

Are you ready?

Think about potential risks:

- Major earthquakes and tsunamis
- Major typhoons
- Abnormal weather (torrential downpours and tornadoes)
- Volcanic eruptions
- Influenza, etc.



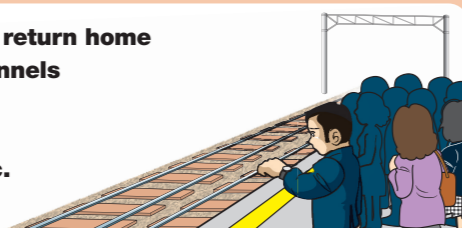
At home:

- Water and power outages, gas leaks, and fires
- Collapsed houses
- Unable to contact family members
- Injuries and illnesses
- Evacuation orders and how to respond
- No heat (in winter), etc.



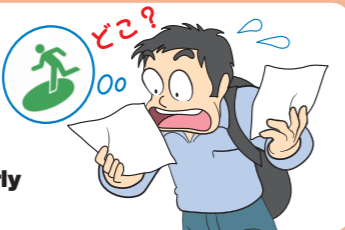
At school or at work:

- No train service, unable to return home
- Impassable bridges and tunnels
- Toilets that won't flush
- No phone service
- Nothing to eat or drink, etc.



In the community:

- No knowledge of shelter locations and evacuation routes
- No knowledge of the members of neighboring households
- Need for relief supplies
- Need for people to care for the elderly
- Unable to withdraw cash, etc.



To reduce the damage:

- Decide what steps to take and the order of priority
- Prepare emergency supplies and information devices
- Strengthen community organizations (neighborhood associations and residents' associations)
- Organize walks to learn about the local history of past disasters
- Hold disaster preparedness festivals
- Plan volunteer activities, etc.



Know what to do if it happens. Be prepared to protect yourself.

Day of the disaster to
a few days afterward

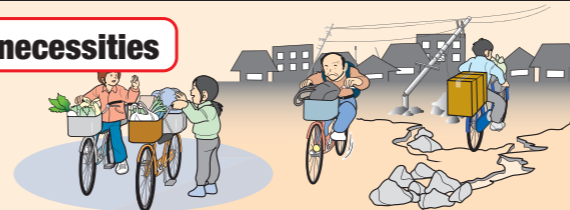
Confirm everyone's safety



Life at the evacuation shelter



Ensuring the necessities



Gathering critical information



Response at schools and workplaces



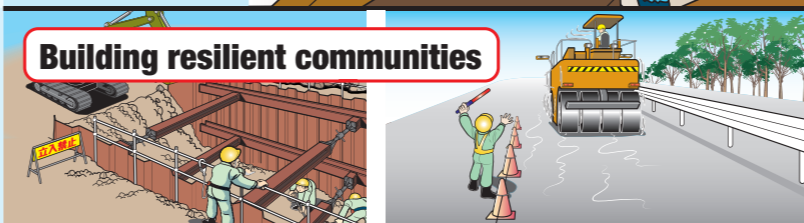
Health maintenance



Rebuilding lives



Building resilient communities



A few days to two
weeks afterward

Two weeks to several
months afterward

Several months to
half a year afterward



2014 年に 百周年 JSCE
2014 Centennial
100th anniversary of the founding of JSCE

Knowing what to do in an emergency: Helpful tips for dealing with the unexpected



Japan Society of Civil Engineers (JSCE)
Committee on Safety Problems

<http://www.jsce.or.jp/committee/csp/csp1.htm>

We need to think together about preparing for the unexpected.

Examples of civil engineering structures that protected human lives and transportation infrastructure from disaster

The Fudai floodgate (Iwate Prefecture) prevented tsunami runup.



The East Sendai Expressway (Miyagi Prefecture) held back the tsunami.



The Tohoku Shinkansen elevated bridge (Fukushima Prefecture) had only minor damage.

Communication and community-building

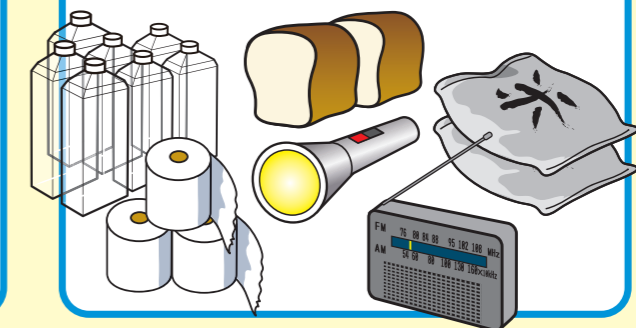
Mutual assistance

- Know the locations of evacuation shelters and evacuation routes Use hazard maps to check on hazardous locations requiring particular care
- Know what past disasters have occurred in the region where you live (Place names, oral history, etc.)
- Learn in advance about anticipated disasters in your region
- Participate in disaster preparedness training
- Learn about your community, neighborhood association, and residents' association (Active participation in the residents' association and neighborhood association leads to better everyday communication)
- Gather contact information for relatives and friends in distant locations

Preparing water and food, etc.

Self help

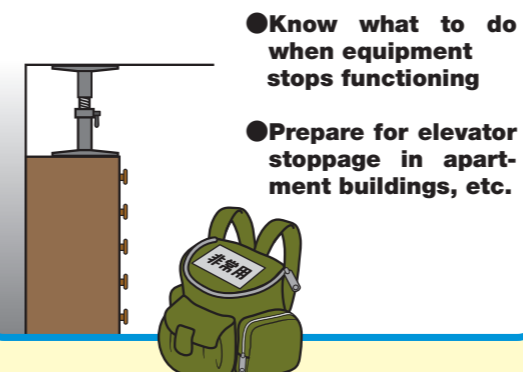
- Drinking water and food (The government recommends a seven-day supply.)
- Sanitary items, prescriptions, and change of clothing
- Flashlight, radio, and batteries
- Storing water in the bathtub
- Portable stove and kerosene lantern
- Keep your car's gas tank at least half full



Preparations at home

Self help and mutual assistance

- Have your home checked and reinforced for earthquake resistance (Find out about local government assistance, etc.)
- Brace large items to prevent toppling (wardrobes, refrigerators, etc.)
- Take earthquake safety measures for gas appliances and space heaters
- Prepare an emergency "go bag" and portable evacuation supplies



- Know what to do when equipment stops functioning
- Prepare for elevator stoppage in apartment buildings, etc.

Life and work

Self help, mutual assistance, and public assistance

- Keep a minimum supply of cash on hand in case financial services are unavailable
- Know alternate routes in case main roads in the area are blocked
- Prepare to assist the elderly and persons requiring care
- Psychological care for children affected by a disaster
- Prepare for hardships due to mental fatigue, unemployment, etc. (Find information about public services, etc.)
- Efforts of local volunteer organizations
- Consider earthquake insurance and mutual aid programs

Day of the disaster to a few days afterward

Problems that may occur

●Neighborhood residents are injured



Useful tips to know

●First aid for broken bones with newspaper and cloth

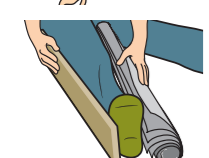
用意するもの
新聞紙 (2~3冊)、※三角巾 (なければ包帯・シーツ・ネクタイなど)



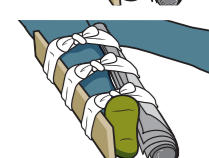
●腕の骨折
2冊くらいの新聞紙で腕を包み、骨折した部分から上下2関節を※包帯等で結ぶ。



関節の動きを制限し、無理な力をかけないように身体に固定する。



●足の骨折
新聞紙3冊を丸めます。足に添え木をする。

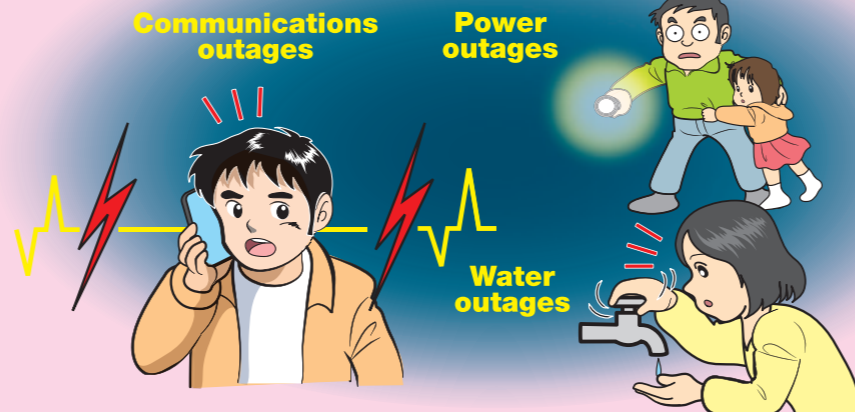


丸めた新聞紙も足に添えます。3ヶ所を※三角巾等で結ぶ。

NHK preparedness tips
http://www.nhk.or.jp/sonae/douga/inochi_0004.html



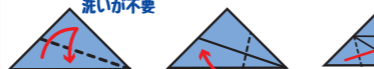
●Lifeline utilities are cut off



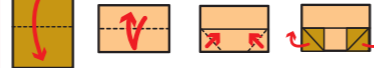
Life at the evacuation shelter

●Folding dishes out of newspaper

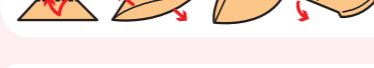
ポリ袋でカバーをして、食べた後捨てれば洗いが不要



●お椀を作ろう
新聞紙で正方形を作ってから



長方形のままから



NHKそなえる防災
http://www.nhk.or.jp/sonae/douga/hinanseikatsu_0039.html



●Preventing cavities without a toothbrush or water

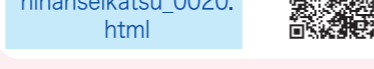
虫歯予防のためには、出来る限り水でうがいをする。



水がない場合は、清潔なガーゼを水に浸して拭いたり、キシリトール入りガムをかむなどで工夫しましょう。

また、唾液を多く出せるように唾液腺のマッサージも効果的です。

NHKそなえる防災
http://www.nhk.or.jp/sonae/douga/hinanseikatsu_0020.html

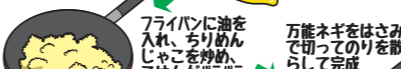


●Cooking with relief food supplies

●おにぎりでチャーハン作り
用意するもの



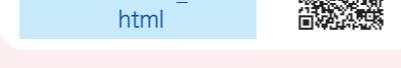
●おにぎり 4個
●ちりめんじゃこ
●油
●コンソメ
●万能ネギ



フライパンに油を入れ、ちりめんじゃこを炒め、ごはんがパラパラになるまで炒める。

万能ネギをはさみで切ったのを散らして完成

NHKそなえる防災
http://www.nhk.or.jp/sonae/douga/hinanseikatsu_0036.html



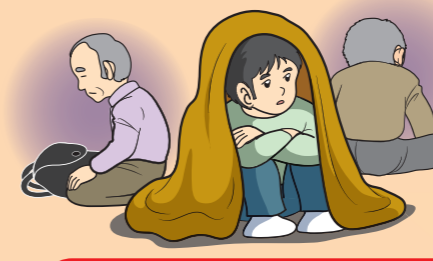
A few days to two weeks afterward

Procurement of relief supplies

Schools and workplaces are closed

Problems that may occur

●Lack of privacy



●Lack of critical information

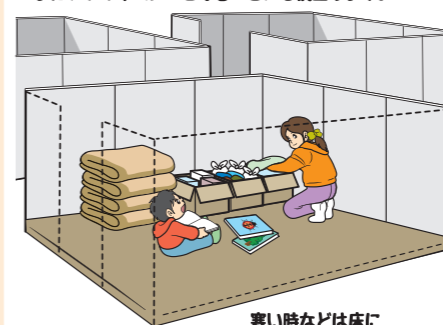
情報伝達に障害が発生し、情報不足状態となり必要な情報が必要な場所に伝達されないという問題が発生する



Useful tips to know

●Partitions made of cardboard

底冷えのする体育館での避難生活では、段ボールのついたてが、冷たい風から守ってくれます。また、プライバシーを守ることに役立ちます。



寒い時などは床に発砲スチロールを敷く事で厳しい寒さを和らげてくれます。

●Simple baby bed

避難所では段ボール箱の中にバスタオルを敷き赤ちゃんを寝かせます。仕切りや覆いで赤ちゃんも安心。

「赤ちゃんがいます」という張り紙で周囲に気付いてもらうことも大切です。

周囲の気が付いた人たちが一緒になって赤ちゃんのケアをしようという意識にもつながります。



NHKそなえる防災
http://www.nhk.or.jp/sonae/douga/hinanseikatsu_0021.html



●Checking whether others are safe

●災害用伝言ダイヤル (171) とは?

災害用伝言ダイヤルは、地震、噴火などの災害の発生により、被災地への通信が増加し、つながりにくい状況になった場合に提供が開始される声の伝言板です。



※発信地から被災地電話番号間の伝言の録音・再生にかかる通話料はお客様負担です。なお、伝言の録音・再生に伴うサービス料は、無料です。

●災害用伝言板 (web171) とは?

インターネットを利用して被災地の方の安否確認を行う伝言板です。インターネットを経由して災害用伝言板 (web171) にアクセスし、電話番号をキーとして伝言情報 (テキスト) を登録できます。



Disaster message boards
NTT東日本
<http://www.ntt-east.co.jp/saigai/web171s/tourou.html>
NTT西日本
<http://www.ntt-west.co.jp/dengon/web171/>

使い方を紹介しています。



●Local radio broadcast

被災者にとってラジオが一番頼りになるメディアです。〇〇町FMといった地域ラジオでは、周辺の災害状況や町の復興計画、生活支援の情報などをこまめに配信しています。



Processes after a disaster

Two weeks to several months afterward

Problems that may occur



●Stress and illness

被災した人には無理に体験を聞き出さず、まず心を落ち着けてもらいます。コントロールできない興奮と生き延びた事への自責の念を和らげることが、心のケアにつながります。



Restoration of infrastructure

●Uncertain livelihood and job loss

被災して休業した企業の従業員への手当は、まず雇用調整助成金を積極的に活用することで職者を防ぐことから始まります。その後は、復興の需要を被災者の恒常的な生計に結び付けることが課題です。

Useful tips to know

●Community-building in shelters

被災者は感情がデリケートになっています。最初は顔や名前を覚えてもらうことから始め、孤立者が出ないようにしましょう。



●Movement to prevent health problems

National Institute of Health and Nutrition
http://www.linkdediet.org/hn/modules/pico/index.php?content_id=550



●Checking availability of subsidies to rebuild lives



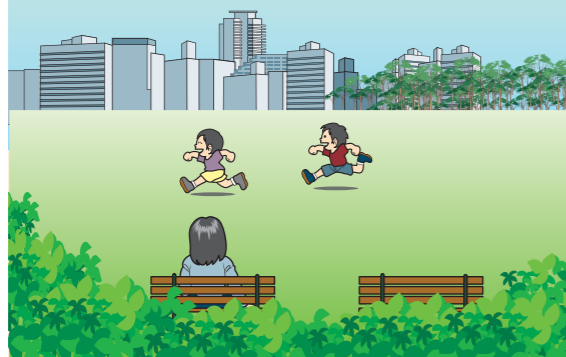
2. 制度の対象となる自然災害				
10世帯以上の住宅全壊被害が発生した市町村等(別添参照)				
3. 制度の対象となる被災世帯				
上記の自然災害により				
① 住宅が全壊した世帯				
② 住宅が半壊、又は住宅の敷地に被害が生じ、その住宅をやむを得ず解体した世帯				
③ 災害による危険な状態が継続し、住宅に居住不能の状態が長期にわたる世帯				
④ 住宅が半壊し、大規模な補修を行わなければならない居住する世帯(大規模半壊世帯)				
4. 支援金の支給額				
支給額は、以下の2つの支援金の合計額となる				
(※ 世帯人数が1人の場合は、各該当額の半額(3/4の額))				
住宅の被害程度	全壊	解体	長期半壊	大規模半壊
支給額	100万円	100万円	100万円	50万円
(2) 住宅の再建方法に応じて支給する支援金(加算支援金)				
住宅の再建方法	建設・購入	補修	賃借	(公営住宅以外)
支給額	200万円	100万円	50万円	50万円

内閣府 防災情報のページ
<http://www.bousai.go.jp/taisaku/seikatsusaiken/pdf/140612gaiyou.pdf>

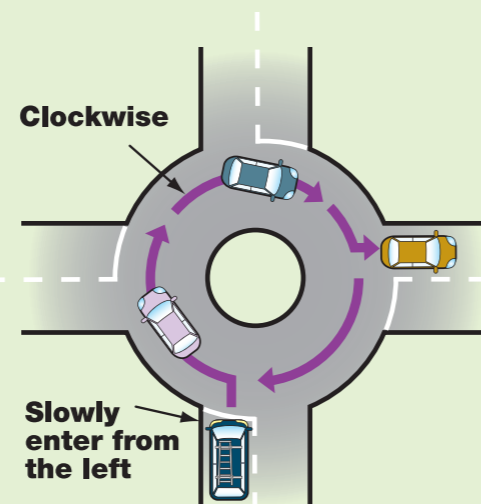
Several months to half a year afterward

Working to rebuild lives and livelihoods

●Building disaster-resilient communities and ensuring open spaces



●Intersections without traffic signals



Processes after a disaster (few days to half a year afterward)

More useful information to read



Source: Compiled by the Special Committee on Improving Public Awareness of Disaster Prevention, JSCE

<http://www.jsce.or.jp/publication/detail/detail.asp?id=2055a>



Source: Website of the Fire and Disaster Management Agency, Ministry of Internal Affairs and Communications

http://www.fdma.go.jp/html/life/survival/pdf/h27/survival2703_all.pdf



Source: Website of the Disaster Information Center, Ministry of Land, Infrastructure, Transport and Tourism

<http://www.mlit.go.jp/saigai/bosaijoho/>

Emergency contact information

Emergency contacts	Address	Address 1	Address 2	Address 3
	Name	Name 1	Name 2	Name 3
	Telephone	Telephone 1	Telephone 2	Telephone 3
	Mobile phone	Mobile phone 1	Mobile phone 2	Mobile phone 3
	Email address	Email address 1	Email address 2	Email address 3
	Workplace	Workplace 1	Workplace 2	Workplace 3
	School	School 1	School 2	School 3
	Family gathering place (evacuation site)	evacuation site 1	evacuation site 2	evacuation site 3
	Relatives or close friends	close friends 1	close friends 2	close friends 3
	Other notes	Other notes 1	Other notes 2	Other notes 3