

# **Overview of the 2016 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) The Damage from and Response to the Kumamoto Earthquakes

### [Extent of the Damage]

- On April 14, 2016 an earthquake with a seismic intensity of 7 was observed in Mashiki Town, Kumamoto Prefecture, with another such earthquake observed in Mashiki Town and Nishihara Village on April 16 (**there are no cases of regions where two earthquakes with a seismic intensity of 7 were observed in Japan, making this the first time in recorded history that earthquakes have occurred in succession like this.**)
- Numerous buildings collapsed and landslide disasters occurred over an extensive area that centered on Kumamoto Prefecture. This caused human harm that left **139 people dead and 2,581 people injured**, as well as damage to homes in which **8,298 homes were totally destroyed, 31,249 homes were half destroyed, and 141,826 homes suffered partial damage** (as of October 27). In addition, **in Minamiaso Village, the Aso Ohashi Bridge collapsed, and the government office buildings that would have served as bases for disaster response measures were destroyed in five cities and towns in Kumamoto Prefecture (Yatsushiro City, Hitoyoshi City, Uto City, Ozu Town, and Mashiki Town).**

### [Activities of Firefighting Agencies]

- The fire departments in the afflicted region together with prefectural firefighting support teams and Emergency Fire Response Teams joined forces to jointly engage in firefighting, ambulance service, and rescue activities, through which they **rescued 376 people (including 13 people from Oita Prefecture).** This also included coordination between the activities of volunteer fire corps with regular fire prevention services, through which the **lives of 51 people were saved in Mashiki Town, 5 people in Minamiaso Village, and 15 people in Nishihara Village.**
- The Emergency Fire Response Teams coordinated with related agencies such as the police, Japan Self-Defense Forces (JSDF), DMAT, and the Ministry of Land, Infrastructure, Transport and Tourism (TEC-FORCE). Over the **14 days from April 14 - 27 a combined force of 1,644 teams and 5,497 people from 20 prefectures (4,336 teams and 15,613 people in total) were active, with as many as 569 teams and 2,100 people active at the peak (April 16).**
- As for volunteer fire corps, a **total of roughly 105,000 people were active from April 14 through May 31** in Kumamoto Prefecture (**13,858 people at the peak (April 17)**), and a **total of roughly 7,400 people were active from April 14 through May 31** in Oita Prefecture (**2,960 people at the peak (April 16)**).



Miyazono District, Mashiki Town  
(Provided by the Miyazaki City Fire Department)



Activities at the site of a landslide  
(Provided by the Minamiaso Village Volunteer Fire Corps)



An exchange of opinions held between the Mayor of Minamiaso Village and Minister for Internal Affairs and Communications Takaichi in the Minamiaso Village Hall (May 2)

### [Challenges and Responses the FDMA Must Address]

- **Promote the seismic reinforcement of government office buildings** and **ensure business continuity**
  - **By way of projects eligible for emergency disaster prevention / disaster reduction industrial bonds** designed to promote the seismic reinforcement of the government office buildings and so forth that serve as bases for disaster prevention activities, **support will be provided through local fiscal measures and the like.** In addition, the formulation of business continuity plans by regional public organizations will be promoted through efforts like **holding training sessions on formulating business continuity plans** in cooperation with the related ministries and agencies.
- **Promote the installation of structures for receiving support**, such as establishing chains of command that include aid personnel for disaster-afflicted local governments.
  - **Collect prior case examples** through hearings with municipalities that have previous experience with receiving aid and support when they were struck by disasters in the past, and **promote initiatives for municipalities that include positioning the structures for receiving support within regional disaster prevention plans.**
- **Determine information in a centralized manner** on things like the extent of damage.
  - Promote the **installation of disaster operations systems** that provide large-screen displays and sharing of footage from helicopter video transmission systems and ground-mounted cameras in real time. Also promote the **installation of disaster prevention information systems** equipped with disaster emergency response functions, such as centralizing damage information, as well as functions for aiding victims that include managing relief supplies and issuing disaster certificates.
- **Ensure a structure for independent activities by Emergency Fire Response Teams** and **strengthen and enhance the activities of volunteer fire corps.**
  - Promote the **deployment of vehicles equipped with central command functions and fuel supply vehicles**, which make it possible for Emergency Fire Response Teams to carry out independent activities. **Secure volunteer fire corps members, set in place equipment like fire pump-mounted vehicles, and enhance education and training.**

## (Special Feature 2) The Damage from and Response to the Typhoons from August 2016

### [Damage from Typhoon No. 7, Typhoon No. 11, and Typhoon No. 9]

- The heavy rains resulting from this series of typhoons caused damage over a broad area in the Hokkaido, Tohoku, and Kanto Regions. In particular, the heavy rains that began on August 20 caused human harm that left **2 people dead and 77 people injured**, as well as damage to a large number of homes.

### [Damage from Typhoon No. 10]

- The heavy rains resulting from Typhoon No. 10, which approached and made landfall between August 29 - 30 caused flooding in rivers throughout the Hokkaido and Tohoku Regions. This caused human harm that left **22 people dead and 5 people missing**, including 9 residents of a group home, as well as **damage to a large number of homes**. The destruction of roads gave rise to numerous cases of people being stranded and isolated.



Conditions after the disaster struck  
(Akka District, Iwaizumi Town; Provided  
by the Sendai City Fire Department)

### [Activities by Firefighting Agencies for Typhoon No. 10]

- Local firefighting agencies, supporting fire departments within the prefecture, wide-area aerial firefighting support teams, Emergency Fire Response Teams, and volunteer fire corps worked together to carry out activities such as search and rescue activities for missing persons and activities to rescue residents in isolated regions.
- **43 people were rescued via the activities of the Emergency Fire Response Teams**, in addition to which **10 people were rescued in Makubetsu Town, Hokkaido and 6 each were rescued in Kuji City and Iwaizumi Town in Iwate Prefecture** through the activities of volunteer fire corps, including those activities in partnership with regular fire prevention services.
- Regarding the Emergency Fire Response Teams, **257 teams and 1,044 people (a total of 825 teams and 3,238 people) were active in the capital and five prefectures (Aomori Prefecture, Miyagi Prefecture, Akita Prefecture, Fukushima Prefecture, Tokyo, and Kanagawa Prefecture) over the 10-day period from August 31 to September 9, with 93 teams and 364 people active during the peak (September 2).**
- Regarding the volunteer fire corps, **a total of roughly 500 people (276 people during the peak of activities (August 31)) were active in Hokkaido over the period from August 29 to September 14, and a total of roughly 2,700 people (754 people during the peak of activities (August 30)) were active in Iwate Prefecture over the period from August 29 to September 16.**



Coordination committee for activities  
in Iwaizumi Town  
(Iwaizumi Fire Station; Provided by  
Sendai City Fire Department)



Rescue via helicopter hoist  
(Iwaizumi District, Iwaizumi Town;  
Provided by the Tokyo Fire  
Department)



Minister of Internal Affairs and  
Communications  
Takaichi tours the scene of the disaster  
(September 7)  
(Provided by Iwaizumi Town)

### [Reexamining Disaster Prevention Structures for Regions Prepared for Future Water Damage]

- In recent years, significant damage has occurred in regions previously thought to be safe as a result of concentrated downpours the likes of which they have never experienced before. Therefore, on September 7 the FDMA issued Reexaminations of Disaster Prevention Structures for Regions Prepared for Future Water Damage and Landslide Disasters. It will also **check on municipalities' regional disaster prevention plans, manuals, and so forth, and require them to perform examinations when everything is normal to see whether they have secured effective response structures.**

## (Special Feature 3) Enhancing and Strengthening Regional Disaster Prevention Capabilities Centered around Volunteer Fire Corps

### [Initiatives following the Enactment of the Act on Enhancing and Strengthening Regional Disaster Prevention Capabilities Centered around Volunteer Fire Corps]

(Promoting Enrollment in Volunteer Fire Corps)

- The Minister of Internal Affairs and Communications sends letters to the heads of various regional public organizations, and also sends letters to economic organizations.
- **The FDMA popularizes the Volunteer Fire Corps Office Symbol System and promotes the adoption of support measures for offices by regional public organizations.**
- **In November 2016, the FDMA requested that MEXT (Ministry of Education, Culture, Sports, Science and Technology) and the presidents of various national public and private universities give consideration to contacting an environment in which students can easily take part in volunteer fire corps activities.**
- **The FDMA calls for the adoption of the Certification System for Student Volunteer Fire Corps Activities,** in which municipalities certify the track record of their activities.
- In order to further increase the number of volunteer fire corps members who are women and young people, **the FDMA carries out projects to promote enrollment to volunteer fire corps.**
- **In October 2016, the FDMA issued notifications to regional public organizations specifying specific case examples of things that said organizations should work to address.**
- **The Minister of Internal Affairs and Communications sends letters of gratitude** to volunteer fire corps that had considerably increased their number of members.

(Improving Treatment of Volunteer Fire Corps Members)

- The **FDMA requests** that annual compensation and dispatch allowances **be raised, particularly by organizations with low allowances** (organizations offering no compensation were done away with in FY2015).

(Enhancing and Strengthening Equipment)

- The Volunteer Fire Corps Equipment Standards was revised in February 2014 in the aim of enhancing safety equipment like life jackets, while also continuing on from FY2015 by **substantially expanding local tax grant measures in FY2016 as well.**

(Enhancing and Standardizing Education and Training)

- In March 2016 the Education and Training Standards for Fire Academies was revised to reorganize intermediate level leadership courses as command leadership courses as part of leadership education for volunteer fire corps members. **Educational materials for teaching volunteer fire corps members at fire academies were also prepared.**
- Fire academies **are systematically equipped with fire pump-mounted vehicles with onboard rescue equipment and so forth.**

### [Recent Activities by Volunteer Fire Corps and Others]

- After the Kumamoto Earthquake, firefighting activities were carried out together with firefighting personnel in Yatsushiro City and Mashiki Town. In addition, activities to rescue people from destroyed homes and other structures were carried out together with firefighting personnel, with **a total of 71 people rescued in Mashiki Town, Minamiaso Village, and Nishhara Village combined.**
- For the heavy rains from Typhoon No. 10 in August 2016, activities like stacking sand bags, lookout activities, and evacuation guidance were provided. At the same time, rescue activities were carried out together with firefighting personnel, and **10 people were rescued in Hokkaido and 12 were rescued in Iwate Prefecture.**

### [Measures for Enhancing and Strengthening Volunteer Fire Corps to be Instituted in an Ongoing Manner]

- Promoting the **cooperation and understanding of offices** towards volunteer activities by fire corps.
- **Promoting additional enrollment by university students, vocational school students, and other members of the younger generation**
- Promoting the active involvement of female volunteer fire corps
- Introducing measures to diversify volunteer fire corps organizations and programs, such as function-specific members



A display certificate issued by the FDMA (gold mark; left) and a display certificate issued by municipalities and others (silver mark; right)



Image of relief supplies being sorted (Provided by the Kumamoto City Volunteer Fire Corps)



Searching for missing persons (Provided by Mikage Volunteer Fire Corps (Shimizu Town, Hokkaido))

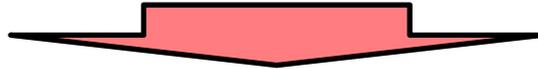


Nationwide Female Firefighting Skills Convention

## (Special Feature 4) Promoting the Active Involvement of Female Firefighting Officials in Firefighting

### [Current Status regarding Female Firefighting Officials]

- The percentage of women among the total number of firefighting officials throughout Japan remains at a low level compared with the percentages in the police, JSDF (Japan Self-Defence Forces), and the Japan Coast Guard (**2.5% as of April 1, 2016**).
- Shared target of raising the nationwide ratio of female firefighting officials to all firefighting officials to **5% by the beginning of FY2026**.



### [Initiatives for Promoting the Active Involvement of Female Firefighting Officials]

(Hold occupational briefing sessions (one-day internships) aimed at female students)

- Occupational briefing sessions **aimed at female students have been held in eight venues throughout Japan** (of these, 189 people took part at the Tokyo venue).
- **Talks were given by active-duty female firefighting officials**, and opportunities were set up to hold **dialogues with these female firefighting officials at booths and in the form of round-table discussions**. In addition, tours of firefighting activity drills are offered at nearby fire stations.

(Publicity using posters, leaflets, etc.)

- The FDMA created **posters** aimed at promoting the active involvement of female firefighting officials, as well as **leaflets** to give people an understanding of what firefighting work is all about, the various support programs for childbirth and childrearing, and educational programs. In addition, it also created a **guidebook** that uses concrete examples in order to show people career paths, working arrangements and working terms and conditions, job descriptions, and balancing family life.

(Extensive PR via a portal site, etc.)

- **A dedicated portal site has been established** within the FDMA's homepage, and at the same time a **public Facebook page entitled FDMA, Ministry of Internal Affairs and Communications: Women's Participation was set up** to serve as platforms for providing information.
- The FDMA **listed information like dates when chances to experience the workplace at fire departments are held and their details** on the FDMA's homepage and private sites that provide job-placement information. It also **established a contact point that enables female students to directly apply to participate**.

(Initiatives by the Fire and Disaster Management College)

- In FY2016 the **FDMA newly established a five-day course exclusively for women** with the primary goal of supporting career development for female firefighting officials, and also **allocated 5% of the spaces in other courses for women**.
- In FY2015 the FDMA **established the Sakura Club consisting of facilities exclusively for women** such as the baths, restrooms, locker rooms, lounges, and more that women need for dormitory life.



Scenes from the one-day internship program



PR poster for female firefighting officials

## (Special Feature 5) Special Fire Prevention Security Instituted at the Ise-Shima Summit

- **The Ise-Shima Summit was held on May 26 and 27, with the Shima Kanko Hotel located in Shima City, Mie Prefecture serving as its main venue.**

### [Initiatives prior to the Holding of the Summit]

- **The FDMA's Headquarters on Response Readiness for the Ise-Shima Summit was established on June 15, 2015, and the Ise-Shima Summit Fire Prevention and Ambulance Service Response Committee was established on July 29.**

Security measures:	Enhance terrorist response structures by augmenting and deploying terrorist response vehicles and equipment, designate facilities subject to the security, hold NBC disaster response drills at the local security headquarters, hold guard inspections aimed at the leaders of each team and confirm the essentials of the disaster activities when it comes to the security measures.
Preventive measures:	Onsite inspection of facilities related to the summit and fire prevention instructions in cooperation with local fire departments and supporting fire departments.
Other:	Hold disaster response drills, ceremonies celebrating the organizations, and more in cooperation with the facility officials at the structures subject to security, including the main venue and the location where the prime minister will spend the night.



NBC response drill at the main venue



Firefighting teams and firefighting vehicles gathered from all over Japan at the venue for the organization ceremony

### [Structure for Special Fire Prevention Security, etc.]

- The special security period **lasted for 6 days from 17:00 on May 24 until 9:00 on May 29**
- A special fire prevention security structure consisting of **99 firefighting vehicles, 6 firefighting helicopters, and 1,014 firefighting and other personnel (912 guard personnel and 102 preventive personnel)**
- Provide security for the **hotel where the prime minister will spend the night, the major lodging facilities in Shima City and Toba City, the international media center, Chubu Centrair International Airport, and the highways that serve as corridors for the movement of important persons**
- Deploy ambulance service team vehicles to the premises of the hotel serving as the main venue and the international media center and **hold security guard activities on a 2-shift, 24-hour system**
- Station firefighting helicopters at Tsu City (Isewan Heliport) and Ise City (Prefectural Ise-Shima wide-area disaster prevention base)
- **Permanently station security personnel on a 24-hour system** within the disaster prevention center within the facilities subject to security measures

### [Activities of the Security Teams, etc.]

- **There was one minor structural fire**, for which the firefighting squad providing security was deployed together with a local firefighting squad.
- **Ambulance services were deployed in eight instances**, in addition to which there were **two false alarms from the fire alarm system** and **one alarm indicating that a fire door had been used**. The squads handled these in coordination with local firefighting squads.



Members of the general security headquarters respond to a call for ambulance service



An ambulance service team responding to a call for ambulance service

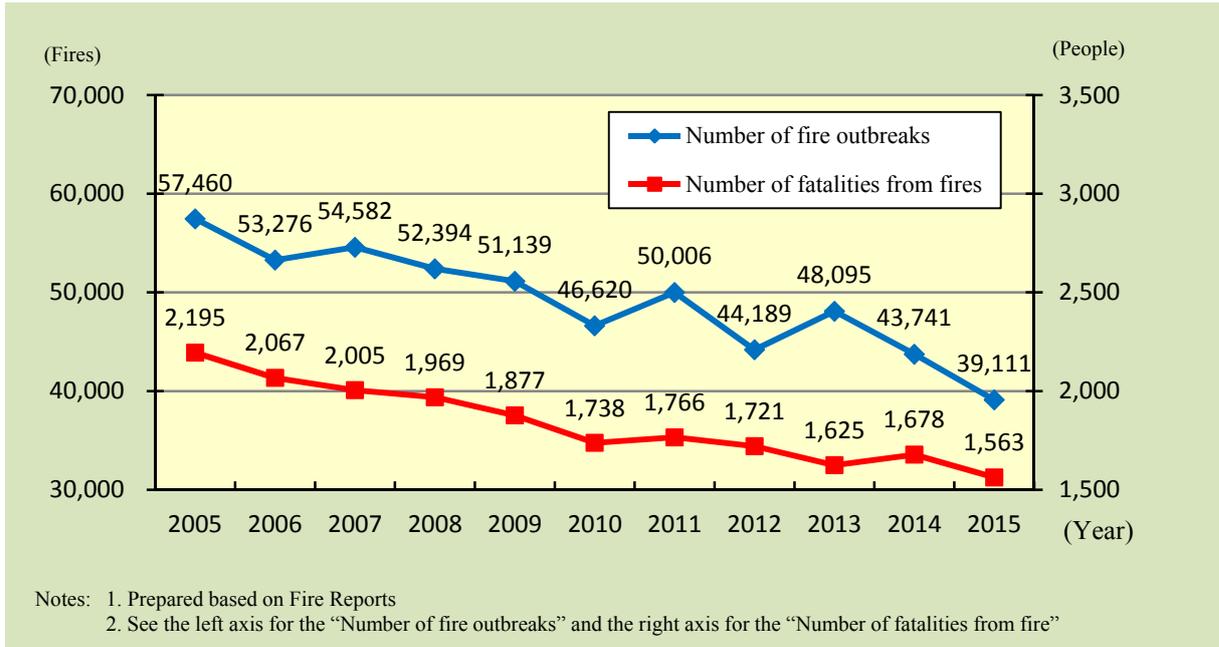
# Major Statistical Figures

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

○ **The number of fire outbreaks and number of fatalities from fires have been gradually trending downward over the past ten years**

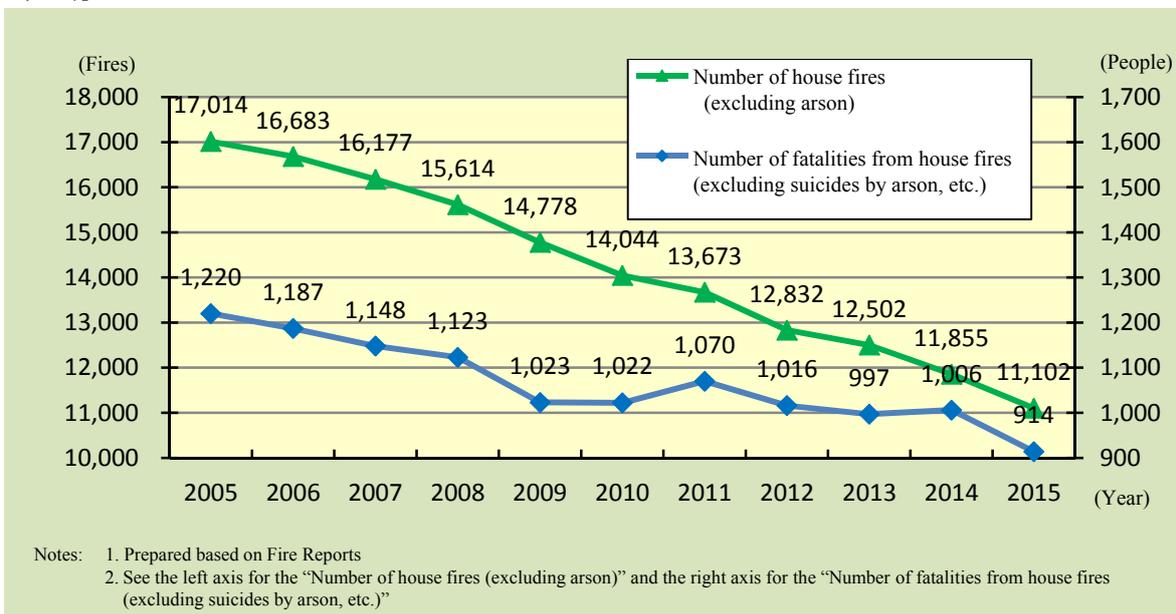
- The number of fire outbreaks in 2015 came to 39,111, with the number of fatalities from these fires coming to 1,563 people.
- The number of fire outbreaks decreased compared to the previous year (a decrease of 4,630 fires), coming to 68.1% versus ten years ago.
- The number of fatalities from fires decreased compared to the previous year (decrease of 115 people), coming to 71.2% versus ten years ago.
- There were 4,033 cases of fires caused by arson, which has been the number one cause of outbreaks of fire for 19 years in a row.

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



- The number of house fires (excluding arson) in 2015 came to 11,102 fires, while the number of fatalities from house fires (excluding suicides by arson, etc.) came to 914 people.
- The number of house fires decreased from the previous year (a decrease of 753 fires), coming to 65.3% versus ten years ago.
- The number of fatalities from house fires decreased from the previous year (a decrease of 92 people), coming to 74.9% versus ten years ago.
- The installation rate for home fire alarms is 81.2% (as of June 1, 2016).

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



## Status for Firefighting Organizations (As of April 1, 2016) (Chapter 2, Section 1)

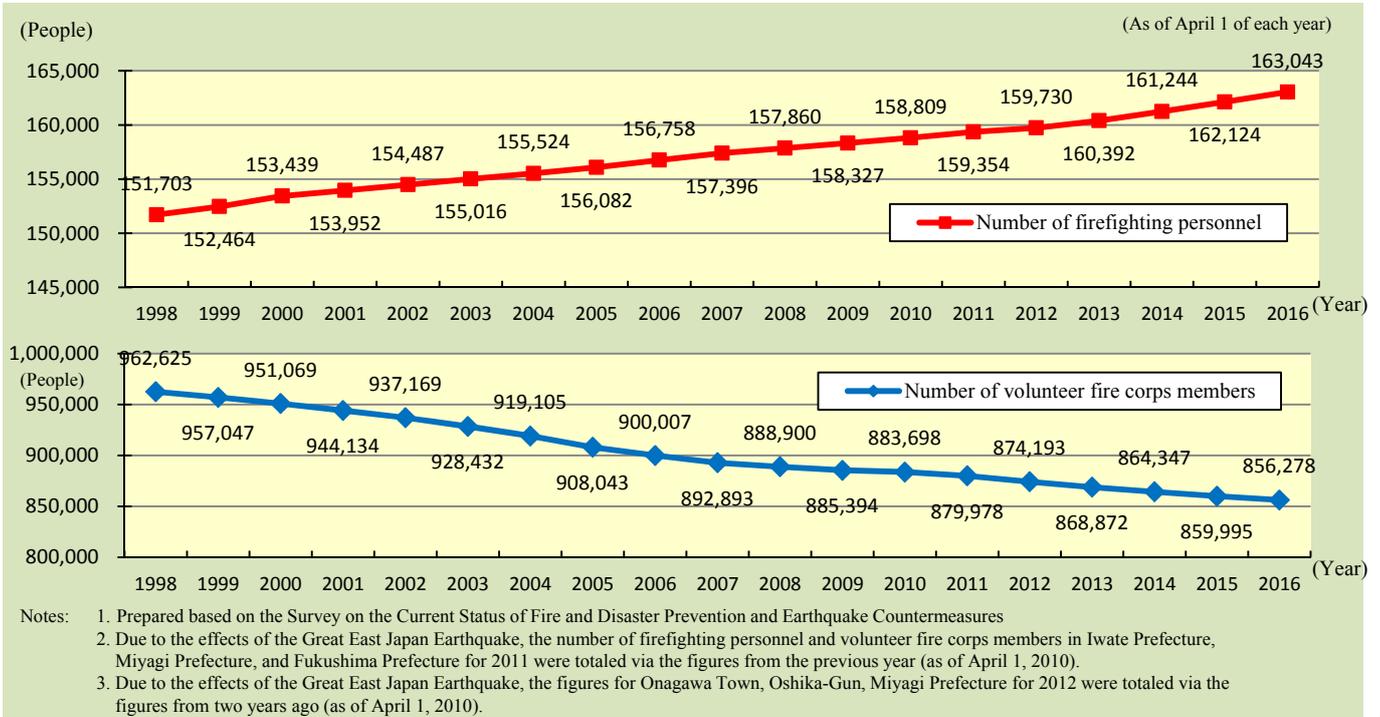
### ○ Fire departments

- 733 fire departments and 1,714 fire departments have been established, with the number of firefighting personnel coming to 163,043 people.

### ○ Volunteer fire corps

- The number of volunteer fire corps is 2,211 and the number of members is 856,278 people. Volunteer fire corps have been established in every municipality.
- The extent of the reduction in the number of volunteer fire corps has shrunk.  
(2014-2015: -4,352 people → 2015-2016: -3,717 people)

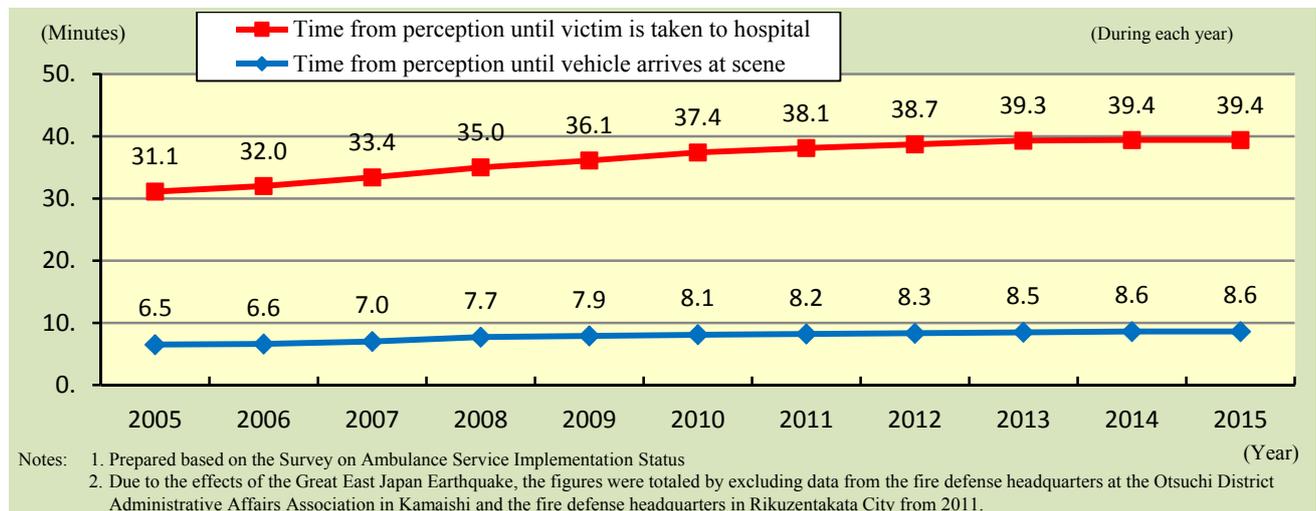
[Trends in the number of firefighting personnel and volunteer fire corps members]



## Ambulance Service Implementation Status (Chapter 2, Section 5)

- The number of times ambulances have been dispatched for emergencies has risen year by year. In 2015 they were dispatched a record high 6,054,815 times, which is a roughly 15% increase compared to ten years ago.
- The number of ambulance service teams established as of April 1, 2016 is 5,090 teams (an increase of 21 teams compared with the previous year), which is a roughly 7% increase compared with ten years ago.
- The average time required to take someone to a hospital was 39.4 minutes in 2015 (this is 8.3 minutes longer compared with ten years ago).
- The average time required to reach the scene was 8.6 minutes in 2015 (this is 2.1 minutes longer compared with ten years ago).

[Trends in the time required to reach the scene and the time required to take someone to a hospital by ambulances]



## **<Reference> 2016 White Paper on Fire Service - Contents (Special Features)**

### Special Feature 1. The Damage from and Response to the Kumamoto Earthquakes

1. Overview of the Earthquakes
2. Overview of the Damage
3. Activities of the Government, FDMA, Firefighting Agencies, and Others
4. Verification and Challenges of the Earthquake Response

### Special Feature 2. The Damage from and Response to the Typhoons from August 2016

1. Conditions from the Typhoons
2. Damage from Typhoon No. 7, Typhoon No. 11, and Typhoon No. 9
3. Damage from Typhoon No. 10
4. Reexaminations of Disaster Prevention Structures for Regions Prepared for Future Water Damage

### Special Feature 3. Enhancing and Strengthening Regional Disaster Prevention Capabilities Centered around Volunteer Fire Corps

1. Initiatives following the Enactment of the Act on Enhancing and Strengthening Regional Disaster Prevention Capabilities Centered around Volunteer Fire Corps and the Recent Activities of Volunteer Fire Corps and Others
2. Measures for Enhancing and Strengthening Volunteer Fire Corps to Be Instituted in an Ongoing Manner

### Special Feature 4. Promoting the Active Involvement of Female Firefighting Officials in Firefighting

1. Current Status regarding Female Firefighting Officials
2. Initiatives for Promoting the Active Involvement of Female Firefighting Officials

### Special Feature 5. Special Fire Prevention Security Instituted at the Ise-Shima Summit

1. Initiatives prior to the Holding of the Summit
2. Structure for Special Fire Prevention Security, etc.
3. Activities of the Security Teams, etc.

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  - Section 4. Countermeasures to Fires in Forests and Fields
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  - Section 6. Earthquake Countermeasures
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- Chapter 6. Research and Development on Science and Technology for Fire and Disaster Prevention

Attached Materials