Rescue Administration

Materials created by the Fire and Disaster Management Agency were translated by the International Fire Service Information Center
### Framework of Rescue Administration

<table>
<thead>
<tr>
<th>Guidelines</th>
<th>Specific articles</th>
</tr>
</thead>
</table>
| **“Ministry ordinance specifying the standards of organization, equipment, and deployment of rescue team” (Rescue ordinance)** | Article 36-2 of the Fire Services Act (Deployment of rescue team)  
“Municipalities shall, in accordance with the standards that are specified by Ordinance of the Ministry of Internal Affairs and Communications while taking into consideration the population and other conditions, deploy firefighting teams equipped with special rescue equipment necessary for the rescue of human life under the provisions of this Act.” |
| Specifying standards for the organization of a firefighting team (rescue team) equipped with special rescue apparatus necessary to save human lives that is set by the municipality  
- Standards of organization, equipment, and deployment of rescue team, special rescue team, advanced rescue team, and special advanced rescue team  
- Equipment to be provided |                                                                                                                                                |
| **“Standards concerning rescue operation” (Fire and Disaster Management Agency Public Notice)** | Article 4 of the Fire Service Organization Act (Duty and jurisdictional affairs of the Fire and Disaster Management Agency) Paragraph 2 Item 16  
“Matters concerning the standards of activities pertaining to lifesaving.” |
| Matters specifying details of rescue ordinance and basic matters for rescue operation  
- Number, qualifications, and clothing of rescue team, duties of the chief, etc.  
- Standards, signs, and equipped rescue apparatus of rescue vehicles  
- Rescue operation (Rescue investigation, mobilization, activities, cooperation with other teams, etc.)  
- Wide area mutual aid agreement, etc. |                                                                                                                                                |
| **“Standards for operation and handling methods for fire rescue” (Fire and Disaster Management Agency Public Notice)** | Article 16 of the Fire Service Organization Act (Treatment of the status of firefighters) Paragraph 2  
“Matters concerning the class, training, rules, and uniforms of firefighters shall be stipulated by municipal rules according to the standards specified by the Fire and Disaster Management Agency.” |
| Specifying the basic matters concerning operation and handling methods of fire rescue equipment necessary for firefighters in conducting rescue trainings, and taking all possible measures to ensure lifesaving by appropriate rescue operation through stable acquisition of operation methods |                                                                                                                                                |
Flow of Rescue Administration

**General rescue countermeasures**
- Responding to local rescue cases such as traffic accidents

**Legislation of rescue operations (1986 - )**
- Rescue ordinance (1986)
  → Standards of organization, equipment, and deployment of rescue team
- Rescue operation standards (1987)
  → Details of rescue ordinance and basic matters

**Establishment of unified rescue drill method (1978)**
- Standards of rescue operation and handling methods
  → Nationwide unification
- Operation and handling of equipment at the time of drills

**Establishment of emergency fire response team (strengthening of system) (1995)**
- Roles of community and fire prevention organizations
- Review of standards of firefighting activities at the time of large-scale disasters caused by earthquakes

**Establishment of advanced rescue team and special advanced rescue team (2006)**
- Establishment of special advanced rescue team, and addition of advanced rescue equipment and special disaster response vehicles

**Necessity of capacity building for rescue team operations in case of large-scale disasters caused by earthquakes (2010- )**
- Increased need for the standardization of activity guidelines for large-scale rescue cases
- Spread of knowledge about urban rescue techniques and work system in the U.S.

**Promotion of sophistication of rescue techniques and rescue operation system**

**Large-scale disaster countermeasures**
- Responding to large-scale disasters following the Great Hanshin-Awaji Earthquake

**NBC terrorism disaster countermeasures**
- Responding to BC terrorism disasters following the sarin gas attack on the Tokyo subway system and the attacks of Sept. 11, 2001

**Strengthening response to NBC terrorism disasters (2008-)**
- Deployment of NBC terrorism disaster response equipment

**Enhancement of activity capacity against NBC terrorism disasters**
- Following the Niigata Chuetsu earthquake and JR Fukuchiyama Line accident
## Organization of rescue teams and owned vehicles and equipment by category

- Types of rescue teams include “Rescue team,” “Special rescue team,” “Advanced rescue team,” and “Special advanced rescue team.” An Ordinance of the Ministry of Internal Affairs and Communications has specified which teams are to be organized, according to the population of the jurisdictional area of the concerned fire defense headquarters.
- Differences between the 4 types of rescue teams are capacities to control special disasters, which are mainly derived from owned vehicles and equipment and educational content.

<table>
<thead>
<tr>
<th>Category and deployment</th>
<th>Education and organization of firefighters</th>
<th>Owned vehicles</th>
<th>Owned rescue equipment</th>
<th>Municipalities to be applied</th>
</tr>
</thead>
</table>
| Rescue team             | A team is made up of 5 or more firefighters who have received special education in lifesaving. | Rescue vehicles (or other firefighting vehicles) | ○ NBC-related equipment  
Combustible gas measuring instrument, gas mask  
General rescue equipment  
Air respirators, engine cutter, lifeline throwing gun, etc. | Municipalities with fire defense headquarters |
| Special rescue team     | Same as above                              | Rescue vehicles | In addition to the equipment above,  
○ NBC-related equipment  
Positive pressure chemical protective suit, radiation protection suit, toxic gas measuring instrument, etc.  
General rescue equipment  
Large hydraulic spreader, mat-type air jack, rock drill, etc. | Municipalities with populations of over 100,000, etc. |
| Advanced rescue team    | A team is made up of 5 or more firefighters who have received special and advanced education in lifesaving (including NBC disaster response). | Rescue vehicles | In addition to the equipment above,  
○ Advanced rescue apparatus  
Image search equipment, earthquake alarm, etc.  
Depending on the area,  
Mobile chemical agent detector  
Mobile biological agent detector | Special wards, designated cities, core cities, etc. |
| Special advanced rescue team | Same as above |  
- Rescue vehicles  
- Special disaster response vehicles (positive pressure type, etc.)  
Depending on the area,  
Large decontamination system vehicle  
Water cutter vehicle  
Large blower vehicle | In addition to the equipment above,  
○ NBC-related equipment  
Chemical agent detector, biological agent detector  
Advanced rescue apparatus  
Carbon dioxide wave explorative device, carbon dioxide wave explorative device, sonar explorative device  
Depending on the area,  
Detection-type remote explorative device (robot) | Special wards and designated cities, etc. |
### Structure of Rescue Team

Rescue operation structure as of April 1, 2014

- **Number of rescue teams:** 1,435 (full-time: 570, Serve concurrent posts: 865)
  - (General rescue teams: 814)
  - (Special rescue teams: 621 (including advanced rescue teams and special advanced rescue teams))

- **Number of rescue workers:** 24,611 (full-time: 8,668, Serve concurrent posts: 15,943)

### Rescue Team

- **Rescue**
  - Rescue team owns general equipment such as rescue ropes, engine cutters, triple extension ladders, and air respirators, and firefighting vehicles equipped with them.

![Engine cutter](image1.png)
![Triple extension ladder](image2.png)
![Air respirators](image3.png)
![Lifeline-throwing gun](image4.png)
![Portable concrete destructive equipment](image5.png)
![Simplified image search equipment](image6.png)
Special Rescue Team

- Special rescue team (set up in municipalities with populations of over 100,000, etc.)
  A special rescue team is made up of firefighters who have received special education in lifesaving, and owns special equipment such as mat-type air jacks, positive pressure chemical protective suits and rescue vehicles, in addition to the general equipment owned by a rescue team.

Advanced Rescue Team

- Advanced rescue team (set up in core cities, etc.)
  An advanced rescue team is made up of firefighters who have received special and advanced education in lifesaving, and owns advanced equipment such as image search equipment, thermal image direct-vision devices, and earthquake alarms, and rescue vehicles equipped with them, in addition to the equipment owned by a special advanced rescue team.
Special Advanced Rescue Team

- Special advanced rescue team (set up in Tokyo Fire Department and government-designated cities, etc.)

A special advanced rescue team is made up of firefighters who have received special and advanced education in lifesaving, and owns robust equipment such as special disaster (NBC) response vehicles, water cutters, and large blowers that can deal with special disasters, in addition to the equipment owned by an advanced rescue team.

- Special disaster response vehicle
- Vehicle equipped with a water cutter
- Vehicle equipped with a large blower
- Radar explorative device
- Sonar explorative device
- Special advanced vehicle

* Special advanced vehicle: A vehicle equipped with a water cutter and a large blower
Scale of Fire Defense Headquarters, etc.

(As of April 1, 2014)

Number of fire defense headquarters in Japan: 752

○ Number of staff members

- 50 or fewer: 84 headquarters (11.2%)
- 51 to 100: 223 headquarters (29.7%)
- 101 to 200: 249 headquarters (33.1%)
- 201 to 300: 90 headquarters (12.0%)
- 301 to 500: 71 headquarters (9.4%)
- 501 to 1000: 22 headquarters (2.9%)
- 1001 or more: 13 headquarters (1.7%)

☆ Headquarters with fewer than 201 staff members account for 74.0%.

○ Category of owned rescue teams

- No rescue teams: 22 headquarters (2.9%)
- Rescue team: 730 headquarters (97.1%)
  (Including the Special rescue team, Advanced rescue team, Special advanced rescue team)

☆ Headquarters with rescue teams account for 97.1%.
Main NBC Equipment Owned by Fire Prevention Organizations

1. Protection suit

- Protection suit
- Chemical protection suit (Positive pressure type)
- Chemical protection suit (Non-positive pressure type)

2. Radiation counter

- Neutron dosemeter
- Air dosemeter
- Individual alarm dosemeter
3. Biological/Chemical agent detector

- **Portable biological agent detector**
  - Detection takes about 10 to 15 minutes.
  - Agents to be detected: Anthrax, ricin, botulinus toxin, staphylococcus enterotoxin B, bacillus pestis, smallpox

- **Biological agent collector**
  - 0.5 micron and larger biological agents can be collected.

- **Biological agent detector paper**
  - Agents to be detected: Anthrax, ricin, botulinus toxin, staphylococcus enterotoxin B, and bacillus pestis

4. Decontamination equipment

- **Portable chemical agent detector**
  - Alerts with alarms by detecting chemical agents instantly
  - Agents to be detected: Sarin, tabun, soman, etc.

- **Decontamination agent diffuser**
  - Tank capacity: 11 liters

- **Decontamination shower**
  - To be used for biological/chemical agent

5. Gas mask

- **To be used for biological/chemical agent and radioactive dust**
Fourier transform infrared spectrophotometer
Identify chemical agents by comparing with libraries registered by measuring infrared absorption spectrum
Deployed in: Tokyo Fire Department and fire defense headquarters in government-designated cities

Gas-ID
Identify gaseous materials

HazMat-ID
Identify liquid/solid-state materials
This device has a structure that can mount chemical agent detectors necessary for detecting chemical agents. The main body and relay equipment can be remotely operated.

Example of composition
- Main body (equipped with a camera)
- Relay equipment (same functions as the main body)
- Loaded items: Chemical agent detector, gas detector, infrared camera, etc.

Fire defense headquarters deployed:
- Tokyo Fire Department, Sapporo, Nagoya, Osaka, and Fukuoka
In order to respond to disasters involving poisonous materials, a special disaster response vehicle is equipped with analysis equipment, etc. to analyze toxic gases inside the vehicle, and a storage compartment loaded with various protection suits and equipment.

- Owned by Tokyo Fire Department and government-designated cities (20)
- Loaded items: Biological agent detector, portable chemical agent detector, mobile chemical agent detector, decontamination shower, positive pressure chemical protective suit, etc.
Water cutter
By discharging a mixture of water and abrasive at high pressure, concrete and steel can be cut promptly without vibration or spark. Water cutters will be used at sites posing risks of fire or explosion due to combustible gas.

Large blower
Cooling of fire by mist discharge and elimination of smoke, toxic gas, steam, and heat by positive pressure ventilation will be conducted in the case of tunnel fires and fire disasters at large facilities.
Large blowers can be used for decontamination by supplying large amounts of air.

_owned by Tokyo Fire Department and government-designated cities (20)
By using a large decontamination system vehicle, decontamination activity can be conducted for a large number of survivors who are contaminated by a chemical agent, etc. Decontamination of more than 200 people can be conducted in an hour.

Deployed in Tokyo Fire Department and 17 government-designated cities

- Shower lane [3 lanes]
- Walking survivors lane (2 lanes)
- Walking difficulty survivors lane (1 lane)
Risk Management Education for Fire Prevention Organizations

♦ Specialized knowledge and expertise necessary for appropriate response to NBC terrorism are provided in risk management education conducted in Fire and Disaster Management College, etc.

[Fire and Disaster Management College]
■ Emergency firefighting rescue team education course
  • NBC course
  • Special advanced rescue/Advanced rescue course
■ Specialized education
  • Rescue course

[Prefectural Fire academy]
■ Special disaster course (since FY2004)

[Consignment lecture conducted by the Fire and Disaster Management Agency]
■ Lecture at Omiya Chemical School, Japan Ground Self-Defense Force (5 days)
■ Lecture at the National Research Institute of Police Science, National Police Agency (2 days), etc.
The Great East Japan Earthquake
Features of the disaster, etc.

- It has been the greatest earthquake in Japan’s history (moment magnitude 9.0), accompanied by three huge destructions occurred continuously in a fault with about 450 km long and 200 km wide. The shaking of the earthquake continued for more than 6 minutes throughout the Tohoku region. (Four large quakes were observed in Sendai City of JMA seismic intensity 6 upper for those 6 minutes.)
  * The fault destruction began from off the coast of Miyagi Prefecture and transmitted in the direction of off the coast of Iwate, Fukushima, and Ibaraki Prefectures.
- Enormous material damage and human damage were caused due to the tsunami.
- A vast area was stricken. (The human damage and material damage have been widespread in East Japan centered in Tohoku region.)
- The number of refugees reached over 550,000 people (as of March 15, 2011), and many people had to continue to live in evacuation shelters (69,891 people, as of September 6, 2012).
- Fukushima Daichi NPS disaster occurred. (The main cause of the accident was the tsunami.)
- The number of aftershocks (Magnitude 5.0 or more) has been 713 times until now.

Outline of the damage caused by the Tsunami

(As of September 1, 2014, Fire and Disaster Management Agency)

<table>
<thead>
<tr>
<th>Damage to houses</th>
<th>Iwate</th>
<th>Miyagi</th>
<th>Fukushima</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete collapse: 127,361</td>
<td>19,107</td>
<td>82,992</td>
<td>21,224</td>
</tr>
<tr>
<td>Half-collapse: 273,268</td>
<td>6,609</td>
<td>155,122</td>
<td>73,764</td>
</tr>
<tr>
<td>Partial destruction: 762,277</td>
<td>18,827</td>
<td>224,158</td>
<td>161,139</td>
</tr>
</tbody>
</table>

(As of September 1, 2014, Fire and Disaster Management Agency)

<table>
<thead>
<tr>
<th>Number of fire accidents</th>
<th>Iwate</th>
<th>Miyagi</th>
<th>Fukushima</th>
</tr>
</thead>
<tbody>
<tr>
<td>330</td>
<td>33</td>
<td>137</td>
<td>38</td>
</tr>
</tbody>
</table>
The Fire Bell had been Ringing... Eleven firefighters of volunteer fire corps were killed or are missing (March 23, The Mainichi)

In Otsuchi-cho of Iwate, more than 2,000 people were killed or are missing due to the Great East Japan Earthquake. At that time, the firefighters of the Otsuchi-cho volunteer fire corps No. 2 Squad (with Hiroshi Koshida as the head, 28 members) rushed to the breakwater to close the gates, and stayed by the seaside to guide the residents to evacuate until the tsunami hit. As a result of the duty, four members were killed, and seven members are missing. One of them, named Fujio Koshida (57 years old), had kept ringing a fire bell, which was the symbol of the fire corps, and he was swept into the sea by the tsunami.

Went to the Site Immediately after the Earthquake... 26 firefighters of the squad of volunteer fire corps were killed or are missing (March 28, morning edition of the Yomiuri Shimbun)

The firefighters of the volunteer fire corps Takada Squad (about 120 persons) of Rikuzentakata City, Iwate, went to the breakwater and closed the five iron gates immediately after the earthquake occurred. However, the huge tsunami reached far above the breakwater and swallowed one after another the firefighters who had begun to guide residents to evacuate. Twenty-six of the volunteer firefighters were killed or are missing. The survived volunteer firefighters have continued searching for the missing persons and removing rubble without taking time to mourn for fellows, having pride as guards of the area.

Firefighters Called for Evacuation until the Very End through Microphone (March 21, morning edition of the Tokyo Shimbun)

"Run away to higher ground." These were the last words announced by Ayumu Sakurai (46 years old), who lived in Natori City, Miyagi. On the day of the earthquake, the volunteer firefighter who called at the top of his voice for residents on a loudspeaker in a fire truck was drowned in the tsunami. The fire truck was swept away and crushed miserably, and three volunteer firefighters were found dead in the vehicle. Mr. Sakurai was in the passenger seat with a microphone in his right hand.

### Damage to Fire Protection Agencies

#### Damage to fire protection agencies in major disaster-stricken prefectures

<table>
<thead>
<tr>
<th>Major damage to the Fire Defense Headquarters</th>
<th>Major damage to the volunteer fire corps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire personnel</td>
<td>Number of the dead and missing: 27</td>
</tr>
<tr>
<td>Damage to buildings (complete collapse, half-collapse, or partial destruction)</td>
<td>Fire defense headquarters and fire stations: 143</td>
</tr>
<tr>
<td></td>
<td>Branches / Sub-stations: 161</td>
</tr>
<tr>
<td>Damage to vehicles, etc.</td>
<td>Vehicles: 86 units, Fire boats: 2 units, Prefectural disaster-prevention helicopter: 1 unit</td>
</tr>
<tr>
<td>Volunteer firefighters</td>
<td>Number of the dead and missing: 254</td>
</tr>
<tr>
<td>Damage to buildings (Unavailable)</td>
<td>Base facilities of volunteer fire corps (Office, etc.): 419</td>
</tr>
<tr>
<td>Damage to vehicles, etc.</td>
<td>Vehicles: 252</td>
</tr>
</tbody>
</table>

### Reference: News reports about volunteer firefighters’ rescue operations (examples)

**The Fire Bell had been Ringing...**

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Rescue Operations

Kesennuma City, Miyagi Pref.

Rescue operation by fire brigades (1)

Rescue operation by fire brigades (2)

Rescue operation by fire brigades (3)

Rescue operation by fire brigades (4)
Kesennuma city, Miyagi prefecture

Kesennuma city, Miyagi prefecture. 12 March, 2011
Local Input Regarding the Great East Japan Earthquake
(according to local hearing)

1. Vehicles could not enter due to rubble. It took more than 1 hour to get to some sites.

2. Since water did not recede, we conducted activities in chest-high water.

3. There are not many sites where survivors were trapped in rubble. Most of them were left on the top of a building or the roof of a house.

4. Since the whole town was steeped in darkness due to electrical outage, we had almost lost all sense of direction.

5. We carried sick people on stretchers dragged on rubble.

6. As rubble was scattered all around and targets were washed away, we could not find out where we were.

7. Helicopters were very useful. (for rescue of people left on roofs, for collecting information, etc.)

8. We had difficulty in securing camp sites and fuels at the time of accepting emergency fire rescue teams.

9. It was difficult to position the activities during practical searching.
Lessons for Rescue Operations and Rescue Equipment

1. Operations at a site where rubble is scattered all around
   (1) Transportation of equipment is difficult.
      → Procurement of light and compact equipment
   (2) Vehicles cannot enter the site.
      → Preparation of heavy equipment for removing rubble
      → Increase of helicopters
   (3) Transportation of survivors on rubble
      → Use of light and strong sked stretchers, etc.
   (4) Identification of the site is difficult.
      → Use of GPS, etc.

2. Operations in chest-high mud and water
   (1) Vehicles cannot enter the site.
      → Preparation of FRP and aluminum boats, etc.
   (2) Difficulty in conducting activities due to wet clothing
      → Preparation of accident prevention shell-type dry suits and waders, etc.
3. Electricity cannot be secured due to electrical outage.
   There are no lights during nighttime. Only individual floodlights can be used.
   It is hard to find direction due to rubble scattered all around.
   → Preparation of balloon light, etc.
     (It may be used as a replacement for a lighthouse for finding direction.)
   → Securing and strengthening of a power generator, etc.

4. Operations associated with a risk of tsunami due to repeated aftershocks
   → Strengthening of monitoring of tsunami and preparation of earthquake alarm, etc.

5. Difficulty in securing camp sites, etc. at the time of accepting emergency fire rescue teams
   → Implementation of acceptance drills
   → Installation of camp sites outside of the jurisdiction, etc.

6. Activities when searching for dead bodies is virtually the main operation
   → Review of duties and roles of firefighting services and cooperation with other organizations
Issues and measures of the Great East Japan Earthquake

[Preparation of equipment]
Equipment has been prepared based on the issues found as a result of the questionnaire for fire defense headquarters at disaster sites and fire defense headquarters which conducted activities at disaster sites as emergency fire rescue teams.

**Issue 1. Vehicles could not enter the site due to rubble and mud and water.**
- Procurement of light and compact equipment (FY2011 first supplementary budget)
- Preparation of heavy equipment for removing rubble (FY2011 third supplementary budget)
- Preparation of advanced rescue vehicles for large-scale disasters (FY2011 third supplementary budget)
- Preparation of all-terrain vehicles (FY2011 third supplementary budget)

**Issue 2. Conducted operations under mud and water including rubble**
- Preparation of dry suits, etc. (FY2011 first supplementary budget)

**Issue 3. Securing of fuels was very difficult due to unavailability of refueling at the disaster site.**
- Preparation of fuel service vehicles (FY2011 first supplementary budget)
Compact advanced rescue equipment for large-scale disasters is loaded into a small vehicle.

- "Vehicle equipped with an air destructive equipment" is a vehicle which can be used for rescue operations at a site where vehicles cannot enter due to rubble and equipment transportation is difficult. Rescue operation can be conducted by extending a high-pressure hose (up to about 200 m) from the vehicle equipped with an air compressor and using destructive equipment attached to the hose. Filling of an air tank is also available.

- "Disaster response rescue vehicle" is a vehicle equipped with compact advanced rescue equipment, which is used by IRTs, etc.

- Disaster response vehicles and high ground-covering 4-wheel drive vehicles equipped with air rescue tools will be lent, with a small rescue vehicle IV type as its base.
[Hydraulic shovel 3 t (or 5 t)]
- 3 types of exchangeable attachments
  1. Bucket (Shovel)
  2. Slewing grapple (grab)
  3. Breaker (hole and break)
- Radio-operable

[Heavy equipment guided vehicle]
15 t truck (with 2.9 t crane)
(or 20 t truck (with 2.9 t crane))
- 3 types of attachments loaded
- Attachment can be exchanged while being loaded.
International Rescue Team (IRT)
**Outline of the International Rescue Team**

- International Rescue Team (IRT) is organized by the Fire and Disaster Management Agency with registered rescuers of cooperative municipalities as members. (Registration: 599 personnel of 77 fire defense headquarters)
- Upon the dispatch, based on the Act on Dispatchment of the Japan Disaster Relief Team and requests from the disaster-stricken countries or international organizations, the Fire and Disaster Management Agency discusses with the Ministry of Foreign Affairs and requests for the fire defense headquarter in charge of the duty on the day of the request to dispatch rescue teams.

**Flow from a request to a dispatch**

1. **Request for rescue**
   - Disaster-stricken countries and international organizations
   - Request for rescue
   - Ministry of Foreign Affairs of Japan

2. **Discussion**
   - Instruction
   - JICA
   - Dispatching affairs

3. **Request to dispatch**
   - International Rescue Team (IRT)
   - Fire and Disaster Management Agency of the Ministry of Internal Affairs and Communications

4. **Dispatch**
   - Registered fire defense headquarters

**Positioning of the International Rescue Team (IRT)**

- **Human aid (Japan Disaster Relief Team)**
  - Rescue team
  - Medical team
  - Team of experts
  - Team of the Self-Defense Force

- **Material aid Financial aid**

- **International Rescue Team (IRT)**
  - Police
  - Japan Coast Guard
  - Doctors & nurses
  - Emergency measures for disasters
  - Recovery from disasters

**Duty roaster**

A fire defense headquarter that is in charge of the duty on the day (Japan time) when the Secretary requests the dispatch will be dispatched.

<table>
<thead>
<tr>
<th>Mobilization order</th>
<th>Group No. 1</th>
<th>No. 2</th>
<th>No. 3</th>
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<tr>
<td>Akita</td>
<td>Utsunomiya</td>
<td>Kanazawa</td>
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<tr>
<td>Takasaki</td>
<td>Moriguchi / Kadoma</td>
<td>Matsuyama</td>
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<tr>
<td>Toyama</td>
<td>Mito</td>
<td>Niigata</td>
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<td>...</td>
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<tr>
<td>Sakai</td>
<td>Hamamatsu</td>
<td>Shizuoka Pref.</td>
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<tr>
<td>Mito</td>
<td>Takasaki</td>
<td>Moriguchi / Kadoma</td>
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<td>...</td>
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<tr>
<td>Shimono</td>
<td>Akita</td>
<td>Utsunomiya</td>
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<tr>
<td>Himeji</td>
<td>Kawagoe</td>
<td>Ichihara</td>
</tr>
</tbody>
</table>
Since these disasters occurred prior to the enforcement of the Act on Dispatchment of the Japan Disaster Relief Team, the rescue teams were dispatched as short-term expert teams of JICA.
# Outline of the 2015 Nepal Earthquake

## Federal Democratic Republic of Nepal
- Area: 14.7 square kilometers (approximately 1.8 times that of Hokkaido)
- Time difference from Japan: -3:15
- Capital: Kathmandu
- Altitude: 1,300 m
- Climate: average temperature in April: maximum 28.2° C, minimum 11.7° C

## Outline of the Earthquake
- Date of the earthquake: around 15:11 on April 25, 2015 (Saturday) (11:56 on the same day in the local time)
- The epicenter: Lamjung district, Gandaki zone (about 80 km northwest of the capital Kathmandu)
- Scale of the earthquake: Magnitude 7.8 (Latest release of the United States Geological Survey (USGS))

## Outline of the damage caused by the Tsunami
- Deaths: 8,460 people (May 15, 10:00 in the local time, including the 117 people who were killed in the aftershocks on May 12, publicized by the Interior Department of Nepal)
- Injured: 20,741 people (including 2,871 people in aftershocks on May 12)
- Damage to Japanese: one killed person (a man in his 50s), one injured person (a woman in her 50s). No other cases of severe damage to Japanese nationals or Japanese companies have been reported.
Federal Democratic Republic of Nepal

**Seismic center**

**Kathmandu**

**Himalaya Mountains**

**Everest**

**Federal Democratic Republic of Nepal**

**Kathmandu**: arrived on April 28, 11:45
(Time difference from Japan: -3:15)

**Arrived at Bangkok on April 26, 22:40**
(Time difference from Japan: -2:00)

**Narita**: departed on April 26, 17:52
Japan Disaster Relief Team for the 2015 Nepal Earthquake Dispatch System

**Head:** 1 person
Ministry of Foreign Affairs

**Subhead:** 4 persons
National Police Agency, Fire and Disaster Management Agency, Japan Coast Guard, JICA

**Medical team:** 5 persons
Doctors & nurses, etc.

**Structure evaluation:** 2 architects of private companies
Project coordinator: 7 officials of JICA
In charge of communication: 2 officials of the Metropolitan Police Department

**Subhead:** 1 person
Tokyo Fire Department

**Assistant of the subhead:** 1 person
Tokyo Fire Department

**Platoon:** 10 persons
A combined rescue team consists of the staff of fire, police, and the Japan Coast Guard

**Subhead:** 1 person
Metropolitan Police Department

**Assistant of the subhead:** 1 person
Metropolitan Police Department

**Platoon:** 10 persons
A combined rescue team consists of the staff of fire, police, and the Japan Coast Guard

**Rescue dog team:** 5 persons
Metropolitan Police Department

**Japan Disaster Relief Team:** 70 members
There are 17 fire officials among them.
Subhead: Fire and Disaster Management Agency of the Ministry of Internal Affairs and Communications
Company commander: Tokyo Fire Department
Assistant of the company commander: Tokyo Fire Department
Firefighters of the Tokyo Fire Department: 4 persons
- Saitama City Fire Department: 3 persons
- Hamamatsu City Fire Department: 3 persons
- Kawagoe District Fire Department: 1 person
- Akita City Fire - Defense Headquarter: 1 person
- Takasaki City and Wide-Area Fire Department: 1 person
- Toyama City Fire Department: 1 person

**Platoon:** 10 persons
A combined rescue team consists of the staff of fire, police, and the Japan Coast Guard

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Outline of the Dispatch of the Japan Disaster Relief Team
[Dispatched period: From April 26 to May 9, 2015 (14 days)]

◎ April 26 (Sunday)
12:00: Gathered at the Narita International Airport.
   Inaugural meeting of the Japan Disaster Relief Team
   Dispatch ceremony of the International Rescue Team (The message of the Minister of the Internal Affairs was read by
   the Counselor.)
18:00: Departed from the Narita International Airport for Bangkok by charter flights.

◎ April 27 (Monday)
The rescue team traveled from Bangkok to Kathmandu, but could not land due to the congestion of the airport and had to turn
back to Bangkok.

◎ From April 28 (Tuesday) to May 6 (Wednesday) (Rescue operation for 9 days)
   After arriving at Kathmandu, the team carried out search and rescue operations.
   [Major operation sites]
   ■ Around the old Royal Palace (Hanuman Dhoka) ■ Bhaktapur and its northern areas ■ Sankhu village ■ Gongbu district

◎ May 7 (Friday)
   Preparation for withdraw, Reports of departure for Japan to the Ministry of Interior and the Ministry of Foreign Affairs of Nepal,
   Armed Police Force of Nepal, and the Embassy of Japan in Nepal, etc.

◎ May 8 (Friday)
   13:30 (Nepal time): Departure, via Bangkok (divided into two flights for boarding)

◎ May 9 (Saturday)
   [First flight] around 6:10 (Japan time) arrived at the Narita International Airport.
   [Second flight] around 7:40 (Japan time) arrived at the Narita International Airport.
   Breaking-up ceremony of the Japan Disaster Relief Team
   Disbanding ceremony of the International Rescue Team
Outline of Rescue Operations by Japan Disaster Relief Team in the 2015 Nepal Earthquake

April 28, 29, 30
Around the old Royal Palace (Hanuman Dhoka)
One person was found in die on April 29.

April 30
Around the west side of the airport

May 1, 2
Sankhu village

May 3, 4, 5
Gongbu district

Epicenter: Lamjung district
Capital: Kathmandu
Rescue Operations in Sites
Coordination of the rescue operations in disaster-stricken areas overseas

<International society>

UNOCHA
United Nations Office for Coordination of Humanitarian Affairs

UNDAC
United Nations Disaster Assessment and Coordination

NDAC
United Nations Disaster Assistance Coordination

International rescue team of each country
(INSARAG member countries, etc.)

Assigning operation sites according to the capacity of each international rescue team

Coordinating rescue operations of each supporting country

Either of the UNDAC team or a rescue team that arrived first at the site will open the OSOCC.

<Disaster-stricken countries>

Survey and information gathering of disasters
Launch of the OSOCC
Various coordination

A department that has the right to make the final decision over the entire sections in the disaster-stricken area (Government local response headquarters)

Coordination, cooperation, and support

Site A
Site B
Site C

RDC
Reception and Departure Centre

OSOCC
On Site Operational Coordination Center

NDAC
Local Emergency Management Agency

Either of the UNDAC team or a rescue team that arrived first at the site will open the OSOCC.
INSARAG External Classification (IEC)

Purpose
According to the INSARAG guidelines, the capacity of each country’s rescue team is classified into two levels; Heavy and Medium; by using a checklists containing 130 items.

→ Use as a guide of acceptance of a rescue team in each disaster-stricken country
→ Standardize the organization and capacity of each country’s rescue team
→ Use for considering the assignment of operation site

Evaluation methods and details

- Mutual evaluation by the team of evaluators elected from member countries (about 10 persons)
- Re-evaluation of every 5 years (IER)
  (Japan was re-certified as “Heavy” level in March 2015.)

Requirements for the team of “Heavy” level

- Setting of the OSOCC and the management
- Ability to provide rescue operations continuously for 10 days
- System to provide rescue operations in two places at the same time
- Search operations using both search equipment and rescue dogs, etc.

<table>
<thead>
<tr>
<th>Place of rescue operation</th>
<th>Light</th>
<th>Medium</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the home country</td>
<td></td>
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<td></td>
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<tr>
<td>Within the home country and overseas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particularly complicated structure collapsed site</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Capability of search and rescue operations</th>
<th>Light</th>
<th>Medium</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the ground</td>
<td></td>
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<tr>
<td>Structure collapsed site</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Search operations</th>
<th>Light</th>
<th>Medium</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search operations</td>
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<tr>
<td>Search operations by using search dogs or search equipment</td>
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<tr>
<td>Search operations by using search dogs and search equipment</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Start of rescue operations in disaster-stricken areas</th>
<th>Light</th>
<th>Medium</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathering at the airport of each team’s country within 8 hours after the decision making.</td>
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</tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent operation period</th>
<th>Light</th>
<th>Medium</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 days</td>
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<tr>
<td>7 days</td>
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<td></td>
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<tr>
<td>10 days</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent operation period at the same time</th>
<th>Light</th>
<th>Medium</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 site</td>
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<tr>
<td>2 sites or more</td>
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</tbody>
</table>

IEC certification of each countries

<table>
<thead>
<tr>
<th>Year</th>
<th>Heavy</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Hungary (HUNNOR)</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>UK, U.S. (Fairfax)</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>U.S. (LA) the Netherlands, Germany (THW)</td>
<td>Germany (ISAR)</td>
</tr>
<tr>
<td>2008</td>
<td>Singapore, Sweden Australia (QFRS), Switzerland</td>
<td>Norway</td>
</tr>
<tr>
<td>2009</td>
<td>Poland, Iceland, China</td>
<td>UAE (promoted to the “Heavy” level in 2013)</td>
</tr>
<tr>
<td>2010</td>
<td>Japan, Denmark, Czech Republic</td>
<td>Belgium, France (PUI)</td>
</tr>
<tr>
<td>2011</td>
<td>Russia, Korea</td>
<td>Lithuania, Austria, Turkey (AKUT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spain (UME), Spain (ERICAM)</td>
</tr>
<tr>
<td>2012</td>
<td>Finland, Austria Australia (NSW), Turkey (AFAD)</td>
<td>Oman, Hungary (HUSZAR)</td>
</tr>
<tr>
<td>2013</td>
<td>Jordan, Belarus, UAE</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>France (UIISC1), France (UIISC7)</td>
<td>Romania, Ukraine, Morocco</td>
</tr>
</tbody>
</table>
International Rescue Team
of Japanese Fire Service

This emblem means that we will rush to the disaster-stricken site anywhere in the world and hold out a helping hand.