

Overview of the 2021 White Paper on Fire Service

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

**The Fire and Disaster Management Agency
(FDMA)**

[Special Feature 1] Responses to Recent Large-scale Natural Disasters

The damage from and response to the mudslide in Atami City, Shizuoka Prefecture, July 2021

[Extent of the Damage]

- Heavy rains in a wide area from western Japan to the Tohoku region caused river flooding, inundation, landslides, etc. in many places. A large-scale mudslide occurred in a residential area in the Izusan district of Atami City, Shizuoka Prefecture, causing extensive damage, including **27 people killed or missing**.

[Activities of Fire Service Agencies]

- The local fire department and prefectural firefighting support teams conducted rescue activities and searched for missing persons under difficult conditions where the disaster site was covered with mud from mudslides and debris from collapsed houses.
- **The National Fire-Service Teams**, made up of **a total of 2,097 units containing 7,961 members**, conducted rescue activities over the **24 day period** from July 3 to 26.
- **The FDMA** dispatched **a total of 42 employees for 27 days** to coordinate activities of the National Fire-Service Teams.
- In addition to guiding residents to evacuate after a disaster, the volunteer fire corps organized traffic around the site and conducted nighttime vigilance.

[The FDMA's post-disaster response]

- In addition to considering **guidelines for quick assessment of the disaster situation and more effective measures such as providing command support to local fire departments and coordinating activities with related organizations**, the FDMA will promote the deployment of effective equipment such as **advanced information gathering drones** that can create map images and **small rescue vehicles capable of handling steep slopes**.



Search activities

The damage from and response to the heavy rains that began on August 11, 2021

[Extent of the Damage]

- Record-heavy rains caused inundation in low-lying areas in many areas of Japan, with widespread residential inundation in Saga Prefecture and landslides in Nagano and Nagasaki Prefectures, resulting in **13 deaths, 16 injuries, and damage to 8,203 residential buildings (flooding, etc.) nationwide**.

[Activities of Firefighting Agencies]

- The local fire department and prefectural firefighting support teams immediately conducted rescue and ambulance service activities, including rescue operations, information gathering, and searching for missing persons with lifeboats and fire and disaster prevention helicopters.
- In preparation for heavy rains, the volunteer fire corps patrolled dangerous areas, called for early evacuation, and guided residents to evacuate. After a disaster occurred, they conducted rescue operations by boat and removed debris and sediment.



Rescue activities by volunteer firefighters
(Courtesy of Kurume City Volunteer Fire Corps)

The damage and response to a forest fire in Ashikaga City, Tochigi Prefecture

[Extent of the Damage]

- The fire broke out in a forest near the top of Mt. Ryogai in Ashikaga City, Tochigi Prefecture, and spread rapidly over a wide area of forest, **destroying about 167 ha of privately owned forest, but there was no damage to people or residential buildings**.

[Activities of Firefighting Agencies]

- The local fire department prevented the fire from spreading to residential areas.
- The firefighting disaster prevention aviation team and the National Fire-Service Team deployed by integrated aerial firefighting support conducted aerial firefighting and aerial command support activities using firefighting disaster prevention helicopters.

[The FDMA's post-disaster response]

- The "**Study Group on More Effective Forest Fire Fighting**" examined issues such as **the timing of requests for support in forest fires and the early establishment of a command and support system**, and their findings will be used in future responses to forest fires.



Aerial firefighting by a Tokyo Fire Department
helicopter
(Courtesy of Yokohama City Fire Bureau)

[Special Feature 1] Responses to Recent Large-scale Natural Disasters

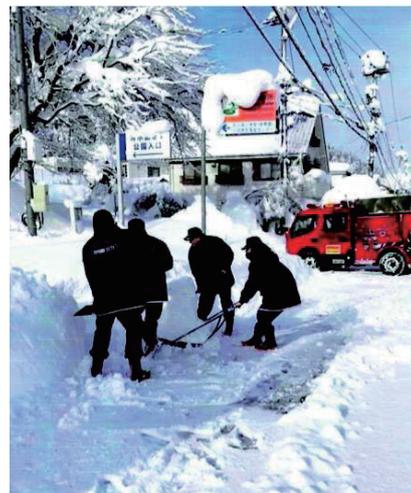
The damage and response to the heavy snowfall that began on December 16, 2020

[Extent of the Damage]

- Heavy snowfall caused vehicles to become stranded on the Kan-Etsu Expressway in Gunma and Niigata Prefectures (**up to 2,000 vehicles**), resulting in **4 people suffering minor injuries** such as ill health in their vehicles. In addition, utility poles collapsed, causing the isolation of various areas, damage to lifelines such as power and water outages, and traffic disruptions such as road closures.

[Activities of firefighting agencies]

- Local fire departments increased the number of personnel and concentrated the deployment of ambulances to fire stations near the interchange, creating a system that was able to respond quickly to emergency calls.
- In addition to clearing snow from around water sources and firefighting facilities, volunteer fire corps responded to avalanches and falling snow, and searched for residents who had fallen into irrigation ditches.



The damage and response to the earthquake centered in northwestern Chiba Prefecture

Clearing snow operation
(Courtesy of Toyama City Volunteer Fire Corps)

[Extent of the Damage]

- **6 people were seriously injured** and **43 people suffered minor injuries** as a result of falls, etc. in Saitama, Chiba, Tokyo, and Kanagawa prefectures.
- In addition to rescue calls from people trapped in elevators (five in the jurisdiction of the Tokyo Fire Department), there were many passengers stuck at terminal stations due to the suspension of train operations.

[Activities of firefighting agencies, etc.]

- Fire departments in the afflicted areas responded to incoming 119 calls and conducted information gathering activities by helicopter.
- Chiba, Tokyo, and Kanagawa prefectures provided temporary accommodations for those who had difficulty returning home.

Special fire prevention measures for the Tokyo Olympic and Paralympic Games

The Tokyo Olympic and Paralympic Games were held in 10 prefectures from July 23 to August 8, 2021, and August 24 to September 5, 2021, respectively.

[Efforts leading up to the event]

- To strengthen the ability to respond to NBCs and other terrorist disasters, the FDMA implemented joint training between national and local public entities for people protection cases and **provided financial support for the costs needed to deploy vehicles equipped with large decontamination systems, remote detection equipment for chemical agents, and to construct a support system**. In addition, the FDMA promoted various measures to accommodate foreigners and people with disabilities, such as simultaneous interpretation between three parties via telephone interpretation centers and the introduction of the Net119 emergency call system.
- Fire departments conducted preliminary investigations of fire prevention management systems for the competition period as well as on-site inspections of facilities in the vicinity of competition venues.



NBC disaster response training at Sapporo Dome

[Implementation status of special fire prevention measures]

- A local fire prevention headquarters was set up at each venue during the competition period.
- **A total of 2,760 firefighting units and 13,521 firefighters** were deployed in and around the venues **for the Olympic Games**, while **a total of 652 firefighting units and 3,361 firefighters** were deployed **for the Paralympic Games**.
- To strengthen the communication system, **the FDMA dispatched a total of 348 staff members for the Olympic Games and 118 staff members for the Paralympic Games** to their respective venues and to the security headquarters of the Tokyo Organizing Committee of the Olympic and Paralympic Games.

[Special Feature 2] COVID-19 Infection Control Measures

[Outbreak of COVID-19-infected patients and expansion status]

- Total number of the outbreak of COVID-19-infected patients in Japan is 1,722,864, total number of deaths is 18,268, and the number of serious cases is 122 (as of November 1, 2021)

[Efforts by the firefighting agencies related to COVID-19 infection control measures]

(Measures in emergency cases)

- The FDMA requested the fire department to call attention to COVID-19 infection and to **thoroughly disseminate the concrete procedure of the infection control measures in the ambulance services.**
- In addition to requesting **close information sharing and cooperation between public health centers and other related organizations to reduce the number of difficult-to-transport cases**, the FDMA also requested that **when an emergency call is made for an infected pregnant or nursing woman and it is determined that emergency obstetric treatment is required, a list of medical institutions should be used to aid in selecting a facility to receive the patient.**
- The FDMA **procured N95 masks, infection prevention clothing, and other infection prevention equipment and materials** using the FY2020 supplementary budget, and **provided them to the necessary fire departments** to ensure infection prevention measures for ambulance team members.

(Service continuity of firefighting agencies, etc.)

- The FDMA requested firefighting agencies to **establish a system that enables them to continue providing necessary services** by ensuring thorough health management for firefighters, securing infection prevention materials and equipment, implementing thorough infection prevention measures within the fire department, as well as preparing for a decrease in the number of personnel due to an outbreak of infections.
- The FDMA clarified that **the medical personnel subject to early vaccination against COVID-19 includes ambulance team members as well as firefighting personnel dispatched alongside emergency teams.**
- In FY2021, **a government subsidy system was established to promote the procurement of equipment and materials to prevent the spread of COVID-19 among volunteer firefighters**, and examples of efforts by municipalities and other organizations to prevent the spread of COVID-19 were posted on the FDMA's website.

(Vaccination services, etc.)

- The FDMA asked firefighting agencies to cooperate as much as possible when they receive requests **to use their EMTs** for vaccination services (intramuscular injections and post-vaccination observation), and to give special consideration to the need for EMTs to attend classroom training in order to provide such vaccination services.
- The FDMA also asked firefighting agencies establish a system for transporting people who develop anaphylaxis as a result of vaccination.

(Dissemination of information to residents, etc.)

- The FDMA requested fire departments, etc. to ensure the smooth implementation of measures to ensure the effectiveness of requests to shorten business hours, such as patrolling the streets and calling out to customers.

(Infection control measures in the event of disaster)

- Since there are concerns about the spread of COVID-19 when evacuees gather together in the event of a disaster, the FDMA requested the use of hotels and inns to secure a large number of evacuation centers, as well as the improvement of their sanitary environments.

(Measures related to fire prevention laws and ordinances, such as hazardous material safety and fire prevention)

- From the perspective of preventing the spread of COVID-19, efforts have been made toward **the early introduction of electronic applications, etc. using the Mynaportal and Pittari Service** for procedures in the field of fire prevention which require many applications and document submissions

[Special Feature 3]

Enhancing and Strengthening Regional Disaster Prevention Capabilities Centered around Volunteer Fire Corps

Volunteer fire corps, with their community-based nature and ability to mobilize personnel, need to be further enhanced and strengthened as the core of regional disaster capabilities. However, the number of volunteer firefighters has been decreasing year by year, and as of April 1, 2021, the number of volunteer firefighters stood at **804,877 people** (down 13,601 from the previous year).

[Efforts to improve the treatment of volunteer firefighters]

- In December 2020, the **Minister of Internal Affairs and Communications sent a letter** to local public entities **calling for better treatment of volunteer firefighters**, and requested that efforts (including better treatment) be made to secure volunteer firefighters.
- The **“Study Group on the Treatment of Volunteer Firefighters”** was held from **December 2020 to August 2021** to consider the appropriate compensation for volunteer firefighters, as well as ways to promote understanding of volunteer firefighters and encourage a wide range of residents to join the volunteer fire corps.

[Measures to enhance and strengthen volunteer fire corps]

(Improving compensation and other treatment)

- The FDMA formulated the **“Compensation Standards for Part-time Volunteer Firefighters”**, requesting that the standard compensation for volunteer firefighters be set at 8,000 yen per day in the event of a disaster, and that compensation be paid directly to individual volunteer firefighters by municipalities, effective April 1, 2022.

(Promoting understanding of volunteer fire corps)

- The FDMA has implemented measures to increase membership in the volunteer fire corps and recognize their activities, such as conducting a nationwide campaign to encourage residents to join the volunteer fire corps, holding a conference to enhance and strengthen local disaster prevention capabilities, and awarding certificates of appreciation from the Minister of Internal Affairs and Communications.

(Encouraging a wide range of residents to join the volunteer fire corps)

- In order to create an environment in which a wide range of people can join the volunteer fire corps, the FDMA requested early assessment of the introduction of a system of function-specific membership and function-specific divisions for volunteer fire corps, and has implemented measures such as the **“Volunteer Fire Corps Office Symbol System”** and **“Certification System for Student Volunteer Fire Corps Activities”** to encourage employees, women, students, and civil servants to join.
- The FDMA has also requested **schools** to promote **practical, hands-on disaster management education with the participation of volunteer firefighters, etc.**, in order to develop future leaders.

(Conducting volunteer fire corps activities in peacetime)

- Supported training by **lending multi-functional fire trucks equipped with rescue equipment, etc.** free of charge.

(Improving equipment, etc.)

- Supported the improvement of volunteer fire corps equipment and the enhancement of disaster response capabilities through **subsidies for equipment maintenance (Urgent Equipment Improvement Project to Enhance the Rescue Capabilities of Volunteer Fire Corps)**.
- Provided public subsidies for volunteer firefighters to obtain a semi-medium-sized vehicle license, in accordance with the establishment of a new license for semi-medium-sized vehicles.
- Launched a mutual-aid insurance program (My Car Mutual Aid) to compensate volunteer firefighters for damage to private cars used in disaster relief activities.



Recruiting poster for Volunteer firefighters



“Women Volunteer Firefighters Page” in the official website of volunteer fire corps

[Special Feature 4]

Efforts of the FDMA under the “Accelerated Five-Year Plan for Disaster Prevention, Mitigation, and National Resilience”

On December 11, 2020, the Cabinet approved the “Accelerated Five-Year Plan for Disaster Prevention, Mitigation, and National Resilience”, under which the FDMA is implementing eight measures.

[Measures to enhance and strengthen the National Fire-Service Team for large-scale disasters]

- Provide the National Fire-Service Team with 12 special advanced fire trucks, 37 high-spec drones for information-gathering activities, 54 video transmission devices, and 10 vehicles equipped with central command functions, and improve the functions of the National Fire-Service Team movement information system.



Utilizing of high-spec drones for information-gathering activities

[Measures to enhance and strengthen the National Fire-Service Team for NBC disasters]

- Provide equipment based on the latest knowledge to NBC disaster response units (54 units deployed nationwide), and update radiation protection equipment for the National Fire-Service Team as necessary.

[Measures to enhance and strengthen airborne fire protection systems for large-scale disasters]

- Enhance airborne fire protection systems by providing fire and disaster prevention helicopters and related equipment.

[Measures related to volunteer fire corps, which play a central role in regional disaster prevention capabilities]

- Implement a project in which multifunctional fire trucks equipped with rescue equipment are loaned to municipalities free of charge and deployed to volunteer fire corps, as well as a government subsidized project to promote the improvement of rescue equipment, to increase the percentage of volunteer fire corps that can perform rescue activities (especially in storms and floods) to 100%.



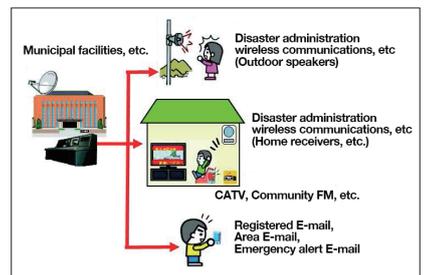
Multifunctional fire truck equipped with rescue equipment

[Measures to secure emergency means of communication in local government facilities, etc.]

- In preparation for the disruption of terrestrial communication networks, encourage local public entities to secure emergency communication means using satellite communication, and introduce satellite communication equipment, including the third-generation system of the regional satellite communications network, to all municipalities.

[Measures to diversify the means of transmitting information to residents, etc.]

- Promote the diversification of the means of transmitting information in municipalities by providing wireless communications for municipal disaster administration and promoting the introduction of disaster administration wireless communications, and ensure that all municipalities have the means to transmit disaster-related information.



The diversity of the means of transmitting disaster information

[Measures for upgrading the firefighting command system]

- In order to upgrade the firefighting command system that supports firefighting unit operations, implement environmental improvements such as building a standard interface to link with external systems (formulate specifications for a standard interface by 2023).

[Measures for understanding and sharing disaster situations, etc.]

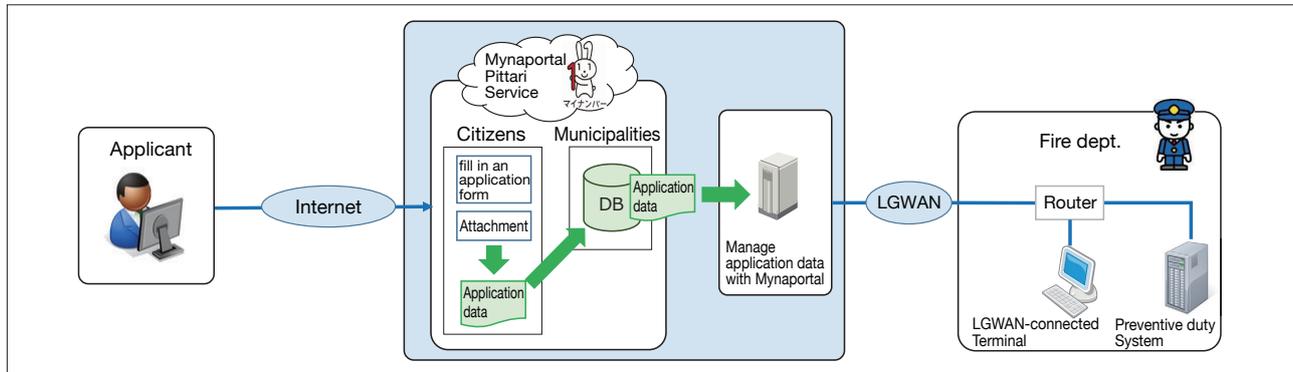
- Establish a system to efficiently share information on damage and the issuance of evacuation orders (12 items) with local public entities (create a system to automatically collect all 12 items in the 47 prefectures by 2023).

[Special Feature 5]

Promoting Digital Transformation in the Field of Fire and Disaster Prevention

[Introducing electronic applications, etc. for various procedures in the field of fire prevention]

- In order to **promote the introduction of electronic applications**, etc. in the field of fire prevention, the “Study Group for the Introduction of Electronic Applications, etc. for Various Procedures in the Field of Fire Prevention” began in March 2021.
- Based on the results of field tests, the FDMA will establish a standard model for electronic applications, etc. **using the Mynaportal Pittari Service**, compile an installation manual, and aim for early introduction at fire departments.



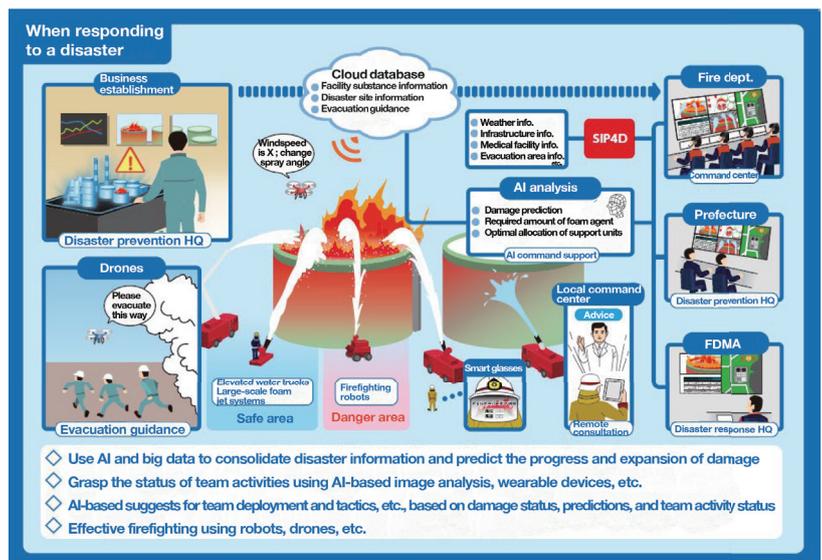
The overview of of electronic applications, etc. using the Mynaportal Pittari Service

[Utilizing of ICT and other technologies in the control of hazardous materials]

- **Safety training for hazardous materials engineers**, which used to be conducted in groups and face-to-face, **is now available online**.
- In light of the fact that smart safety is expected to be achieved at hazardous materials facilities through the introduction of new technologies for effective preventive maintenance, a study was conducted to flexibly respond to future **smart safety measures at hazardous materials facilities**.

[Support for disaster prevention activities using advanced technologies such as AI and IoT]

- The FDMA examined the use of effective advanced technologies (AI, IoT, etc.) to improve the environment for self-defense disaster prevention organizations in petroleum industrial complexes to conduct disaster prevention activities more safely and effectively.
- The goal is to lead the revision of laws and regulations necessary to utilize advanced technologies for disaster response in petroleum industrial complexes, and to further **enhance the efficiency and strength of disaster prevention management systems**.



The Future of Disaster Response at Petroleum Industrial Complexes

[Study for upgrading the firefighting command system]

- In light of recent changes in the ICT environment, a study was conducted to **upgrade the firefighting command system**, which receives emergency calls and supports the dispatch of units.
- The goal is to **reduce system procurement and maintenance costs, facilitate integrated support and emergency activities** by linking with external systems, and improve convenience for residents by **allowing them to receive various types of notices in a single location**.
- With regard to the standard interface for linking with external systems, the FDMA will work to create and present specifications by the end of 2023, based on the testing conducted at fire departments during 2022.

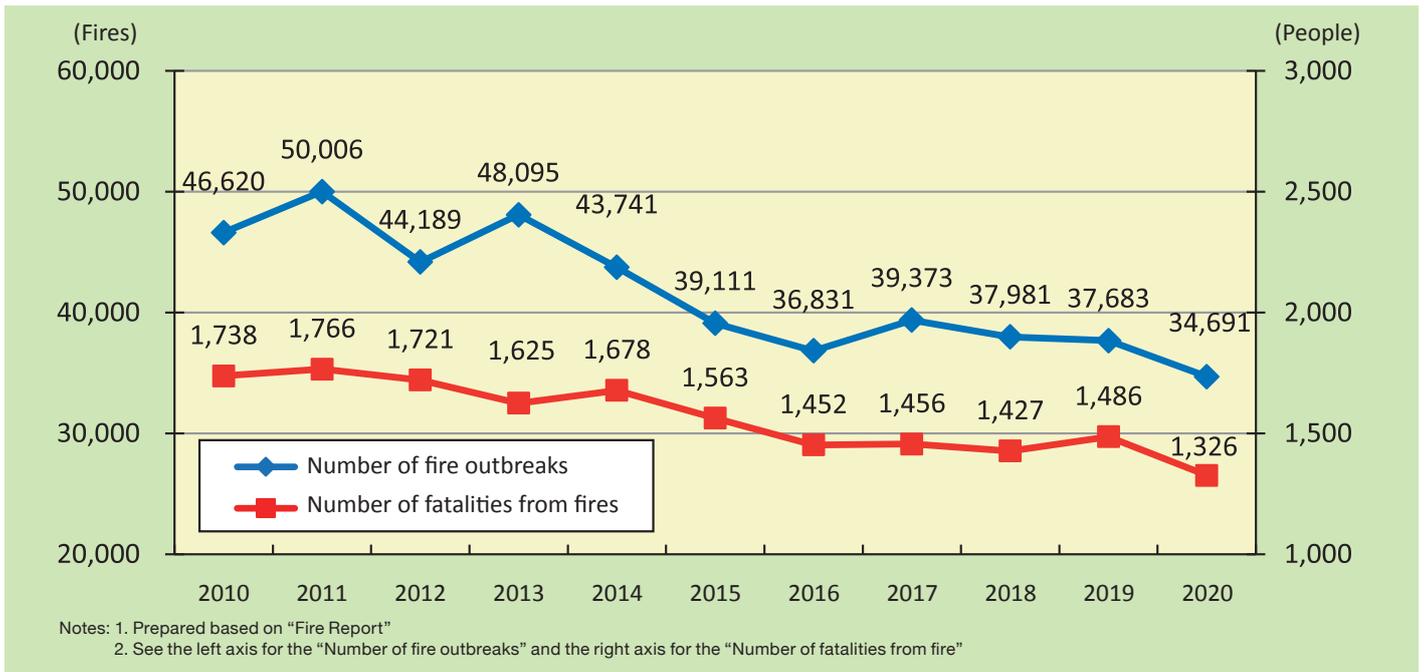
Current Status and Activities concerning Fire and Disaster Prevention

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

○ The number of fire incidents and the number of fatalities from fires have been gradually trending downward over the past 10 years.

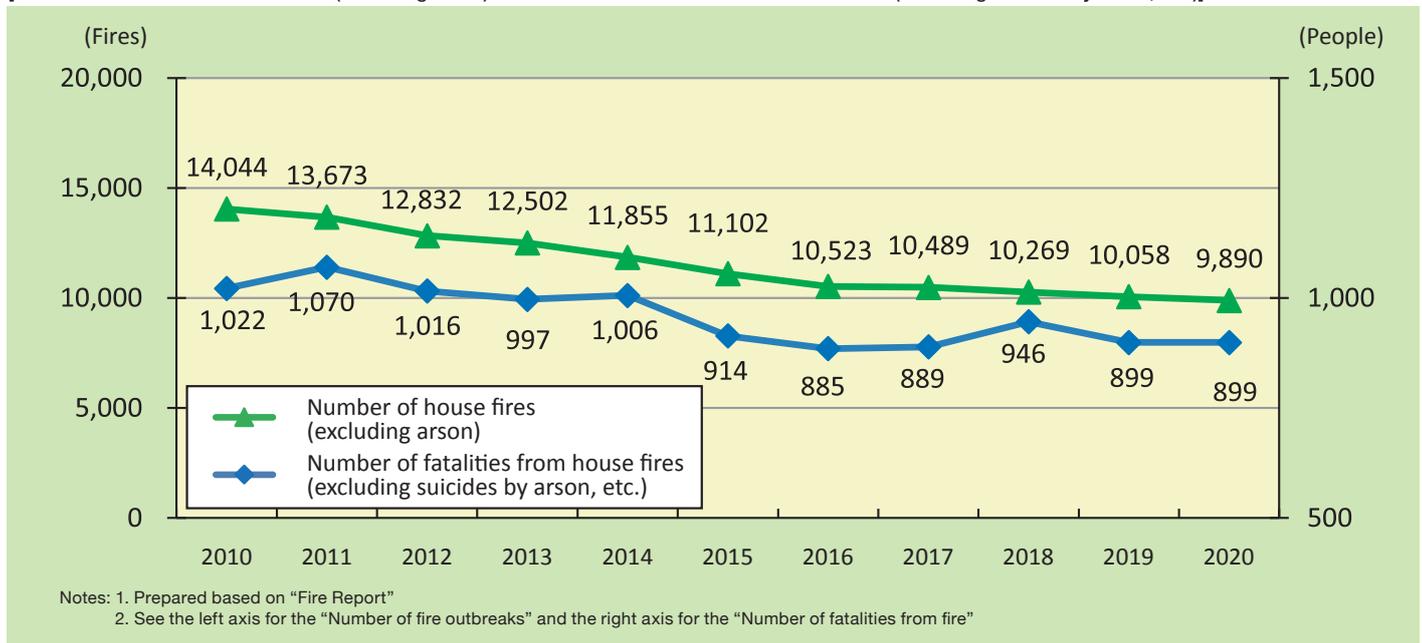
- The number of fire incidents in 2020 was **34,691** (down by 2,992 from the previous year), equating to **74.4% versus 10 years ago**.
- The number of fatalities from fires was **1,326** (down by 160 from the previous year), equating to **76.3% versus 10 years ago**.
- There were 3,104 fires caused by cigarettes, which were the primary cause of fires (bonfires were 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 2020 was **9,890** (down by 168 from the previous year), equating to 70.4% versus 10 years ago.
- The number of fatalities from house fires (excluding suicides by arson, etc.) was **899** (equal to the previous year), equating to **88.0% versus 10 years ago**.
- The installation rate for home fire alarms is 83.1% (as of June 1, 2021).

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



Status of Fire Service Organizations (As of April 1, 2021) (Chapter 2, Section 1)

○ Fire departments

- 724 fire departments and 1,718 fire stations have been established, with **the number of firefighters totaling 167,073**
- The number of firefighters increased compared to the previous year (an increase of 445 people), equating to **104.8% versus 10 years ago**.

○ Volunteer fire corps

- The number of volunteer fire corps is 2,198 and **the number of members is 804,877**. 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 13,601 people), equating to **91.5% versus 10 years ago**.

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

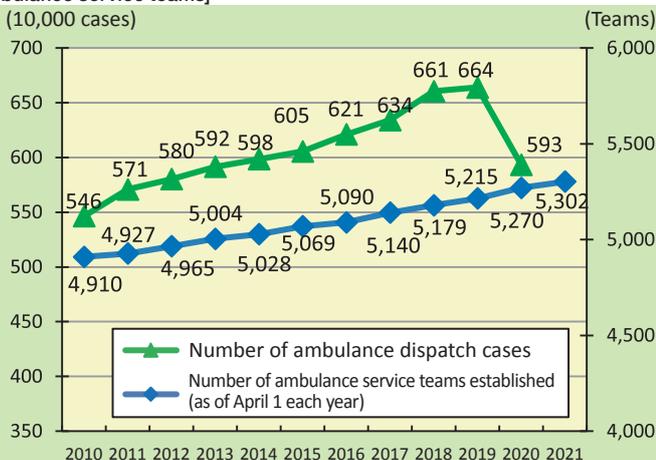


- Notes: 1. Prepared based on "The Survey on the Current Status of Fire and Disaster Prevention and Earthquake Countermeasures"
 2. Due to the effects of the Great East Japan Earthquake, the number of firefighter and volunteer fire corps members in Iwate Prefecture, Miyagi Prefecture, and Fukushima Prefecture for 2011 were totaled using the figures from the previous year (as of April 1, 2010).
 3. Due to the effects of the Great East Japan Earthquake, the figures for Onagawa Town, Oshika-Gun, Miyagi Prefecture for 2012 were totaled via the figures from two years ago (as of April 1, 2010).

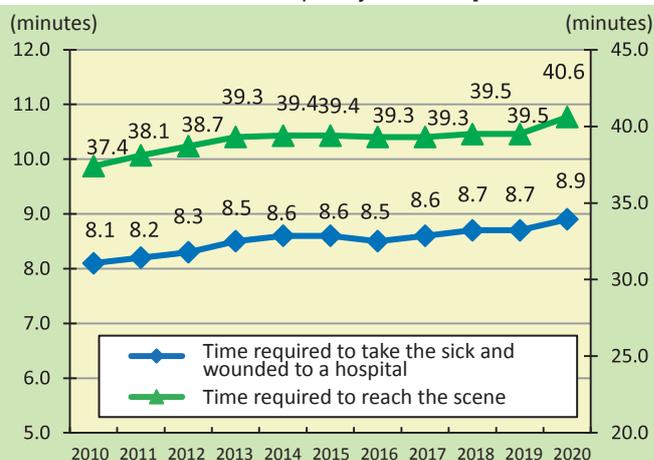
Implementation Status of Ambulance Services (Chapter 2, Section 5)

- The number of emergency calls by ambulance during 2020 was **about 5.93 million**, the first year-on-year decrease in 12 years since 2008.
- The number of ambulance service teams established as of April 1, 2021 is **5,302 teams (an increase of 32 teams compared with the previous year)**, which is **roughly an 8% increase compared to 10 years ago**.
- **The average time required to reach the scene was about 8.9 minutes** in 2020 (0.8 minutes longer than 10 years ago).
- **The average time required to take the sick and wounded to hospital was about 40.6 minutes** in 2020 (3.2 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 "The Annual Reports on Ambulance Service"
 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.

Accidents involving the release of carbon dioxide from fire extinguishing equipment (Chapter 1, Section 1)

- A series of **fatal accidents involving carbon dioxide fire extinguishing systems** occurred between December 2020 and April 2021 (December 2020: Nagoya City, Aichi Prefecture; January 2021: Minato Ward, Tokyo; April 2021: Shinjuku Ward, Tokyo).
- In light of this series of accidents, the FDMA reiterated the safety measures outlined in the guidelines and issued warnings.
- Since May 2021, the **“Review Committee on Installation Standards for Special Fire Extinguishing Systems”** has been working to determine the actual state of carbon dioxide fire extinguishing systems, identify the causes of accidents, and study measures to prevent recurrence.
- Studies has been conducted to resolve technical issues, etc. in order to promote the use of other fire extinguishing agents to replace carbon dioxide.

Holding of web-based work experience events (web internships) for female students (Chapter 2, Section 3)

- The FDMA set a goal of **raising the percentage of female firefighters to 5% of the total number of firefighters in Japan** by the beginning of FY2026 (3.2% as of April 1, 2021), and **has been holding internship programs since FY2018** to provide opportunities for people to learn about the appeal of firefighting jobs and the activities of female firefighters, and to develop their interest in the field.
- In FY2020, the first web-based internship was held, featuring live content such as lectures by female firefighters and web-based roundtable discussions with female students, as well as a number of interactive videos for effective and efficient PR.
- In FY2021, the FDMA plans to hold internships both online and in person (at two locations nationwide).



Live lectures

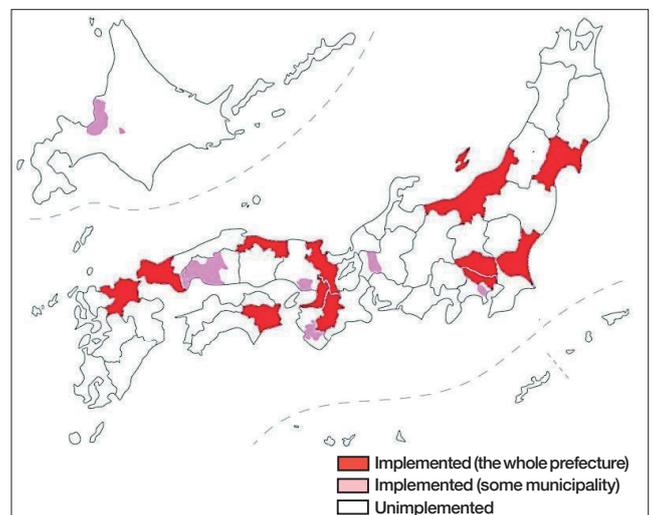


Fire scene VR Experience

Promotion of the Ambulance Advice Center project (#7119) (Chapter 2, Section 5)

The FDMA is promoting the introduction of telephone consultation services by prefectures in order to support residents to seek care from medical institutions in a timely and appropriate manner, in addition to ensuring that ambulances arrive at the scene of urgent injuries and illnesses as quickly as possible.

- A **dissemination promotion adviser system** was established in May 2019, and **39 advisers have been dispatched to a total of 18 regions** (as of November 30, 2021).
- In FY2020, a committee was held to discuss the nationwide rollout of #7119 and to identify issues faced by organizations that have not yet implemented the system and measures to resolve them.
- The FDMA requested that efforts be made for early implementation in all regions, with a focus on prefectures that have not yet implemented #7119 in their jurisdiction.
- Starting in FY2021, a special subsidy tax will be provided to prefectures and municipalities for expenses incurred in the implementation of this project.



Status of dissemination of the Ambulance Advice Center project (#7119)
* implemented in 18 regions nationwide (as of November 30, 2021)

[Special Feature 1]

Responses to Recent Large-scale Natural Disasters

1. The damage from and response to the mudslide in Atami City, Shizuoka Prefecture, July 2021
2. The damage from and response to the heavy rains that began on August 11, 2021
3. The damage and response to a forest fire in Ashikaga City, Tochigi Prefecture
4. The damage and response to the heavy snowfall that began on December 16, 2020
5. The damage and response to the earthquake centered in northwestern Chiba Prefecture
6. Special fire prevention measures for the Tokyo Olympic and Paralympic Games

[Special Feature 2]

COVID-19 Infection Control Measures

1. Outbreak of COVID-19-infected patients and expansion status and response of the government
2. Efforts by the firefighting agencies related to COVID-19 infection control measures

[Special Feature 3]

Enhancing and Strengthening Regional Disaster Prevention Capabilities Centered around Volunteer Fire Corps

1. Current status of volunteer fire corps
2. Holding the “Study Group on the Treatment of Volunteer Firefighters”
3. Policies to enhance and strengthen volunteer fire corps

[Special Feature 4]

Efforts of the FDMA under the “Accelerated Five-Year Plan for Disaster Prevention, Mitigation, and National Resilience”

1. The overview of the “Accelerated Five-Year Plan for Disaster Prevention, Mitigation, and National Resilience”
2. Policies of the FDMA in the Accelerated Five-Year Plan

[Special Feature 5]

Promoting Digital Transformation in the Field of Fire and Disaster Prevention

1. Government movements toward the implementation of a Digital Society
2. Digital Transformation in the field of firefighting and disaster prevention

[Chapter 1]

Current Status of and Challenges for Disasters

Section 1. Fire Prevention

Column Accidents involving the release of carbon dioxide from fire extinguishing equipment

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

Column Holding of web-based work experience events (web internships) for female students

Section 4. Education and Training Structure

Section 5. Ambulance Service System

Column Promotion of the Ambulance Adviser Center project (#7119)

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]