

# Disaster Management Policies in JAPAN



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12 March, 2018

# Basic Act on Disaster Management



**Objectives: To protect people's lives and assets from disasters, and contribute to the societies' safety and well-being**

## 1. Goals and responsibilities

- Goals of DRR policies — reduce damage
- Responsibilities of the national, prefectural, municipalities and designated organisations for public services. — DRR planning and implementation, mutual cooperation
- Responsibilities of citizens — be prepared for disasters and stock foods and the necessities of life, participate in DRR activities

## 2. Organisations for comprehensive DRR policies promotion

- National level: National DRR Council, Emergency DRR Headquarters
- Prefecture and municipality level: Local DRR Council, DRR Headquarters

## 3. DRR Plans — Prepare and implement DRR measures strategically

- National DRR Council: DRR Basic Plan
- Designated administrative organizations, designated organizations for public services: DRR activity plan
- Prefecture and municipalities: Local DRR Plans ○Citizens: Community DRR Plans

## 4. Promotion of DRR measures

- Prevention, Response and recovery phases; The roles and divisions of works by each organizations
- Mayors have the primary responsibility to respond to disasters (e.g. evacuation orders). Prefectures and designate administrative organizations can represent mayors for response in case of large scale disasters

## 5. Measures to support refugees

- List the names of those who need special care in case of emergency ○Institutionalize the system of evacuation and logistics when there is a need for evacuation at a trans-municipality scale
- Clarify the standard of refugee evacuations centers
- Improve the support system of refugees by issuing certificate of being suffered and developing refugee list

## 6. Financial support

- Executing entity on implementations of laws has to bear the associating costs ○The national government supports by the financial measures for extreme events.

## 7. Emergency response

- Issue the order of emergency ⇒ *the cabinet decides the policy outline for emergency response*
- Emergency measures (Limit the supply of necessities, grace period for the payment of debt, emergency governmental order how to accept the support from foreign countries, automatic execution of a law on large scale disasters)

# National Council on Disaster Management



- Established under the Basic Act on Disaster Management
- Chaired by the Prime Minister.
- Consists of Ministers, heads of public institutions and experts.

The Roles of the National Council is...

- to formulate and promote major disaster management policies, including deciding

the **Basic Plan for Disaster Management**



# Basic Plan for Disaster Management



-Stipulated in the Basic Act on Disaster Management

National Basic Plan for DRR (since 1963, last update in 2017)  
- Approved by the National Council on Disaster Management (Chair: Prime Minister)

Prefecture Basic Plan for DRR (47 prefectures)  
- Approved by the Prefecture Council on Disaster Management (Chair: Governor)

Municipality Basic Plan for DRR (all municipalities; 1,718)  
- Approved by the Municipality Council on Disaster Management (Chair: Mayor)

Community DRR Plan  
- Draft prepared by citizens  
- Propose the draft to the municipality to be include in the Municipality Basic Plan

Objectives:

- Improve preparedness
- Response efficiently in case of emergency
- Facilitate recovery and reconstruction processes

Actions in DRR phases

1. Prevention/preparation
2. Response
3. Recovery and reconstruction

Specific actions for each type of disasters

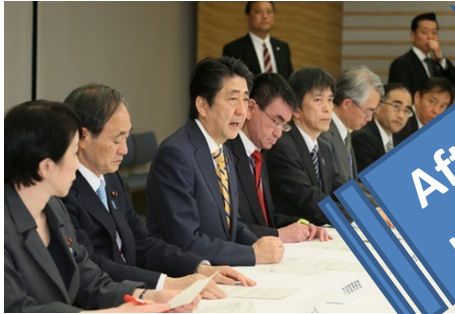
- Earthquake
- Tsunami
- Water related (floods)
- Volcano
- Snow
- Maritime accidents
- Railroad accidents
- Road accidents
- Nuclear accident etc

# Emergency management operation after the earthquakes



## Kumamoto Earthquake's case in 2016

<Tokyo>



After 44 minutes

<National level>

**Headquarter for Disaster Management  
Headquarter  
in Tokyo  
(Cabinet Office)**

Head : Minister of State for Disaster Management  
Members: heads of bureaus in line ministries  
and agencies

<Local level>

April 14 21:26

<Kumamoto>



M6.5

M7.3

April 16 1:25

**Field Headquarter for  
Disaster Management  
in Kumamoto**

Head: State Minister of Cabinet Office  
for Disaster Management

**Kumamoto Prefecture  
Headquarter for  
Disaster Management**

Head : Governor

# Anticipated large-scale earthquakes in Japan



Large-Scale seismic disasters affecting all the areas within western japan

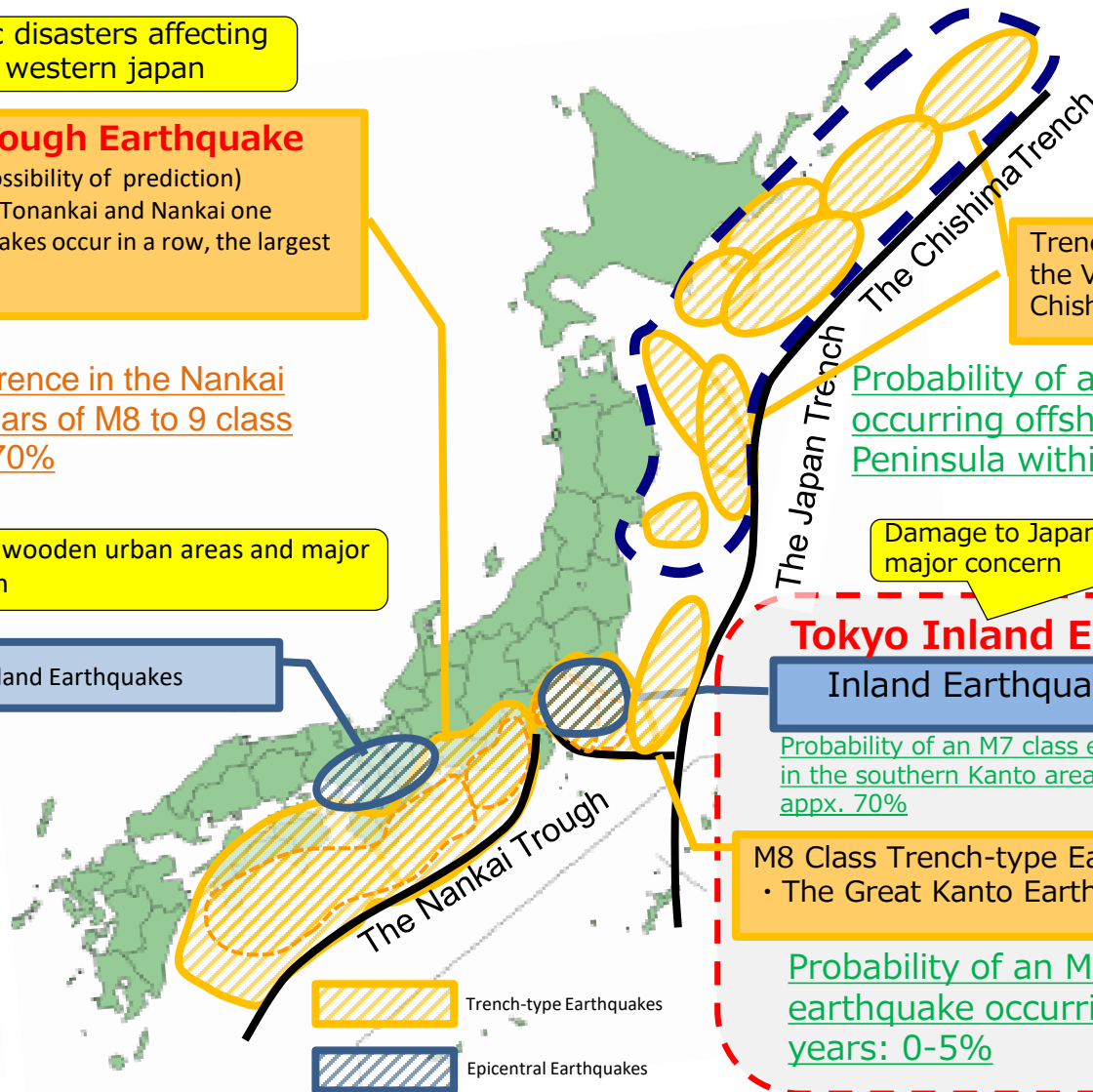
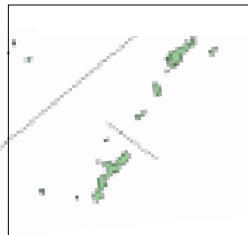
## The Nankai Trough Earthquake

- Tokai Earthquake (with possibility of prediction)
- Earthquakes of the Tokai, Tonankai and Nankai one earthquake or 2 -3 earthquakes occur in a row, the largest class earthquake

Probability of occurrence in the Nankai Trough within 30 years of M8 to 9 class earthquake: appx. 70%

Damage to aged, primarily wooden urban areas and major cultural assets is of concern

The Chubu and Kinki Inland Earthquakes



Trench-type earthquakes in the Vicinity of the Japan and Chishima Trench

Probability of an earthquake (M 7.9) occurring offshore of the Nemuro Peninsula within 30 years; appx. 60%

Damage to Japan's critical functions is of major concern

## Tokyo Inland Earthquake

Inland Earthquake (M7)

Probability of an M7 class earthquake occurring in the southern Kanto area within 30 years: appx. 70%

M8 Class Trench-type Earthquakes  
• The Great Kanto Earthquake in 1923

Probability of an M8 class earthquake occurring within 30 years: 0-5%

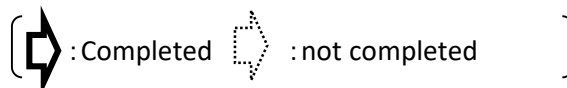
# Risk assessment and planning against large scale earthquakes



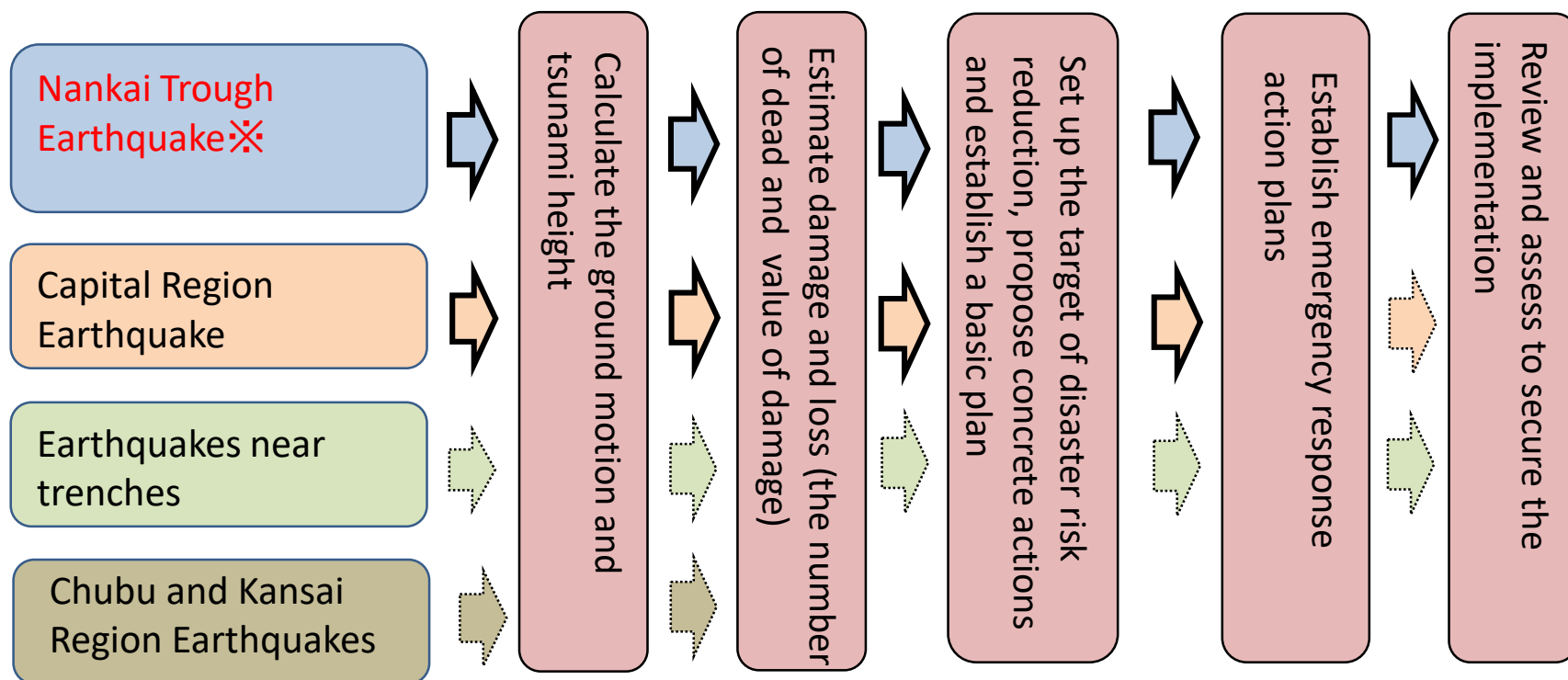
## ● Common framework for any large scale earthquakes

- “Policy measures and action programmes to manage and reduce risk of large scale earthquakes” (National Council of Disaster Management, 2014 March)

## ● Framework specific for each type of earthquake

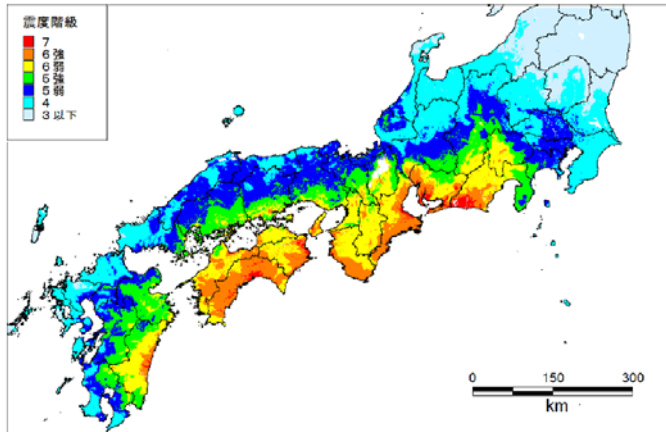


- Process and progress

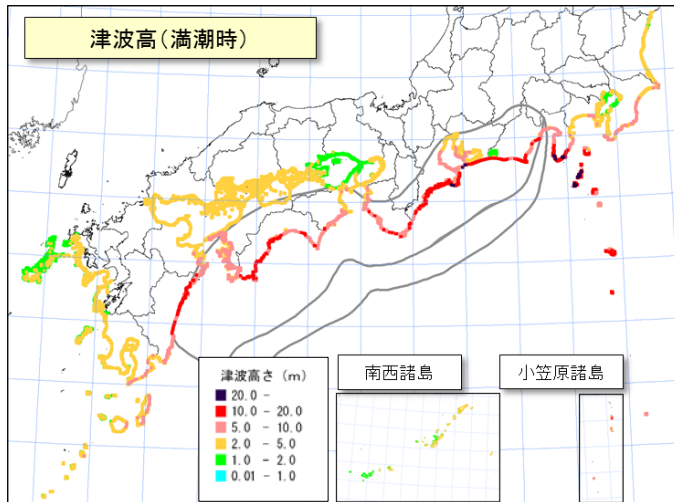


✂ Reviewing the possibility of prediction, and system for observation and evaluation, outside of this framework.





【Earthquake intensity by regions】



【Tsunami height】

## Scale and height

- Scale 7: in 127 municipalities
- Tsunami height more than 10m in 79 municipalities

## Dead and missing persons, damaged buildings

- 323,000 people (in midnight, winter)
- 2.386 million buildings (Evening, winter)

## Infrastructure

- Electricity loss; 27 million cases
- Communication network loss: 9.3 million cases

## Impact on every day's life

- Evacuees : 9.5 million people
- Food shortage: 32 million meals in 3 days

## Economic damage

- Damage on assets: 1.49 trillion USD
- Damage on economic activities : 394 billion USD

※There are several scenario of damage level depending on when the earthquake occurs(season, time, etc.,), Those figures above are not from one scenario. The most critical figures were selected among different cases.



# Emergency Response Activities in the event of a Nankai Trough Earthquake

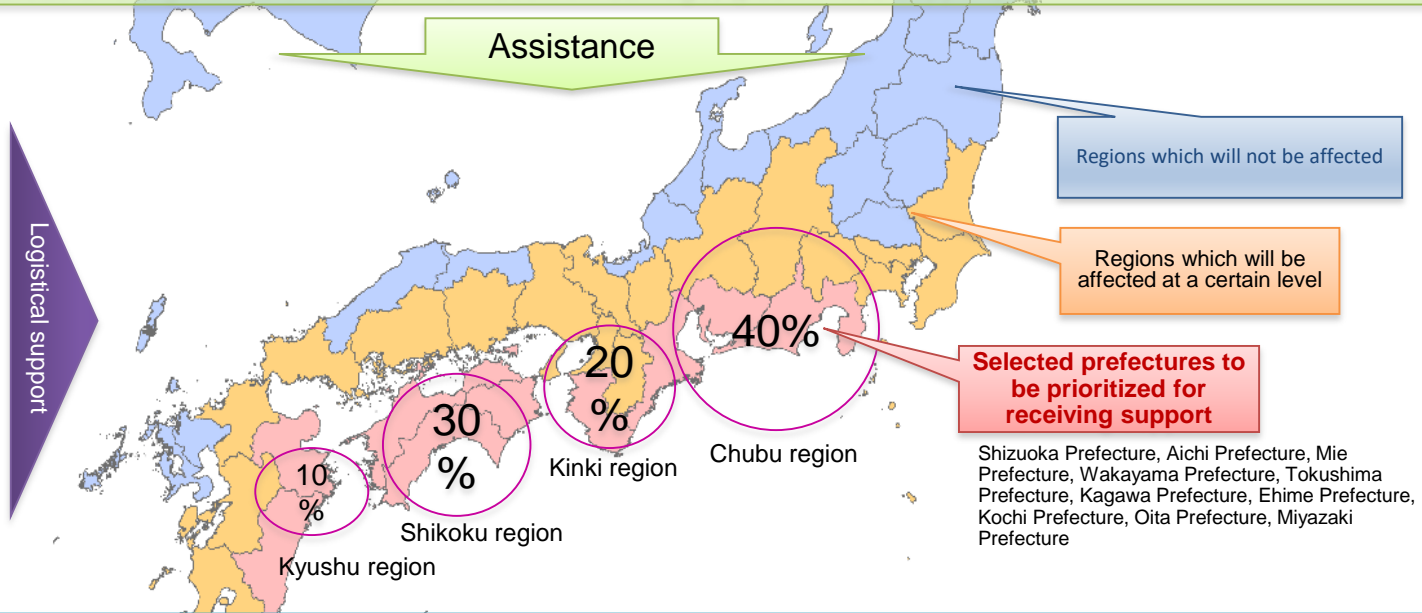


| Rescue, emergency medical service, firefighting, etc.   | Medical treatment  | Goods   | Fuel, electricity and gas   |
|---|--|---|---|
| <ul style="list-style-type: none"> <li>⊙ Dispatch support units from 37 prefectures other than the selected prefectures to be prioritized for receiving support (maximum numbers)                             <ul style="list-style-type: none"> <li>- Police: 16,000</li> <li>- Fire fighters: 17,000</li> <li>- Self-Defense Forces: 110,000, etc.</li> </ul> </li> <li>⊙ Aircrafts 580, ships 520</li> </ul> | <ul style="list-style-type: none"> <li>⊙ DMAT (registered number of teams: 1,571 teams) provides medical support.</li> <li>⊙ Support recovery of medical institutions in the affected areas (human resources, goods and fuel supply, etc.).</li> <li>⊙ Provide region-wide support for critically ill or injured patients by transporting them to proper medical centers in the region.</li> </ul> | <ul style="list-style-type: none"> <li>⊙ Procure relief supplies needed for 4 to 7 days after the occurrence of the disaster. Transport them to the logistic centers in the affected prefectures.                             <ul style="list-style-type: none"> <li>- Water: emergency water supply 460,000 m<sup>3</sup> (first 1-7 days)</li> <li>- Food: 72 million meals</li> <li>- Blankets: 6 million</li> <li>- Diapers: 4.8 million</li> <li>- Portable toilets: for 54 million times usage, etc.</li> </ul> </li> </ul> | <p>Fuel:</p> <ul style="list-style-type: none"> <li>⊙ Secure a supply system beyond the group of affiliated companies in oil industry. Priority supply to core SSs on the emergency transport routes. Priority supply to important facilities such as hospitals, etc.</li> </ul> <p>Electricity and gas:</p> <ul style="list-style-type: none"> <li>⊙ Priority supply to important facilities by power supply vehicles and mobile gas supply facilities.</li> </ul> |

The national government will respond immediately according to the arrangement by the crisis response headquarters, prior to requests from affected areas and regardless of scarce information on damage, (push-mode support).

**Emergency transportation routes, disaster management bases**

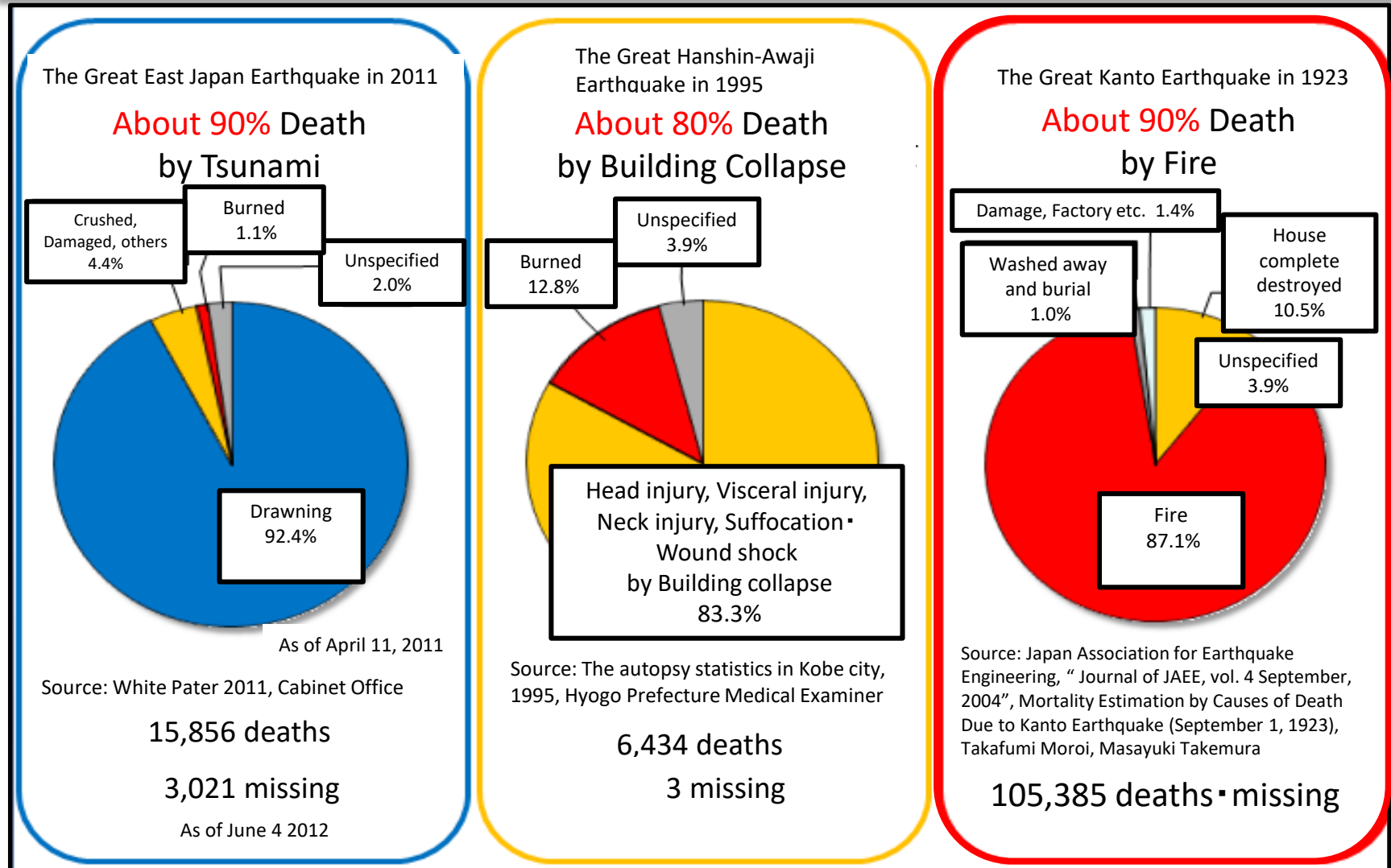
- ⊙ Designate "Emergency Transportation Routes" for personnel and goods in advance. Secure transport through the routes.
- ⊙ Set up "Disaster Management Bases" for each activity by field and secure them.



**Key issues**

- (1) Being aware of the importance of the first 72 hours when saving a human life, set a time line and target actions in each of the fields of emergency transport routes, rescue, medical services, goods, fuel in various fields (Example: Wide area movement routes are secured within 24 hours, wide area support units arrive one after the other, etc.)
- (2) Dispatch support units by mobilizing resources nationwide, in particular, to support areas where the damage can be the most critical.

# Direct causes of people's death in past major earthquakes



\* The number of people deaths or missing is the numerical value of each organization's announcement at that time, which is different from the latest value released by the National government.

Thank you!