ku, Oshima-machi and Toshima-mura 2017: Chofu city, Hachijo-machi and Aogashima-mura 2018: Chuo City/Minato City, Ogasawara Village 2019: Tama City 2020: Kita-ku Major Participants TMG, municipalities, Metropolitan Police Department, Tokyo Fire Department, Self-Defense Force, Japan Coast Guard, lifeline companies, road contract companies, physical distribution companies, etc.
	General disaster prevention training	
	Island general disaster prevention training	
	Measures for stranded individuals countermeasure training	
	Other: Staff emergency attendance training Large-scale terrorist attack countermeasure training (includes on-map training) New influenza virus countermeasure training (includes on-map training)	
Role-playing/ Correspondence Training	Periodic disaster communications training	
	Tokyo on-map training	
	9 Metropolitan Authorities on-map training (held once every two years)	

Practical disaster preparedness training at municipal high schools

Disaster Prevention Drills

This has been implemented at all metropolitan high schools since fiscal 2012 with the goal of educating people that during a disaster they must first protect their own life before helping others. It also intends to foster a sense of self help and mutual aid in people so that they can contribute to disaster preparedness activities in their community, such as helping run the local evacuation shelter.

At each school, a disaster preparedness organization comprised of students that carries out planning and proposals of the school's disaster preparedness initiatives mainly participate to learn about the response and mindset during a disaster. Learning takes the form of disaster prevention drills such as initial fire response training, conducted with the community and outside institutions such as the municipal disaster prevention section, neighborhood associations, fire department, police department, Bureau of Waterworks, and Ministry of Defense.

Also, metropolitan schools for students with special needs have been implementing a two-day one-night overnight disaster prevention drill from fiscal 2014, with the aim of conducting more practical drills assuming evacuation center operation, based on the results of experiential disaster prevention drills that have been conducted so far. The number of implementing schools has increased since the start, and from fiscal 2017, a two-day one-night overnight disaster preparedness training program has been held at all metropolitan schools for students with special needs. This training focuses on initiatives closely tied to the community and related institutions.



Emergency transport using blankets



Smoke house experience



Earthquake experience vehicle

Section 5 Reference Materials

Major Past Disasters in Tokyo

Earthquake			
Date	Disaster name	Main damage	Remarks
April 6 - 11, 1967	Cluster of earthquakes near Kozu Island	3 minor injuries, 16 buildings totally / partially destroyed, etc.	
February 29, 1972	Earthquake off Hachijo Island	3 minor injuries, etc.	
January 14, 1978	Earthquake off Izu Oshima Island	211 buildings damaged	
June 29, 1980	Earthquake off the east coast of Izu Peninsula	Measuring 5 on the JMA seismic intensity scale on Izu Oshima Island, and 4 in Tokyo	
September 24, 1980	South West Ibaraki Earthquake	1 seriously injured, 3 with minor injuries	
September 25, 1980	Central Chiba Earthquake	1 dead, 32 with minor injuries	
March 6, 1984	Earthquake off Torishima Island	1 with minor injuries	
October 4, 1985	Ibaraki-Chiba Border Earthquake	5 persons severely injured, 10 persons with minor injuries	
December 17, 1987	Earthquake off east of Chiba	3 seriously injured, 7 with minor injuries	
March 18, 1988	Eastern Tokyo Earthquake	1 seriously injured, 6 with minor injuries	
March 6, 1989	Northern Ibaraki-Chiba Earthquake	1 person with minor injuries	
February 20, 1990	Earthquake off Izu Oshima Island	1 seriously injured	
February 2, 1992	Tokyo Bay Earthquake	5 on the JMA seismic intensity scale in Tokyo, 22 injured	
June 15, 1992	Kozu Island Earthquake	1 with minor injuries, 5 on the JMA seismic intensity scale in Kozu Island	
October 12, 1993	Earthquake epicentered off Tokaido	1 dead, 2 seriously injured, 2 with minor injuries	
December 19, 1995	Earthquake off south-west of Izu Peninsula	5 on the JMA seismic intensity scale in Kozu Island	
March 14, 1999	Earthquake in waters near Kozu Island	5-lower on the JMA seismic intensity scale in Kozu Island	
July 1, 2000	Earthquake in waters off Izu Islands	1 dead, 1 seriously injured, 13 with minor injuries, 34 buildings total / partially destroyed	
July 5, 2001	Cluster of earthquakes off Aogashima Island	Road damage at 4 locations	
May 12, 2003	Southern Ibaraki Earthquake	2 with minor injuries	
September 20, 2003	Earthquake off east of Chiba	8 with minor injuries	
October 15, 2003	Earthquake off northwest of Chiba	2 with minor injuries	
October 7, 2004	Southern Ibaraki Earthquake	1 with minor injuries	
July 23, 2005	Earthquake off northwest of Chiba	1 seriously injured, 11 with minor injuries, 4 buildings partially damaged	
August 11, 2009	Earthquake in Suruga Bay	1 with minor injuries	
March 11, 2011	Great East Japan Earthquake	Seismic intensity level 5-upper in Tokyo, 7 persons killed, 117 persons injured, 17 buildings completely destroyed, 195 buildings partially destroyed	Disaster Relief Act was invoked.
May 5, 2014	Earthquake off Izu Oshima Island	5-lower on the JMA seismic intensity scale in Chiyoda-ku, Tokyo, 3 with minor injuries	
May 30, 2015	Earthquake off west of Ogasawara Islands	5-upper on the JMA seismic intensity scale in Ogasawara-mura, 3 with minor injuries	
September 12, 2015	Earthquake in Tokyo bay	5-lower on the JMA seismic intensity scale in Chofu-shi, 1 seriously injured, 5 with minor injuries	

Major Past Disasters in Tokyo

Wind / flood damage			
Date	Disaster name	Main damage	Remarks
September 16-18, 1965	Typhoon #24	6 dead, 3 seriously injured, 7 with minor injuries, 14 buildings totally / partially destroyed (across Tokyo)	
June 27-28, 1966	Typhoon #4	2 dead, 1 missing, 2 seriously injured, 4 with minor injuries, 32 buildings totally / partially destroyed (across Tokyo)	Disaster Relief Act was invoked.
September 24-25, 1966	Typhoon #26	5 dead, 24 seriously injured, 289 with minor injuries, 3,311 buildings totally / partially destroyed (Tama region)	Disaster Relief Act was invoked.
August 31, 1971	Typhoon #23	3 dead, 1 building partially destroyed (central and Tama regions)	Disaster Management Headquarters established
July 20, 1974	Thunderstorm	1 dead, 2 with minor injuries, 3 buildings partially destroyed (central and Tama region)	
July 7, 1977	Thunderstorm	1 dead, 1 with minor injuries, 2 buildings partially destroyed (Tama region)	Disaster Relief Act was invoked.
October 19, 1979	Typhoon #20	5 dead, 10 seriously injured, 71 with minor injuries, 391 buildings totally / partially destroyed (across Tokyo)	Disaster Relief Act was invoked.
September 10-11, 1980	Typhoon #13	1 dead, 1 with minor injuries (central and Tama regions)	
November 30, 1982	Rainstorm	1 dead, 1 with minor injuries (central and Tama regions)	
July 14, 1985	Rainstorm	1 dead, 1 with minor injuries (central Tokyo)	
March 23, 1986	Snow and rainstorm	2 dead, 1 seriously injured, 8 with minor injuries (across Tokyo and Oshima Island)	
July 25, 1987	Rainstorm	1 dead, 1 with minor injuries, etc. (across Tokyo)	
July 31, 1987	Rainstorm	1 dead, 2 with minor injuries (central Tokyo)	
August 27, 1989	Typhoon #17	1 dead (Ome, etc.)	
August 10, 1990	Typhoon #11	1 dead (across Tokyo)	
August 20, 1991	Rainstorm	3 dead, 1 missing, 2 with minor injuries, 6 buildings totally / partially destroyed (across Tokyo)	
September 19-20, 1991	Typhoon #18	1 dead, 1 seriously injured, 2 with minor injuries, 4 buildings totally / partially destroyed (across Tokyo)	
June 20, 1997	Typhoon #7	1 dead, 1 seriously injured, 2 with minor injuries (Shibuya, Musashi-Murayama, etc.)	
September 21-25, 1997	Typhoon #24	3 dead, 3 with minor injuries, 8 buildings totally / partially destroyed (Ogasawara)	
January 15, 1998	Snowstorm	1 dead, 2 with minor injuries (across Tokyo)	
July 21, 1999	Rainstorm	1 dead, 1 seriously injured, 2 with minor injuries (Shinjuku-ku, Suginami-ku, etc.)	
September 10, 2001	Typhoon #15	1 dead, 1 with minor injuries (across Tokyo)	
September 4-5, 2005	Rainstorm	2,972 floods above ground level, 2,644 floods below ground level	Disaster Relief Act was invoked.
September 11, 2006	Rainstorm	32 buildings flooded above ground level, 54 buildings flooded below ground level	
September 6-7, 2007	Typhoon #9	3 with minor injuries, 7 buildings partially destroyed, 166 buildings partially damaged, other damage	
July 8, 2008	Heavy rainfall in short time period	1 dead	
August 5, 2008	Heavy rainfall	5 dead, 86 buildings flooded below ground level other damaged	
August 28-30, 2008	Rainstorm	1 building totally destroyed, 4 buildings partially damaged	
August 9-10, 2009	Rainstorm	5 with minor injuries, 61 buildings flooded below ground level, other damage	
October 8, 2009	Typhoon #18	4 with minor injuries, 1 building totally destroyed, 20 buildings partially damaged	
July 5, 2010	Rainstorm	2 missing, 381 floods above ground level, 401 floods below ground level	
December 3, 2010	Rainstorm	1 dead, 1 injured, 14 floods above ground level, 14 floods below ground level	
August 26, 2011	Rainstorm	171 floods above ground level, 153 floods below ground level	
September 21, 2011	Typhoon #15	11 injured persons, 1 building completely collapsed, 1 building partially destroyed, 1 flood below ground level	
February 29, 2012	Snowstorm	1 seriously injured	
April 3, 2012	Rainstorm	5 with minor injuries, 14 buildings partially damaged	
June 19, 2012	Typhoon #4	4 with minor injuries, 9 buildings partially damaged	
September 30, 2012	Typhoon #17	1 with minor injuries, 7 buildings partially damaged	
October 15, 2013	Typhoon #26	37 persons killed, 3 persons missing (Oshima-cho, Machida-shi)	Disaster Relief Act was invoked.
February 8, 2014	Snow and rainstorm	5 seriously injured, 61 with minor injuries	
February 14, 2014	Snow and rainstorm	6 seriously injured, 50 with minor injuries	
September 8-11, 2015	Heavy rains in Kanto and Tohoku regions	1 with minor injuries, 8 floods above ground level, 14 floods below ground level	
August 21-22, 2016	Typhoon #9	2 with minor injuries, 55 floods above ground level, 89 floods below ground level	
September 20, 2016	Rainstorm	1 with minor injuries	
October 22, 2017	Typhoon #21	1 minor injury, 18 homes flooded above ground level, 26 homes flooded below ground level, 20 homes partially destroyed	
October 29, 2017	Typhoon #22	4 homes flooded above ground level, 7 homes flooded below ground level	
January 22-23, 2018	Snowstorm	592 people with minor injuries	
September 8, 2019	Typhoon No.15	1 dead, 6 with minor injuries, 14 completely destroyed buildings, 73 half collapsed buildings, 1,624 partially damaged buildings, 24 buildings suffering from inundation above a floor level, 13 buildings suffering from inundation below a floor level	Disaster Relief Act was invoked
September 15, 2019	Rainstorm	2 with minor injuries, 2 completely destroyed buildings, 80 half collapsed buildings, 710 partially damaged buildings	
October 10, 2019	Typhoon No.19	3 dead, 10 with minor injuries, 36 completely destroyed buildings, 666 half collapsed buildings, 1,045 partially damaged buildings, 320 buildings suffering from inundation above a floor level, 531 buildings suffering from inundation below a floor level	Disaster Relief Act was invoked, Disaster Management Headquarters established
October 23, 2019	Typhoon #21	1 with serious injuries, 1 completely destroyed buildings, 2 half collapsed buildings, 21 partially damaged buildings	
October 8, 2020	Typhoon #14 and rain front	5 partially damaged buildings	Disaster Relief Act was invoked

Major Past Disasters in Tokyo

Other disasters			
Date	Disaster name	Main damage	Remarks
January 11, 1965	Oshima Fires	358 buildings burnt down	Disaster Relief Act was invoked. Disaster Management Headquarters established
February 4, 1966	ANA jetliner crash	133 dead	
March 4, 1966	Canadian Pacific Airlines jetliner crash	63 dead, 1 missing, 8 seriously injured	
May 14, 1972	Landslide at Yanokuchi Nishi Mountain	2 buildings partially damaged	
April 7, 1977	Nippara rockfall incident	1 building partially damaged	
February 10, 1979	Gas explosion (Condominium complex in Minami Ikebukuro)	1 seriously injured, 23 with minor injuries, 9 buildings totally / partially destroyed	
November 2, 1981	Miyake Island Tornado	2 buildings partially damaged	
February 8, 1982	Hotel New Japan fire	32 dead, 150 injured	
February 9, 1982	JAL jetliner crash	24 dead, 150 injured	
October 10, 1982	Landslide	3 dead, 3 seriously injured	
October 3, 1983	Miyake Island volcanic eruption	340 buildings totally destroyed	Disaster Relief Act was invoked. Disaster Management Headquarters established
August 11, 1984	Landslide	1 building partially destroyed	
November 21, 1986	Izu Oshima Island volcanic eruption	6 buildings partially damaged	Disaster Relief Act was invoked. Disaster Management Headquarters established
May 26, 1987	TEPCO Oil Thermal Power Station fire	4 dead, 1 injured	
June 6, 1987	Special aged care facility Shojuen fire	17 dead, 25 injured	
April 24, 1989	Hachijo Island tornado	1 building partially destroyed, 17 buildings partially damaged	
August 24, 1989	Koto Ward high-rise condominium building fire	6 with minor injuries	
January 22, 1990	Road cave-in near the Okachimachi Station	10 with minor injuries	
May 26, 1990	Daiichi Kasei Kogyo explosion	8 dead, 18 injured	
June 16, 1990	Tanashi & Kodaira tornado	2 with minor injuries, 61 buildings partially damaged	
December 8, 1992	Gas explosion (Fuchu City)	2 seriously injured, 1 with minor injuries	
February 1, 1993	Gas explosion at a water piping installation site Etchujima (Koto Ward)	4 dead, 1 seriously injured	
September 27, 1994	Aogashima Village landslide	2 dead, 1 missing	
July 2, 1997	Diamond Grace crude oil spillage	18 with minor injuries	
June 27, 2000	Miyake Island volcanic eruption	1 with minor injuries, 16 buildings totally / partially destroyed	Disaster Relief Act was invoked. Disaster Management Headquarters established
September 1, 2001	Shinjuku Kabukicho building fire	44 dead, 3 injured	
August 14, 2006	Large-scale Tokyo area blackout	Power interrupted to 1.39 million households in Tokyo Metropolitan Area, mostly in Tokyo.	
June 19, 2007	Explosion at Shibuya hot spring facility	3 persons killed, 3 persons severely injured	
October 24, 2009	Daiichi Kofuku-maru maritime accident	1 dead, 4 missing	
April 27, 2014	Massive power failure in Tokyo	Power interrupted to approximately 300,000 households	
July 26, 2015	Plane crash of private small aircraft in Chofu-City	3 dead, 9 injured, 1 building burnt down, 1 building partially burnt down	
October 12, 2016	Large-scale power outage	Interruption of power supply to up to 350,000 households in Tokyo	
February 23, 2021	Large-scale forest fire in Ome City	500 m ² of a temple and 85,000 m ² of forest burned	

Facilities for Disaster Preparedness Education and Training

Ikebukuro Bosaikan (Tokyo Fire Department Ikebukuro Life Safety Learning Center)	Address 2-37-8 Nishiikebukuro, Toshima-ku Phone 03-3590-6565 Closed 1st Tues., 3rd Tue., 3rd Wed. (or the following day, if a holiday), 12/29 through 1/3 Hours 9:00-17:00 Access 5 min. walk from South Exit, West Exit, and Metropolitan Exit, JR Ikebukuro Station URL https://tokyo-bskan.jp/bskan/ikebukuro/
Tachikawa Bosaikan (Tokyo Fire Department Tachikawa Life Safety Learning Center)	Address 1156-1 Izumi-cho, Tachikawa-shi Phone 042-521-1119 Closed Thurs., 3rd Fri. (The following day, if it is a holiday), 12/29 through 1/3 Hours 9:00-16:30 Access Tachikawa Shobosho Fire Station stop (bus departing from North Exit, JR Tachikawa Station) URL https://tokyo-bskan.jp/bskan/tachikawa/
Honjo Bosaikan (Tokyo Fire Department Honjo Life Safety Learning Center)	Address 4-6-6 Yokokawa, Sumida-ku Phone 03-3621-0119 Closed Wed., 3rd Thurs. (The following day, if it is a holiday), 12/29 through 1/3 Hours 9:00-17:00 Access 10 min. walk from North Exit of Kinshicho Station on the JR Sobu Line, or Exit 4 of Kinshicho Station on the Hanzomon Line URL https://tokyo-bskan.jp/bskan/honjo/
Tokyo Reconstruction Memorial Museum / Tokyo Memorial Hall	Address 2-3-25 Yokoami, Sumida-ku (in Yokoamicho Park) Phone 03-3622-1208 Closed Mon. (or Tues., if Mon. is a holiday), 12/28 through 1/4 Hours 9:00-17:00 Access 10 min. walk from JR Ryogoku Station (JR Sobu Line) West Exit or 2 min. walk from Ryogoku Station (Toei Oedo Line) A1 Exit URL http://tokyoireikyokai.or.jp/
Fire Prevention Museum	Address 3-10 Yotsuya, Shinjuku-ku Phone 03-3353-9119 Closed Mon. (or Tues., if Mon. is a holiday), year-end and New year (12/29 through 1/3) Hours 9:30-17:00 Access Directly connected to Yotsuya 3-chome Station (Tokyo Metro Marunouchi Line), Exit No. 2 URL https://www.tfd.metro.tokyo.lg.jp/ts/museum.html
SONA AREA TOKYO (Tokyo Rinkai Disaster Prevention Park)	Address 3-8-35 Ariake, Koto-ku Phone 03-3529-2180 Closed Mon. (Open on Mon. if it is a national holiday, and then closed the following day.), New Year holidays, irregular closing days. (Please check the following website for details.) Hours 9:30-17:00 Access 4 min. walk from Kokusai-tenjiro Station (Rinkai Line), 2 min. walk from the Yurikamome Ariake Station URL http://www.tokyorinkai-koen.jp/sonaarea/
Public Interest Incorporated Association Zenkoku Shiyu Bukken Saigai Kyosaikai Bosai Semon Library	Address 2-4-1 Hirakawa-cho, Chiyoda-ku (8F, Nihon Toshi Center Hall) Phone 03-5216-8716 Closed Sat., Sun., holidays, year-end and New year, and library sorting days Hours 9:00-17:00 Access 4 min. walk from Nagatacho Station on the Yurakucho Line, Hanzomon line or Namboku Line URL http://www.city-net.or.jp/library/

Sections in Charge of Disaster Response for Municipal Authorities

Municipality	Section in Charge Of Disaster Prevention	Phone (main)	Municipality	Section in Charge Of Disaster Prevention	Phone (main)
Chiyoda-ku	Disaster Response and Crisis Management Section, Policy Management Division	03-3264-2111	Machida-shi	Disaster Prevention Section, Disaster Prevention Safety Department	042-722-3111
Chuo-ku	Disaster Prevention Section, General Affairs Department	03-3543-0211	Koganei-shi	Community Safety Section, General Affairs Division	042-383-1111
Minato-ku	Disaster Prevention Section, Disaster Prevention & Living Safety Support Division	03-3578-2111	Kodaira-shi	Disaster Prevention and Crisis Management Section, General Affairs Department	042-341-1211
Shinjuku-ku	Crisis Management Section, General Affairs Department	03-3209-1111	Hino-shi	Disaster Safety Section, General Affairs Division	042-585-1111
Bunkyo-ku	Disaster Management Section, General Affairs Department	03-3812-7111	Higashi Murayama-shi	Disaster Prevention and Crime Prevention Section, Disaster Prevention and Public Safety Department	042-393-5111
Taito-ku	Crisis & Disaster Countermeasures Section, General Affairs Department	03-5246-1111	Kokubunji-shi	Living Safety Section, General Affairs Division	042-325-0111
Sumida-ku	Disaster Prevention Section in Charge of Crisis Management, City Planning Department	03-5608-1111	Kunitachi-shi	Community Disaster Prevention Section, Administrative Management Division	042-576-2111
Koto-ku	Disaster Prevention Section, Crisis Management Room, General Affairs Division	03-3647-9111	Fussa-shi	Disaster Prevention and Crisis Management Section, General Affairs Department	042-551-1511
Shinagawa-ku	Disaster Prevention Section, Disaster Prevention and City Planning Department	03-3777-1111	Komae-shi	Safety & Security Section, General Affairs Division	03-3430-1111
Meguro-ku	Disaster Prevention Section, Crisis Management Department	03-3715-1111	Higashiyama-shi	General Affairs Section, General Affairs Division	042-563-2111
Ota-ku	Disaster Prevention and Crisis Management Section, General Affairs Department	03-5744-1111	Kiyose-shi	Disaster Prevention and Crime Prevention Section, General Affairs Division	042-492-5111
Setagaya-ku	Disaster Countermeasures Section, Crisis Management Department	03-5432-1111	Higashi kurume-shi	Disaster Prevention and Safety Section, Environmental Safety Department	042-470-7777
Shibuya-ku	Disaster Prevention Section, Crisis Management Measures Department	03-3463-1211	Musashi murayama-shi	Disaster Prevention & Safety Section, General Affairs Division	042-565-1111
Nakano-ku	Disaster Prevention and Crisis Management Section, General Affairs Department	03-3389-1111	Tama-shi	Disaster Prevention Section, General Affairs Division	042-375-8111
Suginami-ku	Disaster Prevention Section, Crisis Management Room	03-3312-2111	Inagi-shi	Disaster Prevention Section, Fire Defense Headquarters	042-377-7119
Toshima-ku	Disaster Prevention and Crisis Management Section, General Affairs Department	03-3981-1111	Hamura-shi	Disaster Prevention & Security Section, Resident Life Division	042-555-1111
Kita-ku	Disaster Prevention and Crisis Management Section, Crisis Management Room	03-3908-1111	Akiruno-shi	Community Development Section, General Affairs Division	042-558-1111
Arakawa-ku	Disaster Prevention Section, Resident Life Division	03-3802-3111	Nishitokyo-shi	Crisis Management Section General Affairs Department	042-464-1311
Itabashi-ku	Disaster Prevention and Crisis Management Section, Crisis Management Department	03-3964-1111	Mizuho-machi	Regional Promotion Section, Resident Living Division	042-557-0501
Nerima-ku	Disaster Prevention Section, Crisis Management Room	03-3993-1111	Hinode-machi	Living Safety & Security Section	042-597-0511
Adachi-ku	Disaster Countermeasures Section, Comprehensive Disaster Preparedness Countermeasures Room, Crisis Management Department	03-3880-5111	Hinohara-mura	General Affairs Section	042-598-1011
Katsushika-ku	Crisis Management Section, Regional Development Department	03-3695-1111	Okutama-machi	General Affairs Section	0428-83-2111
Edogawa-ku	Disaster Prevention and Crisis Management Section, Crisis Management Department	03-3652-1151	Oshima-machi	Disaster Prevention Section,	04992-2-0035
Hachioji-shi	Disaster Prevention Section, Living Safety Division	042-626-3111	Toshima-mura	General Affairs Section	04992-9-0011
Tachikawa-shi	Disaster Prevention Section, Resident Life Division	042-523-2111	Niiijima-mura	General Affairs Section	04992-5-0240
Musashino-shi	Disaster Prevention Section, Disaster Prevention & Safety Division	0422-51-5131	Kozushima-mura	General Affairs Section	04992-8-0011
Mitaka-shi	Disaster Prevention Section, General Affairs Division	0422-45-1151	Miyake-mura	General Affairs Section	04994-5-0935
Ome-shi	Disaster Preparedness Section, Civic Affairs Department	0428-22-1111	Mikurajima-mura	General Affairs Section	04994-8-2121
Fuchu-shi	Disaster Prevention Section, Administrative Management Division	042-364-4111	Hachijo-machi	General Affairs Section	04996-2-1121
Akishima-shi	Disaster Prevention Section, General Affairs Division	042-544-5111	Aogashima-mura	General Affairs Section	04996-9-0111
Chofu-shi	General Disaster Prevention & Safety Section, General Affairs Division	042-481-7111	Ogasawara-mura	General Affairs Section	04998-2-3111

Inquiries Relating to Disaster Preparedness

If you have any questions about disaster prevention, please contact your local municipal authority's disaster prevention section (see page 63). TMG and other relevant organizations also accept inquiries on areas of their respective expertise, (generally 9 am to 5 pm, Mon. through Fri.)

Item	Department in charge	Tel. No.
On disaster prevention measures in general	Management Section, Disaster Prevention Division, Bureau of General Affairs	03-5388-2453
On district-based vulnerability measures for the areas crowded with wooden houses	Disaster Management Section, Urban Department Projects Division, Bureau of Urban Development	03-5320-5003
About earthquake resistance (Housing and emergency transport roadside building) (Condominiums)	Building Planning Section, Urban Building Division Bureau of Urban Development Office for Housing Policy Condominium Policy Section, Bureau of Urban Development	03-5388-3362 03-5320-4944
Flood damage related to rivers	Disaster Prevention Section, River Division, Bureau of Construction	03-5320-5164
Medical aid	Emergency Medical Services and Disaster Response Section, Medical Policy Division, Bureau of Social Welfare and Public Health	03-5320-4445

Electricity	Please contact your contracted service provider.	
City gas		
Telephone		
Waterworks	Bureau of Waterworks Customer Service Center (23 Wards)	03-5326-1101
	Bureau of Waterworks Tama Customer Service Center * For Musashino, Akishima, Hamura, Hinohara and minor islands, please contact each municipality directly.	0570-091-101
Sewerage	General Affairs Division, Bureau of Sewerage, Tokyo Metropolitan * For the Tama area, please contact each municipality directly.	03-5320-6511
Police	Disaster Division, Security Bureau, Metropolitan Police Department	03-3581-4321
Firefighting	Voices of Residents, PR Section, Planning and Coordination Division, Tokyo Fire Department * For Inagi and minor islands, please contact each municipal fire department directly.	03-3212-2111

Emergency laws, support groups, rescue operations, etc	Japan Red Cross Tokyo Branch	03-5273-6741 (rep)
Volunteer activities	Tokyo Volunteer Action Center	03-3235-1171 (rep)

Tokyo Metropolitan Government Disaster Prevention Guide Book

Published in December 2021

Edited and Published by: Management section, Disaster Prevention Division,
Bureau of General Affairs, Tokyo Metropolitan Government
2-8-1 Nishi Shinjuku, Shinjuku-ku, Tokyo 163-8001 Japan

Phone: 03(5388)2453

Printed by: CandZ Communication co., Ltd

First Class Standard Printed Matter
Print number (3)22



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