

# **Overview of the 2023 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)**

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## Special Feature 1

# Improvement of Fire and Disaster Prevention Systems Based on Recent Large Scale Disasters

\*Damage information as of 11/15/2023

### Damage caused by earthquakes in 2023 and the response of firefighting agencies

#### ● 2023 Noto Earthquake

- On May 5th, 2023 at 14:42, a magnitude 6.5 earthquake occurred centered off the coast of the Noto Peninsula. It registered at Shindo (Japanese seismic intensity) 6 in Suzu city of Ishikawa Prefecture.
- Additionally, at 21:58 that same day, a magnitude 5.9 earthquake occurred. It registered at Shindo 5 in Suzu city.
- The Okunoto Fire Department in the disaster area engaged in rescue, first-aid, and other activities. Ishikawa prefecture fire and disaster prevention helicopters gathered information.
- The volunteer fire corp in the disaster area carried out patrolling and vigilance, information gathering, and rubble removal operations.

Affected Prefectures	Victims	Properties Damaged
Ishikawa and Toyama Prefectures	1 Dead, 48 Injured	3,397



Volunteer Fire Corp in Action (Provided by Suzu City, Ishikawa Prefecture)



Rescue Operation in Progress (Provided by the Okunoto Fire Department)

### Damage caused by storms and floods in 2023 and the response of firefighting agencies

#### ① 2023 Seasonal rain-front heavy rains and Typhoon Mawar

- Fire departments in the disaster areas engaged in rescue, first aid, and other activities.
- Volunteer fire corps in the disaster areas carried out patrolling and vigilance, evacuation guidance, and drainage work using fire engines and other vehicles.

Main Areas Affected	Victims	Properties Damaged
Kanto, Koshin, Tokai, and Kinki regions	6 Dead, 2 Missing, 49 Injured	10,276



① Drainage Work in Progress by Volunteer Fire Corps (Provided by Yoshikawa City, Saitama Prefecture)

#### ② Heavy rains starting on June 29, 2023

- Mutual support between prefectural fire departments in Fukuoka, Saga, and Oita prefectures.
- Volunteer fire corps in the disaster areas carried out patrolling and vigilance, evacuation guidance, rescue activities using boats, and disaster reconstruction activities like clearing landslides.

Main Areas Affected	Victims	Properties Damaged
Hokuriku, Chugoku, and Kyushu Regions (Special Heavy rain Warnings: Fukuoka and Oita Prefectures)	13 Dead, 1 Missing, 16 Injured	8,020



② Rescue Operation in Progress (Provided by the Kurume Fire Department)

③ Heavy rains starting on July 17, 2023

- Mutual support between prefectural fire departments in Akita prefecture.
- Volunteer fire corps in the disaster areas carried out patrolling and vigilance, evacuation guidance, support for rescue activities, performed drainage work using small pumps, and disaster reconstruction activities like clearing landslides.

Main Areas Affected	Victims	Properties Damaged
Touhoku Region	1 Dead, 5 Injured	6,966



③ Fire Department The Damage  
(Provided by the Gojome Town Fire Department)

④ 2023 Typhoon Lan

- Tottori and Okayama prefecture fire and disaster prevention helicopters gathered information.
- Volunteer fire corps in the disaster areas carried out patrolling and vigilance, evacuation guidance, drainage work using fire engines and other vehicles, and disaster reconstruction work like clearing landslides.

Main Areas Affected	Victims	Properties Damaged
Tokai, Kinki, and Chugoku regions (Special Heavy rain Warnings: Tottori Prefecture)	70 Injured	929



④ Rescue Operation in Progress  
(Provided by the Ayabe City Fire Department)

⑤ 2023 Typhoon Yun-yeung

- Fukushima and other prefecture fire and disaster prevention helicopters gathered information.
- Volunteer fire corps in the disaster areas carried out patrolling and vigilance, evacuation guidance, and disaster reconstruction work like drainage work using fire engines and other vehicles.

Main Areas Affected	Victims	Properties Damaged
Tohoku, Kanto, and Koshin Regions	3 Dead, 18 Injured	6,096



⑤ Rescue Operation in Progress  
(Provided by the Fukushima Prefecture)

**FDMA Efforts in the “5 Year Accelerated Plan for Disaster Prevention, Disaster Mitigation, and National Land Resiliency”**

- There are 8 policies being implemented in the 5 Year Accelerated Plan, such as the “Measures to enhance and strengthen air fire and disaster prevention systems for large scale disasters” and the “Measures regarding volunteer fire corps which form the core of regional disaster prevention capabilities.”



FDMA Helicopter  
(Measures to enhance and strengthen air fire and disaster prevention systems for large scale disasters)



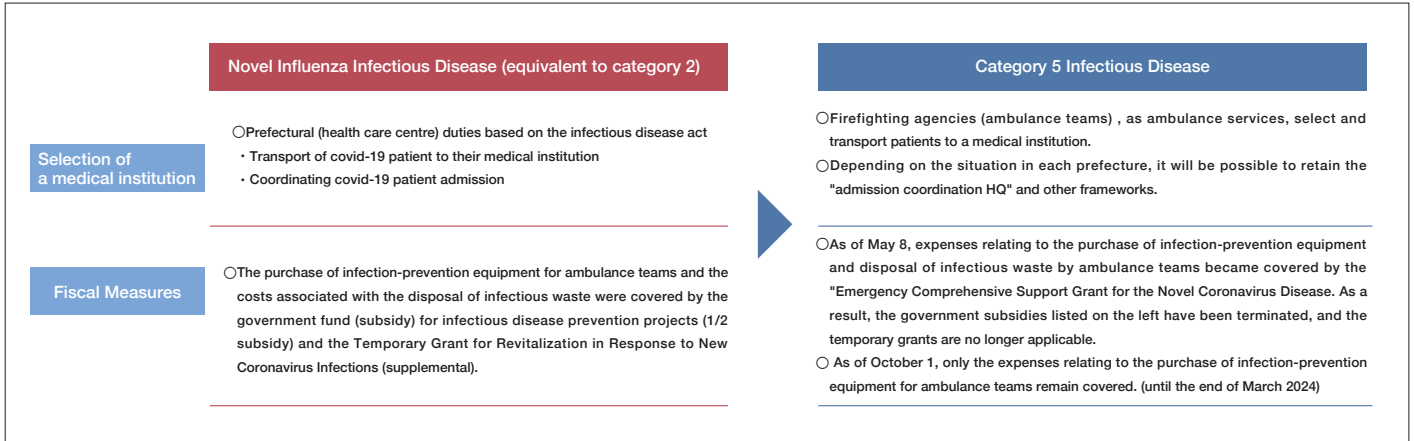
Vehicle equipped with small mounted powered pump and rescue equipment  
(Measures regarding volunteer fire corps which form the core of regional disaster prevention capabilities)

## Special Feature 2

### Countermeasures Against COVID-19 Infection and Responses to Heat Stroke

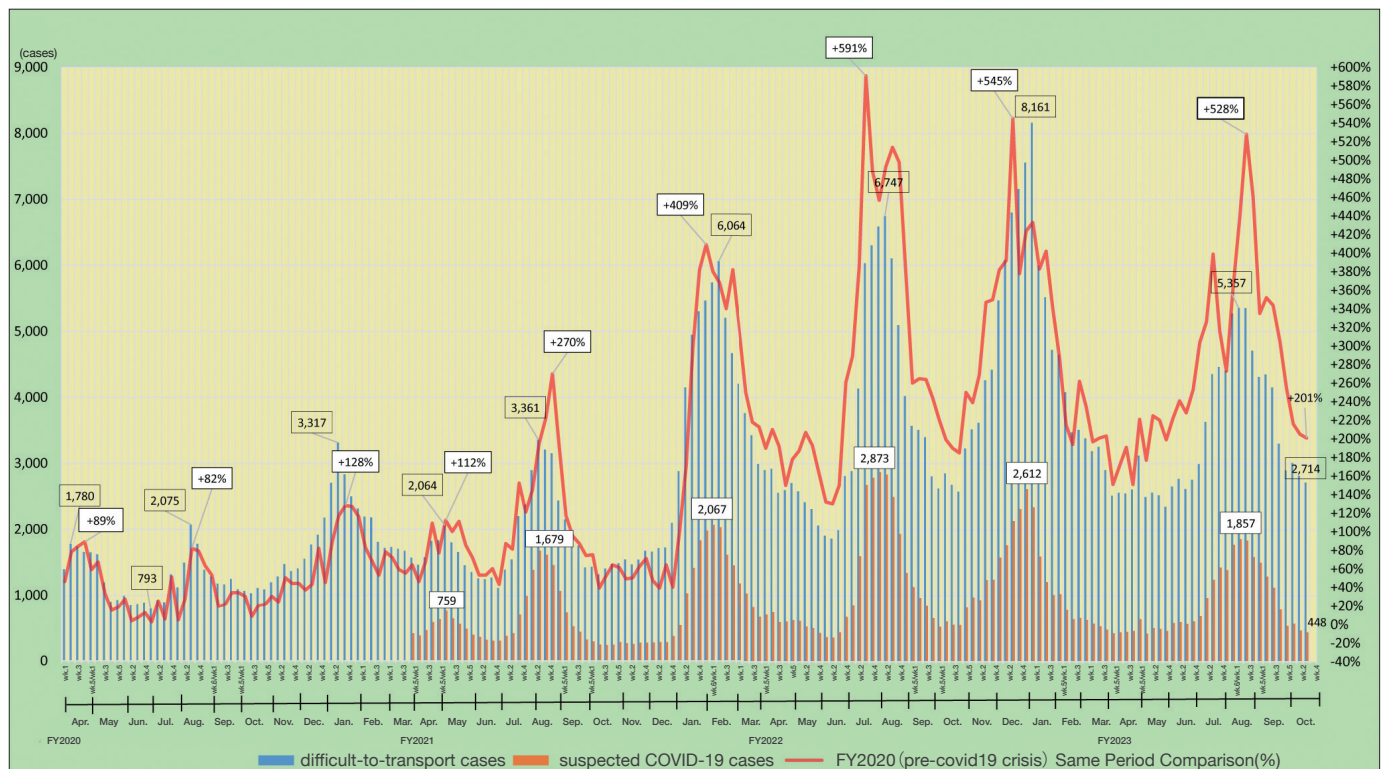
#### Changes to the status of covid-19 under the Infectious Disease Act and the FDMA's response

- On May 8, 2023 COVID-19 was reclassified from a novel influenza infectious disease (equivalent to category 2) to a category 5 infectious disease.
- Therefore, when a 119 call is received from a patient with COVID-19, as ambulance services, firefighting agencies will select and transport them to a medical institution as with other diseases.



#### Response after reclassification of COVID-19 infections to category 5 (firefighting agencies)

- In response to difficult ambulance transport cases, the FDMA has been surveying the number of such cases at 52 fire departments nationwide since April, 2020, and is continuing to do so after the change to category 5.
- The FDMA is requesting firefighting agencies share best practices regarding handling influxes of difficult-to-transport cases, while also making use of prefectural coordinating committees based on the Infectious Disease Act, and coordinating with firefighting agencies and medical institutions, and responding as necessary.

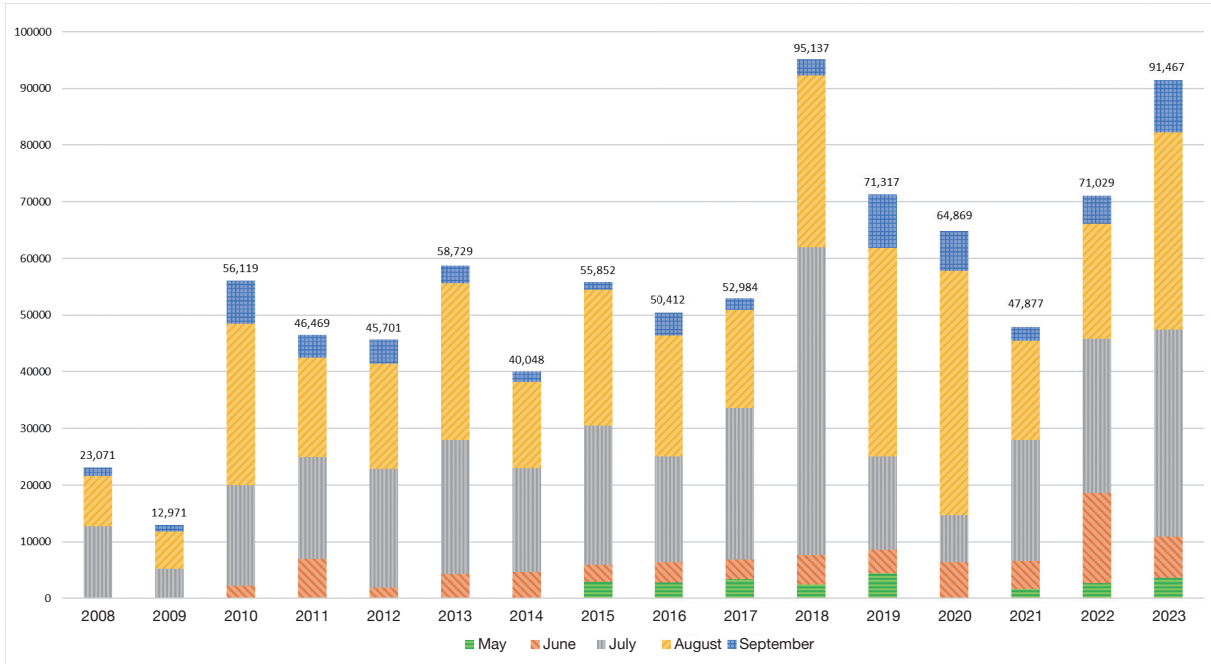


#### Survey results regarding difficult ambulance transport cases from each firefighting agency (weekly comparison)

- \*1: In this survey, "difficult-to-transport cases" are those reported by firefighting agencies to the FDMA of the Ministry of Internal Affairs and Communications as cases in which the ambulance team members "made four or more referrals to medical institutions" and "stayed at the scene for 30 minutes or more. Of these cases, none were not able to be transported to a medical institution.
- \*2: Surveyed headquarters = 52 in total: fire departments of government ordinance-designated cities, Tokyo Fire Department, and representative fire departments of each prefecture.
- \*3: A suspected COVID-19 case is a case involving an injured or sick person with symptoms (fever of 98.6°F/38°C or higher, difficulty breathing, etc.) of a suspected COVID-19 infection (including cases involving patients who, due to the shift to Category 5, were not referred to a medical institution by a health care facility, but were referred by a fire department.)
- \*4: Share the situation with the Ministry of Health, Labor and Welfare and prefectures, etc. to ensure the acceptance system of medical institutions.
- \*5: These figures are preliminary.
- \*6: This survey does not include those that were referred to medical institutions by health care centers.

## Response to Heat Stroke

- The FDMA has been surveying the number of people transported by ambulance due to heat stroke from fire departments nationwide since 2008.
- 91,467 people were transported by ambulance due to heatstroke between May and September of 2023. This is the second highest number of people transported since 2015, when the survey period became May through September.



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
May	NA	NA	NA	NA	NA	NA	NA	2,904	2,788	3,401	2,427	4,448	NA	1,626	2,668	3,655
June	NA	NA	2,276	6,980	1,837	4,265	4,634	3,032	3,558	3,481	5,269	4,151	6,336	4,945	15,969	7,235
July	12,747	5,294	17,750	17,963	21,082	23,699	18,407	24,567	18,671	26,702	54,220	16,431	8,388	21,372	27,209	36,549
Aug.	8,857	6,495	28,448	17,566	18,573	27,632	15,183	23,925	21,383	17,302	30,410	36,755	43,060	17,579	20,252	34,835
Sept.	1,467	1,182	7,645	3,960	4,209	3,133	1,824	1,424	4,012	2,098	2,811	9,532	7,085	2,355	4,931	9,193
Total	23,071	12,971	56,119	46,469	45,701	58,729	40,048	55,852	50,412	52,984	95,137	71,317	64,869	47,877	71,029	91,467

Trend in the amount of people transported by ambulance due to heat stroke from 2008-2023

- The FDMA, in addition to promoting their use among related bodies, provides various forms of content regarding heat stroke prevention such as informational posters on the heat stroke informational page on the FDMA website, and also posts information about heat stroke on X (formerly twitter).



Heat stroke prevention informational poster



Prevention informational video

## Special Feature 3

### Special Fire Prevention Security at the 49th G7 Summit in Hiroshima

- The 49th G7 Summit in Hiroshima was held from May 19-21, 2023, mainly at the Grand Prince Hotel Hiroshima. As the fire department, the FDMA took various measures to ensure fire prevention in related facilities as well as an immediate response system in the event of various kinds of disaster, including terrorist attack.
- The “G7 Hiroshima Summit Fire and Emergency Countermeasure Committee” consisting of the FDMA, Hiroshima prefecture, related fire departments, and the Fire Chiefs Association of Japan, was established to prepare a study system for the summit. During the 7-day alert period between May 16th and May 22nd, Hiroshima Prefecture, 13 fire departments in Hiroshima Prefecture, and 20 fire departments in other prefectures established a fire and emergency prevention security structure with 179 vehicles, 6 fire and disaster prevention helicopters, 4 fire boats, 8 prevention-related vehicles, and 1,777 firefighters and other personnel.
- The FDMA established a general security headquarters with the Hiroshima city fire services bureau department chief as the head, as well as the FDMA security headquarters in the Hiroshima city fire department with the FDMA fire and ambulance service division chief as the head. In addition to operating and coordinating alert units and conducting on-site inspections of related facilities, the FDMA ensured a complete system by deploying units to respond to nuclear, biological, and chemical disasters, conducting air alerts using fire and disaster prevention helicopters, and conducting maritime alerts using fire boats.



General Security Headquarters



On-site Inspection of Related Facilities



Hiroshima Airport On-site Headquarters



NBC Disaster Response Drill



Air Alerts Provided by Fire and Disaster Prevention Helicopters



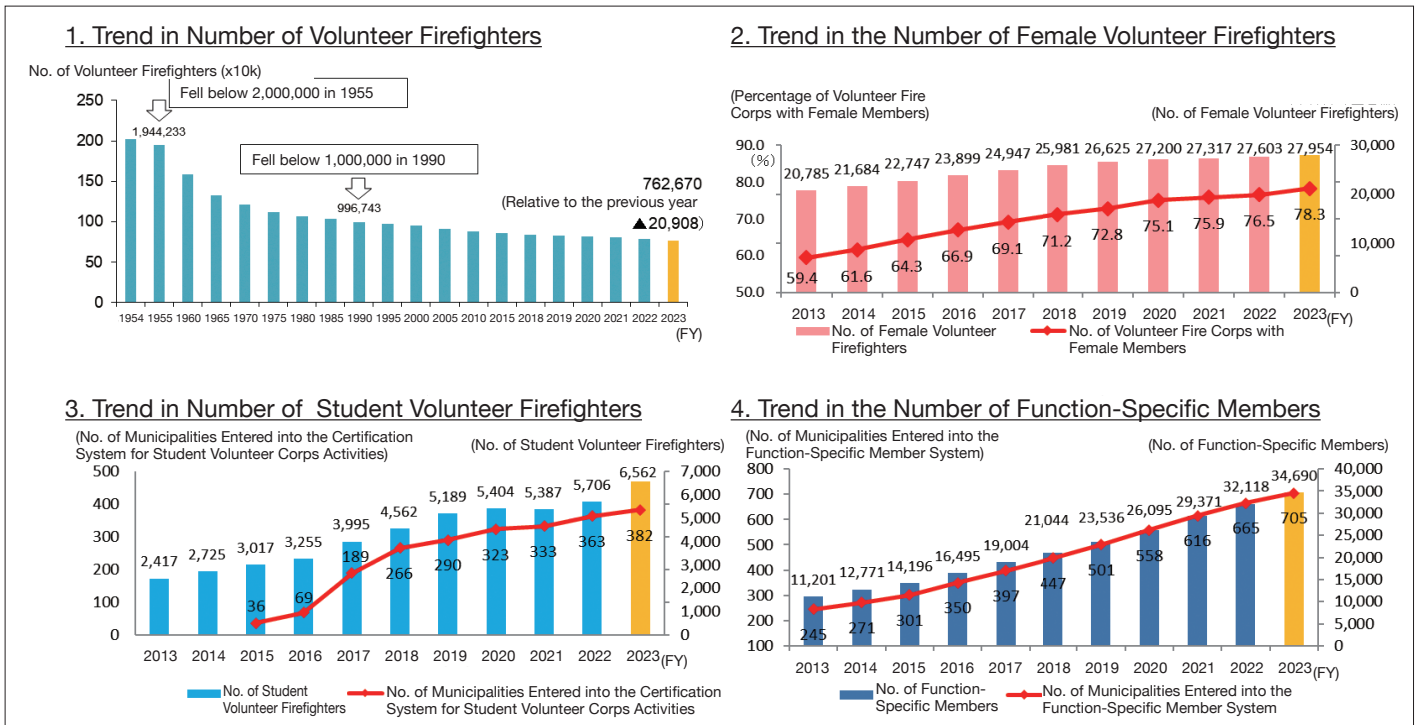
Maritime Alerts Provided by Fire Boats

## Special Feature 4

# Enhancement and Strengthening of Regional Disaster Prevention Capabilities Centered Around Volunteer Fire Corps

### Current State of Volunteer Fire Corps

- The number of volunteer firefighters has decreased year by year. As of April 1, 2023, compared to the previous year, the number decreased by 20,908 to 762,670, and for two consecutive years since 2022, the number has decreased by more than 20,000 compared to the previous year.
- In recent years, the number of retirees has remained at a high level. The number of new recruits is on a declining trend, though it recovered slightly according to the 2023 survey, increasing for the first time in 8 years.
- On the other hand, there is an increasing trend in female volunteer firefighters (1.3% compared to the previous year), student volunteer firefighters (15.0% compared to the previous year), and function-specific members (8.0% increase compared to the previous year).



### Efforts to Enhance and Strengthen Volunteer Fire Corps

- Implementing the following in order to further promote the enlistment of a wide variety of citizens, starting with women and young people.
  - The creation of posters, PR videos, etc. featuring widely known personalities such as Koji Imada and Yuriyan Retriever
  - The dissemination of information through SNS platforms which young people interact with frequently
  - The promotion of the "Certification System for Student Volunteer Fire Corps Activities" which certifies the achievements of students who have served as volunteer firefighters
- Additionally, through the "model project for the enhancement of volunteer fire corps," the FDMA is supporting innovative efforts of local public entities to enhance and strengthen volunteer fire corps starting with securing female, student, and function specific members through publicity for women and young people and promoting joining volunteer fire corps in cooperation with businesses and universities.



Volunteer Fire Corps Recruitment Posters



## Special Feature 5

### Promotion of Digital Transformation in the field of fire and disaster prevention

#### Increasing the Speed and Smoothness of Ambulance Services Using the My Number Card

- With the participation of a large number of fire departments, The FDMA is working to establish a system that allows ambulance teams to access a patient's medical history, medications, and treatments at the site of an emergency by using their My Number Card when selecting a medical institution to transport them to.

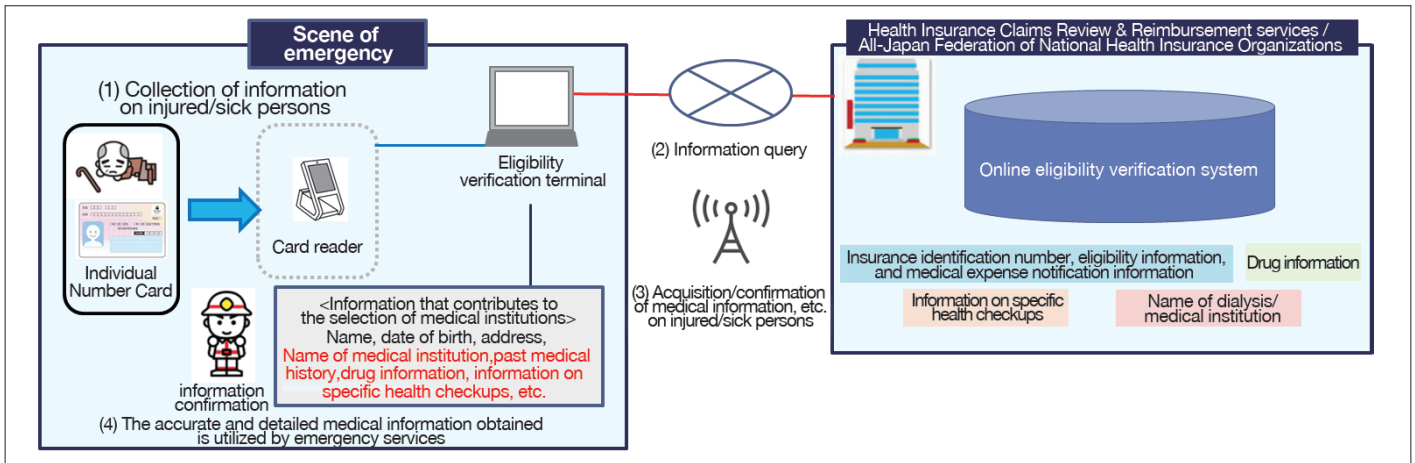
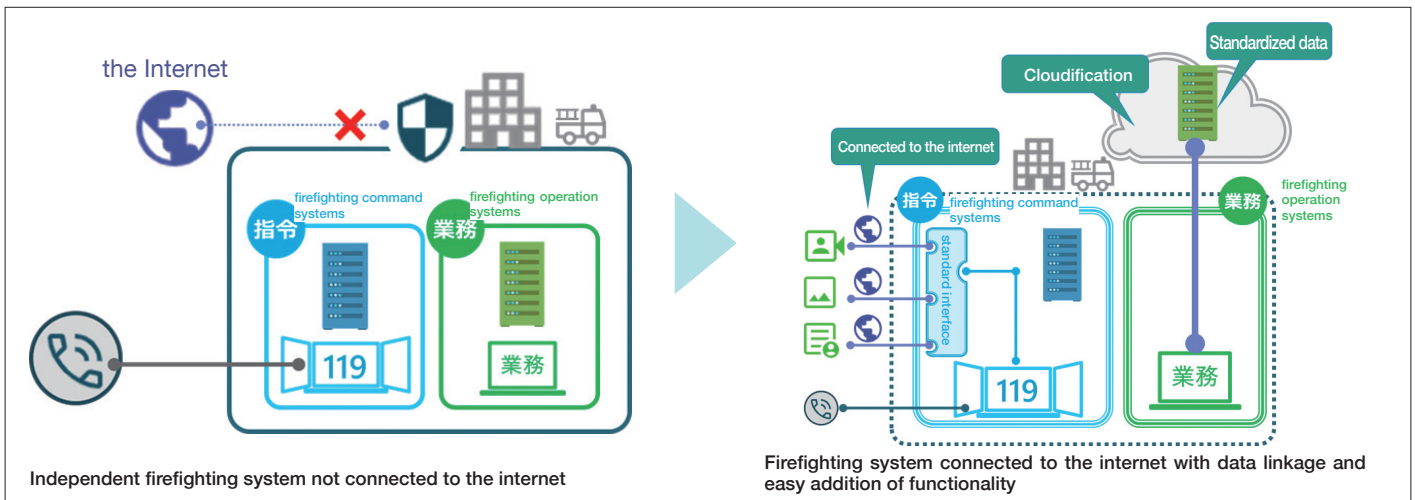


Illustration of the service

#### Standardization of the Firefighting Command System / Cloudification of the Firefighting Operation System

- Taking advantage of the peak of system upgrades at each fire department taking place from FY 2024 to FY 2026, the interfaces of firefighting command systems are being standardized and firefighting operation systems are being shifted to the cloud in order to facilitate coordination between fire departments and with external systems.



#### Deployment of drones to volunteer fire corps / implementation of training

- The project promotes the deployment of drones in volunteer fire corps and the acquisition of drone operating skills in order to improve the information-gathering capabilities of said community based volunteer fire corps and to enable them to quickly and safely assess the situation at the scene of a disaster.

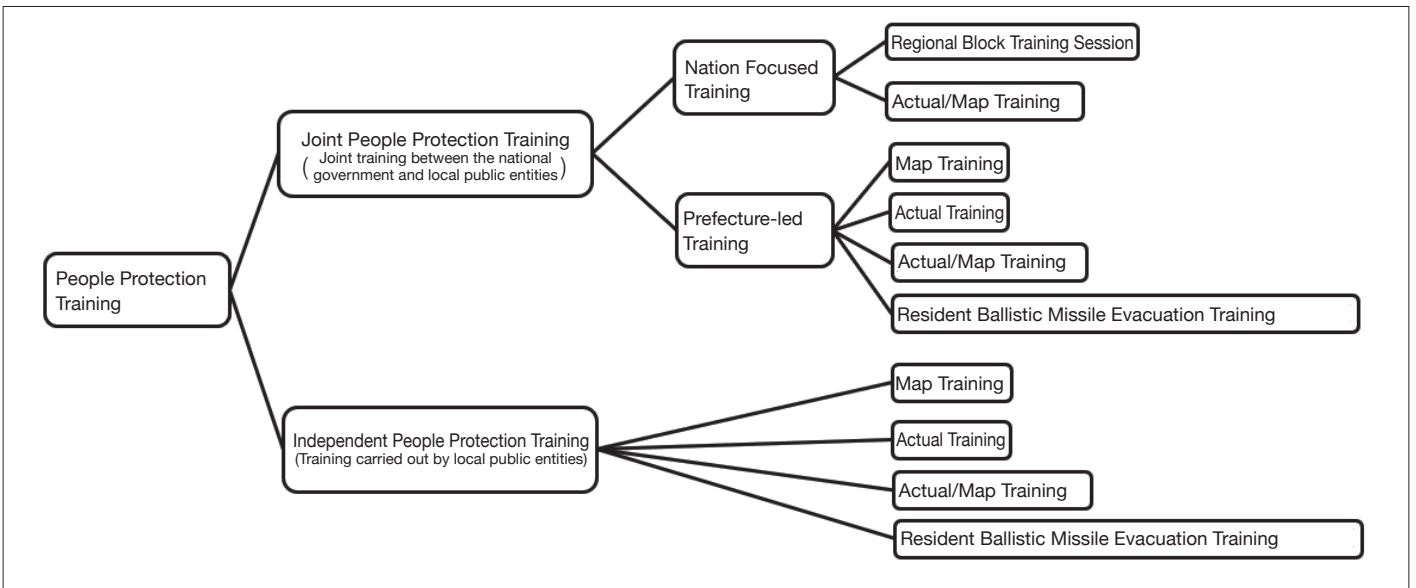


Disaster Response Training Using a Drone

## Special Feature 6 Advancement of People Protection Policies Based on the Recent Security Environment

### Progress on People Protection Policies Based on the Security Environment and Other Factors

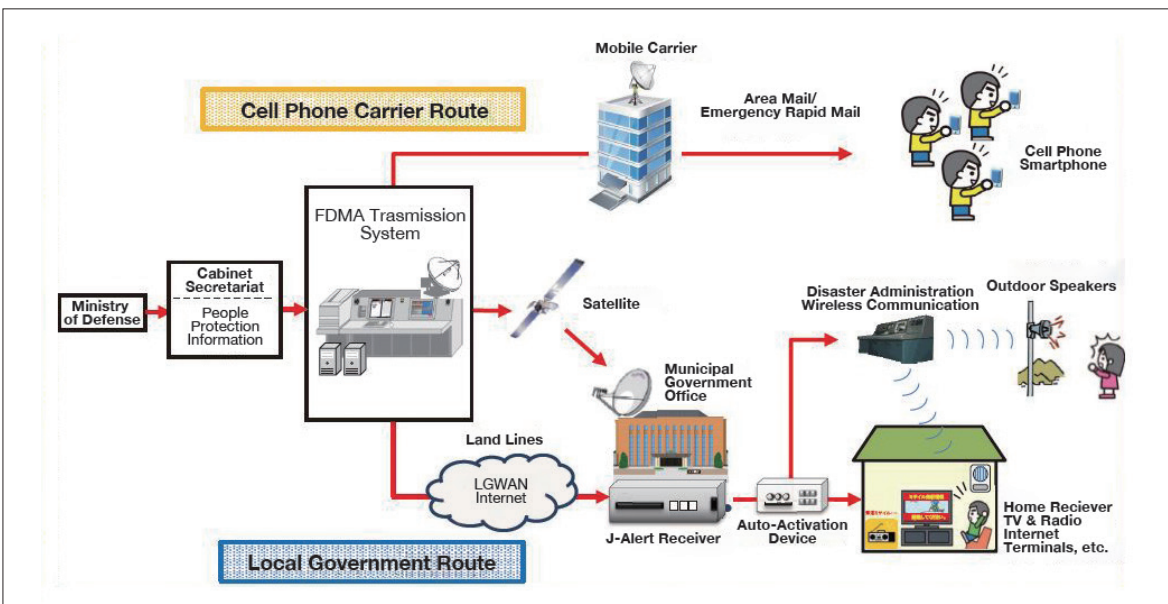
- With the Russian invasion of Ukraine, North Korea launching ballistic missiles, and more, the security environment has become increasingly severe.
- Municipal mayors are required to prepare multiple patterns in order to smoothly establish evacuation procedures for residents in the event of a people protection incident. The FDMA is also conducting training nationwide and working towards improving the effectiveness of evacuations in isolated islands and the municipalities around nuclear power facilities.
- Additionally, the FDMA is encouraging local public entities and facility managers to designate emergency shelters in order to reduce damages from missile strikes, and is promoting such designations nationwide.
- Furthermore, the FDMA, in cooperation with the Cabinet Secretariat, is further promoting nationwide efforts for joint training between the national government and local public entities on people protection measures.



People Protection Training Categories

### The FDMA's Response to Recent Trends in North Korean Missile Launches

- In April, May, August, and November of 2023, when North Korean ballistic missiles with the possibility of landing in or passing over Japanese soil or territorial waters were launched, evacuation warnings were broadcast to the people via J-Alert.
- In order to ensure reliable transmission of information through J-Alert, the FDMA conducts nationwide simultaneous information transmission tests to local public entities, confirms equipment settings, and more.



J-Alert Information Transmission During a Ballistic Missile Launch

## Special Feature 7 100 Years Since the Great Kanto Earthquake

### Overview of the Great Kanto Earthquake

- The Great Kanto earthquake occurred on September 1, 1923, at 11:58 and left approximately 105,000 people dead or missing, while the number of properties damaged from fire and complete or partial collapse reached approximately 370,000.
- It occurred at lunchtime and there were strong winds due to a typhoon, so many fires broke out, and the majority of casualties were due to fires.

### The FDMA's Efforts

- 2023 marks 100 years since the Great Kanto Earthquake occurred, thus, utilizing the experience from that earthquake and using the catchphrase “100 years since the Great Kanto Earthquake. Let’s learn disaster prevention. Let’s save lives,” the FDMA is taking the following steps in order to raise the disaster prevention awareness of each and every citizen and make the importance of earthquake and fire safety common knowledge in order to be prepared for any coming disasters.
  - ▶ Creating a special page about the Great Kanto Earthquake on the FDMA website. This page contains an overview of the earthquake, preparations that can be made for earthquakes and the fires that result from them, information regarding voluntary disaster prevention groups, and experimental footage of firestorms
  - ▶ Creating poster tie-ins with the anime “Firefighter! Daigo of Fire Company M” that teaches about the 100 years since the Great Kanto Earthquake
  - ▶ Conducting publicity efforts that utilize various forms of public relations media such as the FDMA’s PR magazine

etc.

Damages		
Dead and Missing		105,385 people (Of which, deaths due to fire 91,781 people)
Property Damage	Fully Demolished	109,713 properties (Of which, not burnt 79,733)
	Partially Demolished	102,733 properties (Of which, not burnt 79,272)
	Burnt	212,353 properties
	Washed Away Buried	1,301 properties

### 1. 一般住宅 ・ 自宅での基本的事項

丈夫な机やテーブルなどの下にもぐり、机などの脚をしっかりと握りましょう。また、頭を座布団などで保護して、揺れが収まるのを待ちましょう。

- 突然大きな揺れに襲われたときは、まずは自分の身を安全に守れるように心がけましょう。
- 戸を開けて、出入り口の確保をしましょう。
- 棚や棚に乗せてあるもの、テレビなどが落ちてきたりするので、離れて揺れが収まるのを待ちましょう。
- あわてて戸外に飛び出さないようにしましょう。



消防署からのお知らせです

### 地震火災を防ぐポイント

地震火災対策きちんと出来ていますか？

**事前の対策**

- 住まいの耐震性を確保しましょう
- 家具等の転倒防止対策（固定）を行いましょう
- 感震ブレーカーを設置しましょう
- ストープ等の燃焼機種の周辺は整理整頓し、可燃物を近くに置かないようにしましょう
- 充電器タイプ、コンセントタイプ
- 住宅用消火器等を設置し使用方法について確認しましょう
- 住宅用火災警報器を設置しましょう

※火災の発生は建物内住宅用火災警報器などの即時の警報を早く検知・伝達することにより、火災の発生を未然に防ぎ、被害を軽減することができます。火災警報器については消防団長等から知らせています。

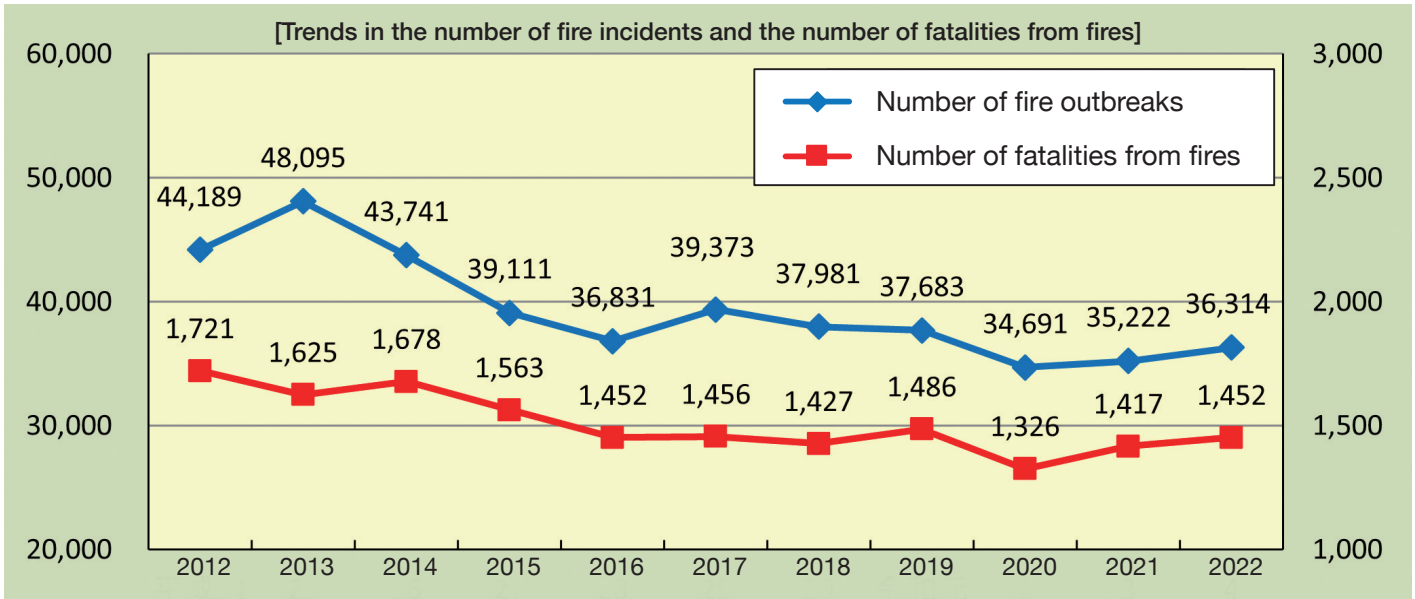
“Important Steps to Prevent Earthquake Fires” Leaflet Outlining Earthquake and Fire Safety (From the Special Web Page about the Great Kanto Earthquake)

FDMA Disaster Prevention Manual –Educational Materials on Earthquake Disaster Safety– (From the Special Web Page about the Great Kanto Earthquake)

# Elementary Items

## Fire Prevention -Number of Fire Incidents/Number of Fatalities from Fires-

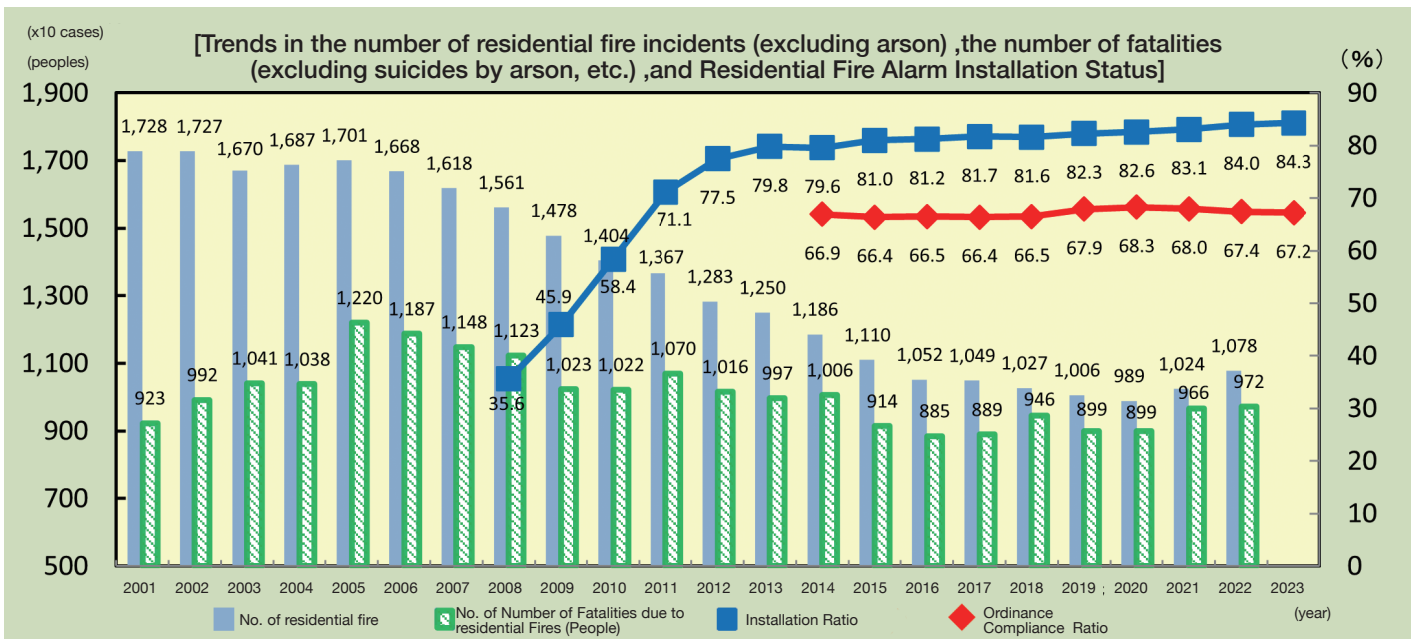
- There is a general downward trend in the number of fire incidents and the number of fatalities from fires over the past 10 years.
- The number of fires in 2022 was 36,314 (increased by 1,092 from the previous year), 82.2% of that of 10 years ago.
- The number of fatalities from fires was 1,452 (35 more than last year), 84.4% of 10 years ago.



Notes: 1. Prepared based on "Fire Report"  
 2. See the left axis for the "Number of fire outbreaks" and the right axis for the "Number of fatalities from fire"

## Fire Prevention -Number of Residential Fire Incidents/Number of Fatalities, Residential Fire Alarm Installation Status-

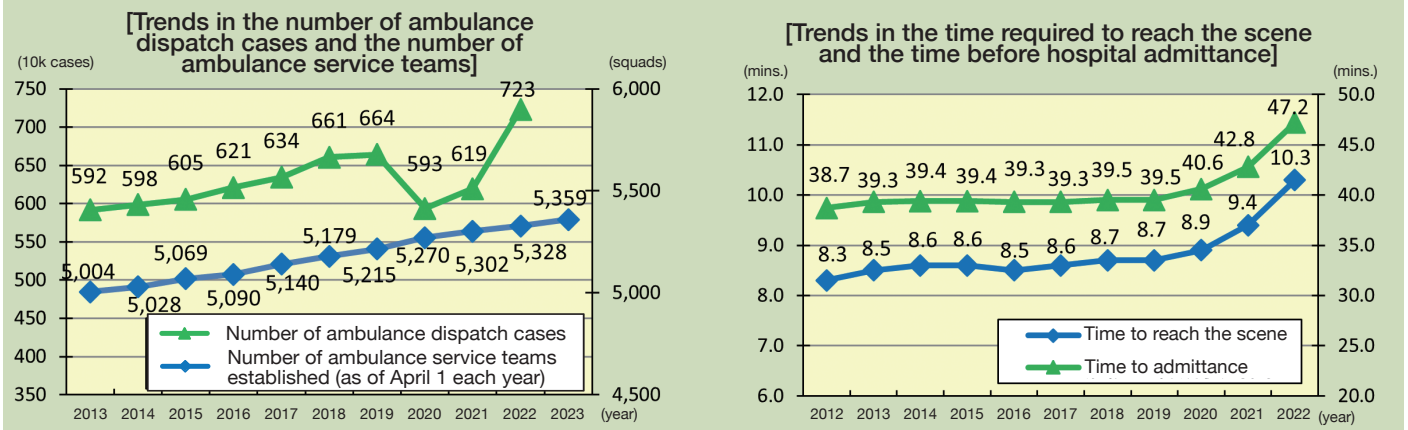
- The majority of deaths from fire occur in house fires.
- The number of residential fire incidents in 2022 was 10,783 (540 more than the previous year), and the number of fatalities was 972 (6 more than the previous year).
- The ratio of homes with residential fire alarms installed is increasing every year. As of June 1, 2023 the rate nationwide was 84.3%, and the rate of compliance with regulations 67.2%.



Notes: 1. Prepared based on "Fire Report" and "the Survey Result Residential Fire Alarm Installation Status"  
 2. The installation rate: The share of households that have installed residential fire alarms in at least one location of the sections of their home in which they are obligated to do so by municipal fire prevention ordinances (including households that are exempt from installing residential fire alarms on account of having installed fire alarm systems, etc.) out of the total number of households.  
 3. The ordinance compliance rate: The share of households that have installed residential fire alarms in every section of their home in which they are obligated to do so by municipal fire prevention ordinances (including households that are exempt from installing residential fire alarms on account of having installed fire alarm systems, etc.) out of the total number of households.  
 4. The number of residential fires and the fatalities in residential fires in 2023 are not yet determined.

## Ambulance System -Status of Ambulance Service Operations-

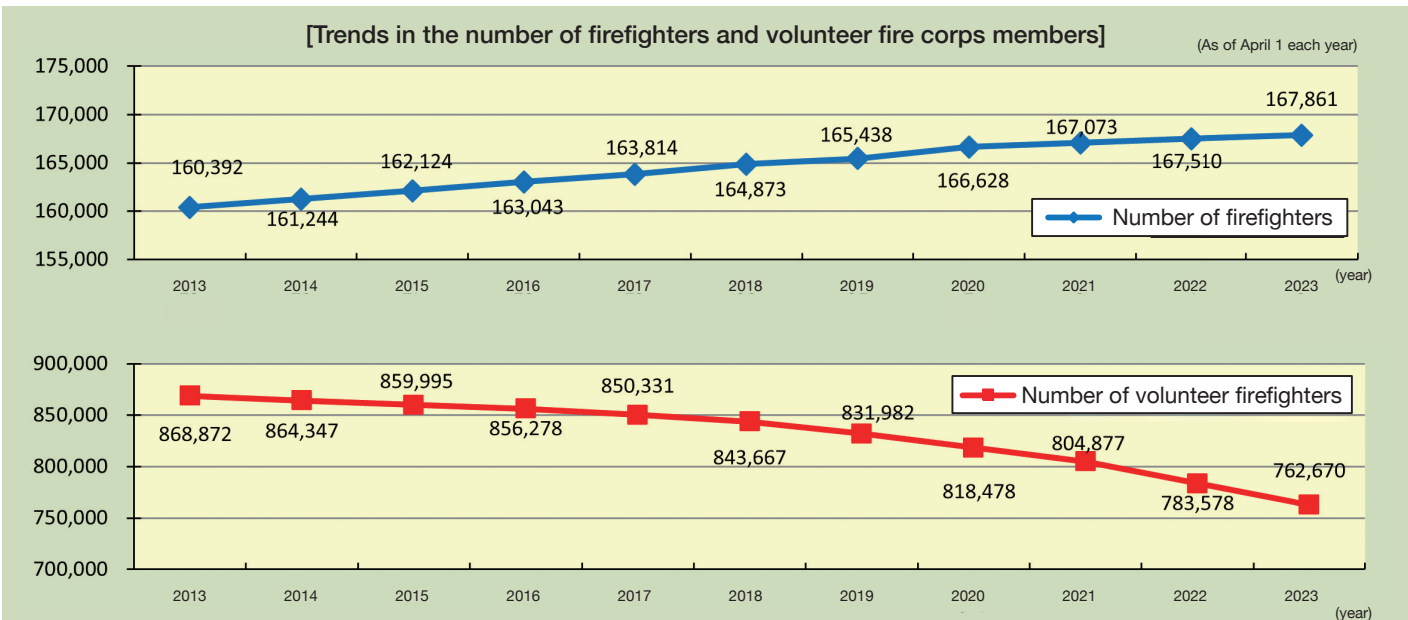
- The number of ambulance service dispatch cases in 2022 was 7,230,000 (approx. 1,040,000 more than the previous year).
- As of April 1, 2023, there were 5,359 ambulance teams, (31 more compared to the previous year) a 7.1% increase compared to 10 years ago.
- In 2022 the average time required to reach the scene was approximately 10.3 minutes (an increase of approximately 2 minutes compared to 10 years prior).
- In 2022 the average time before hospital admittance was 47.2 minutes (an increase of approximately 8.5 minutes compared to 10 years prior).



- Notes:
1. Prepared based on "Fire Report"
  2. The graph on the left refers to the left column regarding the number of ambulance dispatch cases, and to the column on the right regarding the number of established ambulance teams (as of April 1st of each year)
  3. The graph on the right refers to the left column regarding the time required to reach the scene, and to the column on the right regarding time before hospital admittance

## Firefighting System -Fire Defense Organization-

- Fire departments (as of April 1, 2023)
  - There are 722 fire departments, with 1,714 fire stations. There are 167,861 firefighters (an increase of 351 compared to the previous year).
- Volunteer fire corps (as of April 1, 2023)
  - There are 2,177 volunteer fire corps, with 762,670 volunteer firefighters (a decrease of 20,908 compared to the previous year).
  - Volunteer fire corps are the non-standing firefighting agencies in the municipalities. They are in every municipality.



- Notes:
1. Number of firefighters created using the "Survey on the Current State of Fire and Disaster Prevention and Earthquake Countermeasures"
  2. Number of volunteer firefighters created using the "Survey on the Current State of Fire and Disaster Prevention and Earthquake Countermeasures" and the "Survey Regarding the Organization of Volunteer Fire Corps" the total number of households.

## Structure of the Firefighting White Paper

### Special Feature

- Special Feature 1 Improvement of Fire and Disaster Prevention Systems Based on Recent Large Scale Disasters
- Special Feature 2 Countermeasures Against COVID-19 Infection and Responses to Heat Stroke
- Special Feature 3 Special Fire Prevention Security at the 49th G7 Summit in Hiroshima
- Special Feature 4 Enhancement and Strengthening of Regional Disaster Prevention Capabilities Centered Around Volunteer Fire Corps
- Special Feature 5 Advancing Digitization in the Field of Fire and Disaster Prevention
- Special Feature 6 Advancement of People Protection Policies Based on the Recent Security Environment
- Special Feature 7 100 Years Since the Great Kanto Earthquake

### Topics

1. Increase in the Retirement Age of Firefighters
2. Efforts to Promote Women in Firefighting
3. Promotion of the Emergency Relief Center (#7119)
4. Public Relations for the Fire and Disaster Prevention Administration
5. Dispatch of International Fire and Rescue Teams to the Earthquake Disaster In the Republic of Turkey
6. International Cooperation and Exchange
7. Response to Special Fires

### Elementary Items

- Number of Fire Incidents/Number of Fatalities Due to Fires
- Number of Fire Incidents by Main Cause
- Number of House Fire Incidents/Number of Fatalities, Residential Fire Alarm Installation Status
- Status of Ambulance Service Operations
- Number of Rescue Activities by Accident Type
- Number of People Rescued by Accident Type
- Fire Defense Organization
- Trends in the Number and Ratio of Female Firefighters

### <Web Version>

- Section 1 Current Disaster Status and Challenges
- Section 2 Fire and Disaster Prevention Organization and Activities
- Section 3 Measures Towards People Protection
- Section 4 Voluntary Fire and Disaster Activities and Creating Regional Disaster Resiliency
- Section 5 Responses to International Issues
- Section 6 Research and Development of Fire and Disaster Prevention Science and Technology

Materials