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## Disaster Facts and Information You Should Know

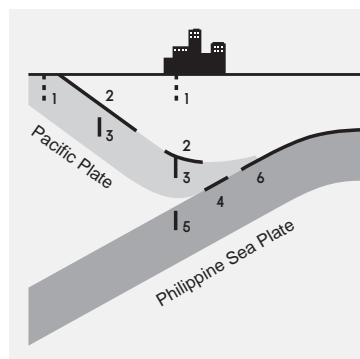
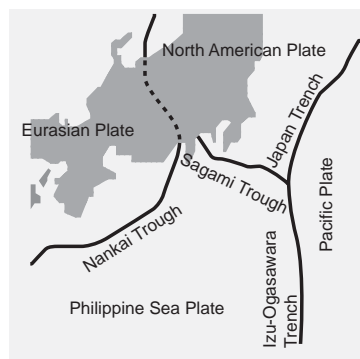


Learning as much as you can about disasters will help you make quick and accurate decisions when one strikes. This knowledge will not only be helpful to you, but could lead to helping many others too. In this chapter, we have compiled a range of information on different types of disasters and disaster preparedness. Enhance your level of disaster preparedness by learning more!





# Knowledge of Earthquakes



## Mechanism of Earthquake

Earthquakes occur when slabs of rock underground slip away or toward each other. Around Japan, oceanic plates move at a speed of several centimeters a year toward the land plates, and when the land plates can no longer resist this stress and slip, an earthquake occurs at the plate boundary (interplate earthquake). The complex forces of multiple plates around Japan make it one of the world's most seismically active areas.

An earthquake that occurs inside the tectonic plate is called an intraplate earthquake. Intraplate earthquakes include earthquakes occurring within the subducting plate and earthquakes occurring in the shallow area of a land plate (shallow focus inland earthquake: active fault earthquake). As a shallow focus inland earthquake would occur near residential areas, it could cause large damage. A large earthquake directly hitting Tokyo, the Tokai earthquake, and other major earthquakes are forecasted to occur.

## Active Fault

These were active in the most recent period of geological time (from the Quaternary Period: within the last 1.7 to 2 million years), and are faults that can become the source of future earthquakes.

## Seismic Intensity and Magnitude

Seismic intensity describes the degree of shaking. Seismic intensities announced by the Japan Meteorological Agency are ranked into 10 levels from "0" to "7" (see the table below). Magnitude (M) is the energy of the earthquake. Even an earthquake with a small magnitude could have a large seismic intensity in areas near the source.

Seismic intensity	Situation
0	Imperceptible to people
1	Felt slightly by some people keeping quiet in buildings.
2	Felt by most people keeping quiet in buildings.
3	Felt by almost all people inside buildings.
4	Almost all people are startled. Hanging objects such as lights sway significantly. Unstable objects/figurines may fall.
5 Lower	Most people feel the need to hold onto something stable. Things such as dishes or books on shelves may fall. Unsecured furniture may move and unstable objects may topple over.
5 Upper	Walking is difficult without holding onto something stable. More things such as dishes or books on shelves fall. Unreinforced concrete block walls, etc., may collapse.
6 Lower	It is difficult to remain standing. Most unsecured furniture move and some may topple over. Wall tiles and windows may sustain damage and fall. For wooden houses with low earthquake resistance, roof tiles may fall, and the houses may tilt or collapse.
6 Upper	People need to crawl to move, and may be thrown through the air. Almost all unsecured furniture move and more start toppling over. Large cracks may form in the ground, and large-scale landslips and massif collapse may occur.
7	There are even more cases of wooden houses with low earthquake resistance tilting or collapsing. Even buildings with high earthquake resistance could tilt. More reinforced concrete buildings with low seismic resistance collapse.



Liquefaction

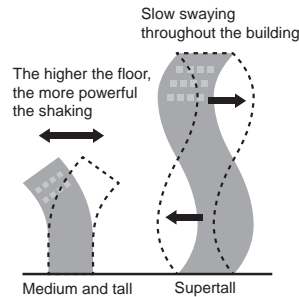
Liquefaction is a phenomenon in which soil behaves like a liquid due to the occurrence of an earthquake. It could cause damage such as the tilting or sinking of houses and other buildings. It could also result in the uplifting of manholes and structures with low specific gravity such as sewage pipes.

Long-period Ground Motions

When an earthquake occurs, various periods of shaking (ground motion) occur. Here, “period” means the time it takes for the ground to move back and forth to complete one cycle. When a large-scale earthquake occurs, a long-period, slow and large shaking (ground motion) occurs. This kind of ground motion is called “long-period ground motion.”

Swaying characteristics of tall buildings

Buildings have what is called a natural period—the rate at which they sway back and forth. When this natural period and the seismic wave period match up, the subsequent resonance will make the building shake significantly. In general, tall buildings have a longer natural period than low buildings. Due to this fact, tall buildings tend to resonate with the seismic waves of long-period ground motion, and once this resonance occurs, a building will sway largely for a long period. The higher floors of a tall building also tend to sway more than the lower floors.



Long-period ground motion observation information

The Japan Meteorological Agency is announcing long-period ground motion observation information on its website on a trial basis (as of April 2015).

Long-period ground motion levels

Long-period ground motion is ranked according to situations inside tall buildings, such as human perception and reaction, and the movement or toppling over of furniture. For instance in long-term ground motion grade 1, window blinds swing significantly and almost everyone can feel the shaking. At grade 4, most of the furniture that is not secured to the floor or wall moves and people find it difficult to remain standing.

Long-period ground motion level	Human perception and reaction	Situation
Grade 1	Almost everyone can feel the shaking. Some are startled.	Blinds and other hanging objects swing significantly.
Grade 2	People feel large shaking and want to hold onto something stable. They have problems moving, such as having difficulty walking without holding onto something.	Furniture and fixtures on casters move slightly. Dishes and books on shelves may fall.
Grade 3	It becomes difficult to remain standing.	Furniture and fixtures on casters move significantly. Unsecured furniture may move, and unstable items may topple over.
Grade 4	People cannot remain standing, have to crawl to move, and are tossed about by the shaking.	Furniture and fixtures on casters move significantly, and some may topple over. Most of the unsecured furniture will move and some will topple over.



## Earthquake Early Warnings

Earthquake Early Warning is information on the estimated seismic intensity and arrival time of strong tremors, which is provided as soon as possible after the occurrence of an earthquake. When an Earthquake Early Warning is issued by the Japan Meteorological Agency, people are informed through television, radio, the Internet, and others.

### Types of Earthquake Early Warnings

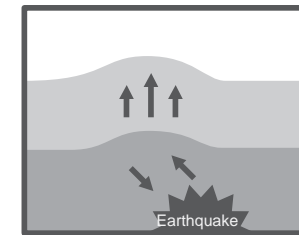
There are two main types of Earthquake Early Warnings: forecasts and alerts. An Earthquake Early Warning forecast is issued when an earthquake with a maximum seismic intensity of at least 3 or a magnitude of at least 3.5 is expected to occur. An Earthquake Early Warning alert is issued for areas that will have tremors with a seismic intensity of at least 4 when an earthquake with a maximum seismic intensity of at least 5 Lower is expected to occur. When the maximum seismic intensity is expected to be at least 6 Lower, the Early Warning alert is positioned as an emergency alert.

Type	Name of Earthquake Warning Issued	Contents
Ground motion forecast	Earthquake Early Warning forecast	Maximum seismic intensity 3 or higher or magnitude 3.5 or higher
Ground motion alert	Earthquake Early Warning or Earthquake Early Warning alert	Maximum seismic intensity 5 Lower or higher
Ground motion emergency alert		Maximum seismic intensity 6 Lower or higher

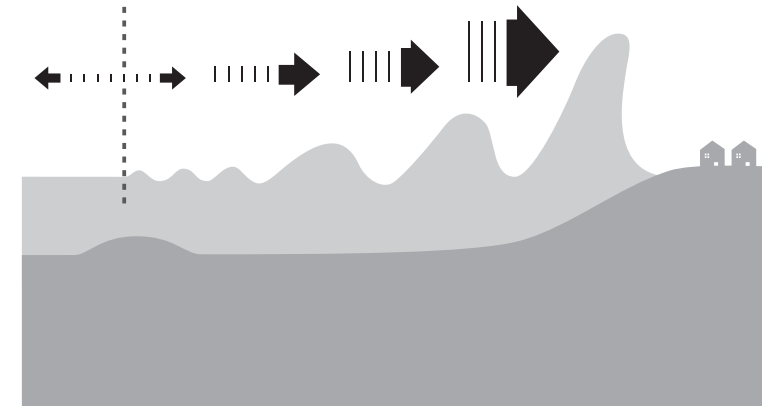
### Mechanism of Earthquake Early Warning System

When an earthquake occurs, the P waves that cause small shaking are followed by the S waves that cause large shaking. After detecting the first P wave by the seismometers, the Earthquake Early Warning is issued to warn people of the approaching S wave. However, in areas close to the focus, the Earthquake Early Warning may not be issued in time.

## Tsunami Knowledge



1. The ocean floor and ocean surface rise or sink due to an earthquake.
2. The fluctuation of the ocean surface becomes a large wave that spreads in all directions and strikes the coastal areas.



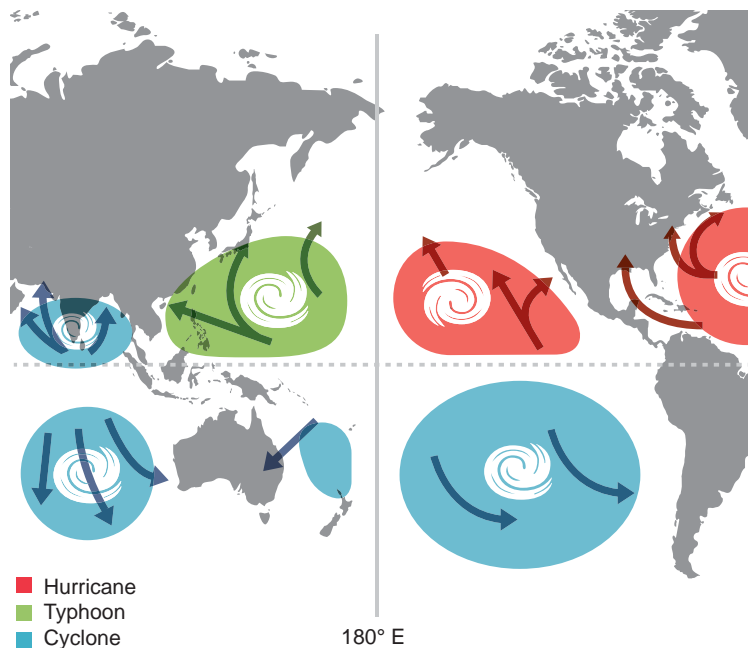
### Mechanism of a Tsunami

When an earthquake occurs at a shallow place below the surface of the ocean floor, fault movements make the ocean floor rise or sink. This results in a fluctuation of the ocean surface, which becomes a large wave that spreads in all direction. This is a tsunami. The deeper the water depth, the faster the tsunami travels, and the more shallow the water, the higher the tsunami becomes. In any case, the tsunami flows powerfully inland at a speed that most people will not be able to outrun. It also recedes very strongly, taking everything that floats out to sea. Tsunamis will hit repetitively as well.





# Typhoon and Heavy Rain Knowledge



\* Large tropical cyclones are called different names depending on where they occur.

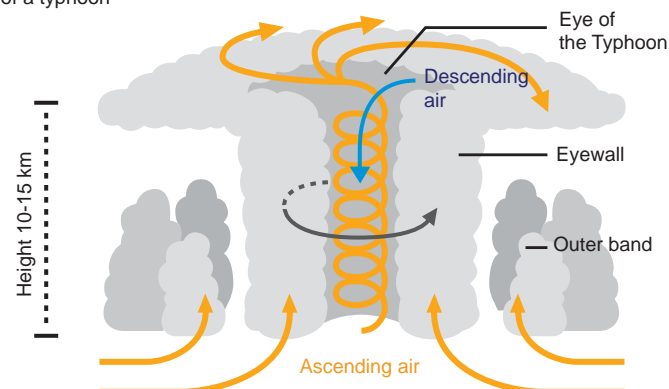
## Typhoons and Tropical Cyclones

Low-pressure systems forming over tropical waters are called tropical cyclones. Of these tropical cyclones, those in the northwestern Pacific or the South China Sea that have a maximum wind speed (10-minute average) of at least 17m/s are called typhoons. Upper level winds push the typhoon, which is disposed to moving north due to the effect of earth's rotation. Because of this, in low latitudes where east winds normally blow, the typhoon moves north while being steered to the west. When the typhoon reaches the middle and high latitudes where strong west winds (prevailing westerlies) are blowing in the upper level, typhoons move northeast at a high speed.

## Typhoon Structure

Eye of the typhoon	Air descends, with no clouds, and weakening wind and rain. The eye has a diameter ranging from around 20 to 200 km. In general, the smaller the eye of the typhoon, the more powerful the typhoon.
Eyewall	The eye of the typhoon is surrounded by the eyewall, a ring of dense cumulonimbus clouds. This is where the strongest wind and rain of the storm occurs.
Spiral band	A somewhat thick spiral band (inner rainband) around the eyewall, which produce strong and continuous rainfall.
Outer band	Outer rainbands around the spiral band, forming about 200 to 600 km from the center of the typhoon, which intermittently produce strong rain showers, thunderstorms, and at times, tornadoes.
Above the clouds	Air is released clockwise.

Cross section diagram of a typhoon



## Advisories and Warnings for Typhoons and Heavy Rain

Heavy rain advisory	Issued when there is the risk that heavy rain will cause flooding or sediment disasters. The advisory continues to be issued even after the rain has stopped if there is still the risk of sediment disasters, etc.
Heavy rain warning	Issued when there is the risk that heavy rain will cause serious flooding or sediment disasters. The warning continues to be issued even after the rain has stopped if there is still the risk of serious sediment disasters, etc.
Gale advisory	Issued when there is the risk of disasters occurring from strong winds.
Storm warning	Issued when there is the risk of serious disasters occurring from violent winds.
Flood advisory	Issued when there is the risk of rising levels or flooding of rivers, damage or collapse of levees, and other disasters occurring due to heavy rain, long rain, snowmelt, etc.
Flood warning	Issued when there is the risk of serious disasters occurring due to heavy rain, long rain, snowmelt, etc.
High wave advisory	Issued when there is the risk of disasters occurring due to high waves. High waves are completely different from tsunamis occurring from earthquakes.
High wave warning	Issued when there is the risk of serious disasters occurring due to high waves. High waves are completely different from tsunamis occurring from earthquakes.
Storm surge advisory	Issued when there is the risk of disasters occurring through the abnormal rise of the ocean surface due to typhoons, low pressure systems, etc.
Storm surge warning	Issued when there is the risk of serious disasters occurring through the abnormal rise of the ocean surface due to typhoons, low pressure systems, etc.
Thunderstorm warning	Issued when there is the risk of disasters occurring through lightening. Alerts may also be added for hail or sudden gusts of wind that often form under thunderclouds. Thunderstorm advisories will also call for caution against sudden heavy rain.

## Typhoon and heavy rain emergency warnings

Heavy rain emergency warning	Issued when heavy rainfall of an intensity observed only once every few decades is forecasted due to typhoons or torrential rain, or when a powerful typhoon with a level of intensity observed only once every few decades or an extratropical cyclone of comparable intensity is forecasted to bring heavy rain. When a heavy rain emergency warning is issued, it is expected that there is an extremely large risk of serious damage such as inundation and sediment disaster occurring. The emergency warning continues to be issued even after the rain has stopped when there is still a significantly large risk of serious sediment disaster, etc. occurring.
Storm emergency warning	Issued when it is forecasted that a powerful typhoon with a level of intensity observed only once every few decades or an extratropical cyclone of comparable intensity will produce violent winds.
High wave emergency advisory	Issued when it is forecasted that a powerful typhoon with a level of intensity observed only once every few decades or an extratropical cyclone of comparable intensity will produce high waves. High waves are completely different from tsunamis occurring from earthquakes.
Storm surge emergency warning	Issued when it is forecasted that a powerful typhoon with a level of intensity observed only once every few decades or an extratropical cyclone of comparable intensity will result in storm surge.

## Other typhoon and heavy rain bulletins and forecasts

Record-time heavy rain information	During a heavy rain warning, this bulletin is announced on the observation or analysis of severe record-time heavy rain of a scale that only occurs once every several years to let everyone know that the current rainfall is of a severity rarely seen in that area.
Designated river flood forecast	The Japan Meteorological Agency and the national government or prefectural governments jointly make flood forecasts that indicate the water level and flow rate of designated rivers. There are four types of designated river flood forecasts: Flood advisory bulletin, flood warning bulletin, flood risk bulletin, and flood bulletin.
Sediment-disaster alert bulletin	During a heavy rain warning, if a very high risk of sediment disaster arises, the municipalities at risk are identified, and this bulletin is issued jointly by the relevant prefecture and the Japan Meteorological Agency. Locations at risk of sediment disasters, warning and evacuation districts, and emergency warning districts can be confirmed on the Tokyo Metropolitan Government's Sediment Disaster Risk Map





## Various Weather Information

### Heavy snow advisory, warning, emergency warning

Heavy snow advisory	Issued when there is the risk of disasters occurring due to heavy snow.
Heavy snow warning	Issued when there is the risk of serious disasters occurring due to heavy snow.
Heavy snow emergency warning	Issued when heavy snow with a level of intensity observed only once every few decades is forecasted.

### Snowstorm advisory, warning, emergency warning

Gale and snow advisory	Issued when there is the risk of damage from gales accompanying snow. In addition to disasters from strong winds, alerts are also given for disasters resulting from visibility obstruction (reduction of visibility), etc., accompanying snow.
Snowstorm warning	Issued when there is the risk of serious disasters occurring from gales accompanying snow. In addition to serious disasters occurring from violent winds, warnings are also given about the risk of serious disasters resulting from visibility obstruction (reduction of visibility), etc., accompanying snow.
Snowstorm emergency warning	Issued when it is forecasted that a powerful typhoon with a level of intensity observed only once every few decades or a extratropical cyclone of comparable intensity will produce violent winds accompanying snow. In addition to serious disasters occurring from violent winds, warnings are also given about the extremely high risk of serious disasters resulting from visibility obstruction (reduction of visibility), etc., accompanying snow.

### Avalanche, etc. advisories

Avalanche advisory	Issued when there is the risk of disasters occurring from avalanches.
Snowmelt advisory	Issued when there is the risk of serious disasters occurring due to heavy snow.
Snow accretion advisory	Issued when heavy snow with a level of intensity observed only once every few decades is forecasted.

### Cold weather advisories

Ice accretion advisory	Issued when there is the risk of damage to communications lines, power lines, ship hulls, etc., due to significant ice accretion.
Frost advisory	Issued when there is the risk of damage to crops due to early and late frost.
Low temperature advisory	Issued when there is the risk of significant damage to crops, etc., due to low temperatures, or the risk of significant damage brought about by the freezing or rupture of water supply pipes in the winter.

### Other Advisories

Dense fog advisory	Issued when there is the risk of disasters occurring due to thick fog. Disasters include significant impairments that hinder the operation of transit systems.
Dry air advisory	Issued where there is the risk of disasters occurring due to dry air, and when weather conditions that have a high risk of fire outbreak are forecasted.



# Large-Scale Disasters in the Past

## Earthquakes since the Great Kanto Earthquake that wrought enormous damage

Year	Scale	Disaster name	Damage
1923	M7.9	Great Kanto EarthquakeKita	Deaths/missing: Over 105,000
1927	M7.3	TKita Tango Earthquake	Deaths: 2,925
1943	M7.2	Tottori Earthquake	Deaths: 1,083
1944	M7.9	Tonankai Earthquake	Deaths/missing: 1,223
1945	M6.8	Mikawa Earthquake	Deaths: 2,306
1946	M8.0	Nankai Earthquake	Deaths: 1,330
1948	M7.1	Fukui Earthquake	Deaths: 3,769
1995	M7.3	Great Hanshin-Awaji Earthquake	Deaths: 6,434
2011	M9.0	Great East Japan Earthquake	Deaths: 19,225 (as of March 2015)



1923 Great Kanto Earthquake (from the archives of the Tokyo Metropolitan Government Memorial Hall of Reconstruction Hall of Reconstruction)



2011 Great East Japan Earthquake

## Major volcanic eruptions that had an impact on Tokyo

Year	Name	Damage, etc.
1707	Hoei-Eruption of Mount Fuji	Large quantities of volcanic ash
1902	Izu-Torishima Eruption	Deaths: 125
1940	Miyakejima Eruption	Deaths: 11
1983	Miyakejima Eruption	Damage from lava flow, etc.
1986	Izu-Oshima Eruption	All residents evacuated from the island
2000	Miyakejima Eruption	All residents evacuated from the island

\* Volcanic eruptions that left behind damage in Tokyo



1986 Izu-Oshima eruption  
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2000 Miyakejima Eruption



# Support for Rebuilding of Life after a Disaster

## Recent typhoons and heavy rain that had an impact on Tokyo

September 4-5, 2005	Heavy rain	Inundation above floor level: 2,349 Inundation below floor level: 2,129
September 5-7, 2007	Typhoon No. 9	Injured: 2 Houses totally destroyed: 2 Houses destroyed to some degree: 189
August 9, 2009	Heavy rain	Injured: 5 Inundation above floor level: 7 Inundation below floor level: 5
July 5, 2010	Heavy rain	Missing: 1 Inundation above floor level: 336 Inundation below floor level: 372 Landslip: 1
December 2-3, 2010	Heavy rain, gales	Deaths: 1 Injured: 5 Houses destroyed to some degree: 1
September 21, 2011	Typhoon No. 15	Injured: 6 Houses destroyed to some degree: 1 Inundation below floor level: 5
September 15-16, 2013	Typhoon No. 18	Injured: 3 Houses destroyed to some degree: 4 Inundation below floor level: 1
October 16, 2013	Typhoon No. 26	Deaths: 36 Missing: 4 Houses totally destroyed: 46; Houses partially destroyed: 40

\* Typhoons and heavy rain that wrought human damage in Tokyo and damage to over 2,000 houses.



2013 Typhoon No. 26 sediment disaster in Izu Oshima island

## Support for rebuilding life

There are various systems in place to help you rebuild your life when you have incurred damage from a natural disaster such as an earthquake. Some of the systems may require that you present a damage certificate (risai shomeisho), which certifies the degree of damage to your home or office, etc., caused by the earthquake, etc. File for this certificate at your municipality. Following this, you can apply for various systems that can help you rebuild your life. In addition, if you were insured for earthquakes, etc., you can receive insurance money.

Death of a parent or child, etc.	➡	Disaster sympathy money
Disability from injury or disease	➡	Disaster disability compensation money
Need money for the time being to live and to rebuild life	➡ ➡	Support fund for disaster victims to rebuild their lives Disaster relief fund
Wish to get a tax exemption or reduction	➡ ➡	Income tax casualty loss deduction Income tax disaster exemption
Wish to rebuild my house	➡	Disaster reconstruction housing loan
Wish to resume work	➡ ➡ ➡	Public vocational training Job seeker support training Vocational training allowance
Wish to resume school	➡ ➡	Emergency scholarship by the Japan Student Services Organization National government education loan's special measure for disasters
Wish to rebuild my business	➡ ➡	Disaster reconstruction loan Loan systems for SMEs and agricultural, forestry, and fisheries businesses

## Damage certificate

A damage certificate is issued by the head of the municipality to certify the degree of damage to a person's residence due to disasters such as earthquakes, wind and floods. It will be necessary to use this certificate to receive benefits, loans, disaster relief money, extension and/or reduction/exemption of payment of taxes, national health insurance, etc., reduction/exemption of fees for public services, to file for insurance benefits, and apply for residence in emergency temporary housing.

### Criteria for the Damage Certificate

The damage certificate is widely used as material to determine eligibility for various disaster victim support measures. It is classified according to the degree of damage to the dwelling (owned housing, rented housing) as shown in the table. For details, inquire at your local municipality office.

Degree of damage	Percentage destroyed
Total destruction	50% or more
Significant partial destruction	40% to under 50%
Partial destruction	20% to under 40%

## Disaster Sympathy Money

The families of those who lost their lives or are missing due to the disaster can receive sympathy money. For details, inquire at your local municipality.

Amount	<input type="checkbox"/> Death of the household's main provider: Amount determined by municipality ordinance (5 million yen) <input type="checkbox"/> Death of another family member: Amount determined by municipality ordinance (2.5 million yen)
Recipient	<input type="checkbox"/> Family of the deceased (1. Spouse 2. Child 3. Parent 4. Grandchild 5. Grandparent) <input type="checkbox"/> When there are none of the above family members, a sibling of the deceased (Lived with the deceased at the time of death, or lived under the same household budget)

## Disaster disability compensation money

Those who became severely disabled due to the disaster can receive disaster disability compensation money. For details, inquire at your local municipality.

Amount of compensation	<input type="checkbox"/> When the household's main provider became severely disabled: Amount determined by municipality ordinance (2.5 million yen) <input type="checkbox"/> When other members of the family became severely disabled: Amount determined by municipality ordinance (1.25 million yen)
Recipient	<input type="checkbox"/> Those who are blind in both eyes. <input type="checkbox"/> Those who have lost the functions of mastication and speech. <input type="checkbox"/> Those who are left with serious impairment in the functions of the nervous system or in the psyche and require continuous nursing care. <input type="checkbox"/> Those who are left with serious impairment in the functions of the thorax and abdominal organs and require continuous nursing care. <input type="checkbox"/> Those who have lost both upper limbs above the elbow joint. <input type="checkbox"/> Those who have completely lost the functions of both upper limbs. <input type="checkbox"/> Those who have lost both lower limbs above the knee joint. <input type="checkbox"/> Those who have completely lost the functions of both lower limbs. <input type="checkbox"/> For those with multiple physical or mental impairments,

## Support fund for disaster victims to rebuild their lives

A support fund will be provided to households that suffered significant damage to their livelihoods through the disaster, such as total destruction of their residences. For details, inquire at your municipality

Payment	<input type="checkbox"/> Total destruction, etc.: 1 million yen <input type="checkbox"/> Significant partial destruction: 500,000 yen
Support provided according to how the dwelling will be reconstructed (additional fund)	<input type="checkbox"/> Construction or purchase: 2 million yen <input type="checkbox"/> Repair: 1 million yen <input type="checkbox"/> Rental (excluding public housing): 500,000 yen

\*If a dwelling is built or purchased (or repaired) after renting a dwelling, the combined total amount of support will be 2 million (or 1 million) yen.

\*For single households, the payment will be 3/4 of the amount indicated above.



Disaster Relief Fund

Those who have suffered injury or damage to their residence or property are eligible to borrow funds for disaster relief. However, income limits apply. For details, inquire at your local municipality.

Head of household has injuries lasting at least 1 month.	<input type="checkbox"/> This injury alone 1.5 million yen
	<input type="checkbox"/> Damage to at least 1/3 of household possessions 2.5 million yen
	<input type="checkbox"/> Partial destruction of dwelling 2.7 million yen
	<input type="checkbox"/> Total destruction of dwelling 3.5 million yen
Head of household does not have injuries lasting at least 1 month	<input type="checkbox"/> Damage to at least 1/3 of household possessions 1.5 million yen
	<input type="checkbox"/> Partial destruction of dwelling 1.7 million yen
	<input type="checkbox"/> Total destruction of dwelling (excluding dwellings that were completely lost or swept away) 2.5 million yen
	<input type="checkbox"/> Dwelling was completely lost or swept away 3.5 million yen

Loan interest rate	<input type="checkbox"/> Annual rate of 3% (no interest during the period of deferment)
Period of deferment	<input type="checkbox"/> Within 3 years (5 years in special cases)
Period of repayment	<input type="checkbox"/> Within 10 years (includes the period of deferment)

Income tax casualty loss deduction

When a disaster results in damages to your property such as housing, household possessions, and clothing, which are needed for daily life, you can deduct a certain amount from income when filing your tax returns. The amount deductible can be chosen from either (1) casualty loss deduction based on the Income Tax Act, or (2) income tax exemption/reduction measures based on the Disaster Exemption Act, whichever is better. For details, inquire at your local tax office.

Income tax disaster exemption

When your income in the year of the disaster does not exceed 10 million yen, and damages to your home or household possessions were 50% or more of the current value, you can receive income tax exemption/reduction. However, this only applies to those who are not filing for income tax casualty loss deductions. For details, inquire at your local tax office.

Other reduction/exemption from taxes, etc.

You may be eligible for tax or insurance reduction/exemption or deductions according to the scale of the disaster and the degree of damage. Inquire at the relevant divisions noted below.

Tax Office	<input type="checkbox"/> Inheritance tax, gift tax,
Nearby municipal office	<input type="checkbox"/> Inhabitant tax, fixed asset tax (for those residing in the 23 wards, inquire at the metropolitan tax office), etc.
	<input type="checkbox"/> National health insurance / long-term care insurance
Metropolitan Tax Office	<input type="checkbox"/> Business tax on individuals
Japan Pension Service	<input type="checkbox"/> National pension
Relevant utility service or office	<input type="checkbox"/> Electricity, gas, water supply and sewerage, telephone bills, NHK receiving fee, etc.

Disaster reconstruction housing loan

Those who own or reside in dwellings that were damaged by the disaster can receive a disaster reconstruction housing loan to rebuild their homes. Residences eligible for this loan are, in principle, those with a floor space from 13sqm to 175sqm. These residences must also meet the criteria set by the Japan Housing Finance Agency. For details, inquire at the Japan Housing Finance Agency, which is providing the loan..

Implementing organization	Japan Housing Finance Agency
Eligible borrowers	People who have received a Damage Certificate for partial destruction or more, and own, rent, or live in a dwelling with floor space from 13sqm to 175 sqm.
Use of funds	Construction, purchase, or repair of own home
Loan limit	<input type="checkbox"/> Construction funds: Basic loan 16.5 million yen / special addition 5.1 million yen <input type="checkbox"/> Land acquisition funds: 9.7 million yen <input type="checkbox"/> Ground leveling funds: 4.4 million yen
Interest rate	Basic loan: 0.91% / special addition: 1.81%
Loan period	Within 35 years

(as of February 2014)

Emergency temporary housing

Emergency temporary housing is for people who have lost a place to live because their home was total destroyed (collapsing, burning, swept away) in a disaster, and who do not have the financial means to secure housing on their own. If enough emergency temporary housing cannot be built in time, it would also be possible to live in rented private housing deemed to be temporary housing. According to the situation, the Tokyo Metropolitan Government plans to promptly and appropriately provide disaster survivors with emergency temporary housing by using public housing such as metropolitan housing, renting private housing, and constructing temporary housing.

Earthquake insurance

In Japan, you never know when you might suffer damages to your home and household possessions due to an earthquake, tsunami, or other catastrophe. These damages can be covered by earthquake insurance or mutual aid (this is different from fire insurance). Earthquake insurance is insurance dedicated to earthquake disasters, which provides compensation for damages to property by fire, destruction, immersion or being swept away, caused by an earthquake or volcanic eruption or a subsequent tsunami. Damages from liquefaction caused by earthquakes are also covered.

Receiving earthquake insurance

Insurance will be paid according to the degree of damage to the building or household possessions. Even if you do not have the insurance papers with you due to fire or tsunami, as long as you can prove who you are, you can take the procedures to receive insurance.



## Support for Daily Life

### Resuming work

Those who have lost work can look for a job at Hello Work (national government's employment service center) or receive support such as vocational training.

Public vocational training	Eligibility	<input type="checkbox"/> Those receiving unemployment benefits
	Contents	<input type="checkbox"/> Can receive training for free to acquire skills and knowledge necessary for employment (trainee must bear the text fees, etc.)
Job seeker support training	Eligibility	<input type="checkbox"/> Those who cannot receive unemployment benefits because they were self-employed, were not participating in the employment insurance program, etc.
	Contents	<input type="checkbox"/> Can receive training for free to acquire skills and knowledge necessary for employment (trainee must bear the text fees, etc.)
Vocational training allowance	Eligibility	<input type="checkbox"/> Those who cannot receive unemployment benefits and who are instructed by Hello Work to receive training, and fulfill certain conditions.

### Returning to school

Those with drastic changes in household finances or whose school has been damaged due to the disaster can receive emergency scholarships to help cover matters such as school tuition and fees for transferring schools.

Emergency scholarship by the Japan Student Services Organization	Eligibility	<input type="checkbox"/> Households residing in areas falling under the Disaster Relief Act, which have had a drastic change in the financial situation within the past 12 months
	Inquiries	<input type="checkbox"/> Current school
Education loan as the Government's disaster special measures	Eligibility	<input type="checkbox"/> Special measure for disasters may apply to those who have a damage certificate, etc. There are also special measures such as partial easing of income restrictions and extension of repayment period.
	Inquiries	<input type="checkbox"/> Japan Finance Corporation

### Disaster Reconstruction Loan

This is a disaster reconstruction loan to support small and medium-sized companies that were affected by the disaster in rebuilding their business. The repayment period is longer than regular loans, and it also has benefits such as a long grace period. For details, inquire at the Japan Finance Corporation.

Eligibility	<input type="checkbox"/> Small and medium-sized business operators who suffered damages due to a designated disaster
Use of funds	<input type="checkbox"/> Equipment funds or long-term operating funds to rebuild the business after the disaster
Maximum loan	<input type="checkbox"/> Direct loan: 150 million yen <input type="checkbox"/> Loan by agent: additional 75 million yen within the limits of the direct loan
Standard interest rate	<input type="checkbox"/> 1.4 - 2.0% (as of April 2015)
Repayment period	<input type="checkbox"/> Equipment funds: within 10 years (of which there is a period of deferment of up to 2 years) <input type="checkbox"/> Operating funds: within 10 years (of which there is a period of deferment of up to 2 years)
Security/guarantor	<input type="checkbox"/> Whether there is the need to provide security and the type of security, etc. is decided after discussion

### Loan systems for SMEs and agricultural, forestry, and fisheries businesses

The Shoko Chukin Bank provides loans for equipment funds or operating funds to small and medium-size companies that have suffered damages, and Credit Guarantee Corporations serve as guarantors for loans from financial institutions. The Japan Finance Corporation also loans operating funds and management funds to agricultural, forestry, and fisheries operators who suffered damages. Business funds are also loaned at low interest rates to agricultural cooperatives and other cooperatives.

Main loan systems	<input type="checkbox"/> Shoko Chukin Bank's disaster reconstruction funds for SMEs <input type="checkbox"/> Credit guarantee corporations around Japan provide credit guarantee to SMEs <input type="checkbox"/> Support by the Japan Finance Corporation for agricultural, forestry, and fisheries businesses <input type="checkbox"/> Natural calamity loan system for agricultural, forestry, and fisheries businesses provided by the local municipality
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# Emergency First Aid

## Burn degree and treatment

### Determining burn depth

Degree	Damaged tissue	External appearance	Symptom
First degree	Epidermis	Skin is red	Painful, tender and sore
Second degree	Dermis	Skin is red and appears swollen; blisters may form	When the upper layer of the dermis is involved (superficial second degree) there is strong pain and a burning sensation. When the lower layer of the dermis is involved (deep second degree), pain and sensation of the skin is diminished.
Third degree	Subcutaneous fat tissue	Skin is dry and leathery, with no elasticity, is white and charred in some areas	No pain or sensation of the skin

### Treatment of severe burns

Cool the burned area with water over the clothes, and cover the burn with clean thick cloth such as towels, to protect from pressure and friction. See a doctor as soon as possible.

Treatment of light burns ➔ P. 182

### Exposure to chemical agents

When the skin has come in contact with a chemical agent, wash off with water. Do not scrub with a brush, etc., as this will irritate the wound. Immediately dispose of clothing or shoes that have been covered with the chemical. See a doctor as soon as possible.

### Clothing catching fire

If your clothing catches fire, do not run as this will worsen the fire. Stay where you are and try to extinguish the fire immediately by dropping to the floor or ground and rolling, removing your clothing, beating your body, pouring water over yourself, etc. If someone else's clothing has caught fire, extinguish the fire by pouring water or covering the person with your clothes.

## Degree of bleeding and treatment

### Arterial bleeding

When the blood is bright red and spurts out in rhythm with the pumping of the heart, it is arterial bleeding. Call for an ambulance or medical help immediately since profuse bleeding could result in death. The most effective first-aid treatment would be to cover the wound with a thick piece of gauze, etc., and apply direct pressure to the wound to stop the bleeding. When this is not sufficiently effective, try to stop the bleeding by an indirect method in which the thumb, etc., is used to apply pressure on the artery between the wound and heart.

Details ➔ P. 179

### Venous bleeding

When blood is dark red and flows out continuously, bleeding is from a vein. A large amount of blood loss within a short time usually does not occur. Firmly press a bandage, etc., on the wound to stop the bleeding.

### Capillary bleeding

When red blood oozes out from a cut on the finger, a knee abrasion after a fall, etc., this is bleeding from the capillary veins. Treat by applying a bandage, etc.



## Triage at the emergency medical station

The arrival of patients at emergency medical stations will be a mixture of both lightly wounded or ill patients and critical patients. In order to achieve the best life saving results in a short period of time, the patients will be evaluated and categorized according to the degree of their illness or wounds, and prioritized for treatment or transfer to a medical facility outside the disaster zone. This is called “triage.”

The evaluation criteria for triage are standardized, and medical practitioners will conduct treatment in the order of the triage tag. This is a necessary measure to fully use limited resources such as medical staff and drugs, in order to save as many lives as possible.

Categorization	Priority	Color tag	Symptoms
Highest priority treatment group (serious)	I	Red	Immediate treatment needed to save life. Are choking, have extensive bleeding, or are in shock.
Elective treatment group (moderate)	II	Yellow	Slight delay in treatment will not be life threatening. Basically have stable breathing and pulse.
Wait group (minor)	III	Green	Minor injuries or illness other than the above, which hardly need treatment by a specialist.
Not breathing group (deceased)	IV	Black	No breathing even when the airway has been secured. Already deceased. Or clearly instant death with no possibility of resuscitation even if CPR is conducted.

## Types of Infectious Disease

Infectious diseases range from the annual seasonal influenza to diseases that could result in death. Under the Infectious Diseases Act, infectious diseases are categorized into groups from Class 1 to Class 5, and doctors are required to notify the nearest public health center when a patient is diagnosed with such a disease.

Class I infectious disease	Ebola hemorrhagic fever, Crimean-Congo hemorrhagic fever, smallpox, South American hemorrhagic fever, plague, Marburg disease, and Lassa fever
Class II infectious disease	Poliomyelitis, tuberculosis, diphtheria, severe acute respiratory syndrome (limited to those resulting from the SARS coronavirus as a beta coronavirus), Middle East respiratory syndrome (limited to those resulting from the MERS coronavirus as a beta coronavirus), and avian influenza (H5N1 and H7N9)
Class III infectious disease	Cholera, bacillary dysentery, enterohemorrhagic E. coli infection, typhoid, and paratyphoid
Class IV infectious disease	E hepatitis, West Nile Virus, A hepatitis, echinococcosis, yellow fever, psittacosis, Omsk hemorrhagic fever, relapsing fever, Kyasanuru forest disease, Q fever, rabies, coccidioidomycosis, monkey pox, severe fever with thrombocytopenia syndrome (limited to those resulting from the phlebovirus genus SFTS virus), hemorrhagic fever with renal syndrome, western equine encephalitis, tick-borne encephalitis, and others
Class V infectious disease	Amoebic dysentery, viral hepatitis (except for hepatitis E and hepatitis A), carbapenem-resistant Enterobacteriaceae bacterial infection, acute encephalitis (except for West Nile encephalitis, western equine encephalitis, tick-borne encephalitis, eastern equine encephalitis, Japanese encephalitis, Venezuelan equine encephalitis, and Rift Valley fever), and others



# Disaster Volunteers

## Disaster Volunteers

Disaster volunteers are supporters who willingly take on restoration and recovery activities in the event of a disaster such as earthquakes, tsunamis, and wind and flooding from typhoons. You may have a strong image of volunteers conducting activities such as removing rubble and garbage at the stricken site, helping out at evacuation centers, and transporting and distributing relief. But their activities cover a broader range, including providing mental care to the disaster survivors, holding consultations and study meetings on rebuilding life, and providing information over the Internet.

## Fundamentals of volunteer activities

Disaster survivors can request various kinds of support from volunteers working in the disaster-stricken area, such as removing rubble. However, volunteers are volunteers. It is up to the volunteers to decide whether or not to take up this request. It should be understood that they will not always respond to requests when, for instance, it could be dangerous or if there are not enough volunteers.

## Disaster Volunteer Center

The Disaster Volunteer Center is a hub of volunteer activities to be installed in the event of a disaster. In general, organizations, such as the social welfare council of the affected area, are responsible for the operation of the Disaster Volunteer Center in cooperation with administrative officials and volunteers for smooth volunteer activities.

Main activities	<ul style="list-style-type: none"><li><input type="checkbox"/> Collecting and comprehending the needs of the disaster site</li><li><input type="checkbox"/> Preparing to receive and take in people wishing to volunteer</li><li><input type="checkbox"/> Adjusting the number of volunteers according to needs, and arranging their activities</li><li><input type="checkbox"/> Preparing and loaning out needed tools</li><li><input type="checkbox"/> Feeding back and reporting on the results of activities and matters that were noted during activities</li><li><input type="checkbox"/> Discussion on points to be improved</li></ul>
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## Tokyo Fire Department (TFD) disaster volunteers

The TFD disaster volunteers are specialized volunteers who are registered in advance with the TFD to provide support in the event of a large-scale accident or natural disaster such as an earthquake with a seismic intensity of 6-lower or more in a district under the jurisdiction of the TFD. These volunteers assemble at their own initiative at the fire station where they are registered or at a nearby fire station, and provide support for firefighting activities.

## Activities of the TFD disaster volunteers

These volunteers support firefighting activities, provide logistics support, etc., for instance, supporting the firefighting activities of the department's firefighters, supporting rescue activities, providing first aid, and collecting information on the damage situation. In normal times, their main activities are participating in drills and events in preparation for a disaster. As community disaster response leaders, they might also coach residents on fire and disaster prevention.

## How to register as a TFD disaster volunteer

In principle, a person at least 15 years old (excluding middle school students) who resides, works, or commutes to school in an area under the jurisdiction of the TFD, and who fulfills one of the following conditions can register.

- ☐ Has knowledge on first aid, such as having completed a lifesaving course.
- ☐ Has at least one-year experience as a volunteer fire corps member or a junior fire corps member
- ☐ Has qualifications or skills needed to support restoration activities after an earthquake, etc. (qualified fire defense equipment officer, hazardous materials engineer)

<http://www.tfd.metro.tokyo.jp/hp-bousaika/sien/>

\*Former TFD employees can register regardless of where they live





## Emergency Contact Numbers

### Telephone Numbers

Police (to report a crime or accident)	110
Fire Department (to report a fire or request an ambulance)	119
Tokyo Metropolitan Government Hours: 8:30 a.m. – 6:15 p.m. Weekdays	03-5321-1111
Tokyo Metropolitan Health & Medical Information Center “Himawari” (assistance in a foreign language) Hours: 9:00 a.m. – 8:00 p.m.	03-5272-0303 03-5285-8181 (Guidance in foreign languages)

### Multilanguage Resources

Tokyo International Communication Committee (Living Information website)	<a href="http://www.tokyo-icc.jp/">http://www.tokyo-icc.jp/</a>
Tokyo Fire Department	<a href="http://www.tfd.metro.tokyo.jp/">http://www.tfd.metro.tokyo.jp/</a>
NHK WORLD (Radio programs in English and 16 other languages)	<a href="http://www3.nhk.or.jp/nhkworld/english/radio/program/">http://www3.nhk.or.jp/nhkworld/ english/radio/program/</a>

## Inquiries Related to Disaster Preparedness

Type	Office in charge	Telephone
Disaster preparedness (general inquiries)	Tokyo Metropolitan Government, Bureau of General Affairs, Disaster Prevention Division, Management Section	03-5388-2453
River-related floods	Tokyo Metropolitan Government, Bureau of Construction, River Division, Disaster Prevention Section	03-5320-5431
Community earthquake risk	Tokyo Metropolitan Government, Bureau of Urban Development, Urban Development Projects Division, Disaster Management Section	03-5320-5003
Subsidies for seismic evaluation of buildings, seismic retrofitting and reinforcement	Tokyo Metropolitan Government, Bureau of Urban Development, Urban Buildings Division, Building Planning Section	03-5388-3362
Subsidies for seismic evaluation of condominium buildings, seismic retrofitting and reinforcement	Tokyo Metropolitan Government, Bureau of Urban Development, Housing Policy Promotion Division, Condominium Policy Section	03-5320-4944
Water supply	Bureau of Waterworks Customer Service Center for the 23 special wards	03-5326-1101
	Bureau of Waterworks Customer Service Center for the Tama area	0570-091-101
Police	Tokyo Metropolitan Police Department, Disaster Division	03-3581-4321
Fire department	Tokyo Fire Department	03-3212-2111
	Inagi City Fire Department	042-377-7119
	Oshima Town Fire Department	04992-2-0119
	Miyake Village Fire Department	04994-6-0119
	Hachijo Town Fire Department	04996-2-0119
First aid, volunteering, relief and aid	Japanese Red Cross Society Tokyo Branch Relief Section	03-5273-6744
Volunteering	Tokyo Volunteer and Citizens Activity Center	03-3235-1171

Residents of Musashino City, Akishima City, Hamura City, Hinohara Village, and the islands should contact the municipality where you live with questions in regard to water supply. Please direct inquiries related to electric, gas, or telephone service to your service provider. Please understand that assistance in a foreign language may not be available.





# Directory of Sources for Disaster Management Information

## Disaster Preparedness Websites

Tokyo Metropolitan Government Disaster Prevention Website	<a href="http://www.bousai.metro.tokyo.jp/">http://www.bousai.metro.tokyo.jp/</a>
Tokyo Fire Department	<a href="http://www.tfd.metro.tokyo.jp/">http://www.tfd.metro.tokyo.jp/</a>
Office of the Prime Minister of Japan and His Cabinet (disaster management information)	<a href="http://www.kantei.go.jp/jp/headline/bousai/">http://www.kantei.go.jp/jp/headline/bousai/</a>
Office of the Prime Minister of Japan and His Cabinet (infectious diseases information)	<a href="http://www.kantei.go.jp/jp/headline/kansensho/">http://www.kantei.go.jp/jp/headline/kansensho/</a>
Cabinet Office (disaster management information)	<a href="http://www.bousai.go.jp/">http://www.bousai.go.jp/</a>
Cabinet Secretariat Civil Protection Portal Site (armed attacks and terrorism information)	<a href="http://www.kokuminhogo.go.jp/">http://www.kokuminhogo.go.jp/</a>
Ministry of Land, Infrastructure, Transport and Tourism (disaster and disaster prevention information)	<a href="http://www.mlit.go.jp/saigai/">http://www.mlit.go.jp/saigai/</a>
Ministry of Land, Infrastructure, Transport and Tourism (river flooding information)	<a href="http://www.river.go.jp/">http://www.river.go.jp/</a>
Fire and Disaster Management Agency	<a href="http://www.fdma.go.jp/">http://www.fdma.go.jp/</a>
Japan Meteorological Agency	<a href="http://www.jma.go.jp/">http://www.jma.go.jp/</a>
Ministry of Health, Labour and Welfare (infectious diseases information)	<a href="http://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryoku/kenkou/kekaku-kansenshou/">http://www.mhlw.go.jp/stf/seisakunitsuite/bunya/kenkou_iryoku/kenkou/kekaku-kansenshou/</a>
Tokyo Metropolitan Police Department (traffic restrictions following a major earthquake)	<a href="http://www.keishicho.metro.tokyo.jp/kotu/shinsai_kisei/top.htm">http://www.keishicho.metro.tokyo.jp/kotu/shinsai_kisei/top.htm</a>
Japanese Red Cross Society	<a href="http://www.jrc.or.jp/">http://www.jrc.or.jp/</a>
Zenshakyo volunteer website (volunteer information)	<a href="http://www.saigaivc.com/">http://www.saigaivc.com/</a>
NHK Public Welfare Organization Volunteer Network	<a href="http://npwo.or.jp/nhkvnet/">http://npwo.or.jp/nhkvnet/</a>
Tokyo Electric Power Company (TEPCO) information on power outages, etc.	<a href="http://www.tepco.co.jp/life/custom/q_and_a/komatta/">http://www.tepco.co.jp/life/custom/q_and_a/komatta/</a>
Tokyo Gas (how to safely resetting your gas meter)	<a href="http://home.tokyo-gas.co.jp/userguide/anzen/meter/reset/">http://home.tokyo-gas.co.jp/userguide/anzen/meter/reset/</a>
The General Insurance Association of Japan	<a href="http://www.sonpo.or.jp/">http://www.sonpo.or.jp/</a>

NHK ONLINE (information on disasters nationwide)	<a href="http://www5.nhk.or.jp/saigai/index_fd.html">http://www5.nhk.or.jp/saigai/index_fd.html</a>
NHK ONLINE (Weather and disaster information)	<a href="http://www3.nhk.or.jp/weather/">http://www3.nhk.or.jp/weather/</a>
NHK WORLD (radio programs in English and 16 languages)	<a href="http://www3.nhk.or.jp/nhkworld/english/radio/program/">http://www3.nhk.or.jp/nhkworld/english/radio/program/</a>

## Disaster Preparedness Twitter Accounts

Tokyo Metropolitan Disaster Prevention	@tokyo_bousai (Twitter Alert available)
Tokyo Fire Department	@Tokyo_Fire_D (Twitter Alert available)
Office of the Prime Minister of Japan and His Cabinet (disaster and crisis management information)	@Kantei_Saigai
Cabinet Office Disaster Prevention	@CAO_BOUSAI
Ministry of Land, Infrastructure, Transport and Tourism	@MLIT_JAPAN
Fire and Disaster Management Agency	@FDMA_JAPAN
Japan Meteorological Agency	@JMA_kishou
Tokyo Metropolitan Police Department, Security Bureau, Disaster Division	@MPD_bousai
NHK News	@nhk_news
Japanese Red Cross Society	@JRCS_PR
Tokyo Electric Power Company (TEPCO)	@OfficialTEPCO

## Earthquake Early Warning Alerts for Your Mobile Phone

NTTDoCoMo	<a href="https://www.nttdocomo.co.jp/service/safety/areamail/">https://www.nttdocomo.co.jp/service/safety/areamail/</a>
au	<a href="http://www.au.kddi.com/mobile/anti-disaster/kinkyu-sokuho/">http://www.au.kddi.com/mobile/anti-disaster/kinkyu-sokuho/</a>
SoftBank	<a href="http://www.softbank.jp/mobile/service/urgent_news/about/eww/">http://www.softbank.jp/mobile/service/urgent_news/about/eww/</a>
Y!mobile	<a href="http://www.ymobile.jp/service/urgent_mail/">http://www.ymobile.jp/service/urgent_mail/</a>

Please note that information may only be provided in Japanese on some of these sites and Twitter accounts.



## Safety Confirmation Services

NTT East	<a href="http://www.ntt-east.co.jp/saigai/web171/">http://www.ntt-east.co.jp/saigai/web171/</a>
NTT DoCoMo	<a href="http://www.nttdocomo.co.jp/info/disaster/">http://www.nttdocomo.co.jp/info/disaster/</a>
au	<a href="http://www.au.kddi.com/mobile/anti-disaster/saigai-dengon/">http://www.au.kddi.com/mobile/anti-disaster/saigai-dengon/</a>
SoftBank	<a href="http://www.softbank.jp/mobile/service/dengon/">http://www.softbank.jp/mobile/service/dengon/</a>
Y!mobile	<a href="http://ymobile.jp/service/dengon/">http://ymobile.jp/service/dengon/</a>
J-anpi	<a href="http://anpi.jp/">http://anpi.jp/</a>

## Transportation Information

East Japan Railway Company (operations information)	<a href="http://traininfo.jreast.co.jp/train_info/">http://traininfo.jreast.co.jp/train_info/</a>
Tokyo Metro (operations information)	<a href="http://www.tokyo-metro.jp/unkou/">http://www.tokyo-metro.jp/unkou/</a>
Toei Subway (operations information)	<a href="http://www.kotsu.metro.tokyo.jp/subway/schedule/">http://www.kotsu.metro.tokyo.jp/subway/schedule/</a>
Japan Road Traffic Information Center	<a href="http://www.jartic.or.jp/">http://www.jartic.or.jp/</a>
Haneda Airport (flight information)	<a href="http://jatns.tokyo-airport-bldg.co.jp/flight/">http://jatns.tokyo-airport-bldg.co.jp/flight/</a>
Narita Airport (flight information)	<a href="http://www.narita-airport.jp/jp/flight/">http://www.narita-airport.jp/jp/flight/</a>

## Transportation Information Twitter Accounts

Tokyo Metropolitan Government, Bureau of Transportation (Toei Subway, Toden Arakawa Line, Nippori-Toneri Liner)	@toeikotsu	Kyokyu Line operation information	@keikyuu_official
		Seibu Railway operation information	@seiburailway
East Japan Railway Company	@JREast_official	Tokyu Line's service information	@tokyu_official
Odakyu Line Operations Status	@odakyuline_info	Rinkai Line official announcement	@twr_official
Keio Railway Operations Information	@keiodentetsu	Yurikamome's official announcement	@yurikamome_info
Keisei Railway Operations Information	@keiseirailway	Tama Monorail information	@tamamono_info

## Tokyo Fire Department Life Safety Learning Centers

Ikebukuro Life Safety Learning Center	<p>Address: 2-37-8 Nishi-Ikebukuro, Toshima-ku, Tokyo</p> <p>Telephone: 03-3590-6565</p> <p>Access: 5 minute walk from Ikebukuro Station served by JR and other railways. Use the South, West or Metropolitan Exit.</p> <p>Hours: 9:00 a.m. – 5:00 p.m.</p> <p>Closed: Tuesdays and every third Wednesday (If either day is a national holiday, the center will be closed the following day.), end of the year/new year's holiday</p> <p>Admission: Free</p>
Honjo Life Safety Learning Center	<p>Address: 4-6-6 Yokokawa, Sumida-ku, Tokyo</p> <p>Telephone: 03-3621-0119</p> <p>Access: 10 minute walk from JR Sobu Line Kinshicho Station North Exit or Tokyo Metro Hanzomon Line Kinshicho Station Exit No. 4, 10 minute walk from Keisei Oshiage Line Oshiage Station (also served by other railways) Exit B1.</p> <p>Hours: 9:00 a.m. – 5:00 p.m.</p> <p>Closed: Wednesdays and every third Thursday (If either day is a national holiday, the center will be closed the following day.), end of the year/new year's holiday</p> <p>Admission: Free</p>
Tachikawa Life Safety Learning Center	<p>Address: 1156-1 Izumi-cho, Tachikawa-shi, Tokyo</p> <p>Telephone: 042-521-1119</p> <p>Access: Bus from JR Tachikawa Station North Exit (board at stop no. 1). Short walk from the Tachikawa Shobosho (Fire Department) bus stop. 15 minute walk from Takamatsu Station Tama Monorail.</p> <p>Hours: 9:00 a.m. – 5:00 p.m.</p> <p>Closed: Thursdays and every third Friday (If either day is a national holiday, the center will be closed the following day.), end of the year/new year's holiday</p> <p>Admission: Free</p>

Please note that information may only be provided in Japanese on some of these sites and Twitter accounts.



# Pictograms



JIS Z8210

## Evacuation Center

People whose homes were destroyed or have collapsed due to an earthquake or other disaster and have no place to go are accepted here for a period of time. In addition, these facilities provide disaster-related information and distribute goods to people affected by the disaster.



JIS Z8210

## Evacuation Area

Open areas such as large parks that have the amount of space needed to protect the lives of evacuees from the spread of fire caused by a major earthquake and other dangers.

## Temporary Evacuation Area

Places where evacuees gather temporarily to grasp the situation prior to moving to the evacuation area. These are school yards, neighborhood parks, and other places with enough space to secure the safety of the people gathered there.

## Temporary Shelter

A facility where people who are unable to return home following a disaster can temporarily stay. There are 200 metropolitan-owned facilities designated to serve as temporary shelters.



## Support Stations

Facilities (convenience stores, fast food shops, casual restaurants, gas stations, and other establishments) that will support people who have become stranded following a disaster and are attempting to return home on foot. Support stations will provide road information, drinking water, toilet facilities, a place to rest, and other assistance.



JIS Z8210

## Tsunami Evacuation Area

This sign indicates a safe location or elevated ground where people can evacuate to when a tsunami occurs.



JIS Z8210

## Tsunami Evacuation Building

This sign indicates a reinforced concrete building that has at least three floors where people can evacuate to if there is no elevated ground nearby when a tsunami occurs.



# Symbols for People Who Need Special Care in an Emergency



## Help Mark

A mark used by people with conditions that are not outwardly apparent, such as a prosthetic limb or joint, internal medical condition, intractable disease, or the early stages of pregnancy. The mark is displayed to inform those around them of their need for special consideration.



## Help Card

A card created to help those with disabilities or other conditions inform the people around them about their disability or condition when an emergency or disaster occurs. Information such as emergency contact numbers and details on the type of support they require is printed on the card.



## International Symbol of Access

This symbol is the universal symbol that indicates a building, form of public transportation, etc., is accessible to people with disabilities. This symbol is not for wheelchair users only, but for all people with disabilities.



## International Symbol of Access for Individuals Who Are Blind

Designated as the universal symbol by the World Blind Federation in 1984, this symbol is displayed on buildings, facilities, equipment, and other objects developed with special consideration for the safety and accessibility of the visually impaired. The symbol is used on crosswalk signals, voice guidance devices, international mail containing materials in braille, books, printed materials, etc.



## Mark for the Hearing Impaired

This mark indicates that the holder has a hearing impairment, and is used in situations such as when requesting consideration with regard to how to communicate. It is also used at institutions such as local governments, hospitals, and banks to indicate that assistance is provided to people with hearing impairments.



## Mark for Expectant Mothers

A mark displayed by expectant mothers to indicate the condition, especially in the early stages of pregnancy when it is not yet outwardly apparent.



## Mark for Assistance Dogs

This mark is posted at the entrance to businesses that accept certified assistance dogs (guide dogs, service dogs, and hearing dogs) in accordance with the Act on Assistance Dogs for Physically Disabled Persons. Under the act, facilities used by a large number of people such as department stores and restaurants are required to accept assistance dogs.



## Ostomate Mark

This symbol, representing an ostomate (someone who has an ostomy or an artificial bladder), is displayed to indicate that a facility has toilet facilities for ostomates, etc.



## Heart Plus Mark

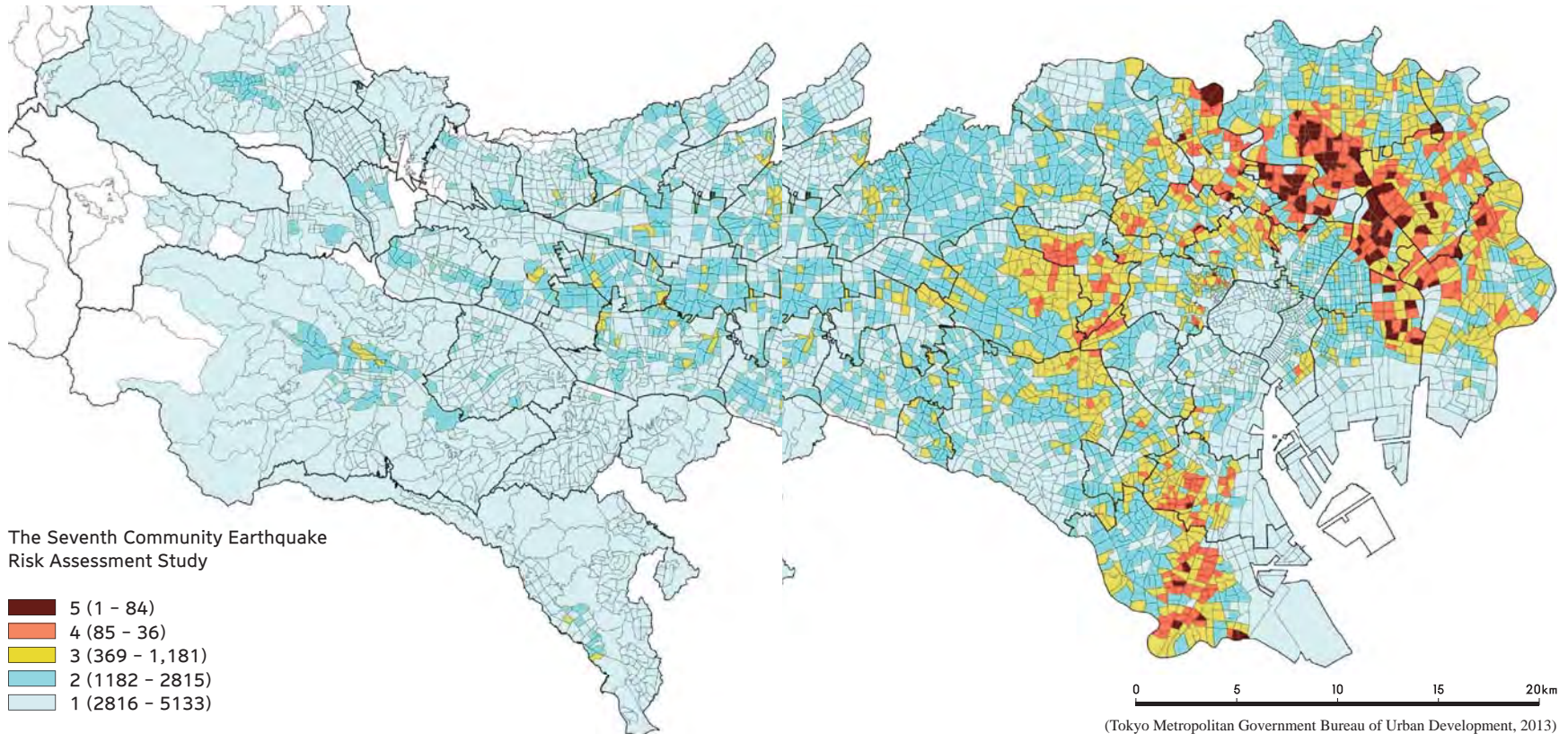
This mark is used to represent people with internal conditions that are not readily apparent to others such as those associated with the heart, respiratory functions, kidneys, bladder, rectum, small intestine, liver, and immune system.





# **i Combined Risk in Light of Emergency Response Difficulty**

\*\*The map below was recreated based on data from the Tokyo Metropolitan Government Bureau of Urban Development using Color Urban Design.



Combined risk ratings were determined by aggregating a community's building collapse risk ranking and fire risk ranking, and then ranking this sum. Communities with high combined risk need to develop measures tailored to the characteristics of each area. The "combined risk in light of emergency response difficulty" rating takes into account the difficulty of emergency response such as evacuation and fire/rescue

activities in addition to overall combined risk. This data assesses the status of the development of roads that will serve important roles when a disaster strikes such as community roads and city-planned roads. The combined risk in light of emergency response difficulty is made available by the Tokyo Metropolitan Government on the following website:

[http://www.toshiseibi.metro.tokyo.jp/bosai/chousa\\_6/home.htm](http://www.toshiseibi.metro.tokyo.jp/bosai/chousa_6/home.htm)

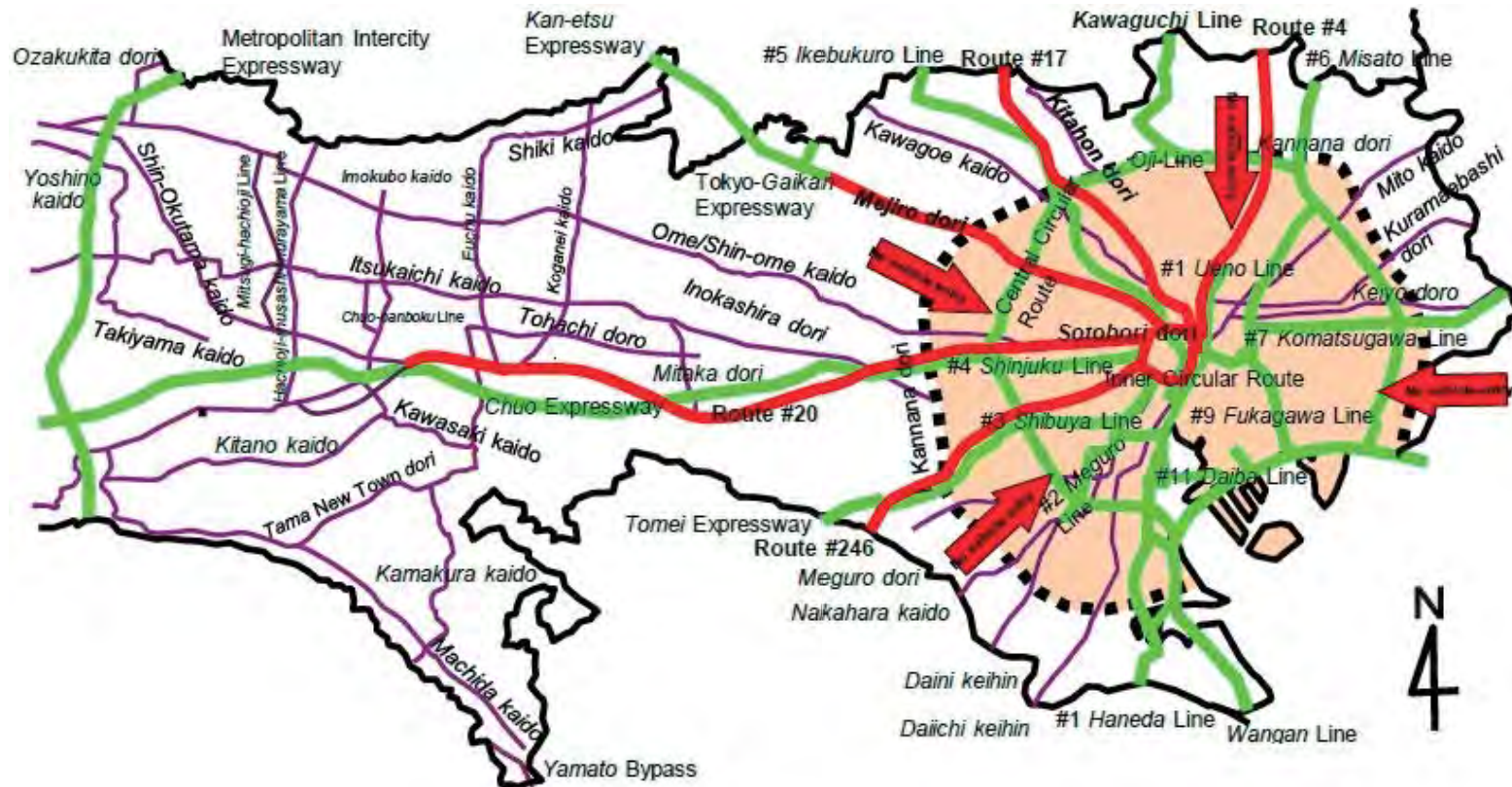




## Traffic Restrictions Following a Major Earthquake

\*\* The map below was recreated based on data from the Tokyo Metropolitan Police Department using Color Universal Design.

- Regular roads to be designated as Routes for Authorized Emergency Vehicles
- Expressways to be designated as Routes for Authorized Emergency Vehicles
- Key road routes to be designated, if necessary, as Emergency Access Roads



Directly following a major earthquake, traffic restrictions (stage 1 restrictions) will be implemented in order to prevent danger on roads, as well as to ensure the smooth passage of emergency vehicles engaged in activities such as rescue and firefighting, based on the Road Traffic Act (Act No. 105 of 1960).

Disaster response routes for emergency vehicles are then secured (stage 2 restrictions) to ensure that emergency response can be carried out accurately and smoothly based on the Disaster Countermeasures Basic Act (Act No. 223 of 1961).


Furthermore, even when an earthquake strikes that does not qualify as a massive earthquake (an earthquake measuring a 6 lower and higher on the Japanese seismic intensity scale), traffic restrictions may be put into place based on the Road Traffic Act when an earthquake measuring a 5 upper occurs.

Tokyo Metropolitan Police Department


[http://www.keishicho.metro.tokyo.jp/foreign/earthquake/english\\_270309.pdf](http://www.keishicho.metro.tokyo.jp/foreign/earthquake/english_270309.pdf)




## A Day in Tokyo

	Births	301	(2013)
	Deaths	303	(2013)
	Average life span	Men: 79.82 Women: 86.39	(2010) (2010)


	Successful employment	411	(FY2013)
---	-----------------------	-----	----------

	Move out	975	(2014)
	Move in	1,176	(2014)
	Food expenditure per household with 2 or more members	2,639 yen	(2013)


	Gross regional product	251.8 billion yen	(FY2012)
---	------------------------	-------------------	----------


	Marriages	241	(2013)
	Divorces	68	(2013)

	Number of books lent out by public libraries	313,000	(FY2013)
---	--	---------	----------

	Number of traffic accidents	115	(2013)
	Number of traffic accident fatalities	0.5	(2013)
	Number of ambulance transports	2,052	(2013)

	Number of fire outbreaks	14.2	(2013)
	Number of fire trucks dispatched	96	(2013)

	Number of emergency calls to the police	3,913	(2013)
	Number of recorded crimes	445	(2013)
	Number of crimes cleared	123	(2013)

	Trash disposal (includes recyclable resources) per resident	950 g	(FY2012)
---	---	-------	----------

	JR line passengers	9,089 million	(FY2013)
---	--------------------	---------------	----------

	Lighting consumption per resident	6.1 kW	(FY2013)
---	-----------------------------------	--------	----------

Figures are simple averages derived by dividing the figure for that year or fiscal year by the number of days in that year.

Lighting consumption is the amount of power consumed by households and stores for lighting and home appliances

Number of newly employed people indicates the number of people confirmed to have found a job through Hello Work.

Figures per resident are simple averages derived by dividing the total figure by that year's population

("Life and Statistics 2015," Bureau of General Affairs, Tokyo Metropolitan Government)





# Tokyo's Ranking in Japan

Item		Tokyo	Japan	Rank	As of
Land/Climate	Area	2,189km <sup>2</sup>	377,962 km <sup>2</sup>	45th	Oct. 1, 2013
Housing	Home ownership rate	45.8%	61.7%	47th	Oct. 1, 2013
	Total area per dwelling in an exclusively residential dwelling	63.54 m <sup>2</sup>	92.97 m <sup>2</sup>	47th	Oct. 1, 2013
Population and household	Total population (estimate)	13.3 million	127.298 million	1st	Oct. 1, 2013
	Foreign residents	407 thousand	2,066 thousand	1st	Dec. 31, 2013
	People moving in	432 thousand	2,405 thousand	1st	2014
	People moving out	356 thousand	2,405 thousand	1st	2014
	Total fertility rate	1.13	1.43	47th	2014
	Private households	6.38 million	51.84 million	1st	Oct. 1, 2010
	Average number of private households	2.03 people	2.42 people	47th	Oct. 1, 2010
Labor	Ratio of job openings to job seekers	1.57	1.09	---	2014 average
	Average monthly salary before deductions per person	463,833 yen	357,972 yen	---	2013 average
	Average monthly working hours per person	150.1 hours	149.3 hours	---	2014 average
	Unemployment rate	3.8%	3.6%	---	2013 average
Household budget	Monthly earned income per household	549.8 thousand yen	486.6 thousand yen	---	2013 average

Item		Tokyo	Japan	Rank	As of
Household expenditure	Monthly living expenditure per household	363.7 thousand	318.7 thousand	---	2013 average
Health care and environment	Number of hospitals	646	8,540	1st	Oct. 1, 2013
	Total area of natural parks	79,889 ha	5,431,321 ha	27th	March 31, 2014
Prices	Regional difference index of consumer prices	105.9	100	---	2013 average
Regional economy	Nominal gross regional product	91.9 trillion yen	472.6 trillion yen	---	FY 2012
Businesses	Number of private business establishments	627 thousand	5,454 thousand	1st	Feb. 1, 2012
	Number of people employed by private businesses	8.655 million	55.837 million	1st	Feb. 1, 2012
Agriculture, forestry and fisheries	Agricultural output	27.1 billion yen	8.6 trillion yen	47st	2012
Industry	Manufactured product shipments	7.9 trillion yen	292.1 trillion yen	13st	2013
Commercial and service industries	Yearly commodity sale	182.2 trillion yen	548.2 trillion yen	1st	2007
Finances	General account budget	6.7 trillion yen	95.9 trillion yen	----	FY 2014
Police and firefighting	Number of traffic accidents	42 thousand	629 thousand	4st	2013
	Number of recorded crimes	163 thousand	1,314 thousand	1st	2013
	Number of fire outbreaks	5,213	48,095	1st	2013
	Number of fire outbreaks per 10,000 residents	3.97	3.75	20th	2013

("Life and Statistics 2015," Bureau of General Affairs, Tokyo Metropolitan Government)





## Let's get prepared !

外国人向け今やろう



LET'S GET PREPARED MARK

**This manual contains valuable information on various types of disasters and how to protect yourself and your family when one strikes. The 10 most important steps to take immediately are outlined below. Make sure to refer to this list as you get prepared!**

### Hold a family meeting.

Divide responsibilities between family members in advance, such as who will be in charge of preventing a fire and who will secure an exit path.

### Confirm the nearest evacuation area and evacuation center.

Review the locations of the evacuation areas and evacuation centers nearest to your home.

### Register to receive alerts and useful information.

Register to receive Twitter Alerts and other useful information on disaster preparedness.

### Make stockpiling items a part of your daily life

Ensure that you have ample stockpiles of water, food, and emergency supplies by buying a little more than you need and continuously replenishing items throughout the course of daily life.



### Prepare an emergency bag.

Prepare an emergency bag that contains the minimum essentials needed for the time being after you evacuate.



### Have important items ready to carry with you.

Keep passports, certificates, records, and other important documents in a plastic case with a fastener.



### Check the layout of furniture in your home.

Ensure that furniture is arranged so that it will not topple over or slide across the floor, resulting in injury or blocking your escape path.



### Stabilize furnishings in your home.

Stabilize the furniture and household appliances in all rooms of your home to prevent them from falling over or sliding across the floor.



### Check the seismic resistance of your home.

Use the do-it-yourself seismic resistance checklist in this manual (p. 107) to check the seismic resistance of your home.



### Participate in disaster prevention drills.

Enhance your awareness and disaster preparedness skills by participating in local disaster drills.





## Helpful Phrases

非常時に使える英会話

### WHEN A DISASTER STRIKES

災害発生時の行動

Q

Where is the evacuation center?  
避難所はどこですか？  
(Hinanjo wa doko desuka?)

The ABC Park/ABC Elementary School/ABC area just over there is serving as an evacuation center.  
その近くにある〇〇公園〇〇小学校・〇〇地区が避難場所になっています。  
(Soko no chikaku ni aru XXX koen/XXX shogakko/XXX chiku ga hinanjo ni natteimasu.)

A

Q

I am looking for my family.  
家族を探しています。  
(Kazoku wo sagashiteimasu.)

Please go to the evacuation center in the area where your family lived and ask the staff for information.  
家族が住んでいたところの近くの避難所で、係の人に聞いてください。(近くの避難所を案内)  
(Kazoku ga sundeita tokoro no chikaku no hinanjo de kakari no hito ni kiitekudasai.)

A

Q

Where is the evacuation center?  
避難所はどこですか？  
(Hinanjo wa doko desuka?)

I'll show you the way. Let's go together.  
案内します。一緒に行きましょう。  
(Annai shimasu. Issho ni ikimasho.)

A

Q

Where should we go? Where is a safe place to go?  
どこに逃げればいいですか？ 安全な場所を教えてください。  
(Doko ni nigereba iidesuka? Anzen na basho wo oshiete kudasai.)

Do you have a map? You should evacuate here.  
地図を持っていますか？あなたはそこに避難すべきです。(地図を見て案内)  
(Chizu wo motteimasuka? Anata wa soko ni hinan subeki desu.)

A

Q

What is the name of this place?  
ここは、どこですか。  
(Koko wa doko desu ka?)

You are in XXX. You are near XXX. This is the XXX elementary school.  
ここは、〇〇(〇〇の近く)です。  
(Koko wa XXX desu. Koko wa XXX no chikaku desu.)

A



Q

I need information in English.  
英語の情報がほしいです。  
(Eigo no joho ga hoshii desu.)

Please try the NHK World website.  
You will be able to get news in English and other languages.  
NHK WORLDのサイトを見て下さい。英語と他の外国語でニュースを提供しています。  
(NHK WORLD no site wo mite kudasai. Eigo to hoka no gaikokugo de nyuusu wo teikyo shiteimasu.)

A

Q

When will transportation be back in service?  
(電車・バス・空港)はいつ復旧しますか。  
(Densha, basu, kuuko) wa itsu fukkyuu shimasuka?

Information on transportation services (trains, buses, ships/ferries, flights) will be updated on TV and the radio.  
電車(バス・船・飛行機)の情報は、テレビとラジオで お知らせしています。  
(Densha, basu, fune, hikoki) no joho wa, terebi to rajio de oshiraseshiteimasu.)

A

Q

When will roads be open again? Which roads are passable?  
道路はいつから通れますか? どの道路が通れますか?  
(Doro wa itsu tooremasuka? Doko no doro ga tooremasuka?)

Route XX going from XX to XX is closed between XX and XX.  
XXからXXに向かうXXX号線は、XX~XXの間は通れません。  
(XX kara XX ni mukau XXX go-sen wa, XX~XX no aida tooremasen.)

A

Q

Where can I get (food/water/a blanket)?  
(食べ物・水・毛布)はどこで手に入りますか?  
(Tabemono/mizu/mofu) wa doko de te ni hairimasuka?

I asked the person in charge. Please wait.  
係の人にお願ひしたので待っていてください。  
(Kakari no hito ni onegasishita node matteite kudasai.)

A

Q

Where can I make an international call?  
国際電話はどこでかけられますか?  
(Kokusaidenwa wa dokode kakeraremasuka?)

I will check. Please wait a moment.  
調べるので待っていてください。  
(Shiraberu node matteite kudasai.)

A





# Start Preparing with Your Family Now



## Confirm your evacuation center

Name of center \_\_\_\_\_  
 Map showing the route from home and where to meet up  
 \_\_\_\_\_

Decide the place (the evacuation center, etc.) where your family will meet if the members are separated due to work, school, shopping, or other reasons when a disaster occurs. Use the Disaster Prevention Map and other information to select a safe place. It would be reassuring if you make the meeting place specific, such as near the jungle gym at a school playground or the bench at a park. Details ➡ P. 115

## Confirm your evacuation route

Evacuation route from home (1)  
 \_\_\_\_\_  
 \_\_\_\_\_

Evacuation route from home (2)  
 \_\_\_\_\_  
 \_\_\_\_\_

Walk through the evacuation route in advance. You should do it twice, at daytime and night, and check whether there are hazardous spots, as well as where you would be able to rest and use a toilet. It is important to check multiple routes to prepare for a case in which one of them will not be safe due to a fire or other reasons. Details ➡ P. 040



## Decide how to contact each other

Contact method \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Decide in advance how your family will confirm each other's safety, such as the disaster emergency message dial, message board, and SNS. Share your contact information with relatives and friends far away. This could be helpful because even when telephone lines are congested within the area affected by a disaster, calls to and from other areas are sometimes easier to get through Details ➡ P. 128

## Decide each family member's role

Prepare emergency supplies of food and other items \_\_\_\_\_  
 Check the emergency bag \_\_\_\_\_  
 Check electricity, gas, and water \_\_\_\_\_  
 Check measures for preventing furniture from falling over \_\_\_\_\_  
 Other \_\_\_\_\_

Assign roles to each of your family members, such as who will be turning off the flame, who is in charge of the emergency bag, and who takes measures to prevent furniture from falling over. If everyone fulfills their roles, your family can act calmly without going into a panic. Details ➡ P. 084-112





## Personal Information



Name					
Date of birth/Gender	(age )				
Blood type	A	B	O	AB	Rh +, —
Allergy / Health problems					
Medication					
Address	〒				
Phone number		-		-	
Mobile number		-		-	
School/Workplace	〒				
Emergency contact	〒				



## Family Information



Name					
Date of birth / Gender	(age )				
Blood type	A	B	O	AB	Rh +, —
Allergy / Health problems					
Medication					
Mobile number		-		-	
School/Workplace	〒				
Name					
Date of birth / Gender	(age )				
Blood type	A	B	O	AB	Rh +, —
Allergy / Health problems					
Medication					
Mobile number		-		-	
School/Workplace	〒				





# Memo

Name

Date of birth / Gender

(age )

Blood type

A B O AB Rh +, —

Allergy / Health problems

Medication

Mobile number

- -

School/Workplace

〒

Name

Date of birth / Gender

(age )

Blood type

A B O AB Rh +, —

Allergy / Health problems

Medication

Mobile number

- -

School/Workplace

〒











# Index of Glossary Terms

## A

### **Act concerning the Measures for Protection of the People in Armed Attack Situations, etc.**

A law enacted in 2004 with the aim of protecting the lives and properties of the citizens.

P. 164

### **Active fault**

A fault that has repeatedly caused earthquakes since the prehistoric age, and is predicted to be active in the future.

P. 238

### **Advisory**

An advisory is issued by the Japan Meteorological Agency when there is the risk that heavy rain, strong wind, etc. will cause a disaster.

PP. 145, 246

### **AED (automated external defibrillator)**

A device that gives an electric shock to a person in cardiopulmonary arrest to restore the heart's ability to pump blood. Installed at public places such as railway stations and schools.

PP. 53, 177

### **Aerosol spray type fire extinguisher**

A fire extinguisher that sprays a fire-extinguishing agent by gas pressure. Can be used handily at home. Useful for first response firefighting.

P. 110

### **Alluvium**

A weak stratum that is relatively new, formed about 10,000 to 20,000 years ago or earlier. It is difficult to construct heavy buildings on alluvium.

P. 116

### **Area with steep slopes at risk of landslides**

An area with a 30-degree or steeper slope where a landslide could cause damage to housing.

P. 116

### **Arterial bleeding**

A type of bleeding in which bright red blood spurts out in rhythm with the pumping of the heart.

PP. 178, 263

## B

### **Baiu stationary front**

A stationary front that moves from south to north over the Japanese archipelago during the seasonal transition from spring to mid-summer.

P. 146

### **Biological agent**

Bacteria, viruses, or poisonous substances produced by them, etc. used as weapons.

PP. 165, 167

### **Building collapse risk**

The degree of risk that a building will collapse or lean because of an earthquake.

PP. 118, 278

## C

### **Canal**

An artificial channel to deliver water for agricultural and/or urban use.

P. 151

### **Capillary bleeding**

Blood oozing out from capillary veins.

PP. 178, 263

### **Chemical agent**

Sarin or other toxic chemicals that can be used as weapons in terrorist attacks, etc.

P. 167

### **Chest compression**

Also called external cardiac massage, chest compressions are given with both hands near the heart to a person in cardiopulmonary arrest, in order to restore blood circulation.

P. 177

### **Commissioned welfare volunteer**

A part-time local government employee commissioned by the minister of health, labour and welfare, who is tasked with providing consultation to local residents while placing himself/herself in their position, extending necessary assistance, and trying to enhance social welfare.

P. 124

### **Communications drill**

A drill to practice communicating information about fires, rescue/relief, and earthquake damage properly to firefighting authorities, via telephone or in person.

P. 133

### **Cross-bracing**

Steel bars installed in an X-shape to reinforce steel-frame buildings.

P. 113

### **Cumulonimbus**

A massive cloud that develops vertically due to powerful upward air currents and can produce rain and lightning. With a height of more than 10 km, these clouds sometimes reach the stratosphere.

PP. 150, 245

## D

### **Daily stockpile**

Purchasing and storing extra supplies of food and other items that you use on a daily basis.

PP. 85, 92

### **Damage certificate**

A certificate issued by municipalities on the degree of damage to dwellings, etc., caused by disasters such as earthquakes, floods, and wind.

P. 254

### **Direct pressure method**

A method to stop bleeding where pressure is applied directly to the point of bleeding using your hand or fingers to stop the flow of blood.

PP. 179, 263

### **Disaster disability compensation money**

In accordance with the law, compensation money will be paid to those who have become severely disabled due to the disaster (blindness in both eyes, constant need of nursing care, severance of both arms above the elbow joint, etc.).

P. 255

### **Disaster Emergency Message Dial**

A service provided by Nippon Telegraph and Telephone Corp. (NTT). A disaster survivor can dial 171 and record a message, and those who wish to contact the person can listen to the message.

PP. 128, 226

### **Disaster map exercise**

A type of disaster drill referred to as DIG ("Disaster" "Imagination" "Game").

P. 140

### **Disaster Message Board**

A service provided by mobile phone carriers to enable people to confirm each other's safety via text messages. To use the service, visit the portal site of your mobile phone carrier.

PP. 128, 227

### **Disaster preparedness education**

Teaching people knowledge needed to protect themselves in natural disasters, such as preparations and actions to take in a disaster.

PP. 135, 140

### **Disaster prevention map**

In addition to showing areas expected to sustain damage when a disaster occurs, evacuation areas and routes, this map also includes disaster prevention agencies and other helpful information.

P. 161

### Disaster reconstruction loan

A loan to support small- and medium-sized companies that were affected by the disaster in rebuilding their business.

P. 261

### Disaster relief fund

When a disaster occurs and the Disaster Relief Act is applied, these funds are used by the municipalities to offer low-interest loans to households that have been affected by the disaster, in order to help rebuild their lives.

P. 256

### Disaster response goods and equipment

Equipment and tools used to prevent the spread of disaster.

P. 137

### Disaster response routes for emergency vehicles

Major roads designated to serve as the main arteries for evacuation, rescue and firefighting activities, and the transport of emergency supplies when a disaster strikes. These roads will be closed to non-emergency vehicles.

PP. 33, 280

### Disaster sympathy money

In accordance with the law, sympathy money will be paid to the families of those who lost their lives in the disaster.

P. 254

### Disaster volunteers

Volunteers who support recovery and rebuilding following a disaster, such as an earthquake, tsunami, or a wind and flood disaster caused by a typhoon.

P. 266

### Disorder of consciousness

A condition where a person becomes unable to properly respond to the people around him/her following trauma to the head, etc. Disorders range from the minor to the severe, including disorientation/confusion, drowsiness/somnolence, numbness, and coma.

P. 186

### Drain cock

A valve for controlling the amount of water supply or drainage.

P. 191

### Drill to prevent fire outbreaks

Training to prevent fire outbreaks when a disaster strikes.

P. 133

### Dust

Fine powder consisting of dry particles that floats in the air.

P. 166

### Dust goggles

Protective goggles that protect your eyes from smoke generated by a fire, volcanic ash, etc.

PP. 161, 163

### Dust mask

Protective mask that prevents you from inhaling smoke generated by a fire, volcanic ash, etc.

PP. 161, 163

## E

### Earthquake directly hitting Tokyo

An earthquake directly hitting the National Capital Region that is predicted to occur within the next 30 years with a 70 percent probability.

PP. 15, 52, 68

### Earthquake resistance

The degree to which a building or other structure can withstand an earthquake.

PP. 107, 118

### Earthquake resistance standards

Standards ensuring that a building fulfills the minimum requirements for earthquake-resistant design.

PP. 24, 108

### Earthquake-resistant shelter

A structure that can protect the bedroom or sleeping area even if the house collapses due to an earthquake.

P. 113

### Earthquake-resistant wall

A wall of a building that can resist horizontal forces created by an earthquake, wind, etc.

P. 50

### Electrical current leak

Electricity leaking out due to causes such as damaged wires and damaged insulation due to age.

PP. 110, 111

### Emergency bag

A bag that contains the essential goods to take with you when you have to evacuate.

P. 90, 92

### Emergency light

A light that automatically turns on in the event of a blackout.

P. 23

### Emergency stockpile

Stocking supplies in preparation for emergencies.

PP. 55, 85, 93

### Emergency Stockpile Day

The Tokyo Metropolitan Government has designated November 19 as Emergency Stockpile Day.

P. 55

### Emergency temporary housing

Emergency housing built under the Disaster Relief Act. Provided to people who have no place to live because their homes have collapsed, burned down, or become uninhabitable for other reasons.

PP. 69, 259

### Emergency vehicle (emergency car)

A vehicle used to respond to an emergency, such as for disaster relief.

PP. 39, 280

### Emergency warning

An emergency warning is issued by the Japan Meteorological Agency when there is a very high risk of a severe disaster.

PP. 145, 247, 248

### Ethanol

A type of alcohol. Volatile. Used for sterilizing and disinfecting, and also as fuel.

P. 65

### Evacuation area

When an earthquake occurs causing a large-scale fire to spread, this is a place to evacuate to in order to protect yourself from the flames. Places such as large parks, areas rich with greenery, and fireproof building districts are designated as evacuation areas.

PP. 40, 120, 274

### Evacuation center

A place that temporarily accommodates and provides shelter to those affected by a disaster, whose homes have collapsed, burned down, etc. Public facilities such as schools and community centers are designated as evacuation centers.

PP. 40, 56, 274

### Evacuation drill

Training to learn your evacuation route and to safely evacuate without panicking.

P. 134

### Evacuation hatch

A hatch equipped with hanging ladders for evacuation.

P. 48

### Evacuation route

A route which one takes when evacuating.

PP. 21, 23, 95, 114, 119, 153, 161

### Eyewall

A tall ring of dense cumulonimbus clouds surrounding the eye of a typhoon. This is where the strongest wind and rain of the storm occurs.

P. 245

## F

### Facebook

A social networking service that allows users to connect and interact with their real-world friends using their real names.

P. 43

### Fall stationary front

A stationary front that moves from north to south over the Japanese archipelago during the seasonal transition from summer to fall.

P. 146

### Fire risk

The degree of the risk of wide-area damage from the spread of fires breaking out due to an earthquake.

PP. 118, 278

### Fire-safe area

An area where fireproofing has progressed and where there is no fear of large-scale spread of fires.

P. 120

### First response firefighting drill

A drill to learn how to use a home-use fire extinguisher, standpipe, portable fire pump and other firefighting devices and equipment.

P. 132

### First response firefighting

An emergency measure taken to extinguish a fire in its early stages when the flames have not yet reached the ceiling.

PP. 18, 46, 78, 188

### Flood risk area map

A map showing areas that are likely to flood when there is a torrential downpour that greatly exceeds the flood control capacity of rivers and sewerage systems.

P. 148

### Food poisoning

A condition caused by eating food contaminated by bacteria or a virus, or food that contains a poisonous or harmful substance.

P. 64

## G

### Ground fault circuit interrupter

A device that quickly shuts down the power after a current leak to prevent a disaster.

P. 110

### Gutter

Ditches built along roads or railway tracks to drain water.

PP. 147, 148, 151

## H

### Hands-on training for disaster response

An event where participants can learn about disasters while enjoying hands-on training.

P. 135

### Hazard lights

Lights used to the draw the attention of the drivers around you, especially of the car behind you.

P. 32

### Hazard map

A map that contains information such as areas predicted to suffer damages, evacuation areas, and evacuation routes, for use in mitigating damages from a natural disaster and for disaster preparedness.

P. 119

### Heat stroke

A condition that occurs when you have engaged in activities such as work and exercise under the blazing sun. Symptoms such as dehydration, seizures, and weakness appear, sometimes even leading to death.

PP. 65, 185, 194

### Hello Work

A public employment security office. An administrative body that the Ministry of Health, Labour and Welfare established with the aim to secure stable employment opportunities for citizens.

PP. 70, 240

### Hemorrhagic shock

A condition in which blood flow decreases due to internal or external bleeding, so that sufficient blood cannot be delivered to tissues and organs around the body.

P. 185

### Household stockpile

Stocking food and daily items according to the family structure.

P. 88

### Housing with a semi-basement

A house with space that is partially below the level of surrounding roads.

PP. 147, 151

## I

### Income tax casualty loss deduction

An income tax deduction you can receive when your home or household possessions have been damaged due to a natural disaster, fire, etc.

P. 257

### Indirect pressure method

A method used to temporarily stop the flow of blood by pressing down on the artery between the injury and the heart, compressing it against the bone.

PP. 179, 263

### Indoor fire hose

A fire hose installed indoors. Has highly effective water discharge capability and range.

P. 189

### Infiltration inlet

A place where rainwater that has fallen on the grounds collects.

148

### Inundation

Being flooded. A disaster in which a residential area or farmland is inundated due to rainfall that exceeds the drainage capacity of gutters or the sewerage system. This is called a flood disaster.

PP. 147, 148

### Islands

A region with islands of various sizes. In Tokyo, there are the Izu Islands and Ogasawara Islands.

PP. 37, 117, 160

## J

### Jack

A device used to lift something, typically a car that needs a tire change.

P. 53

### J-anpi

A free service that can be used from a computer, smartphone, mobile phone, etc., to check the safety of an individual by entering his/her phone number or name. In addition to safety information on the disaster message boards of mobile phone carriers, you can also access safety information collected by companies and organizations.

## L

### Large-scale fire

A fire that can break out over a large area when an earthquake occurs. Such a fire is expected to result in many injuries and deaths.

P. 45

### Lifeguard

A person with a license issued by the Japan Lifesaving Association, whose job is to prevent water accidents at places such as beaches where swimming is permitted.

P. 49

### Lifeline

Infrastructure indispensable to daily life, such as electricity, water, gas and telephone services.

PP. 55, 84

### Literacy

Knowledge about a certain field, and the ability to use such knowledge.

P. 172

### Long-period ground motion

Earthquake-induced slow shaking with a period of a few seconds or more, which travels far from the earthquake focus.

PP. 97, 240

## M

### Magnitude

A unit for measuring energy from an earthquake.  
P. 239

### Micon-meter (intelligent gas meter)

A meter that shuts down the gas and displays a warning when a problem occurs with gas flow or pressure, or when an earthquake measuring a 5 upper on the Japanese seismic scale occurs.  
P. 111

### Mutual help

The concept of people in the same neighborhood helping each other in the event of a disaster to protect lives and the community.  
P. 52

## N

### Neighborhood disaster response group

A group actively engaged in disaster preparedness activities designated by the Tokyo Metropolitan Government.  
P. 138

### No-rinse/non-residue soap

A special type of cleanser that enables you to keep clean with little to no water.  
204

## O

### Oral rehydration solution

A mixture of salt and glucose dissolved in water, which is mainly used to treat dehydration.  
P. 197

### Outer band

Outer rainbands that form about 200 to 600 km from the center of the typhoon, and intermittently produce strong rain showers, thunderstorms, and at times, tornadoes.  
P. 245

### Overnight disaster drill at school

A drill conducted at school, which simulates evacuation life after a disaster, through activities such as preparing for sleep and preparing stockpiled food.  
P. 131

## P

### Pandemic

A nationwide or worldwide outbreak of an infectious disease.  
P. 170

### Passive smoking

Inhaling secondhand smoke from cigarettes.  
P. 63

### People who need special care

The elderly, the disabled, infants, foreign nationals, and other people in need of special care.  
PP. 58, 66

### People who need special support in evacuating

If a disaster occurs or there is the threat of a disaster occurring, these people are in particular need of support to ensure they can evacuate safely and promptly, as it would be difficult for them to evacuate on their own.  
P. 145

### Physical protection drill

A drill to practice protecting yourself when an earthquake occurs. Activities include experiencing shaking on an earthquake simulator and training to protect yourself from falling objects.  
P. 133

### Portable fire pump

A fire pump equipped with an engine that can be lifted by hand. Placed at facilities used by fire authorities, volunteer fire corps, volunteer disaster response teams, etc.  
PP. 132, 191

### Prevailing westerlies

Winds that flow from west to east at high altitudes, in the middle latitudes of the northern hemisphere.  
P. 244

### Propane gas

Liquefied petroleum gas that is supplied from a tank installed at homes. City gas, on the other hand, is supplied through gas lines that run under roads.  
P. 111

### Public health center

A public agency that supports the health of local residents and sanitation.  
PP. 171, 265

## R

### Radar and Nowcasts weather map for tornadoes

A service of the Japan Meteorological Agency which analyzes 10 km zones, and forecasts the probability of a tornado developing, up to one hour ahead (10 to 60 min ahead).  
P. 157

### Radio (emergency radio)

A radio (emergency radio) that not only receives general broadcasts, but can automatically receive the local government's disaster radio broadcasts.  
P. 42

### Rebuilding life

After the foundation of their lives have been destroyed by a disaster, residents rebuild their daily lives.  
P. 70

### Rescue and relief drill

A drill that teaches how to use everyday tools to rescue people who were unable to escape in time, due to building collapse, etc.  
P. 134

### Resonance

A phenomenon where the natural frequency of a building and the frequency of earthquake waves coincide, causing the shaking to intensify greatly.  
P. 240

## S

### Safety confirmation services

Services for confirming the safety of your family and friends in the event of a disaster, such as the Disaster Emergency Message Dial provided by Nippon Telegraph and Telephone Corp. (NTT) and the Disaster Message Boards provided by mobile phone carriers.  
P. 272

### Sandbag

A cloth bag filled with sand that is used as a material for civil engineering applications, which can also be used to prevent flood damage.  
PP. 147, 148

### Secondary disaster

A disaster caused by the initial disaster, such as a fire following an earthquake.  
PP. 45, 95

### Secondary evacuation center (welfare evacuation center)

An evacuation center that accepts people who would have difficulty living in a regular evacuation center, and need special care.  
P. 56

### Sediment disaster hazard area map

A map showing areas where there is a risk of a sediment disaster.  
153

### Seismic damper

Equipment that absorbs earthquake energy and mitigates damage to the building.  
P. 113

### Self-help

Protecting yourself and your family by yourself, without help from others.  
P. 17

### Separation panel

A panel that separates an apartment unit's veranda or balcony from that of the adjacent unit. It can be broken through during an emergency to allow escape to the unit next door.

P. 48

### Smart key

A system for locking and unlocking a door, or starting an engine, without a mechanical key.

P. 32

### Smartphone app

Web applications that can be used on smartphones. There are many disaster preparedness apps, including Internet radio apps, disaster alerts and earthquake information apps.

P. 129

### SNS (social networking service)

A service for providing social networking through exchanges via the Internet, such as Twitter, Facebook, and LINE.

PP. 43, 47

### Spindle driver

A tool used to open and close the water outlet of a fire hydrant.

P. 190

### Spiral band

A strong rainband surrounding the eye of a typhoon. Shaped like a spiral around the eye.

P. 245

### Splint

An object used to temporarily immobilize a fracture, joint, etc.

P. 180

### Stabilizing adjuster

An implement used to stabilize copiers, multifunction printers and other machines to prevent them from moving.

P. 105

### Standpipe

A firefighting instrument that can be used by local residents. The standpipe is inserted into a fire hydrant or drain valve on the road, and a hose is attached to conduct firefighting activities.

PP. 132, 190

### Staying at home

Staying at home, as opposed to going to an evacuation center, when the building where you live was not damaged by the disaster and there is no danger of tsunami or fire.

PP. 41, 54

### Storm surge

Abnormally high levels of ocean water due to gales and low pressures coinciding with high tides cause the water to surge toward the land.

P. 146

### Stranded commuters and others

People who become stranded due to an earthquake or disaster that occurs when they are at a place other than their home.

P. 127

### Submerged

Farmland, crops, roads, cars, etc., in areas where there usually is no water, becoming covered with water due to heavy rain or river flooding.

PP. 146, 147, 149, 151

### Support fund for disaster victims to rebuild their lives

Support fund provided to households that suffered significant damage to their livelihoods through the disaster, such as total destruction of their residences.

P. 255

### Symbolic disaster remains

A structure that passes down the memories and lessons of a disaster to future generations, such as destroyed buildings. Some are restored and preserved, while others are dismantled.

P. 72



"Takidashi"

To provide meals and other food free of charge when a disaster occurs, etc.

P. 64

### Temporary evacuation area

An area to which you evacuate temporarily when evacuation orders are given, or when the danger of fire approaches. Temporary evacuation areas include local elementary schools, junior high schools, and parks.

PP. 40, 115, 274

### Temporary shelter

A facility that temporarily accommodates people who have trouble returning home due to a disaster.

P. 274

### TFD Disaster Volunteers

Volunteers who work at the scene of disaster who have pre-registered at a Tokyo Fire Department fire station, within whose jurisdiction their home, place of work, or school is located.

P. 267

### Tokyo Metropolitan Government Disaster Prevention Map

A map provided on the TMG disaster prevention website. You can find the location of disaster prevention facilities, support stations for people returning home following a disaster, and other relevant facilities.

P. 128

### Tokyo Metropolitan Government Disaster Prevention Twitter account

The Tokyo Metropolitan Government's Twitter account on disaster prevention. By activating Twitter Alerts, important tweets issued by public agencies and emergency response organizations will appear on your home timeline.

PP. 129, 271

### Tokyo Metropolitan Government Disaster Prevention Website

A website that provides information on preparing for a disaster in normal times, as well as information on the situation when a disaster strikes.

PP. 128, 270

### Tokyo Metropolitan Seismic Certification Mark

A mark, issued by the Tokyo Metropolitan Government that shows the safety of the building against earthquakes so that Tokyo residents can feel safe using buildings.

P. 108

### Triage

The process of determining the level of urgency and severity of injuries/illnesses, and assigning priority for treatment and transport out of the area.

P. 264

### Tsunami evacuation building (evacuation tower)

A facility where residents and visitors can immediately evacuate to when a tsunami occurs.

P. 49, 275

### Twitter

A communication tool with which messages of up to 140 letters can be exchanged via the Internet.

PP. 43, 129, 271

### Twitter Alert

By activating TMG Disaster Prevention Twitter Alerts, important tweets issued by public agencies and emergency response organizations will appear on your home timeline.

PP. 129, 271



### Underpass

A road below ground level at a grade-separated crossing. Prone to becoming submerged during torrential rain.

P. 151

### Urban flooding

A type of flooding that occurs in urban areas where much of the ground is covered by concrete or asphalt pavement. It occurs when a massive amount of water flows into the sewerage system or river.

P. 150



## V

### **Venous bleeding**

A type of bleeding in which dark red blood flows out continuously from a vein.

PP. 178, 263

### **Volcanic ash fall**

Volcanic ash released by an eruption that falls to the ground.

P. 163

### **Volunteer fire corps**

A non-regular group made up of members with other occupations that undertakes firefighting activities in the community.

P. 139

## W

### **Warning**

A warning is issued when the Japan Meteorological Agency has determined that there is a risk of a severe disaster.

PP. 145, 246, 248

### **Water bag**

Plastic bags, such as trash bags, filled with water and used for flood prevention. When sandbags are not available, water bags can be used as a substitute.

P. 148

### **Water supply spot**

An emergency water supply tank, water purification plant, water supply station, etc. where people can obtain water when the water supply is interrupted due to a major earthquake.

P. 55

### **WHO** (World Health Organization)

A United Nations body that was established with the objective of attaining the highest possible level of health for all people.

P. 170

### **Wind and flood disaster**

A disaster caused by heavy rain and/or strong wind.

P. 144

### **Workshop**

A lesson in which a group of people takes part in activities, experiences things first hand, and interacts with each other so as to share their knowledge and/or create something.

PP. 228, 232

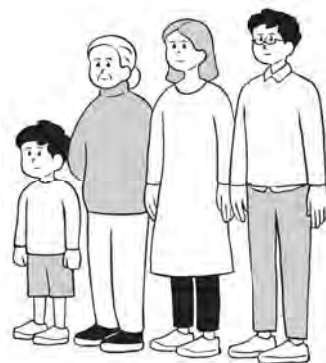


## things through group interaction



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