

# Overview of the 2019 White Paper on Fire Service

Materials created by the Fire and Disaster Management Agency were translated by the International Fire Service Information Center

Fire and Disaster Management Agency (FDMA)

## (Special Feature 1) Responses to Recent Large-scale Natural Disasters, and Development of Fire and Disaster Prevention Systems

### The damage from and response to the heavy rain associated with the rain front in August 2019

#### [Extent of the Damage]

- Record heavy rain caused river floods, inundation, landslide, etc. in various areas and **more than 6,600 residential buildings damaged and 4 deaths** mainly in Saga Prefecture (as of December 5, 2019).
- In an iron factory in Omachi Town, Saga Prefecture, **a large amount of oil spilled from an oil pit in the iron factory** and was widely spread downstream.

#### [Activities of Fire Service Agencies]

- The local fire department immediately conducted rescue and ambulance service activities, collected information from fire and disaster prevention helicopters, confirmed safety by door-to-door visits, and removed the oil spilt from the iron factory, etc.
- The National Fire-Service Team, made up of **a total of 172 units containing 583 members, conducted activities and rescued 11 people** over the 4 days from August 28 to 31.
- The volunteer fire corps conducted rescue activities by urging residents to evacuate early and operating boats, provided evacuation guidance for residents, removed sediment, etc., and implemented drainage activities using power fire pumps, etc.



Omachi Town in Saga Prefecture where the quenching oil was spilled  
(Courtesy of Kumamoto Air Rescue Team)

### The damage from and response to Typhoon No. 15 (Faxai)

#### [Extent of the Damage]

- Heavy rain and storms caused **1 death** in Tokyo and damage to over 74,900 buildings mainly in Chiba Prefecture (as of December 5, 2019). Particularly in Chiba Prefecture, the roof tiles of many houses were scattered due to the storm.
- **Major power outages in up to 934,900 houses** occurred mainly in Chiba Prefecture. The power outages caused communication failures in the mobile telephone networks and in the disaster information wireless broadcast systems of municipalities, etc.

#### [Activities of Fire Service Agencies]

- The local fire department immediately conducted rescue and ambulance service activities, collected information from fire and disaster prevention helicopters, confirmed safety by door-to-door visits, and emergency home repairs using blue tarp, etc.
- The volunteer fire corps conducted activities to remove fallen trees and scattered items, emergency home repairs using blue tarp, supported shelter operations, etc. for extended periods of time.

### The damage from and response to Typhoon No. 19 (Hagibis), etc.

#### [Extent of the Damage]

- Typhoon No. 19 and the following frequent heavy rains caused a lot of river floods, inundations due to banks collapsing, and landslides, etc. in various areas, which caused **98 deaths and damage to over 91,000 houses** mainly in areas on the Pacific side and in the Kanto Region (as of December 5, 2019).
- **Banks collapsed at 140 points of 71 rivers** including the Chikuma River (Nagano Prefecture) and the Abukuma River (Fukushima Prefecture) (as of December 2, 2019 according to research from the Ministry of Land, Infrastructure, Transport and Tourism),
- **Many areas became isolated** due to damaged roads, sediment flowing onto roads, bridge washouts, etc.



Rescue activities in inundation areas in Koriyama City, Fukushima Prefecture  
(Courtesy of Koriyama Fire Department)

## (Special Feature 1) Responses to Recent Large-scale Natural Disasters, and Development of Fire and Disaster Prevention Systems

### [Activities of Fire Service Agencies]

- The local fire department immediately conducted rescue and ambulance service activities, rescue activities using lifeboats and fire and disaster prevention helicopters, missing people searches, etc.
- The National Fire-Service Team, made up of **a total of 809 units containing 2,978 members**, conducted activities for the 6 days from October 13 to 18 and **rescued 171 people**.
- The volunteer fire corps had conducted alert activities in danger areas, searches for missing persons, removal of sediment, etc., and safety confirmation of residents by door-to-door visits, etc. for extended periods of time.
- An accident occurred where a rescued person died by falling out of a helicopter from the Tokyo Fire Department Aviation Unit who were engaged in rescue activities in Fukushima Prefecture on October 13. Tokyo Fire Department held an “Air Safety Board” in which the Fire and Disaster Management Agency (FDMA) also participated in order to investigate the causes and to discuss recurrence prevention measures.



Rescue operations using lifeboats



Missing people searches by volunteer fire corps  
(Courtesy of the Fukushima Prefecture Kawauchi Village Volunteer Fire Corps)

### Lessons from the disaster damage

- Consider efforts related to appropriate ways for local government to **transmit information which urges residents to evacuate**, development of information transmission measures for local government to securely transmit information to residents including **receivers for the disaster information wireless broadcast system**, and **improved disaster drills** at local government to urge the residents to evacuate spontaneously.

### Efforts of the FDMA in “The three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience”

- “The three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience” was decided by the Cabinet on December 14, 2018 in order to maintain the functions of critical infrastructures, etc. in the event of a natural disaster which is becoming an increasingly frequent and severe occurrence in recent years, and six measures were developed by the FDMA.
- 1. Emergency measures related to **National Fire-Service Team for Disaster Response** in order to respond to large-scale storms and floods and landslide disasters.
- 2. Emergency measures related to **aerial fire and disaster prevention systems** in order to respond to large-scale disasters.
- 3. Emergency measures related to **volunteer fire corps** who play the central role in regional disaster prevention capabilities
- 4. Emergency measures related to **securing of the disaster response functions** of the government offices where the disaster response headquarters are established, and the FDMA office.
- 5. Emergency measures related to **securing of emergency communication measures** in local government offices, etc.
- 6. Emergency measures related to **secure information transmission to elderly households, etc.**



Search activities utilizing an amphibious buggy  
(Courtesy of Osaka Fire Department)

**(Special Feature 2) Special Fire Prevention Alert, etc.  
in the G20 Osaka Summit and the Rugby World Cup 2019**

**G20 Osaka summit** (Held in Osaka City, Osaka Prefecture on June 28 and 29, 2019)

**[Efforts made before the summit]**

- The **“G20 Osaka Summit Fire Prevention and Ambulance Service Response Committee”** and **the firefighting and prevention task force** were established on September 25, 2018.

A firefighting plan including dispatch plans and NBC disaster firefighting activities, etc., and a preventive plan including on-site inspections and patrol precautions for related facilities were formulated. Joint training and onsite observation to guard against NBC disasters, onsite inspections of relevant facilities, self-defense and firefighting, training instructions, etc. were all conducted.



**NBC disaster drills**  
\*NBC: Nuclear, Biological, and Chemical weapons  
Biological agents  
Chemical agents

**[Special fire prevention alert systems etc.]**

- The special alert period was 7 days from June 24 to June 30.
- A special fire prevention alert system was constructed that was made up of 266 firefighting vehicles, 6 firefighting helicopters, and 2,858 firefighters (2,179 firefighting staff, 272 prevention staff, and 407 fire department staff), etc.
- Vigilance was increased in Intex Osaka (main venue), Kansai International Airport, Osaka International Airport, accommodation facilities for top-level people, and the highway route for the movements of VIPs, etc. The aerial patrol system with fire and disaster prevention helicopters was constructed and the marine patrol with fireboats, etc., were also conducted.
- Preventive local fire guards who were in operation on a round-the-clock basis were deployed in summit-related facilities.



**General alert headquarter (operation room)**

**[Activities of special alert team]**

- **No fire occurred.** There was an accident where an aircraft made an emergency landing in Kansai International Airport, so 7 firefighting units dispatched and conducted alert activities.
- There were **7 cases where ambulance service** was requested (1 of them was for an erroneous report), and countermeasures were taken in collaboration with medical workers, etc. based on the advance planning.



**JR Osaka Station patrol by fire guards**

**Rugby World Cup 2019** (Held in 12 cities in Japan from September 20 to November 2, 2019)

- The FDMA developed **the large-sized vehicles with a decontamination system** and **chemical agent remote detection device** and formulated **the curricula, etc. for firefighter toward the introduction of tourniquet** as the development and enhancement of the system to respond to terrorism disasters like NBC, etc. Moreover, they have promoted a variety of efforts related to responses to foreign and disabled people, etc.
- The **“Rugby World Cup 2019 Firefighting Measure Council”** was established on November 7, 2017 and the discussion system toward the cup was constructed.
- Prior onsite inspection in the competition sites and accommodation facilities, etc., and self-defense firefighting training instructions, etc. were performed prior to holding the cup in each site. During the period of the cup, the fire alert headquarter was established in order to construct the collaboration system with relevant organizations, enhance the dispatch system of the team to respond to terrorism disasters like NBC, etc., and secure the full readiness system.



**Kamaishi Unosumai Memorial Stadium fire alert Team**

### (Special Feature 3) Responses to Foreign and Disabled People with an Eye to Holding a Large-scale Event

#### [Efforts to handle 119 call, etc. by foreign and disabled people]

- Promote the introduction of “3 Way Telephone Interpretation by a Telephone Interpretation Center” and “ambulance service VoiceTra” in order to meet the needs of smooth communication with foreign people at the time of 119 call and in the ambulance service field as the number of foreign tourists to Japan increased.
- Promote the introduction of “Net119 emergency call system” which enables hearing-disabled and speech-disabled people to use a smartphone to call smoothly without sound.

\* Both policies have a goal of introducing them in all fire departments by the end of 2020.

#### [Disaster information transmission and evacuation guidance guidelines]

- The “guidelines on disaster information transmission and evacuation guidance in the facilities used by foreign and disabled people” were formulated in March 2018. Leaflets that summarized the points of the guidelines comprehensively were distributed to the people concerned with facilities like stations, airports, arenas, inns, and hotels, etc. **in order to promote the dissemination of information transmission and evacuation guidance with consideration to foreign and disabled people** toward the Olympic and Paralympic Games.

Select a fixed phrase from the list (handled by the ambulance worker who will contact the sick or wounded person)



Interpretation and pronunciation is performed with a single touch (the operator communicates with the foreign person who is sick or wounded using the translation results)



Screen of the ambulance service VoiceTra



The effective tool for multilingualization and visualization

### (Special Feature 4) Utilization of AI, etc. in the Era of Society 5.0.

#### [Direction of research and development]

- The major goal of the Fire and Disaster Prevention Science Technology Sophistication Strategy Plan 2018 was to promote the reflection of research results in the society in addition to respond to the increasing natural disaster risk and weakening of the society.
- An emphasis was placed on AI and robots, etc. in the Fire and Disaster Prevention Science Technology Research Promotion System.

#### [State of research and development]

##### (Deployment of firefighting robot systems)

- The research and development of the firefighting robot system utilizing AI technologies that is highly heat-resistant and performs image transmission of the disaster state and firefighting activities like water discharge, etc. have been implemented since FY2014.
- **The firefighting robot system (Scrum Force) was completed in the end of FY2018 and a Special Equipment Unit** with the system was established in May 24, 2019.



Scrum Force

##### (Research and development of ambulance crew optimization toward the prompt ambulance service transport)

- A method was developed for the ambulance crew **to reduce the time required to reach the scene. The areas where high ambulance service demands are expected** are predicted with mesh in real time based on the result of analyzing the relationship between ambulance service activity data of fire departments and weather forecast utilizing the AI, and **the medical crew is transferred and deployed in advance.**
- A demonstration experiment of the program is performed and the optimum deployment model of the ambulance crew is under examination.
- The research is planned to be advanced toward the completion in FY2020.

## (Special Feature 5) Enrichment and Enhancement of the National Fire-Service Team for Disaster Response

### [Revision of the basic plan]

- "The Plan Related to Basic Items Concerned with Organization of the National Fire-Service Team for Disaster Response and Development of Facilities, etc." was revised in March 2019. The National Fire-Service Team for Disaster Response were enriched further by increasing the number of registered National Fire-Service Team for Disaster Response, developing vehicles and equipment utilizing the gratuitous use system and the governmental subsidy, and performing practical training, etc.

### [Enhancement of the National Fire-Service Team for Disaster Response]

- The number of registered National Fire-Service Team for Disaster Response is planned to be **increased up to around 6,600 teams by the end of FY2023**. A logistical support sub-team that supports long-term firefighting support activities is added to major 3 small teams of firefighting, rescue activities, and ambulance service.

### [Establishment of the mobile support team to respond to landslides, storms and floods and the team to respond immediately to NBC disasters]

- The "mobile support team to respond to landslides, storms and floods" that consists mainly of special vehicles **specialized in rescue activities in the fields of landslides, storms and floods** is newly established and around 50 teams are planned to be deployed across Japan by the end of FY2023.
- The "team to respond immediately to NBC disasters" with special equipment and materials is newly established in order to **rescue the injured and perform decontamination activities immediately and appropriately at the time of NBC terrorism disasters**. They turn out immediately based on the special operation plan



The image of training as preparation for an NBC terrorism disaster

### [National Fire-Service Team for Disaster Response logo]

- The National Fire-Service Team for Disaster Response logo is created for the purposes of **enhancing further the solidarity** of the National Fire-Service Team for Disaster Response and **making their activities known more widely, etc.**



緊急消防援助隊  
National Fire Service Team for Disaster Response

## (Special Feature 6) Strengthening the Safe Operation System of Fire and Disaster Prevention Helicopters

### [Repeated fire and disaster prevention helicopter crashes]

- 4 fire and disaster prevention helicopter crashes have occurred since 2009 and 26 firefighter died (August 2018: Gunma Prefecture, March 2017: Nagano Prefecture, July 2010: Saitama Prefecture, September 2009: Gifu Prefecture).

### [Standards on the operation of fire and disaster prevention helicopters]

- In response to the crashes, the FDMA has proposed the two-pilot system to the operation organization toward the recurrence prevention of accidents, but the operation organization, with an idea that it is important to adopt the style with higher-grade norm than proposal in order to make steady efforts toward the improvement of safety, **established the "conference on the way of standards on fire and disaster prevention helicopter operation"** and held discussions on the items to incorporate into the standards related to operation and the contents, etc. (1st: March 14, 2019, 2nd: June 11, 2019)

- Based on the discussions in the conference, the items for the operation organization to address were summarized such as **the development of operation regulations, etc., deployment of the person in charge of operation and the operation safety administrator, two-pilot system, emergency operation training using a simulator, and equipment to load on fire and disaster prevention helicopters, etc.**, and the **"standard on fire and disaster prevention helicopter operation"** was established on September 24, 2019 (the FDMA Notification No. 4 in 2019) and announced as a recommendation by the commissioner of the FDMA based on the Article 37 of the Fire Defense Organization Act.



Scene of the conference

## (Special Feature 7) Overseas Promotion of Fire Protection Equipment Conforming to Japanese Standards

### [Government's efforts for overseas promotion of Japanese fire Protection Equipment]

- Japanese fire protection equipment conforms to standards and criteria formulated by the FDMA, and is certified through strict examinations by third-party organizations to ensure high quality.
- In Southeast Asian countries, there are areas where standards for fire protection equipment are undeveloped. Therefore, in order to further improve the competitiveness of Japanese equipment, **efforts are being made to promote the understanding of those concerned with fire and disaster prevention in Southeast Asian countries regarding the high quality and reliability of Japanese products.**

### [Efforts for overseas promotion]

- To support the in-country cooperation system as well as the Japanese companies, **a seminar was held in cooperation with the Japan External Trade Organization (JETRO)** on February 26, 2019.
- Japan and Vietnam signed the “Memorandum of Cooperation between the Ministry of Internal Affairs and Communications of Japan and the Ministry of Public Security of the Socialist Republic of Vietnam in the Fire Service Field” on October 8, 2018 as an effort to make individual countries to know the quality, standard, and certification system of Japanese fire protection equipment.
- **Japanese private companies jointly exhibited for the first time at the fire and disaster prevention exhibition, “Fire Safety & Rescue VIETNAM 2019” held in Ho Chi Minh, Vietnam** in August 2019. The FDMA staff **carried out a “public-private unity”** by giving lectures on fire prevention measures at the seminar held at the same time.



Fire Safety & Rescue VIETNAM 2019  
Japan pavilion

## (Special Feature 8) Enhancing and Strengthening Regional Disaster Prevention Capabilities with Volunteer Fire Corps Playing the Center Role

Volunteer fire corps are playing major roles in securing the safety and security of local residents as a core existence of fire and disaster prevention system in the region, **but the number of volunteer fire corps members** is declining year by year, and the number of members is **831,982** as of April 1, 2019 (declined by 11,685 from the previous year).

### [Policies to enhance and strengthen volunteer fire corps] (Promoting enrollment in volunteer fire corps)

- To promote the enrollment of students, women, employees and public officials into the volunteer fire corps, efforts are being made such as **the Volunteer Fire Corps Cooperation Establishment Display System** and **the Certification System for Students' Volunteer Fire Corps Activities.**

### (Improving treatment of volunteer fire corps members)

- The FDMA requests that annual compensation and dispatch allowances **be raised, particularly by organizations with low allowances.**

### (Enhancing and strengthening equipment)

- **The fire pump vehicles equipped with equipment for rescue activities was lent to the volunteer fire corps without any charge and they support the training, etc.**
- **The equipment for information collection activities (off-road bikes and drones) and small-sized power pumps easy for women and young people to use were lent to fire academies without any charge and support the training.**
- **Volunteer fire corps facility development subsidy** (volunteer fire corps rescue capability improvement equipment emergency development project) is established to enrich the equipment of volunteer fire corps and improve the disaster response capabilities.



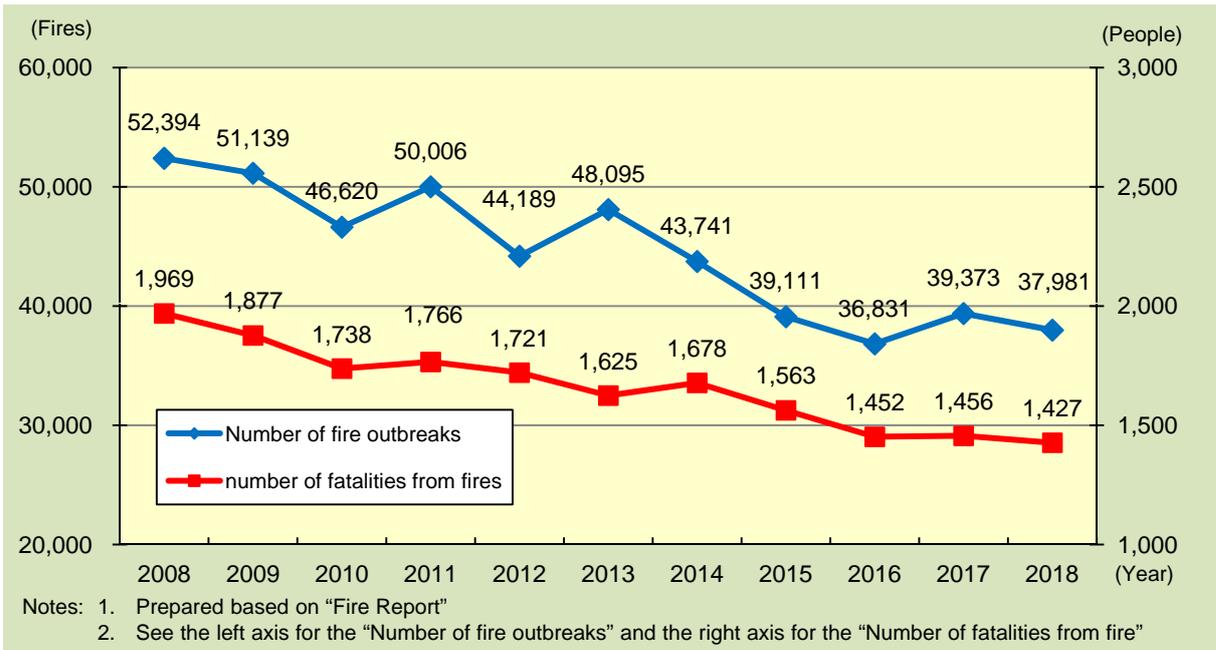
Equipment which is the target of volunteer fire corps facility development subsidy

# Current Status and Activities concerning Fire and Disaster Prevention

## Current Status of Fires and Recent Trends (Chapter 1, Section 1)

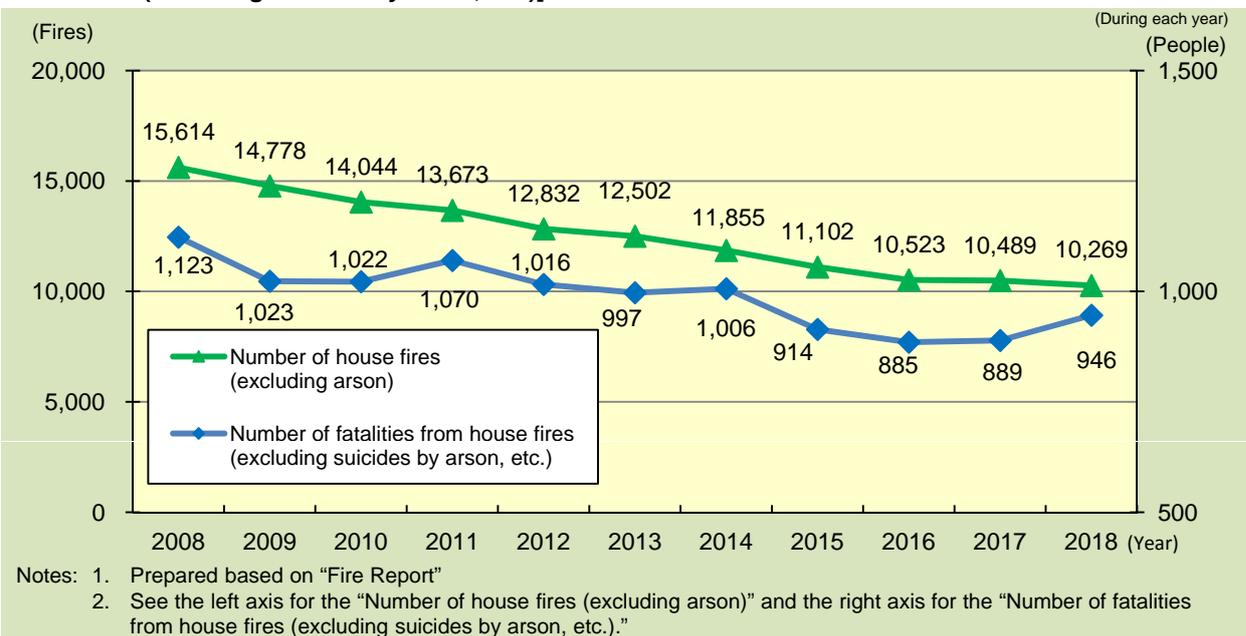
- The number of fire incidents and number of fatalities from fires have been gradually trending downward over the past 10 years.
  - **The number of fire incidents** in 2018 came to **37,981** (declined by 1,392 from the previous year), while coming to **72.5% versus 10 years ago**.
  - **The number of fatalities from fires was 1,427** (declined by 29 from the previous year), while coming to **72.5% versus 10 years ago**.
  - There were 3,414 fires caused by cigarettes, which were the primary cause of fires (bonfire was the second and stoves were the third).

[Trends in the number of fire incidents and the number of fatalities from fires]



- The number of **house fires (excluding arson)** in 2018 came to **10,269** fires (declined by 220 from the previous year), while coming to **65.8% versus 10 years ago**.
- **The number of fatalities from house fires (excluding suicides by arson, etc.) came to 946** (increased by 57 from the previous year), while coming to **84.2% versus 10 years ago**.
- The installation rate for home fire alarms is 82.3% (as of June 1, 2019).

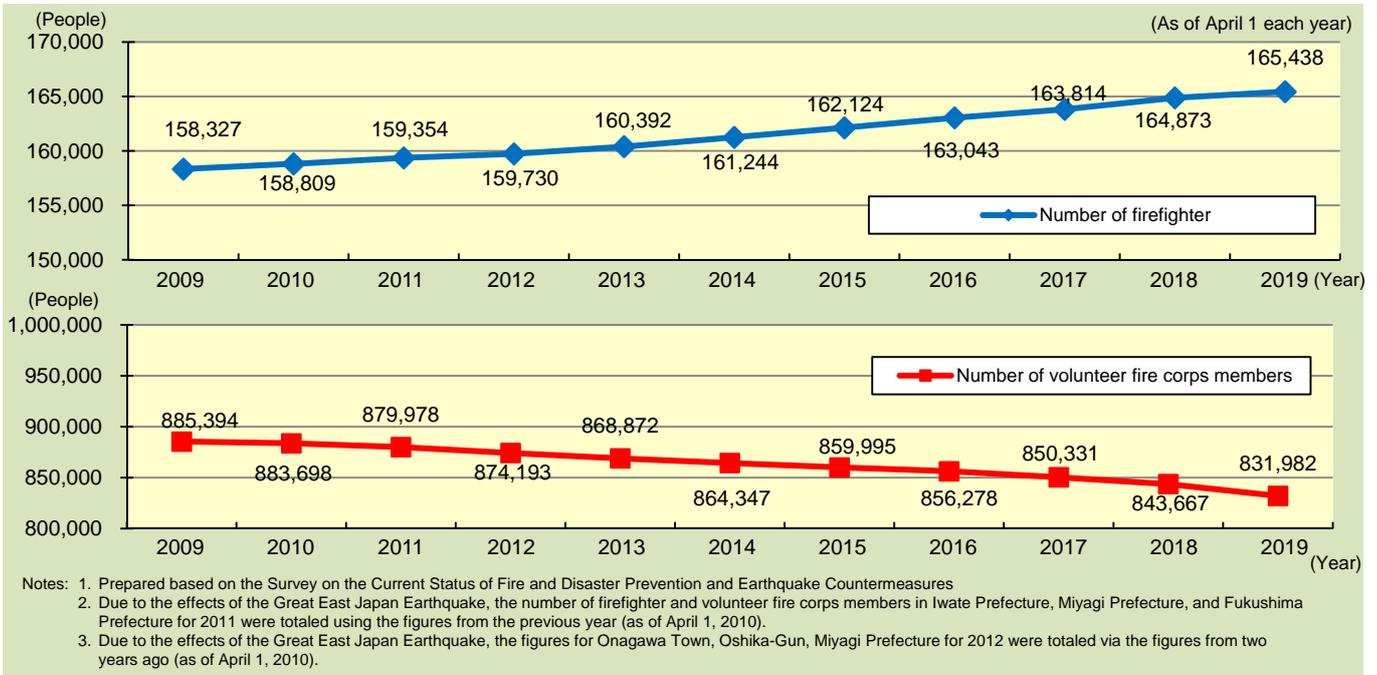
[Trends in the number of house fires (excluding arson) and the number of fatalities from house fires (excluding suicides by arson, etc.)]



## Status for Fire Service Organizations (As of April 1, 2019) (Chapter 2, Section 1)

- **Fire departments**
  - 726 fire departments and 1,719 fire stations have been established, with **the number of firefighter** coming to **165,438**
  - The number of firefighter increased compared to the previous year (an increase of 565 people), while coming to **104.5% versus 10 years ago**.
- **Volunteer fire corps**
  - The number of volunteer fire corps is 2,198 and **the number of member** is **831,982**. Volunteer fire corps have been established in every municipality.
  - The number of volunteer fire corps members decreased compared to the previous year (a decrease of 11,685 people), while coming to **94% versus 10 years ago**.

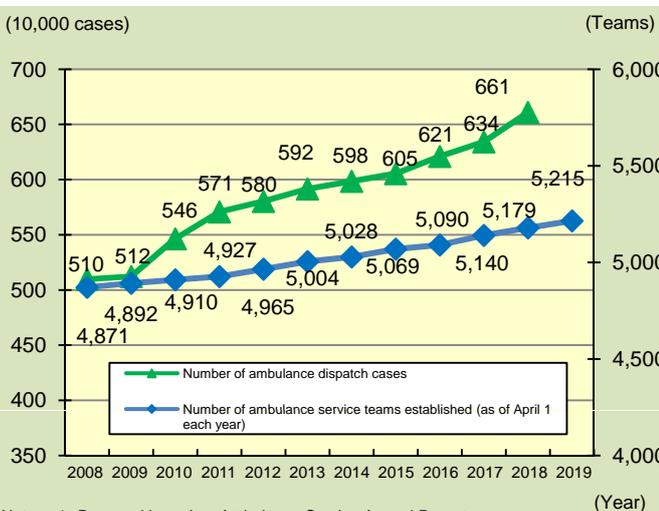
[Trends in the number of firefighter and volunteer fire corps members]



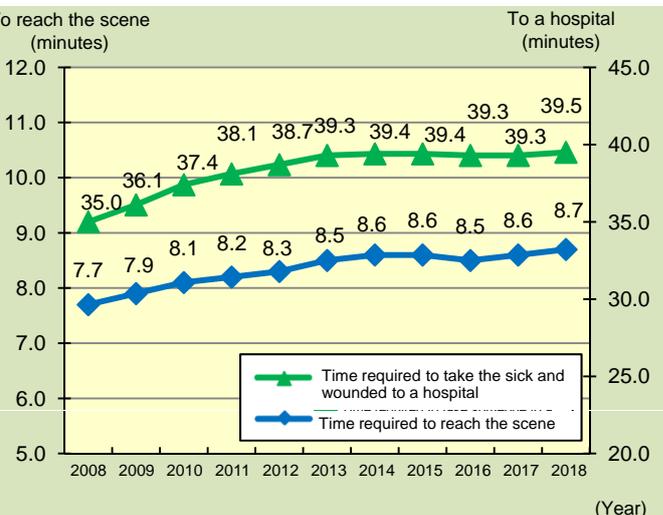
## Implementation Status of Ambulance Services (Chapter 2, Section 5)

- The number of times ambulances have been dispatched for emergencies has kept on upward trend. In 2018, they were dispatched at **the record high of around 6.61 million**, which is roughly **a 30% increase compared to 10 years ago**.
- The number of ambulance service teams established as of April 1, 2019 is **5,215 teams (an increase of 36 teams compared with the previous year)**, which is roughly **7% increase compared with 10 years ago**.
- **The average time required to reach the scene was 8.7 minutes** in 2018 (1.0 minute longer than 10 years ago).
- The average time required to take the sick and wounded to hospital was 39.5 minutes in 2018 (4.5 minutes longer than 10 years ago).

[Trends in the number of ambulance dispatch cases and the number of ambulance service teams]



[Trends in the time required to reach the scene and the time required to take sick and wounded to hospital by ambulance]



- Notes: 1. Prepared based on Ambulance Service Annual Reports  
 2. In the graph on the left, see the left axis for the "number of ambulance dispatch cases" and the right axis for the "number of ambulance service teams established (as of April 1 each year)".  
 3. In the graph on the right, see the left axis for the "time required to reach the scene" and the right axis for the "time required to take someone to a hospital".  
 4. Due to the effects of the Great East Japan Earthquake, the figures for the right-hand graph were totaled by excluding the data for the fire department at the Otsuchi District Administrative Affairs Association in Kamaishi and the fire department in Rikuzentakata City in 2010 and 2011.

## Promotion of appropriate utilization of ambulances (Chapter 2, Section 5)

A variety of policies have been developed like establishment of the telephone consultation window, “Ambulance Advice Center project (#7119)” to ensure that a limited number of ambulances in a region can reach the sick and wounded whose symptoms have high urgency as soon as possible.

### [Promotion of the Ambulance Advice Center project (#7119)]

- The project has been **implemented in 16 regions in Japan** as of December 1, 2019.
- Effects have been confirmed such as detection and rescue of latent patients with severe symptoms, reduction of the transfer ratio of patients with mild symptoms, and control of non-urgent ambulance services dispatch, etc.
- Local government staff engaged in operation have been dispatched utilizing **the dissemination promotion adviser system** since May 2017 and **36 advisers in total have been dispatched to 15 regions** by the end of November 2019.
- **PR activities for a broad range of people have been conducted** by utilizing **the Internet media** and **collaborating with company characters that have great appeal to children** in order to improve the awareness and understanding of residents about #7119 and promote the utilization.

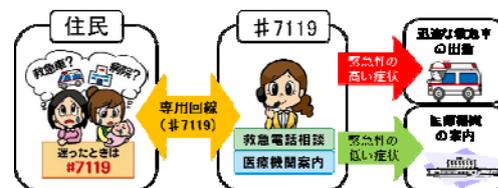


Image of #7119

## Responses to the fire caused by explosions that occurred in Fushimi Ward, Kyoto City.

- In July 18, 2019, a fire caused by explosions involving enormous human damage occurred in Kyoto Animation Co., Ltd. in Fushimi Ward, Kyoto City (**36 deaths and 34 injuries** (7 severe injuries, 7 intermediate injuries, and 20 mild injuries excluding 1 suspect)).
- The building where the fire occurred was an animation studio building of three floors above ground and total area of 691.02 m<sup>2</sup>.
- The FDMA, in collaboration with the National Police Agency, requested the gas station trade associations (Petroleum Association of Japan and National Federation Petroleum Commercial Associations) to demand identification in refilling petroleum containers, ask the purpose of use, prepare the sales record, and report a suspicious person.



1st floor of the building where the fire occurred



The state of fire prevention instructions by the fire defense personnel (Courtesy of Kyoto City Fire Department)

- **Rules of the regulations on hazardous materials** were revised in December 2019 in order to implement thoroughly the efforts above. It became an obligation to identify customers in refilling petroleum containers, ask **the purpose of use**, and **prepare the sales record**.

## Responses to the fire at Shuri Castle that occurred in Naha City, Okinawa Prefecture

- The fire occurred at the Seiden (Main Palace) of Shuri Castle in Naha City, Okinawa Prefecture before dawn on October 31, 2019. **6 buildings including the Seiden (wooden, three floors above ground, and total area of 1,199.24 m<sup>2</sup>) were burned down** and 2 other buildings were burned (no deaths and 1 fire department officer was mildly injured). The place where the fire started has been presumed to be the north east side on the 1st floor of the Seiden, and the cause of fire has not been identified as of November 2019.
- In response to the fire, 11 FDMA officers (including 9 officers from National Research Institute of Fire and Disaster) were dispatched to the site to support the fire investigation performed by Naha City fire department.
- Based on the findings from the fire, in collaboration with **the Agency for Cultural Affairs, the guidelines on fire prevention measures for cultural properties were revised** and the creation of **fire prevention training manual** including responses to the case of cultural properties is planned to be implemented in the future.



The Seiden on fire (Courtesy of Naha City Fire Department)

## <Reference> 2019 White Paper on Fire Service - Contents

### (Special Feature 1) Responses to Recent Large-scale Natural Disasters, and Development of Fire and Disaster Prevention Systems

1. The damage from and response to the heavy rain associated with the rain front in August 2019
2. The damage from and response to Typhoon No. 15 (Faxai)
3. The damage from and response to Typhoon No. 19 (Hagibis), etc.
4. Lessons from the disaster damage
5. Efforts of the FDMA in “the three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience”

### (Special Feature 2) Special Fire Prevention Alert, etc. in the G20 Osaka Summit and Rugby World Cup 2019

1. Efforts made before the summit
2. Special fire prevention alert systems, etc.
3. Activities of special alert team
4. Joint training to protect the citizens
5. Responses in the Rugby World Cup 2019

### (Special Feature 3) Responses to Foreign and Disabled People with an Eye to Holding a Large-scale Event

1. Promotion of efforts based on the social situation
2. Efforts to handle smoothly 119 call, etc. by foreign and disabled people
3. Guidelines on disaster information transmission and evacuation guidance in the facilities used by foreign and disabled people
4. Guidance on the utilization of ambulance

### (Special Feature 4) Utilization of AI, etc. in the Era of Society 5.0.

1. Direction of research and development on fire and disaster prevention technology
2. Status of research and development

### (Special Feature 5) Enrichment and Enhancement of the National Fire-Service Team for Disaster Response

1. Enhancement as a preparation for a Nankai Trough earthquake, etc.
2. Establishment of the mobile support team to respond to landslides, storms and floods and the team to respond immediately to NBC disasters
3. Reorganization of aviation-related teams
4. National Fire-Service Team for Disaster Response logo

### (Special Feature 6) Strengthening the Safe Operation System of Fire and Disaster Prevention Helicopters

1. Overview of fire and disaster prevention helicopter crashes
2. FDMA efforts to improve operating safety (conference)
3. Standards on the operation of fire and disaster prevention helicopters

### (Special Feature 7) Overseas Promotion of Fire Protection Equipment Conforming to Japanese Standards

1. Government's efforts for overseas promotion of Japanese fire protection equipment
2. Status of Japanese fire protection equipment in Southeast Asian countries and strengthening competitiveness
3. Efforts for overseas promotion

### (Special Feature 8) Enhancing and Strengthening Regional Disaster Prevention Capabilities with Volunteer Fire Corps Playing the Center Role

1. Current Status regarding volunteer fire corps
2. Policies to enhance and strengthen volunteer fire corps

## Chapter 1. Current Status of and Challenges for Disasters

- Section 1. Fire Prevention
- Section 2. Countermeasures to Disasters at Facilities for Hazardous Materials
- Section 3. Countermeasures to Disasters at Petroleum Industrial Complexes
- Section 4. Countermeasures to Fires in Forests and Fields
- Section 5. Countermeasure to Storm and Floods
- Section 6. Countermeasures to Earthquake
- Section 7. Countermeasures to Nuclear Disasters
- Section 8. Countermeasures to Other Disasters

## Chapter 2. Fire and Disaster Prevention Organizations and Activities

- Section 1. Fire Service Structure
- Section 2. Promotion of Integration of Fire Department
- Section 3. The Activities of Firefighting Personnel
- Section 4. Education and Training Structure
- Section 5. Ambulance Service System
- Section 6. Rescue System
- Section 7. Aerial Fire and Disaster Prevention System
- Section 8. Integrated Fire Service Support and National Fire-Service Team for Disaster Response
- Section 9. The Disaster Prevention Systems of National and Local Government
- Section 10. Promoting the Computerization of Fire and Disaster Prevention

## Chapter 3. Responses for Public Safety

- Section 1. Efforts for Public Safety
- Section 2. Response to the Case of a Ballistic Missile Launch by North Korea

## Chapter 4. Voluntary Fire and Disaster Prevention Activities and Building Communities that are Resistant to Disasters

## Chapter 5. Responding to International Challenges

## Chapter 6. Research and Development on Science and Technology for Fire and Disaster Prevention

## Attachment