



### **ACCESS**

- O From "Kasumigaseki" Station (M15) on the Tokyo Metro
- Marunouchi Line, immediate access from Exit A3b
- O From "Kasumigaseki" Station (H06) on the Tokyo Metro Hibiya Line, immediate access from Exit A3b
- From "Kasumigaseki" Station (C08) on the Tokyo Metro Chiyoda Line, immediate access from Exit A3b
- From "Sakuradamon" Station (Y17) on the Tokyo Metro Yurakucho Line, 3 minute walk from Exit 4
- 丸ノ内線「霞ヶ関」駅下車/A3b出口直結
- 日比谷線「霞ヶ関」駅下車/A3b出口直結
- 千代田線「霞ヶ関」駅下車/A3b出口直結
- 有楽町線「桜田門」駅下車/4番出口徒歩約3分



Central Combined Government Building No. 2, 3rd Floor 2-1-2 Kasumigaseki, Chiyoda-ku, Tokyo, 100-8927 Japan 〒100-8927 東京都千代田区霞が関2-1-2 TEL/03-5253-5111 FAX/03-5253-7531



National firefighter mascot 全国消防イメージキャラクター



https://www.fdma.go.jp/ Fire and Disaster Management Agency My Page 消防庁マイページ



https://www.fdma.go.jp/mission/prevention/suisin/items/r02\_jishinkasai\_honpen\_11m.mp4

Earthquakes and fires caused by them: what you can do to protect yourself 地震火災〜あなたの命を守るために出来る事〜



https://www.facebook.com/npa.student



acebook

Facebook Account Name:「総務省消防庁 -女性活躍-」



https://twitter.com/fdma\_japan



Twitter Account Name: 「総務省消防庁」





Across the country, 723 Fire Service Institutes, around 170,000 personnel, and around 780,000 Volunteer Fire Corps members.

Fire and Disaster Management Agency (FDMA) embodies the spirit of each and every one of them (FDMA). Through fire prevention, firefighting, rescue operations and ambulance services, the agency is "the security and safety of the people", and along with Fire Service Institutions across the country and the crisis management bureaus of prefectures and municipalities, it plays a large role at keeping damage to a minimum and enhancing fire and disaster prevention systems.

In order to properly confront against large-scale disasters that threaten to occur in the future, such as the Nankai Trough Earthquake and the Tokyo Inland Earthquake, FDMA will work hard at making all of the communities in our country safer places where all people can live securely.

"Protecting beloved communities." "Protecting beloved people."

Their spirits inspire the team members to run to the disaster field.

全国の消防本部 723 本部、職員約 17 万人、消防団員約 78 万人。その一人ひとりの想いを束ねるのが消防庁です。火災の予防や消火、救急、救助など「国民の安心・安全」の担い手として、消防防災体制を強化するとともに、全国の消防本部や都道府県・市町村の危機管理局と共に被害を最小限に防ぐ大きな役割を果たしてきました。今後、発生が懸念される南海トラフ地震や首都直下型地震などの大規模地震などにも、一丸となって立ち向かうべく、誰もが安心して暮らせる全国の地域づくりに取り組んでいきます。大好きな街を守りたい。大切な人を守りたい。チームをひとつにして、想いは現場へと走ります。





# **CONTENTS**



- 07 "Emergency Fire Response Teams," elite units that rush to the rescue from every region of the country
- 07 TOPICS 1/ Upgrading the means of sharing image information between the Fire and Disaster Agency and local governments
- 09 Multiplexed and diversified disaster information channels for residents
- 09 Project to dispatch disaster information channel advisors
- 10 Activities of the "Rescue Team", a specialized unit for saving lives
- 10 International emergency assistance and international cooperation
- 05 近年の大規模自然災害への対応
- 07 全国各地から駆けつける精鋭部隊「緊急消防援助隊」
- 07 TOPICS 1/ 消防庁と地方公共団体との間における 映像情報共有手段の充実
- 09 住民への災害情報伝達手段の多重化
- 09 災害情報伝達手段に関するアドバイザー派遣事業
- 10 人命救助の専門部隊「レスキュー隊」の活動
- 10 国際緊急援助・国際協力



### Save lives that can be saved

- 11 Development of firefighting systems and activity environment
- 12 Integration of fire departments for reinforcement
- 12 TOPICS 2/Further promotion of the active participation of female firefighters
- 13 Step-up of lifesaving and ambulance service systems
- 14 TOPICS 3/Efforts with COVID-19

- 11 消防体制・活動環境の整備
- 12 消防の広域化
- 12 TOPICS 2/ 女性消防吏員の更なる活躍推進
- 13 救急救命体制の充実強化
- 14 TOPICS 3/新型コロナウイルス感染症に係る取組



### Prevent fires and industrial disasters recently becoming diversified 多様化する火災・企業災害を未然に防ぐ

- 15 Prevent fires of greater complexity
- 16 Promotion of residential fire prevention measures
- 16 Investigations into the causes of fires and leakage of hazardous materials, and promotion of prevention of fire caused by ignition of products
- 16 TOPICS 4/Response to fire in Kita Ward, Osaka City and future.
- 17 Enhancement of disaster prevention measures for petroleum complexes, etc.
- 17 Preparedness for nuclear disasters
- 18 Safety of hazardous materials facilities

- 15 多様化する火災の予防
- 16 住宅防火対策の推進
- 16 火災原因・流出事故原因調査、製品火災対策の推進
- 16 TOPICS 4/ 大阪市北区ビル火災に係る対応
- 17 石油コンビナート等の防災体制の強化
- 17 原子力災害への備え
- 18 危険物の安全確保



- 20 Activities to improve Volunteer Fire Corps' compensation and promote participation
- 20 Development of voluntary disaster prevention organizations, which support disaster prevention for communities
- 20 消防団の処遇改善・加入促進に関する取組
- 20 地域防災を支える自主防災組織等の育成

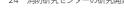


### Protect people from terrorism and armed attacks テロや武力攻撃から国民を守る

- 21 Joint exercises for civil protection
- 22 Preparation of equipment for NBC disasters
- 22 National Early Warning System (J-ALERT)
- 22 TOPICS 5/Promotion of designation of evacuation facilities for civil protection
- 21 国民保護共同訓練
- 22 NBC 対応資機材の整備
- 22 全国瞬時警報システム「Jアラート」
- 22 TOPICS5/国民保護に係る避難施設の指定促進



- 23 Educational training for firefighters and Volunteer Fire Corps
  - "e-COLLEGE" anyone can learn about disaster prevention and risk management via the Internet no matter when
- 24 Technological research and development in fire and disaster prevention
- 24 Research and development of the National Research Institute of Fire and Disaster
- 23 消防職員・団員の教育訓練
  - ●いつでも、誰でも、ネットで学べる防災・危機管理 e- カレッシ
- 24 消防防災における科学技術の研究・開発
- 24 消防研究センターの研究開発





- 25 Organizations and Facilities
- 26 Emergency Management Center

- 25 組織·施設
- 26 消防防災・危機管理センター



Mission of Fire and Disaster Management Agency (FDMA)

消防庁の役割

**FDMA** 

Local communities

Large-scale disaster

Serious incidents

Armed attack

or accident

Local communities

Municipal governments

Prefectural

**FDMA** 

FDMA serves as the foundation for

Within a rapidly changing socio economy

and the consequently changing societies of communities, FDMA strategically and

practically creates secure and safe

communities through developing requisite laws

and guidelines, and preparing vehicles and

equipment, through cooperation with Fire Service

Institutes and local governments across the

社会経済情勢等の変化とこれに伴う地域社会の変化の中で、「安全・安心な地域づくり」 を戦略的かつ実践的に推進していくため、全国の消防本部や地方公共団体と連携して、 必要な法令・ガイドラインの整備、車両・資機材の配備を行います。

Tasks of fire service

Utilizing the available facilities and human resources,

fire service shall protect the lives, physical being and

property of the public from fire, and take precautions against disasters such as storms, floods, fires and

earthquakes, while mitigating the damage of these

disasters. Fire service is also responsible for the

appropriate transport of persons who have sustained

injuries due to a disaster. (Fire and Disaster Management Organization Act, Clause 1)

U[gal IIIZaltiOIT Act, - Clause 1) 消防は、その施設及び人員を活用して、国民の生命、身体及び財産を火災から保護す るとともに、水火災又は地震等の災害を防除し、及びこれらの災害による被害を軽減 するほか、災害等による傷病者の搬送を適切に行うことを任務とする。 (当監知線法第1条)





In the event of emergencies such as extraordinary

natural disasters including large-scale earthquakes and typhoons, catastrophic accidents and terror

attacks, with which each local fire and disaster

team alone cannot cope, FDMA grabs the big

picture of damage immediately, and at the

same time, dispatches Emergency Fire

Response Teams to the disaster hit area,

in order to minimize the damage.

• Earthquake • Tsunami • Wind and flood damage

Volcanic eruption • Fire
Hazardous material accident • Nuclear disaster
Aviation accident • Marine accident

・地震災害・津波災害・風水害・火山災害・火災・危険物事故・原子力災害 ・航空事故・海上事故・鉄道事故・道路事故

Landing invasion • Missile attack
 Attack by guerrillas or special operation forces
 Aorial intrusion

· Railroad accident · Road accident

ハイジャック・大量殺傷型テロ・重要施設テロ

Aerial piracy · Mass killing terror attack
Terror attack on principal facilities

Disaster types 災害の種類



Preparedness for large-scale disasters, such as the Nankai Trough Earthquake and the Tokyo Inland Earthquake

ighters received encouragement from the FDMA missioner, October 9th 2014, Hakkai Mountain

筋庁長官による消防隊員の激励 /

/illa, Otaki Village



# Utilize the lessons learned from past disasters to prepare for future large-scale disaster situations 過去の災害の教訓を活かし、今後の大規模災害に備える

Since the Great East Japan Earthquake, the most serious disaster since World War II, we have faced numerous challenges in various aspects such as the preparation of diversified disaster information tools for residents, secure and rapid mobilization of firefighting forces, support for long-term firefighting activities, and the safety of firefighters and Volunteer Fire Corps.

In addition, frequent large-scale disasters, such as landslide disasters and volcanic eruptions, have caused enormous damage recently.

Utilizing the lessons learned from these disasters, FDMA is building fire and disaster management systems to protect citizens by functional enhancement of the Emergency Fire Response Teams and other measures, in preparation for anticipated large-scale earthquakes like the Nankai Trough Earthquake and the Tokyo Inland Earthquake.

戦後最大の災害となった東日本大震災では、住民への多様な災害情報伝達手段の確保、消防力の確実かつ迅速な投入、長期に及ぶ消防活動への対応及び消防職団員の安全確保など、さまざまな課題が残されました。

また、近年、大規模土砂災害や火山噴火災害など、甚大な被害をもたらす災害が多発しています。

消防庁では、これらの災害の教訓を活かし、今後発生が懸念される南海トラフ地震、首都 直下地震などの大規模地震に備え、緊急消防援助隊の機能強化など、国民の命を守る消防防 災体制の構築に取組んでいます。

# Response to large-scale natural disasters in recent years

近年の大規模自然災害への対応

Mission

At its headquarters for disaster management, FDMA is working with local governments to promote disaster response measures by establishing a wide-area firefighting support system in response to requests from affected municipalities and dispatching staff on site.

消防庁では、災害対策本部において被害状況を速やかに把握するとともに、被災自治体からの要請に応じた広域的な消防応援体制の構築や職員の現地派遣を通じ、政府と自治体が一体となった 災害応急対策を推進しています。

### The Great East Japan Earthquake 東日本大震災

At 14:46 on March 11th, 2011, the Great East Japan Earthquake struck. The fatalities reached up to 22,312 including missing persons. 120,000 houses and buildings were completely destroyed and another 280,000 partially damaged as of March 1, 2012.

The FDMA commissioner ordered the dispatch of Emergency Fire Response Teams to 44 prefectures other than the affected prefectures. Thus, approximately 31,000 units (about 110,000 members) went to the disaster hit areas and performed search and rescue activities for 88 days, saving a total of 5,064 people. Also, when the Fukushima Daiichi nuclear disaster occurred, FDM A received a request from the Prime Minister and the Minister for Internal Affairs and Communications for the Emergency Fire Response Teams to discharge water to the used nuclear fuel pools at the power plant.

平成 23 年 3 月 11 日 14 時 46 分に発生した東日本大震災は、死者・行方不明者 2 万 2,312 人 の人的 被害と、全療約 12 万棟、半壊約 28 万棟の住家被害(会和 4 年 3 目 1 日時点)をもたらしました。

地震発生直後、被災県以外の 44 都道府県に対して、消防庁長官から緊急消防援助隊の出動を指示しました。延べ約 3 万 1,000 隊、約 11 万人の隊員が被災地へ派遣され、消火・救助・救急活動を 88 日間にわたり行い、5,064 人の人命を救助しました。また、福島第一原子力発電所事故に際しては、内閣総理大臣や総務大臣からの要請を受けて、使用済核燃料プールへの放水活動を行いました。



Emergency Fire Response Teams being called out to the disaster hit areas/ Otsuchi-cho, lwate, the Great East Japan Earthquake 被災地へ出動中の緊急消防援助隊 / 東日本大震災・岩丰県大槌町



Rescue operations in Miya 宮城県における救急活動



Rescue operations by a firefighting helicopter/ Kesennuma City, Miyagi, the Great East Japan Earthquake 消防防災ヘリコプターによる救助活動 /



Firefighting in Kesennuma City, Miyagi 宮城県気仙沼市における消火活動

### Mount Ontake Eruption

On September 27th 2014, Mount Ontake along the border of Nagano and Gifu Prefectures erupted, killing 63 people (including missing people).

FDMA dispatched 1,049 units of Emergency Fire Response Teams consisting of 4,332 members, including hyper rescue units with equipment for detecting volcanic gas, and rescue and aerial units specializing in mountainous regions. The Emergency Fire Response Team implemented information gathering with FDMA helicopters, and search and rescue on the top of the mountain while combatting the pile of volcanic ash.

平成 26 年 9 月 27 日、長野県・岐阜県の県境にある御嶽山が噴火し、死者・行方不明者 63 名という甚大な被害が発生しました。

消防庁では、火山ガスの検知が行える資機材を保有する高度救助隊、山岳地域での活動に 精通した救助隊及び航空隊など、延べ1,049隊4,332人の緊急消防援助隊を派遣し、消防 庁へリによる被害情報の収集、火山灰をかきわけながらの要救助者の捜索・救助等を行いました。

### Torrential rain in July 2018 亚成 30 年 7 日亭雨

From June 28 to July 29, 2018, torrential rains across a wide area of Japan, mainly in western Japan, caused flooding and landslides in various parts of the country. As many as 271 people were killed or missing, and more than 46,000 houses were damaged (as of August 20, 2019).

FDMA dispatched 1,383 units of the Emergency Fire Response Team, consisting of 5,385 members, to Okayama, Hiroshima, Ehime, and Kochi Prefectures. They utilized special vehicles such as amphibious buggies and aerial units to search, rescue, and collect damage information.

平成 30 年 6月 28 日から 7 月 29 日にかけて西日本を中心に全国的に広い範囲で発生した豪雨の影響で、各地で河川の氾濫による浸水や土砂崩れが発生し、全国で死者・行方不明者 271 名、住家被害 4.6 万戸以上(令和元年 8 月 20 日時点)となるなど甚大な被害が発生しました。

消防庁では、岡山県、広島県、愛媛県及び高知県に対して、延べ1,383 隊5,385 人の緊急消防援助隊を派遣し、水陸両用パギー等の特殊車両や航空隊を活用して、捜索・救助、被害情報の収集などを実施しました。

# Rescue operations by aerial units 航空隊による救助活動

Search operations with amphibious buggies 水陸両用バギーによる捜索活動

28th 2014, Otaki-guchi Mountain Trail, Mouni Ontake (courtesy of Tokyo Fire Department) パスケット担架等を用いた搬送/

御嶽山王滝□登山道(東京消防庁排

### Atami landslide in Atami City, Shizuoka Prefecture 静岡県熱海市土石流災害

Following torrential rainfall in 2021 that went on from June, a landslide was triggered that swept through a residential area in the Izuyama district of Atami City, Shizuoka Prefecture, at around 10:30 a.m. on the 3rd of July, causing extensive damage, including 28 deaths and missing residents (as of November 18, 2022).

FDMA dispatched 2097 units of the Emergency Fire Response Team, consisting of 7,961 personnel, to Shizuoka Prefecture to collect information from the sky using drones and other equipment and to search for and rescue people who needed to be rescued while using heavy machinery to remove mud and debris that came with the landslide that, at the time, had accumulated over a wide area.

令和3年6月末から日本付近に停滞した梅雨前線の影響で、7月3日10時30分頃、静岡県熱海市伊豆山地区の住宅地で大規模な土石流が発生し、住民等の死者・行方不明者が28名(令和4年11月18日時点)となるなど甚大な被害が発生しました。

消防庁では、静岡県に対して、延べ 2,097 隊 7,961 人の緊急消防援助隊を派遣し、ドローン等を活用した上空からの情報収集、重機等を活用した広範囲に堆積した土石流による泥やがれき等を除去しながら要救助者の捜索・救助等を行いました。



What the entire aftermath of the landslide looked like 土石流現場全容

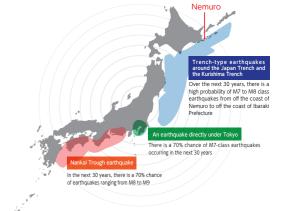


Operations by the East Kyoto Team 東京都大隊活動状況

### Preparation for large-scale disasters in the future

The Nankai Trough Earthquake and the Tokyo Inland Earthquake are forecasted in the future. The damages caused by these earthquakes are expected to be more severe than the Great East Japan Earthquake. Therefore, FDMA is on the way to expand the Emergency Fire Response Team significantly and upgrade their activity systems. In addition, FDMA is making every effort to enhance the fire and disaster management in such measures as strengthening the community's capability in disaster prevention with a focus on Volunteer Fire Corps and sophisticating disaster and risk managements of local governments by utilizing ICT and so forth.

東日本大震災を上回る被害が想定される南海トラフ巨大地震や首都直下地震等に備え、消防庁では、緊急 消防援助隊の大幅増隊、活動体制の充実強化などを図るとともに、消防団を中核とした地域防災力の充実強 化、ICT等を活用した地方公共団体の防災・危機管理体制の高度化など、消防防災体制の充実強化に取組ん でいます。



05

# Mission

# "Emergency Fire Response Teams," elite units that rush to the rescue from every region of the country

The fire service organization in each region is primarily responsible for defending the security and safety of its local residents. However, when a large-scale, or extraordinary disaster occurs, the fire service organization in the disaster hit area alone might not be able to respond adequately to all requests for firefighting, rescue operations, and ambulance services. Such cases require support beyond the borders of local governments.

According to this concept, the Emergency Fire Response Team was established based on the lessons learned from the Great Hanshin-Awaji Earthquake in 1995. The Emergency Fire Response Team is formed with the elite units which serve specific functions in order to respond to various types of disaster. They have gone into action in various disasters - the Great East Japan Earthquake in 2011, the torrential rains of 2018 in July, and the landslide of Atami City, Shizuoka Prefecture of 2021, just to name a few - and performed firefighting, search and rescue operations, and other activities.

消防機関は、それぞれの地域における住民の安全・安心を守っていますが、大規模・特殊 災害が発生した際、被災地の消防機関だけでは消火、救助、救急活動等の要請に対応できな い場合には、自治体の枠を超えて対応する必要があります。

こうした考えから、平成7年に発生した阪神・淡路大震災の教訓をもとに創設されたのが、

緊急消防救助隊です。緊急消防援助隊は、様々な災害に対応できるよう機能別に編成された 精鋭部隊から構成されており、平成23年の東日本大震災、平成30年の7月豪雨、令和3 年の静岡県熱海市土石流災害等の、様々な災害に出動し、消火・救助等の活動を実施してい

# Development of Emergency Fire Response Teams 緊急消防援助隊の体制整備

As the Emergency Fire Response Team was active for a longer period and in wider areas during the Great East Japan Earthquake, FDMA has formulated the "Plan regarding the basics of Emergency Fire Response Team formation and facility arrangement", and decided to substantially increase the number of units registered as the Emergency Fire Response Teams to 6,600 by the end of fiscal 2023.

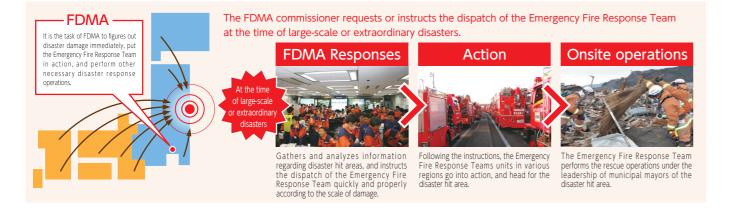
In addition, in preparation for the Nankai Trough earthquakes and earthquakes that may occur directly under Tokyo, we have prepared an action plan for the Emergency Fire Response Team based on damage estimates from each earthquake. By sharing the action plan with Fire Service Institutions nationwide in advance, we have put in place a system that enables the Emergency Fire Response Team to immediately dispatch even under chaotic circumstances at the beginning of a disaster.

消防庁では、東日本大震災での緊急消防援助隊の派遣が広域化・長期化したことを踏まえ、「緊急消防援助隊の編成 及び施設の整備等に係る基本的な事項に関する計画」を策定し、令和5年度末までに緊急消防援助隊の登録隊数を6,600 隊に増強することとしています。

また、懸念される南海トラフ地震、首都直下地震に備え、各地震の被害想定を踏まえた緊急消防援助隊のアクション プランも作成しています。アクションプランを全国の消防本部と予め共有することにより、発災初期の混乱した状態に おいても緊急消防援助隊が即座に出動するための体制を整えています。



The 6th National Joint exercise of Emergency Fire Response Team 第6回 緊急消防援助隊全国合同訓練



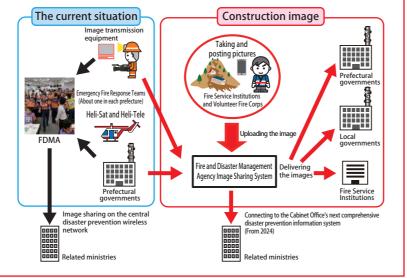
### Upgrading the means of sharing image information between the Fire and Disaster Agency and local governments 消防庁と地方公共団体との間における映像情報共有手段の充実

In order to enhance the means of image sharing between national and local governments in the event of a disaster, FDMA is working to build a "Fire and Disaster Management Agency Image Sharing System" that comes with a function to post videos taken with smartphones and other devices. FDMA believes that the early sharing of images by the Volunteer Fire Corps and Fire Service Institutions, which are the earliest to arrive at the scene of a disaster, by the concerned Fire Service Institutions is effective for early identification of damage and swift response.

With the aim of helping the government make prompt and accurate decisions, the system will be connected to the next comprehensive disaster prevention information system that is set to be developed by the Cabinet Office (in charge of disaster prevention) by the end of 2022, and will also be aimed at enhancing information sharing with relevant ministries and

災害時における国・自治体間の映像共有手段の充実を図るため、 スマートフォン等で撮影した映像の投稿機能を有した「消防庁映像 共有システム」の構築に向けて取り組んでいます。災害現場に最も 早く駆けつける消防団・消防本部の映像を、消防の関係機関が早期 に共有することは、被害の早期把握や迅速な対応の実現に有効であ ると老えます。

当システム整備後は、政府の迅速かつ的確な意思決定を支援するこ とを目的に、内閣府(防災担当)が令和6年度中に整備予定として いる次期総合防災情報システムへ接続させ、関係省庁との情報共有の 充実も目指します。



# Functional enhancement of Emergency Fire Response Teams

FDMA has been promoting functional enhancement of the Emergency Fire Response Team, based on the lessons learned from the Great East Japan Earthquake. In recent years, it has been strengthening their disaster response capabilities to carry out efficient rescue activities by developing high-spec drones and small rescue vehicles in order to respond to increasingly severe and frequent landslides, storms, and floods. In addition, on the assumption that the Emergency Fire Response Teams sometimes needs to operate for an extended period of time, FDMA promotes preparation of the operational base-forming vehicles, which are equipped with large air tents, lavatories, shower facilities, and information and communication equipment, and are capable of accommodating 100 firefighters.

消防庁では、東日本大震災の教訓を踏まえ、緊急消防援助隊の機能強化を進めています。 近年、激甚化・頻発化する土砂・風水害等に対応するため、ハイスペックドローンや小型救 助車の整備等により、効率的な救助活動を行うよう災害対応力を強化しています。さらに、

緊急消防援助隊が長期にわたり活動することを想定し、大型エアーテント、トイレ、シャワー、 情報通信機器等を積載し、100人規模の宿営が可能な拠点機能形成車の配備も進めています。



Operation base forming vehicle 拠点機能形成車

### Mobility enhancement by preparation of firefighting helicopters

With their high speed and mobility, the firefighting helicopters are expected to perform firefighting and disaster response such as rescue operations in mountains and at sea, aerial firefighting in forest fires, and emergency ambulance transport of sick people from distant places.

At the time of a large-scale disaster, they play an important role in revealing damage conditions immediately in order to determine the required scale, equipment, and deployment of the Emergency Fire Response Team.

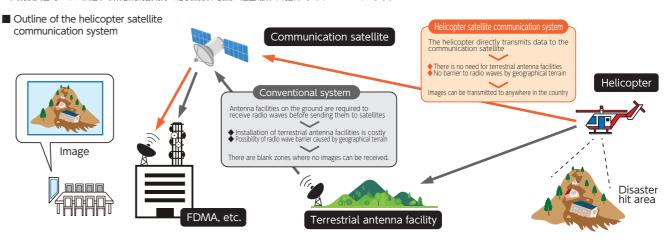
In order to step up the broad-based disaster information gathering arrangement, FDMA promotes the preparation of its own helicopters and the installation of helicopter satellite communication systems, which can directly transmit image information to satellites.

消防防災へリコプターには、山岳や海上での救助活動のほか、林野火災における空中消火、 緊急性の高い傷病者の遠隔地への救急搬送など、ヘリコプターの高速性・機動性を活かした 消防防災活動が期待されています。

大規模災害時には、派遣する緊急消防援助隊の必要規模や装備、進出場所を判断するため

被害状況を迅速に把握する重要な役割を担っています。

消防庁では、広域的な災害情報収集体制の充実強化のため、消防庁へリコプターの整備を 進めるとともに、人工衛星へ直接映像情報を伝送するヘリサットシステムの搭載などを進め



### Dispatch Date Name of Disaster

### ◆ Emergency Fire Response Team established in June 1995

December 6th 1996 Sand and stone avalanche in Gamaharazawa September 4th 1998 Earthquake with its origin inland of Northern Iwate Prefecture (seismic intensity: lower 6)

March 29th 2000 Mount Usu eruption October 6th 2000 Earthquake in Western Tottori Prefecture (seismic intensity: upper 6)

March 24th 2001 Geiyo earthquake (seismic intensity: lower 6) July 26th 2003 Earthquake with its origin in Northern Miyagi Prefecture (seismic intensity: lower 6 - upper 6)

August 22nd 2003 Explosion fire accident at Mie Prefecture Refuse-Derived Fuel Power Plant September 8th 2003 Bridgestone Tochigi factory fire in Kuroiso City, Tochigi Prefecture September 26th 2003 Earthquake offshore of Tokachi (seismic intensity: lower 6) September 28th 2003 Idemitsu Kosan Hokkaido refinery naphtha storage tank fire

### ◆ After legislation, April 1st 2004 July 3rd 2004 Torrential rain in Niigata and Fukushima

July 18th 2004 Torrential rain in Fukui October 21st 2004 Flood damage from Typhoon Tokage in Toyooka City, Hyogo Prefecture October 23rd 2004 Earthquake in Chuetsu, Niligata Prefecture (seismic intensity, 7)

March 20th 2005 Earthquake with its origin offshore of Western Fukuoka Prefecture (seismic intensity: lower 6)
April 25th 2005 JR West Fukuchiyama Line rail crash

January 30th 2007 Buried vehicles due to landslide in Kamikitayama Village, Yoshino District, Nara Prefecture

March 25th 2007 Noto Peninsula earthquake (seismic intensity: upper 6)
April 15th 2007 Earthquake with its origin in Central Mie Prefecture (seismic intensity: upper 5)
July 16th 2007 Earthquake offshore of Chuetsu, Niigata Prefecture (seismic intensity: upper 6)

### | Dispatch Date

June 14th 2008 Iwate and Miyagi inland earthquake (seismic intensity: upper 6) July 24th 2008 Earthquake with its origin in the Northern Coast of Iwate Prefecture (seismic intensity:  $\frac{1}{2}$ 

Name of Disaster

August 11th 2009 Earthquake with it origin in Suruga Bay (seismic intensity: lower 6)
March 11th 2011 Tohoku Earthquake and Tsunami (the Great East Japan Earthquake) (seismic

intensity: 7) October 16th 2013 Landslide in Izu Oshima due to Typhoon Wipha August 20th 2014 Landslide in Hiroshima City due to torrential rains

September 27th 2014 Mount Ontake eruption November 23rd 2014 Earthquake with its origin in Northern Nagano Prefecture

May 29th 2015 Kuchinoerabu-jima eruption September 10th 2015 Kanto and Tohoku torrential rain

April 14th 2016 Kumamoto earthquake (seismic intensity: 7) August 31st 2016 Damage from Typhoon Lionrock March 27th 2017 Avalanche in Nasu Town, Tochigi Prefecture

July 5th 2017 Torrential rain in Northern Kyushu
April 11th 2018 Yabakei landslide occurred in Nakatsu city, Oita prefecture

June 18th 2018 Earthquake with its origin in Northern Osaka Prefecture (seismic intensity: lower 6) July 2018 Torrential rain

eptember 6th 2018 Hokkaido Eastern Iburi earthquake (seismic intensity: 7)

August 28th 2019 A disaster caused by ongoing heavy rain in August 2019
October 13th 2019 A disaster caused by the East Japan Typhoon (Typhoon No. 19) in the first year of

the Reiwa era July 4th 2020 Torrential rain in July 2020

February 25th 2021A forest fire in Ashikaga City, Tochigi Prefecture

July 3rd 2021 Atami landslide in Atami City, Shizuoka Prefecture

# Multiplexed and diversified disaster information channels for residents

FDMA has developed the fire and disaster prevention communication network - which must be robust for quick and proper information gathering and sharing at the time of large-scale disasters. The network includes the central wireless communication network used for sharing information in the government, the fire and disaster prevention wireless communication network connecting FDMA and the prefectural governments, and the municipal disaster information wireless broadcast system to transmit information

大規模災害時に、迅速かつ確実に災害情報の収集及び伝達を行うため、災害に強い消防防 災通信ネットワークの整備が不可欠です。消防庁では、政府内の情報収集に使用する中央防 災無線網、消防庁と都道府県を結ぶ消防防災無線、市町村から住民に情報を伝達する市町村 防災行政無線等の消防防災通信ネットワークの充実強化に取組んでいます。

### Rapid and reliable transition of disaster information to residents 災害情報の住民への迅速かつ確実な伝達

In large-scale disasters, the collection of damage information, and reliable transmission of instructions for evacuation and other information to residents are important. In the Great East Japan Earthquake, some of the disaster information wireless broadcast systems were disabled due to breakage, damage, and loss of power caused by the earthquake and the tsunami.

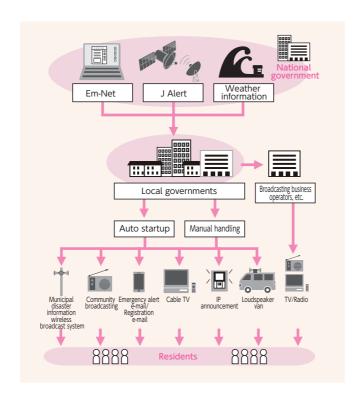
Therefore, to secure reliable and rapid transmission of damage information to all residents, we have to increase communication methods such as cable TVs, community broadcasting services, emergency alert e-mail, and TVs, rather than just depending on the disaster information wireless broadcast systems.

FDMA enhances the disaster-proof performance of the communication methods and combines multiple communication methods for the multiplexing and diversification of the disaster information channels.

大規模災害時においては、被災情報などの収集と住民への避難指示等の確実な伝達が重要 です。東日本大震災において、市町村防災行政無線が活用される一方で、地震の揺れや津波 による倒壊・破損や雷源喪失などにより防災行政無線が利用できなくなった事例もありまし

このため、災害時に、災害情報をすべての住民に確実かつ迅速に伝達する体制を確保する ため、防災行政無線のほか、ケーブルテレビやコミュニティ放送、緊急速報メール、テレビ など、様々な伝達手段を確保する必要があります。

消防庁では、情報伝達手段の耐災害性の強化や複数の伝達手段を組み合わせることなどに より、災害情報伝達手段の多重化を進めています。



### Project to dispatch disaster information channel advisors

災害情報伝達手段に関するアドバイザー派遣事業

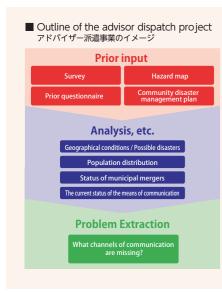
In order to accurately provide information to residents of each city, town and village in the time of disaster, the multiplexing and diversification of communication channels is necessary in accordance with the actual circumstances of the community.

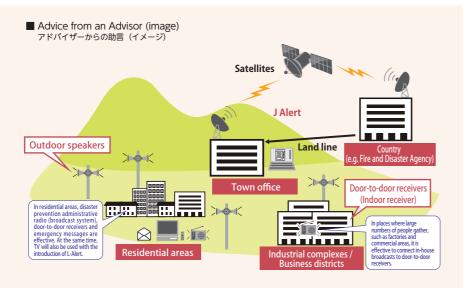
FDMA dispatches advisors with technical knowledge to municipal governments to provide them with technical proposals and advice on multiplexing and diversification of communication channels, as well as advice on financial support measures for the development of these communication channels.

各市町村においては、災害時における住民への情報伝達を的確に行うため、地域の実情に 応じ、情報伝達手段の多重化を図る必要があります。

化に係る技術的提案・助言や情報伝達手段整備に対する財政支援措置に関する助言を行って

消防庁では、技術的な知見を有するアドバイザーを市町村に派遣し、情報伝達手段の多重





### Activities of the "Rescue Team", a specialized unit for saving lives

Rescue teams are required to respond to various disasters such as fires, traffic accidents, natural disasters and terrorist disasters. It is a specialized unit whose mission is to save lives. Rescue teams load rescue vehicles with advanced rescue equipment to save lives. They also own special vehicles, such as special disaster response vehicles and heavy machinery, and receive specialized education and training on a daily basis.

In order to respond appropriately to rescue cases that are becoming more complex and diverse year by year, the Fire and Disaster Management Agency is working to strengthen the nationwide rescue system by improving rescue teams' vehicles and equipment, enhancing education and training, and improving rescue techniques.

救助隊は、火災、交通事故、自然災害やテロ災害等、様々な災害に際し、人命を救うこと を任務とする専門部隊です。救助隊は、人命を救うための高度な救助資機材を救助工作車に 積載しているほか、特殊災害対応自動車や重機などの特殊な車両も保有し、専門的な教育を 受け、日頃から訓練を重ねています。

消防庁では、年々複雑化・多様化する救助 事案に適切に対応するため、救助隊の車両・ 資機材の整備や教育訓練の充実、救助技術の 高度化等、全国的な救助体制の強化に取組ん



A rescue team conducting training in a damaged area. がれき現場で訓練をする救助隊

# International emergency assistance and international cooperation

The International Fire and Rescue Team, which is dispatched overseas to areas affected by large-scale disasters, was established in 1986 and has been dispatched 21 times to date. The Fire and Disaster Management Agency has registered 599 rescue workers as International Rescue personnel, has developed a preparatory system for dispatch, and conducts training and other activities to effectively operate in disaster-stricken areas overseas.

We are also engaged in international cooperation by accepting trainees from fire and disaster prevention organizations in developing countries and holding the International Fire and Disaster Prevention Forum.

海外の大規模災害の被災地へ派遣される国際消防救助隊は、昭和61年に設立され、これ までに 21 回の派遣実績があります。

消防庁では救助隊員 599 人を国際消防救助隊員として登録し、派遣に備えた準備体制を

整備し、海外の被災地で効果的に活動するための訓練等を実施しています。

また、開発途上国等の消防防災機関職員の研修員の受入れや、国際消防防災フォーラムの 開催などを通じて、国際協力に取組んでいます。



 Japan Disaster Relief teams have received "Heavy", the highest classification in the International Capacity Assessment (IEC) and Renewal Assessment (IER) for Rescue International Coponing / Activities. 日本の国際緊急策制隊・教助チームは、教助活動に関する国際的な能力評価(EC)及び更新評価(IEC)において、最高

:略称IRT-JF/愛称「愛ある手」

:Abbreviated as IRT-JF/ Known in Japan as Ai Aru Te



### ■ Dispatch of International Fire-Rescue Corps (past 15 years) 国際消防救助隊の派遣実績 (過去 15 年)

Date of dispatch	Disaster name	Damage situation	Number of people dispatched	Activity Overview
May 15th to 21st 2008 (7 days)	Earthquake disaster in Sichuan Province, China	69,227 people were killed and 374,643 injured	17	Search and rescue operations at collapsed buildings
October 1st to 8th 2009 (8 days)	Earthquake off the coast of Padang, West Sumatra, Indonesia	1,117 people were killed and 2,900 people were injured	17	Search and rescue activities at the site of building collapse, etc.
February 22nd to March 12th 2011 (19 days)	New Zealand South Island Earthquake disaster	181 people died	33	Search and rescue activities at the site of building collapse, etc.
April 26th to May 9th 2015 (14 days)	Nepal earthquake disaster	8,896 dead and 22,302 injured	17	Search and rescue operations at collapsed buildings
September 21st to 28th 2017 (8 days)	Mexico earthquake disaster	369 people were killed and 8,800 injured	17	Search and rescue operations at collapsed buildings
February 8th to 11th 2018 (4 days)	East Taiwan Earthquake disaster	17 people were killed and 285 were injured	2	Support for search and rescue activities at the site of building collapse
February 6th to 15th 2023 (10 days)	Turkey earthquake disaster	Under investigation (as of end of R5.2)	17	Search and rescue activities at the site of building collapse, etc.



(February 2011 New Zealand South Island Earthquake disaster) クライストチャーチ CTV ビルでの捜索救助活動 (平成 23 年 2 月ニュージーランド南島地震災害)



(Mexico earthquake disaster in Septe メキシコシティトラルパンでの捜索救助活動(JICA 提供) (平成 29 年 9 月メキシコ地震災害)



(Earthquake disaster in the Republic of Turkey in February 1993) トルコカフラマンマラシュでの捜索救助活動(JICA 提供)(令和 5 年 2 月トル コ共和国地震災害)



# Integration of fire departments for reinforcement

Due to the occurrence of large-scale disasters such as the Great East Japan Earthquake, the higher risks of future disasters, and the decrease in the population of Japan, we must reinforce the fire departments through the integration of multiple departments. The small size of Fire Service Institutions, which make up 60% of the total number of the organizations, should be a focus of this effort because it is hard for these organizations to clear the organizational/financial challenges when doing improvement of readiness for more complicated and diversified disasters, preparation of advanced devices and equipment, development of human resources with special knowledge and expertise, etc.

To further promote the integration of fire departments, FDMA provides concentrated support and sends advisors to the local areas which could suffer from insufficient preparation of fire and disaster prevention systems and the areas that have momentum of integration, whilst respecting their actual conditions.

東日本大震災のような大規模災害等の発生、今後の災害リスクの高まり、さらに日本全体の人口減少を踏まえると、消防の広域化による消防本部の体制強化が必要となっています。特に、全体の約6割を占める小規模な消防本部では、複雑化・多様化する災害への対応力、高度な装備や資機材の導入及び専門的な知識・技術を有する人材の養成等、組織管理や財政運営面における対応に課題があることから、小規模消防本部の規模を拡大し、体制を充実強化することが重要です。

消防庁では、消防の広域化をさらに推進するため、地域の実情を尊重しながら、十分な消防防災体制が確保できないおそれがある地域や、広域化の気運が高い地域として指定された重点地域に対し、支援を集中的に実施するとともに、アドバイザーの派遣などを行っています。







The fire service organizations have appropriately responded to the changes in their activity environment including more diversified and larger disasters and accidents, more complicated urban structures, and more diversified needs of people. They conduct a diverse range of activities including fire prevention, firefighting, and rescue and ambulance services for the sake of protecting the safety and security of the people.

Currently, there are 723 Fire Service Institutions and 1,714 fire stations in Japan, and 167,510 professional firefighters are quarking these. Also, these are 3,106.

and 167,510 professional firefighters are working there. Also, there are 2,196 Volunteer Fire Corps consisting of 783,578 members to protect the security and safety of people in communities. (As of April 1st 2022)

消防は、災害や事故の多様化及び大規模化、都市構造の複雑化、住民ニーズの多様化等の 環境の変化に的確に対応し、住民の安全・安心を確保するため、火災の予防や消火はもとより、 救急救助など、多岐にわたる活動を行っています。

現在、日本全国に723消防本部、1,714消防署が設置されており、16万7,510人の消防職員が勤務しています。また、消防団は2,196団、78万3,578人が活動し、地域住民の安全・安心を守っています。 (令和4年4月1日現在)

# Development of firefighting systems and activity environment

Save lives that can be saved

Fire service in Japan is comprised of the Fire Service Institutions, which are always on standby, and the Volunteer Fire Corps, which are assembled in response to calls. These organizations are established under the responsibility of local governments, which stand closely to people and are controlled under the jurisdiction of the municipality mayors.

Expand and upgrade the firefighting and lifesaving systems

消防体制と救急救命体制を拡大・充実させていく

In 2021, 35,222 fires occurred, 6,193,581 ambulance services were sent out, and 63,198 rescue operations were recorded across the nation.

FDMA provides financial support to prepare fire and disaster prevention facilities, vehicles, and equipment, and sets up training and activity manuals, in order to develop the activity environment for firefighters and Volunteer Fire Corps, who are working at the frontline of fire services.

日本における消防機関は、常備消防と呼ばれる消防本部・消防署と、非常備消防である消防団によって構成されています。いずれの組織も、住民に最も身近な地方公共団体である市町村の責任のもとに設置され、市町村長の管理下で活動しています。

Mission

件の救助活動事案が発生しており、消防本部、消防団が協力して日夜対応しています。 消防庁では、消防防災施設、車両・資機材等の整備に係る財政支援や訓練・活動マニュア ルの策定などを通じ、最前線で活躍する消防職団員の活動環境の整備に取り組んでいます。

日本では、令和3年の1年間で、3万5,222件の火災、619万3,581件の救急出動、6万3,198

### ■ Municipal fire service organizations Fire volunteer organizations Fire departments and stations 1,719 municipalities • Fire departments are established by municipality. In some cases, Volunteer Fire Corps are established in each municipality they are created jointly by multiples. ● They are involved in activities related to fire precaution, ● The headquarters administrate personnel, budgets, and general affairs related to fire services. 723 headquarters 2,196 departments 167,510 firefighters 783,578 members ● Fire stations are established under Fire Service Institutions Fire stations Usually established in each community of a municipality They operate fire prevention activities, patrols, fire suppressio ambulance services, rescue activities, and disaster prevention 1,714 stations 22,152 branches ● Small-scale fire substations may be established under the fire As of April 1st 2022 3,095 stations

### TOPICS 2

### 

The Kawasaki City Fire Department in Kanagawa Prefecture was the first to hire female firefighters in February of 1969.

Their main duties at the time were preventive work (working every day), such as fire prevention and disaster prevention education for housewives, the elderly, and children. But the restriction on late night work was lifted by a partial revision in 1994 of the Women's Labor Standards Rules (currently the Rules on Labor Standards for Women), and it is now possible to engage in shift work such as ambulance services and communication directive work.

As of April 1, 2022, 5,585 female firefighters are engaged in a variety of activities throughout Japan. We also opened a portal site on the Fire and Disaster Management Agency website to promote the active role of women in the field of firefighting to a wider audience, and to promote the active participation of women in the field of firefighting.

The FDMA is working to increase the number of female recruitment examinees at fire departments nationwide by producing PR posters and pamphlets, and holding work experience events web seminars. In addition, it is providing financial support for the development of facilities exclusively for women (bathrooms, bedrooms, etc.). We are also working to create a workplace environment in which female firefighters can continue to work comfortably and energetically.

消防本部における女性消防吏員は、昭和 44 年 2 月に神奈川県川崎市消防局において初めて採用されました。

当時は、家庭の主婦や高齢者、子ども等に対する防火・防災教育等の予防業務(毎日勤務)が主な活躍の場でしたが、平成6年の女子労働基準規則(現・女性労働基準規則)の一部改正により、深夜業の規制が解除され、救急業務・通信指令業務などの交替制勤務への従事も可能となりました。

令和4年4月1日現在、5,585名の女性消防吏員が全国各地で様々な業務に従事しており、これから社会人となる年齢層の女性に、消防業務の魅力と消防分野での女性の活躍を広く知ってもらうため、消防庁 HP 内に「女性消防吏員の活躍推進のためのポータルサイト」を公開しています。消防庁では、PR ポスター・パンフレットの制作や職業体験イベント・Web セミナーを開催するなど、全国の消防本部における女性の採用試験受験者数を増加させる取組に加え、女性専用施設(トイレ、仮眠室等)の整備に対し財政支援を行うなど、女性消防吏員が生き生きと働き続けられる職場環境整備にも取り組んでいます。



ima City Fire Department (ambulance service)



◀ Higashi-Yamanashi Fire Department (Preventive Work) 東山梨行政事務組合 東山梨消防本部 (予防業務)



the QR code for details. タルサイトはこちらから

# Step-up of lifesaving and ambulance service systems

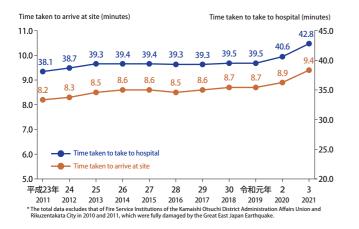
The number of emergency calls in 2021 was about 6,190,000, and the time taken to transport a patient to hospital is also seeing an increasing trend. Every second taken to arrive at hospitals from emergency sites is invaluable for saving people's lives. It depends on the ambulance service team's treatment during the transportation time if seriously injured or ill patients can be saved or not.

Therefore, FDMA enhances cooperation between the fire service organizations and the medical institutions, and also actively promotes the development of Emergency Life-Saving Technicians for advanced ambulance services, and the preparation of equipment and tools for advanced emergency lifesaving treatment.

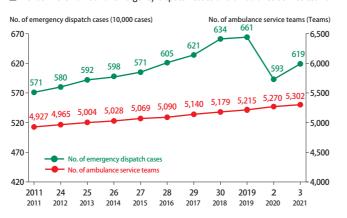
令和3年中の救急出動件数は、約619万件となり、病院収容までの時間も延伸傾向です。 救急現場から病院に到着するまでの一分一秒は、「救える命」を確実に救うためのかけが えのない時間です。この間における対応が重度傷病者の明暗を分けると言っても過言ではあ

このため、消防庁では、消防機関と医療機関の連携強化を推進するとともに、救急業務の 高度化に伴って必要となる救急救命士の養成や高度救急救命処置用資器材等の整備を積極的 に進めています。

### ■ Trends in time taken to arrive at the scene and to transport patients to hospital



### ■ Trends in the number of emergency dispatch cases and ambulance service teams



### Promotion of the timely and appropriate use of ambulances

The emergency callout of ambulance services in 2021 was about 6,190,000, an 8.4% increase from 2011 nearly 10 years ago. On the other hand, the number of ambulance service teams rose just by 7.6% in the same period, and the ambulance transport time tends to be longer. There are concerns that the lifesaving rate is decreasing. FDMA has promoted the nationwide expansion of the telephone services (Emergency Hotline #7119), where advice can be received from experts when people are in doubt

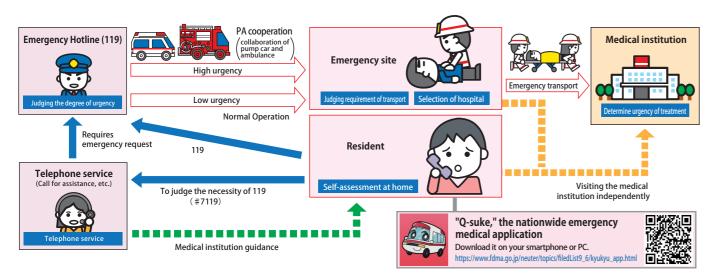
whether to call for an ambulance service or go straight to the hospital in cases of sudden sickness or injury. Also a nationwide emergency consulting app called "Q-suke" has been developed so that people can get assistance in their judging whether or not to carry out the emergency call.

In addition, in order to promote the appropriate use of firefighting, emergency response, and medical resources for highly urgent victims, we have formulated and released the Urgency Determination Protocol Ver. 3, which can judge the urgency according to the symptoms of the victim.

令和3年中の救急自動車による救急出動件数は約619万件と、10年前の平成23年に比 べ約8.4%増加しています。一方、救急隊数は同時期で約7.6%の増加となっており、救急 搬送時間も延伸傾向となるなど、救命率の低下が懸念されています。

消防庁では、救急車の適時・適切な利用の観点から、急な病気やけがをしたときに、救急 車を呼んだほうがいいのか、今すぐ病院に行ったほうがいいのかなど迷った際、専門家から アドバイスを受けることができる電話相談窓口「救急安心センター事業(#7119)」の全国 展開を推進するとともに、住民による緊急度判定を支援する全国版救急受診アプリ「Q助」 を提供しています。

また、緊急性の高い傷病者への消防・救急・医療資源の適切な活用を推進するため、傷病 者の症状に応じて緊急性を判断できる「緊急度判定プロトコル Ver.3」を策定し、公開して



### Promotion of advanced ambulance services, in cooperation with medical institutions

The number of firefighters currently certified as Emergency Life-Saving Technicians, the system of which started in Japan in 1991, is 42,495 (as of April 1st 2022). Emergency Life-Saving Technicians are allowed to perform lifesaving treatment for patients in cardiac or respiratory arrest, such as defibrillation, tracheal intubation, and medication (transfusion and medication before cardiac or respiratory arrest in some cases), and are playing an active role at emergency sites. To respond to the demand of more advanced emergency treatments, FDMA promotes the development of Emergency Life-Saving Technicians and arrangement of the operation system aiming to deploy one or more Emergency Life-Saving Technicians to every ambulance service team.

Also, some local governments have started to prepare a smooth and proper transport and reception system by equipping each ambulance car with information and communication tablets, which allows viewing of the reception condition of medical institutions and inputting the patients' information. Utilizing this kind of ICT, FDMA promotes the advancement of ambulance services.

平成3年に救急救命士制度が導入され、現在救急救命士の資格を持つ消防職員は、4万 2.495人(令和4年4月1日現在)となっています。

救急救命士は、心肺停止状態の傷病者に対し、除細動や気管挿管、薬剤の投与(一部、心 肺停止前に行う輸液や薬剤投与もあります。) といった救命処置を行うことができ、救急現 場で活躍しています。消防庁では、高度化する救急需要に応えるため、全ての救急隊に救急 救命士が少なくとも1人配置される体制を目標に救急救命士の養成と運用体制の整備を推進 しています。

また、いくつかの地方公共団体においては、各救急自動車にタブレット型情報通信端 末等を配備し、医療機関の受入情報や傷病者に係る情報を入力・閲覧すること等により、 円滑かつ適切な搬送・受入体制を確保する取組も始まっており、消防庁では、このよう なICTの活用による救急業務の高度化を推進しています。



Specificied actions 特定行為

# Diffusion and enlightenment of first aid 応急手当の普及・啓発

An ambulance service team needs 9.4 minutes on average (in 2021) to reach a site after receiving an emergency call. If people at the site treat a patient with appropriate first aid, the patient survival rate significantly increases. Therefore, the diffusion of first aid knowledge and procedures to the public is important.

In 2021, about 710,000 people participated in emergency lifesaving training, and the rate of first aid undertaken by residents for patients in cardiac or respiratory arrest was 50.6%. This shows that the diffusion of first aid to the public is progressing. FDMA promotes it further by giving lectures on cardio-pulmonary resuscitations and AED operations.

救急出動の要請から救急隊が現場に到着するまでは、平均で9.4分(令和3年中の平均時 間)を要します。この間に、現場に居合わせた人による適切な応急手当が実施されれば、大 きな救命効果が期待されるため、一般市民の間に応急手当の知識と技術を広く普及すること

令和3年は、約71万人が応急手当講習を受講し、住民による心肺機能停止傷病者への応 急手当の実施率は50.6%となるなど、応急手当の一般市民への普及は進みつつあり、消防庁 では、心肺蘇生や AED の使用方法など応急手当の普及啓発を推進しています。



Emergency lifesaving training 救命講習

### TOPICS 3

### Efforts with COVID-19 新型コロナウイルス感染症に係る取組

With the spread of COVID-19 pandemic which broke out in 2020, the use of personal protective equipment during ambulance services increased which caused problems in securing sufficient equipment in fire departments. FDMA took the situation seriously, and with successful supplementary budgets secured, we were able to support the ambulance services by providing N95 masks, protective clothing, and gloves to the fire departments that needed them.

In addition, measures to prevent infections during ambulance service, such as standard preventative measures, and measures with regard to infection route referenced in the "Ambulance Service Team's Infection Prevention Manual," have been revised based on the latest medical knowledge and experience with the pandemic to keep the personnel safe.

令和2年以降の新型コロナウイルス感染症の感染拡大に伴い、救急活動の際に必要となる感染防止資器材の使 用量が増加し、消防本部における感染防止資器材の確保に支障をきたす事態が発生しました。消防庁では、緊急 的な措置として、累次の補正予算などを活用して N95 マスクや感染防止衣、手袋などの感染防止資器材を調達し、 必要とする消防本部に提供することで、現場の救急活動を支援しています。

また、標準予防策や感染経路別予防策といった救急現場における感染防止対策などの基本的な内容を示す「救 急隊の感染防止対策マニュアル」について、最新の医学的知見や新型コロナウイルス感染症への対応の経験など を踏まえて改訂し、全国の消防本部に周知することで、救急隊員の感染防止対策の徹底を図っています。



Mandat / 個人防護具の着用例(「救急隊の感染防止対策マニュアル」抜粋)

Prevent fire's and industrial disasters recently 多様化する火災・企業災害を未然に防ぐ



Investigate and identify the causes of fires and accidents, and promote fire prevention measures.

火災・事故の原因等を調査・検証し、防火安全対策を推進する

In recent years, new forms of facilities have appeared, such as small scale welfare facilities that include group homes, large-scale distribution warehouses, and vacation rental houses.

In addition, more robust measures for earthquakes in petroleum complexes and hazardous materials facilities are also demanded.

FDMA investigates and identifies the causes and factors that expand the damage of these complicated and diversified fires and accidents, and promotes improvement of both hard and soft fire prevention measures.

近年、グループホームなどの小規模社会福祉施設や大規模物流倉庫、民泊などの新しい形 態の施設が出てきており、新たな火災予防対策の検討が必要となっています。

また、石油コンビナートや危険物施設における震災対策の推進も求められています。 消防庁では、複雑・多様化する火災・事故に対し、原因や被害拡大要因などを調査・検証し、 ハード・ソフト両面からの防火安全対策の強化を図っています。

# Prevent fires of greater complexity

FDMA investigated the cause, especially of large scale fires and has strived to enhance fire prevention administrations by revising fire protection laws. This effort has worked to stop the fire incidents in large buildings which cause a number of deaths, such as the Sennichi Department Store Fire (118 deaths) or the Hotel New Japan Fire (33 deaths),

On the other hand, new forms of facilities have appeared in recent years, such as small scale welfare facilities including group homes, large-scale distribution warehouses, and vacation rental homes. So there is a need for consideration of new fire prevention measures. It is also necessary to prevent accidents related to fire prevention equipment, and appropriately address issues such as environmental regulations of fire-extinguishing chemicals.

FDMA responds flexibly to changes occurring in social structure and the usage of buildings, and carries out necessary revisions of fire protection laws and promotes training for

消防庁では、火災が発生するたびに原因を追求し、消防法令の改正を重ね、火災予防行政 の強化を図ってきました。その結果、千日デパートビル火災(死者 118 人) やホテルニュー ジャパン火災(死者 33 人)のような、大規模な建物で多数の死者が発生する火災は現在で は見られなくなっています。

一方、近年は、グループホームなどの小規模社会福祉施設や大規模物流倉庫、民泊などの

新しい形態の施設が出てきており、新たな火災予防対策の検討が必要となっています。また、 消防用設備等に関する事故の防止や、消火薬剤の環境規制といった課題への対応も必要です。 消防庁では、社会構造の変化や建物の利用形態の変化に柔軟に対応し、必要な消防法令の 改正や、事業者への指導の推進などを行っています。

A series of large-scale warehouse fires occurred such as: the fire in Miyoshicho, Saitama Prefecture in February 2017, the fire in Iwanuma City, Miyagi Prefecture in April 2020, and the fire in Konohana-ku, Osaka City ir November 2021. In response to this in order to thoroughly implement fire prevention and safety measures for large-scale warehouses, we are promoting fire drills by business operators, as well as promoting identification of fire risks.

平成29年2月埼玉県三芳町倉庫火災、令和2年4 日空城県岩沼市倉庫火災。 令和3年11日大阪市此 花区倉庫火災といった大規模倉庫火災が相次いで発 底を図るため、事業者による効果的な消防訓練の実 施や火災危険性の把握等を推進



生。これらを受け、大規模倉庫の防火安全対策の徹 A warehouse fire in Konohana Ward, Osaka City in 2021 (courtesy of Osaka City Fire Bureau) 令和3年大阪市此花区倉庫火災

Large-scale fires occurred in areas with a concentration of old wooden buildings, such as the large-scale fire in Itoigawa City in December 2016 and the fire in Kitakyushu City Tanga District in 2022 in April and August, As a result priority fire prevention areas and promote focused guidance for places that are high risk.

平成 28 年 12 月の糸魚川市大規模火災、令和 4 年 4 月及び 8 月 の北九州市旦過地区火災など、古い木造建築物が密集する地域で 大規模な火災が発生したことから、火災発生時に大規模な火災に つながる危険性の高い地域を「重点防火指導対象地域」と定め、 地域関係者と連携した重点的な防火指導を推進

A large city fire in Itoigawa City in 2016 (Provided by Itoigawa City Fire Department) 平成 28 年糸魚川市大規模火災



# becoming diversified

# Promotion of residential fire prevention measures

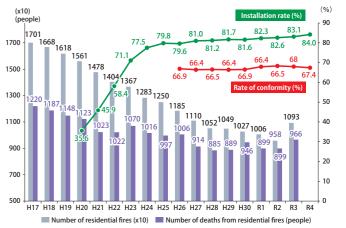
The annual number of fatalities due to residential fires in Japan is close to a thousand. Flderly people account for nearly 70% of the fatalities—the main cause is failure to escape the fires. The installation rate of residential fire alarms stopped at approximately 84%, so further promotion is vital. In addition, due to concerns about battery failure or deterioration of existing fire alarms that have been installed for more than 10 years, we are calling for the necessity of maintenance and management, such as regular inspections, and promoting the replacement of residential fire alarms that have been installed for more than 10 years.

FDMA promotes public awareness through fire prevention campaigns and symposiums for promotion of residential fire prevention measures in cooperation with Fire Service Institutions, Volunteer Fire Corps, Female (Women's) Fire Prevention Clubs, and voluntary disaster prevention organizations in order to reduce the number of deaths caused by residential fires as much as possible

住宅火災の死者は毎年 1,000 人近く発生していますが、そのうち高齢者が約7割を占め ており、特に逃げ遅れによる死者が多い状況です。住宅火災の早期発見に有効である住宅 用火災警報器は、全ての住宅に設置が義務付けられていますが、その設置率は約84%となっ ており、さらなる設置の促進を図っています。また、設置から 10 年以上を経過した住宅 用火災警報器の電池切れや故障が懸念されることから、定期的な点検など維持管理の必要 性を呼びかけるとともに、設置から 10 年以上を経過した住宅用火災警報器の取替えを推

消防庁では、火災予防運動や住宅防火・防災キャンペーン等を通じ、消防本部、女性(婦人) 防火クラブ及び自主防災組織等と協力して、住宅火災による死者が一人でも少なくなるよう、 住宅防火対策を推進してまいります。

### ■ Usage of residential fire alarms and cases of home fires



\* Excluding fires due to "arson"in number of fires.

\* Excluding deaths due to suicide in number of deaths.

\* "Installation rate" refers to the percentage of total households that have installed a fire alarm in at least one part of the house that is obliged to do so under the fire prevention ordinance of the municipality (including households that are exempt from installing a residential fire alarm due to the installation of automatic fire alarm equipment).

\* "Rate of conformity" refers to the percentage of total households that have fire alarms installed in all parts of the house that they are obliged to do so under the fire prevention ordinance of the municipality (including househol that are exempt from installing a residential fire alarm due to the installation of automatic fire alarm equipment).

\* The number of house fires and the number of home fire deaths in 2022 have not been aggregated.

# Investigations into the causes of fires and leakage of hazardous materials, and promotion of prevention of fire caused by ignition of products 火災原因・流出事故原因調査、製品火災対策の推進

When a fire occurs, the fire service organizations investigate the causes, and use the results for enhancing fire prevention measures and firefighting activities.

When a large-scale or unprecedented fire occurs, FDMA investigates the causes through the FDMA commissioner in order to assist the investigation activities of the fire service organizations. Also, when the leakage of hazardous materials occurs, a municipal mayor, who holds authority over the hazardous materials facility, investigates the causes. For an unprecedented leakage accident, the FDMA commissioner investigates the causes at the mayor's request.

In addition, the causes of recent fires have been significantly diversified, and in some cases, household products like electrical appliances and burning appliances cause fires. To protect the security and safety of consumers, FDMA prepares a system to gather information on fires caused by the ignition of products and publishes the fire information to alert the public, and at the same time, shares the information with the Consumer Affairs Agency and other related agencies, in order to enhance the measures against fires caused by ignition of products.

火災が発生した場合、消防機関は火災の原因調査を行い、調査結果から得られた教訓を防 火安全対策や消防活動などに活用しています。

消防庁では、大規模な火災や特殊な火災等が発生した場合、消防庁長官が主導して、管轄 の消防本部と連携した火災原因調査を行います。また、火災につながる恐れのある大規模な 危険物の流出事故や危険物施設の破損等が発生した場合、市町村長等からの求めに応じて消 防庁長官が主導して管轄の消防本部と連携した事故の原因調査を行います。

また、電気用品や燃焼機器等、生活に身近な製品が発火源となる火災も多く発生している ことから、消防庁では、製品の不具合により発生したとされる火災の情報を公表し、国民に 広く注意喚起を図るとともに、消費者庁や経済産業省等の関係省庁との情報共有体制を確保 するなど、国民の安心・安全の確保のため、製品火災対策の取組を強化しています。

# Response to fire in Kita Ward, Osaka City and future.

On December 17 2021,a building fire causing serious personal injuries 27 people died (including one suspect) occurred in Kita Ward, Osaka City. The cause of the fire was determined to be gasoline and a lighter that the

In response to this fire, the FDMA held a panel of experts with the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) to discuss fire prevention and evacuation measures in buildings with only one direct stairway, and compiled a report.

Based on the results, we made the "Guidelines for Evacuation in Buildings with One Direct Stairway" and reviewed on-site inspection manuals. to further promote thorough correction of violations of fire defense laws and regulations. We also took measures such as re-notifying the fire brigade to ensure that there is proper customer identification at gas stations through patrols and on-site inspections.

令和 3 年 12 月 17 日に大阪市北区において、死者 27 人(容疑者 1 人含む。)、負傷者 1 人という極めて重大な人的被害を伴う ビル火災が発生しました。出火原因は、容疑者がガソリンを散布し、ライターを用いて放火したものと判明しました。

この火災を受け、消防庁では国土交通省と合同で開催した有識者検討会において、直通階段が一つしか設けられていない建築物 における防火・避難対策等について検討を行い、報告書がとりまとめられました。

この報告書を踏まえ、「直通階段が一つの建築物向けの避難行動に関するガイドライン」の策定や、立入検査に関するマニュアルなどの見 直しを行い、消防法令違反の是正の徹底等について、より一層の推進を図りました。また、消防隊の見回りや立入検査の機会を通じてガソリ ンスタンドにおける顧客の本人確認等の適正な運用の徹底を図るよう再度通知するなどの対応を行いました。



The exterior of the fire

### Enhancement of disaster prevention measures for petroleum complexes, etc.

石油コンビナート等の防災体制の強化

To ensure the safety of petroleum complexes that store vast quantities of hazardous materials and high pressure flammable gases, they are controlled in accordance with the Fire Service Act, the High Pressure Gas Safety Act, and also the Law on the Prevention of Disasters in Petroleum Industrial Complexes and

In petroleum complexes, large-scale explosions or fires are liable to spread flames outside the factory sites, and have serious impacts on the security and safety of the public. In the Great East Japan Earthquake, large-scale fires at petroleum complexes and other facilities occurred, causing huge damages.

To minimize disasters at petroleum complexes, with the object of preventing expansion of disasters and secondary disasters, as well as of ensuring early suppression, FDMA instructs the business operators of petroleum complexes to share the information about the complex with the fire service organizations in advance, and also to make sure of reporting to the fire service organizations at the time of fire, explosion, and leakage. Furthermore, FDMA requires the operators to maintain and manage the facilities properly, and allocate and maintain disaster prevention equipment, in order to enhance the disaster prevention systems at the petroleum complexes, etc.

危険物や高圧ガスなどの可燃性物質が大量に集積する石油コンビナートでは、消防法、高 圧ガス保安法などとともに石油コンビナート等災害防止法により、様々な保安上の対策が行

石油コンビナートでは、大規模な爆発、火災の延焼等により、工場の敷地外にまで影響が 及ぶなど、国民の安全・安心に大きな影響を及ぼす恐れがあります。東日本大震災では、石 油コンビナート等で大規模な火災が発生し、甚大な被害が生じました。

消防庁では、石油コンビナート災害を防止できるよう、災害の拡大防止、早期鎮圧、二次

災害防止等の観点から、石油コンビナート内の事業者に対し、災害時に消防機関等へ情報提 供を行う体制を整備させるとともに、火災、爆発、漏えい等が発生した際の消防機関への迅 速な通報の徹底、さらには施設の適切な維持管理、防災資機材の配備・維持管理などの徹底 を通じて、石油コンビナート等の防災体制の強化を図っています。



Facilities including oil refineries and petrochemical industry 石油精製業や石油化学工業などの施設



Fire at a petroleum complex (Great East Japan Earthquake) 石油コンピナート火災(東日本大震災)



Firetighting at a petroleum complex 石油コンビナート火災における消火活動



Rapid Reaction Force for Energy and Industrial Infrastructure Disasters (Dragon Hyper Command Unit) エネルギー・産業基盤災害即応部隊(ドラゴンハイパー・コマンドユニット)

# Preparing for nuclear disasters

Based on the lessons learned from TEPCO's Fukushima Daiichi nuclear disaster, the Act on Special Measures Concerning Nuclear Emergency Preparedness was revised, and other nuclear disaster prevention measures have been thoroughly reviewed.

Based on the experience of the firefighting activities at the Fukushima Daiichi power plant and the current technical progress, FDMA has revised the firefighting activity procedures to ensure that the fire brigade members can safely and effectively perform firefighting activities. It is a part of FDMA support for the fire service organization's operation at the nuclear power facilities.

In addition, in order to improve the response to accidents related to radioactive substances, FDMA has deployed personal alarm dosimeters and other equipment for radioactive substance accidents to fire service organizations, and also is creating a specialist course at the Fire and Disaster Management College for nuclear disaster prevention training.

東京電力福島第一原子力発電所で発生した事故の教訓を踏まえ、原子力災害対策特別措置法 が改正されるなど、原子力防災対策の抜本的な見直しが行われています。

消防庁では、福島原発事故等における消防活動事例や近年の技術的進展を踏まえ、事故等の 発生時に消防隊員の安全を確保しながら効果的な消防活動が展開できるよう、消防活動マニュ アルを見直すなど、消防機関による原子力施設等における活動対策に関する支援等を行ってい

さらに、放射性物質の事故等への対応力を強化するため、個人警報線量計などの放射性物質 事故対応資機材を消防本部へ配備するほか、消防職員に対する原子力防災研修として消防大学 校に専門コースを設けるなど、消防機関の消防活動能力の向上等に取り組んでいます。



Nuclear facility disaster response training

# Safety of hazardous materials facilities

# Accident prevention measures in hazardous materials facilities 危険物施設における事故防止対策

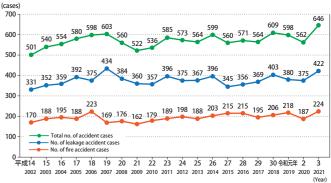
Facilities with hazardous materials such as highly flammable gasoline and diesel oil operate in various forms all over the country, ranging from industrial facilities including chemical plants and petroleum tanks, to more familiar facilities such as gas stations. If accidents such as fire and leakage occur in these facilities, the security and safety of people are seriously affected.

FDMA has stepped up the responses measures to incidents in hazardous materials facilities that occur through a variety of causes. Such measures include inspection methods that use new technology to prevent incidents which occur due to the aging of facilities. Also FDMA has enhanced earthquake measures, along with promoting accident prevention countermeasures where the national government, local governments, fire service organizations, and business operators work closely together.

火災危険性の高いガソリンや軽油などの危険物を取り扱う危険物施設は、化学プラン トや石油タンクなどの産業施設から、ガソリンスタンドのような身近なものまで、様々 な形で全国に設置されています。ひとたびこれらの施設で火災・流出などの事故が発生 すると、国民の安全・安心に大きな影響を与えることとなります。

消防庁では、危険物施設の経年変化による事故を防止するための新しい技術を用いた 点検方法等の検討等、様々な要因で発生する危険物施設における事故への対応や、地震 や風水害等の自然災害対策の推進に取り組むとともに、周、地方公共団体、消防機関、 事業者等、関係者が一体となった事故防止対策を推進しています。

### ■ Trends in number of fire and leakage accidents in hazardous materials facilities



(Note) In order to identify annual trends accident cases, only the number of accidents caused by earthquakes with a seismic intensity higher than 6 Lower (or seismic intensity higher than 6 if before September, 1996) are shown.



Leakage of hazardous materials from an outside storage tank – In the Great East Japan Earthquake (courtesy of Sendai City Fire Bureau) 屋外タンク貯蔵所からの危険物が流出 / 東日本大震災(仙台市消防局提供)

# Safety measures in response to social needs

In recent years, the number of accidents that pertain to hazardous materials has been increasing such as accidents caused by corrosion and deterioration at aged hazardous materials facilities in Japan.

On the other hand, with the advancement of science and technology and the industrial economy, hazardous materials are used for various purposes in the daily lives of people, and it is necessary to promote safety measures for hazardous materials in order to ensure the convenience and safety of the people according to the needs of society.

FDMA is studying safety measures such as when storing large amounts of lithium-ion batteries. We are also working to identify the dangers of new substances at an early stage, and to investigate and research "smart security" so that we can implement effective preventive maintenance at hazardous materials facilities using digital technologies such as drones, IoT, and AI in response to recent technological innovation and rapid progress in

我が国の危険物施設は高経年化が進み、腐食・劣化等を原因とする事故件数が増加す るなど、近年、危険物等に係る事故は高い水準で推移しています。

一方で、科学技術や産業経済の進展に伴い、危険物は国民生活の中で様々な用途に用 いられており、社会のニーズに応じて国民の利便性と安全性を確保するため、危険物の 安全対策を進める必要があります。

消防庁では、リチウムイオン蓄電池を大量に貯蔵する場合等の安全対策について検討 を進めているほか、新たな物質の危険性の早期把握や、昨今の技術革新やデジタル化の 急速な進展に伴うドローンや IoT、AI などのデジタル技術を駆使した危険物施設におけ る効果的な予防保全を行う「スマート保安化」の調査・検討等に取り組んでいます。



Trial testing oil tank inspection by drones 石油タンクのドローン点検に係る実証実験(苫小牧東部国家石油備蓄基地において)







Test extinguishing of a lithium-ion storage battery using a sprinkler system スプリンクラー設備によるリチウムイオン繁層池の消火実験

Enhance disaster management in communities with | Volunteer Fire Corps playing the central role

消防団を中核に地域の防災力を高める



Cooperate with local residents to protect the safety and security of communities. 地域住民と協力しあい、地域の安全・安心を守る

> Volunteer Fire Corps are municipal fire volunteer organizations. While having regular vocations, Volunteer Fire Corps members perform firefighting and disaster prevention activities to protect security in communities based on the loyalty slogan "Protection of our communities by ourselves."

To ensure the safety and security of communities, the construction of the fire service and the disaster management systems, primarily operated by the Volunteer Fire Corps, who are familiar with their community, is essential.

消防団は、市町村の非常備の消防機関です。消防団員は、他に本業を持ちながらも、「自 らの地域は自らで守る」という郷土愛護の精神に基づき、地域の安全を守るために消防・防 災活動を行っています。

地域のことをよく知る消防団を中心とした消防防災体制を構築することが、地域の安心・ 安全の確保に不可欠です。

### Volunteer Fire Corps as the core of local communities

地域コミュニティの核としての消防団員

There are 2,196 Volunteer Fire Corps across the country, and approximately 780,000 members are working day and night.

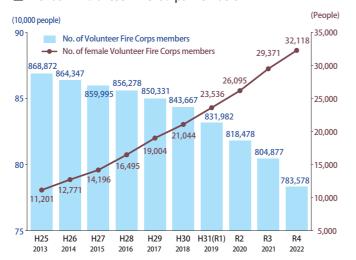
Volunteer Fire Corps perform not only firefighting activities, but also disaster protection activities, public awareness for residents, and the rescue of those affected at the time of natural disasters such as earthquakes and wind and flood damage, in order to protect people and their properties. Also in normal times, they conduct activities closely related to the local communities, and their role in the safety and security of the community is becoming more important.

On the other hand, the number of Volunteer Fire Corps is decreasing due to social and economic changes, such as aging of the population resulting from the decline in the birthrate. To maintain and improve disaster management for communities, we need to stop the reduction in the number of members to enhance the Volunteer Fire Corps system. For example, through the functionbased corps member and function-based division system, in which members are responsible only for specific activities and roles, such as large-scale disasters and preventive publicity, a wide range of local residents are rooted and active in their communities in diverse ways, and the number of functionbased corps member is increasing every year.

消防団は全国に 2,196 団あり、約 78 万人の団員が昼夜を問わず、活躍しています。 消防団は、消火活動をはじめ、地震や風水害などの自然災害などにおける災害防除活動、 住民の避難支援、被災者の救出・救助などの活動を行い、地域住民の生命・身体・財産 を守るとともに、平常時においても地域に密着した活動を行い、地域コミュニティの活 性化に貢献しており、地域住民の安心・安全の確保のために果たす役割はますます大き

一方で、少子高齢化の進展などの社会経済情勢の変化から、消防団員数は年々減少し ており、地域防災力の維持・向上のためには、消防団員数の減少に歯止めをかけ、消防 団の充実強化を図ることが重要です。例えば、大規模災害や予防広報等、特定の活動・ 役割のみを担う機能別団員・機能別分団制度により、幅広い地域住民の方々が多様な方 法で地域に根ざし活躍しており、機能別消防団員は年々増加傾向にあります。

### ■ Trends in Volunteer Fire Corps members





### Activities to improve Volunteer Fire Corps' compensation and promote participation 当防団の処遇改善・加入促進に関する取組

In recent years, while disasters have grown in diversity and scale and a variety of roles have been required of Volunteer Fire Corps, the number of members has been decreasing year by year. In addition, preparations are necessary for possible future large-scale disasters such as the Tokyo Inland Earthquake and the Nankai Trough Earthquake. For the sake of this, FDMA is engaging in the step up of Volunteer Fire Corps, which are crucial in disaster management for communities.

Specifically these efforts include: 1. Improvement of compensation for Volunteer Fire Corps members through establishment of standards for compensation, etc.; 2. Spreading and educating about the Student Volunteer Fire Corps Activity Certificate System, which recognizes the achievement of university students who engage in Volunteer Fire Corps activities earnestly and continuously to make a great contribution to the community; 3. Promoting Volunteer Fire Corps member participation through Volunteer Fire Corps recruitment posters and campaign events; 4. Promoting Volunteer Fire Corps member participation through Volunteer Fire Corps recruitment posters and campaign events; 5. Supporting the efforts of local government to promote the participation of women and young people in Volunteer Fire Corps; 6. Enhancement of Volunteer Fire Corps equipment for rescue operations

近年、災害が多様化・大規模化し、様々な役割が消防団に求められる一方で、消防団員 数は年々減少しています。さらに、今後発生が危惧される首都直下地震や南海トラフ地震等 の大規模災害等に備えることも必要です。このため、消防庁では、地域防災の中核となる消 防団の充実強化に取り組んでいます。

具体的には、①消防団員の報酬等の基準の策定等を通じた処遇の改善、②真摯かつ継続的

に消防団活動に取り組み、地域社会へ多大なる貢献をした大学生等に対して実績を認定する 「学生消防団活動認証制度」の普及・啓発、③消防団活動に協力的な事業所を顕彰する「消 防団協力事業所表示制度」の普及・啓発、④消防団員募集ポスター等の配布やイベントの開 催を通じた消防団への加入促進、⑤女性や若者の加入を促進するための地方公共団体の工夫 を凝らした取組の支援、⑥救助用資機材等の消防団の装備の充実などに取組んでいます。





Presentation of the award to a model Volunteer Fire Corp for its activities. 他の模範となる活動を行った消防団への表彰

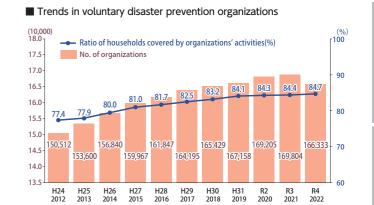
# Development of voluntary disaster prevention organizations, which support disaster prevention for communities

In the event of a large-scale disaster, with the emphatic belief of "Protection of our communities by ourselves" and strong bonds, residents should individually perform disaster prevention activities, such as fire extinguishing, rescue and treatment of those affected, and evacuation guidance, so it is important to energize their own disaster prevention organizations.

In order to foster these voluntary disaster prevention organizations, FDMA creates guidelines compiled with educational training principles, and awards the excellent models of activities.

地域住民一人ひとりが「自分たちの地域は自分たちで守る」という固い信念と連 帯意識の下、大規模災害時には、消火、被災者の救出・救護、避難誘導等の自主的 な防災活動を行うことが重要であり、自主防災組織の活動を活性化していくことが

消防庁では、自主防災組織を育成するために、教育、訓練の指針等をまとめた手引の作成 や優良な活動事例の表彰等を実施しています。



Protect people from terrorism and armed attacks





Protect people through the exertion of all efforts by the entire nation. 国の総力を挙げて国民保護を実施する



The national government, prefectures, and municipalities are responsible for jointly protecting public safety in the event of armed attacks or large-scale terror attacks in our country.

FDMA takes charge of issuing warnings, announcing instructions on evacuation measures, advising for evacuation across prefectural borders, gathering and providing information about disasters and the safety of people, as well as coordinating contact between the national headquarters and municipalities.

Also, FDMA runs joint exercises with national and local governments, prepares the equipment required to deal with terror attacks, and manages the civil protection system for residents to receive emergency information quickly and reliably.

我が国に対する武力攻撃や大規模テロ等が発生した場合、国や都道府県、市町村は相互に 連携協力し、国民の安全を確保する責務を有しています。

消防庁では、警報の発令や避難措置の指示の通知、被災情報及び安否情報の収集・提供等 のほか、国の対策本部と地方公共団体との連絡調整を担当します。

また、国と地方公共団体との共同訓練、テロ災害への対応に必要な資機材の整備及び住民 が緊急情報を迅速・確実に受け取ることができる国民保護のための体制整備などに取組んで

# Joint exercises for civil protection

It is important to carry out practical exercises for various possible situations to strengthen the collaboration between related institutions and improve the coping abilities for civil protection measures. FDMA collaborates with the cabinet secretariat and other related institutions to step up the joint exercises for civil protection, which are carried out in cooperation with

national and local governments. Also through the exercises they check the operations that are required by the Civil Protection Law and push to improve its efficacy. The joint exercises for civil protection include the field exercises and the tabletop exercises for possible large-scale terror attacks and ballistic missiles that are carried out by local governments, and resident evacuation exercises for ballistic missiles.

平素から様々な事態を想定した実践的な訓練を行い、国民保護措置に関する対処能力の向 上や関係機関との連携強化を図ることが重要です。

消防庁では、内閣官房等の関係機関と連携し、国と地方公共団体が共同で行う国民保護共 同訓練の実施を促進するとともに、訓練を通じて国民保護法等に基づく対応を確認し、その 実効性の向上に努めています。

国民保護共同訓練には、地方公共団体が行う大規模テロや弾道ミサイル等を想定した実動 訓練、図上訓練や弾道ミサイルを想定した住民避難訓練があります。



Victim rescue and transportation 被災者の救出・搬送



discussion for resident evacuation

# マは地下に避難

The disaster warning is transmitted to exercise participants via disaster information wireless broadcast systems or emergency messages

Exercise begins



**Evacuation procedures** 



Evacuation procedures are in

# Preparation of equipment for NBC disasters

For proper defense against terror attack disasters caused by NBC (Nuclear, Biological, and Chemical) substances, the expert knowledge and techniques and special equipment are vital.

FDMA deploys equipment for NBC disasters, such as chemical and biological agent detectors, positive pressure chemical protection suits, and decontamination showers, to major Fire Service Institutions across the country.

Also, the Fire and Disaster Management College steps up risk management educational training, and promotes the development of experts, such as by preparing educational training courses for teaching proper responses to NBC terror attacks.

核物質 (Nuclear)、生物剤 (Biological)、化学剤 (Chemical) を使用したテロ災害に適 切に対処するためには、専門的な知識と技術、そして資機材が必要です。

消防庁では、化学剤・生物剤検知器、大型除染システム、化学剤遠隔検知装置など NBC 災

害等に対応するための資機材を全国の主要な消防本部に配備しています。

また、消防大学校では、NBC テロ災害発生時に適切に対処するための教育訓練課程を設け る等、危機管理教育訓練の充実強化を図り、専門知識を擁する人員の育成に取り組んでいます。











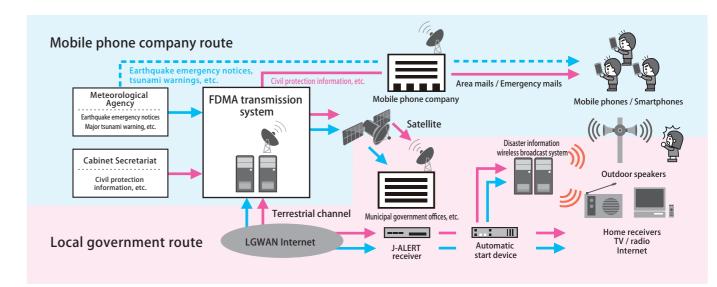
### National Early Warning System (J-ALERT) 全国瞬時警報システム「Jアラート」

J-ALERT is a system that instantly transmits warnings from the national government to residents. Such warnings include ballistic missile information, Earthquake Early Warnings, and Tsunami Information. The warnings on J-ALERT are transmitted th rough the emergency mails sent out to people's mobile phones and the disaster information wireless

J-ALERT began its operation in 2006, and since 2016, all of the municipalities have been able to automatically transmit the J-ALERT emergency warnings to residents via the tools such as disaster information wireless broadcast systems.

Jアラートは、弾道ミサイル情報、緊急地震速報、大津波警報など、対処に時間的余裕の ない事能に関する情報を携帯雷託等に配信される緊急速報メールや、市町村防災行政無線等 により、国から住民まで瞬時に伝達するシステムです。

Jアラートは、平成18年度から運用が開始され、平成28年度には、すべての市町村で、 受信した緊急情報を防災行政無線などの情報伝達手段を自動起動させて住民へ伝達する ことが可能となりました。



# Promotion of designation of evacuation facilities for civil protection

Under the Civil Protection Law, prefectural governors and heads of designated cities must designate evacuation facilities in advance in order to evacuate residents or provide relief to evacuated residents. In addition, from the viewpoint of temporary evacuation in order to reduce direct damage from blasts, etc., we are

encouraging the designation of solid buildings such as concrete structures and underground facilities (emergency temporary evacuation facilities). 国民保護法において、都道府県知事や指定都市の長は、住民を避難させ、又は避難住民等の救援を行うため、あらかじめ避難施設の指定をしな

また、爆風等からの直接の被害を軽減するための一時的な避難に活用する観点から、コンクリート造り等の堅ろうな建築物や地下

施設(緊急一時避難施設)を指定するよう配慮することとされており、指定に向けた取組を行うよう働きかけを行っています。



# Develop human resources and employ new technologies



# Technological research and development in fire and disaster prevention

By further promoting research and development with a view to practical application for the safety and security of society, FDMA sets their basic policy as the contribution to highly developing societal systems in the field of fire and disaster prevention, and aims for further cooperation with related parties.

消防庁では、安心・安全な社会の実現に向けて、実用化を目的とした研究開発を一層推進 することにより、その成果が消防防災分野における社会システムの高度化に大きく貢献する

ことを基本方針とし、関係者の一層の連携を図っています。

### System to promote technology research in fire and disaster prevention

A competitive research funding system was established in 2003 and is open to proposals from the public with the purpose of cultivating and utilizing innovative and practical techniques in the field of fire and disaster prevention. It advances technological development through collaboration with industry, academia, and government. The research results obtained through this system are used for social implementation of knowledge, equipment, and materials useful in the field of fire and disaster prevention, and are reflected in policies and measures.

消防防災分野における革新的かつ実用的な技術の育成・利活用を目的とした提案分墓の形 式による競争的研究資金制度を平成 15 年度に創設し、産学官連携による技術開発を進めて います。本制度により得られた研究成果は、消防防災分野に有用な知見や資機材等の社会実 装、施策への反映等その成果が活用されています。

# Research and development of the National Research Institute of Fire and Disaster

The National Research Institute of Fire and Disaster is the unique national research body of our country, in relation to fire and disaster prevention. It supports the activities of firefighters and Volunteer Fire Corps on the frontline and meets the demands of the safety and security of society. They conduct investigation of causes of accidents such as large-scale fires and leakages of hazardous materials and advance research and development of effective technologies and measures that are based on the policies of FDMA and the results of the cause investigations. Furthermore, as well as supporting the firefighting activities at such extraordinary disaster sites as landslide disasters and hazardous materials storage facility fires, the research center is also engaged in applying research and investigation results to frontline firefighting operations, which includes advice to Fire Service Institutions of knowledge accumulated over many years.

我が国唯一の消防防災に関する国立研究機関である消防研究センターは、第一線で活躍す る消防職団員の活動を科学技術の面から支え、社会の安全・安心に関する要請に応えていま す。大規模火災や危険物流出等の事故に係る原因調査を行い、消防庁の施策や原因調査結果 を踏まえた効果的な対策や技術の研究開発を進めています。さらに、土砂災害や危険物施設 での火災など特殊災害現場での支援活動をはじめ、永年にわたって蓄積されてきた知見を消

させる取組みも行っています。 https://nrifd.fdma.go.jp/public\_info/library/kenkyu\_kaihatsu/index.html

防本部に助言するなど、研究成果や調査結果を最前線の消防活動に反映



### Research and development of firefighting robot systems

In particularly difficult, large-scale/extraordinary disasters where the dispatch of firefighters to the scene would be extremely dangerous, an automated robot is able to be put into operation from a safe location. Multiple robots can cooperate together, and also a firefighting robot system (Scrum Force) with abilities to endure high radiation heat are developed.

消防隊員が災害現場で活動することが極めて危険であり、困難な大規模・特殊な災害にお いて、自律技術により安全な場所からロボットを稼働させることができ、複数のロボットが 協調連携し、さらに、高い放射熱に耐えられる性能を備えた消防ロボットシステム(スクラ ムフォース)を開発しました。



# esearch and development of response to infectious diseases in emergency transport

The National Research Institute of Fire and Disaster conducts research and development on measures to prevent the spread of infection when transporting COVID-19 patients including asymptomatic people, as well as methods to shorten the emergency transportation time when the number of emergency calls increases, including during the period of infection spread.

無症状者を含む新型コロナウイルス感染者を救急搬送する際の感染拡大防止対策及び感染 拡大期を含む救急出場要請件数増大期における救急搬送時間短縮手法の研究開発を行ってい





ontroller prototype. 『験用救急車と気流制御装置の試作機

Here for R&D video ▶

Research and development for enhancement of firefighting performance and operations in times of disaster 、 災害時の消防力・消防活動能力向上に係る研究開発

In order to protect the lives of more people in the event of a large-scale natural disaster, The National Research Institute of Fire and Disaster conducts research that contributes to the rapid and safe rescue of people in need of rescue, such as development of on-site information collection system and information analysis and evaluation methods.

大規模自然災害時においてより多くの国民の生命を守ることを目的として「現場対応型情 報収集システムと情報分析・評価手法の開発」等、要救助者の迅速かつ安全な救助等に資す



砂災害現場でのドローンを用いた夜間の地形計測手法の

# pment of firefighting methods to deal with fires that are difficult to extinguish 災に対応するための消火手法の研究開発

When a fire occurs in a large-scale warehouse, etc., depending on the amount of combustible materials, the fire spreads rapidly and a large amount of dense smoke and heat is generated. In addition, if there are few openings in the exterior walls and the fire origin is far from exterior openings, it becomes extremely difficult for firefighters to enter inside to extinguish the fire directly.

For this reason, a method to safely extinguish fires from outside the building without the need for firefighters to enter inside are currently under development.

大規模倉庫等で火災が発生した場合、可燃物の量によっては急速な延焼拡大や大量の濃煙熱気 が発生し、また、外壁に開□部が少なく、出火場所が外部の開□部から離れている場合、消防隊 が内部進入し直接消火することが極めて困難になります。

このため、消防隊員が内部進入することなく安全に、建物外部から消火を可能とする手法の開 発を行っています。





### Fire and Disaster Management College (National)

**Mission** 

eneral Education ... Executive dept., Top level executive dept., Newly appointed fire chief and fire academy principal dept., Volunteer Fire Corps chief dept.

pecialty Education... Fire defense dept., Rescue dept., Emergency medical service dept., Fire prevention dept., Hazardous materials dept., Fire investigation dept., Newly appointed local instructor dept., Local instructor dept.

mergency Fire Response ··· Commander course. Advanced rescue and special advanced rescue course. NBC course. Air squadron leader course

Risk management and disaster ·· preparedness education dept.

· Risk management and civil protection course, Self-protection organization education course, Volunteer Fire Corps activation promotion course, Self-protection organization education course (short-term), Gender empowerment course, Fire inspection management course

is being run collaboratively by the national, prefectural and municipal governments.

across the country at the Fire and Disaster Management

### Fire academies (prefectural and municipal, etc.)

Specialty education (Fire defense dept., Extraordinary disaster dept., Fire prevention inspection dept., Hazardous materials dept., Fire investigation dept., Ambulance service dept., Rescue dept.), Top management education, Special education

olunteer Fire Corps

Basic education, Specialty education (Fire defense dept., Fire engine dept.), Top management education, Special education

"e-COLLEGE" - anyone can learn about disaster prevention and risk management via the Internet no matter when

At the "Disaster Prevention and Risk Management e-College," anyone can easily learn about disaster prevention information and risk management in the event of a disaster on the Internet.

育訓練も行われています。

In order to reduce the damage caused by large-scale disasters, it is important to enhance and strengthen local disaster prevention capabilities and improve the risk management and judgment skills of each local resident. You can learn how to prepare for disasters and what actions you should take in the event of a disaster. Please make use of "e-COLLEGE.

「防災・危機管理 e- カレッジ」では、インターネットを利用して、誰でも簡単に防災の知識や災害時の危機管理について学習することが可能です。 大規模災害による被害の軽減を図るためには、地域防災力の充実強化を図り、地域住民一人一人の危機管理・判断力を向上させることが重要です。 災害への備えや災害時にとるべき行動を学習することができますので、是非ご活用下さい。

URL (https://www.fdma.go.jp/relocation/e-college/)



**Educational training for firefighters and Volunteer Fire Corps** 

In order for firefighters and Volunteer Fire Corps to appropriately respond to increasingly complex and diversified

disasters, as well as more advanced emergency and fire prevention work, they need to enhance their knowledge and

skills which form the basis of their emergency activities. Training and education for firefighters and Volunteer Fire Corps

FDMA provides advanced educational training required for the top management of firefighters and Volunteer Fire Corps

College. In addition, fire academies, Fire Service Institutions, fire stations, and Volunteer Fire Corps in each prefecture conduct

複雑多様化する災害や救急業務、火災予防業務の高度化に消防職団員が適切に対応するためには、活動の基礎となる知識・技能の

向上が不可欠です。消防職団員に対する教育訓練については、国・都道府県・市町村が機能を分担し、相互に連携しながら実施して

消防庁では、消防大学校において全国の消防職団員に対し、幹部に必要とされる高度な教育訓練を行っています。このほか、都道

府県などの消防学校、各消防本部、消防署や消防団においても教育訓練が実施されており、救急救命研修所などにおいて専門的な教

educational training, and the emergency lifesaving training institutes are also providing expert educational training



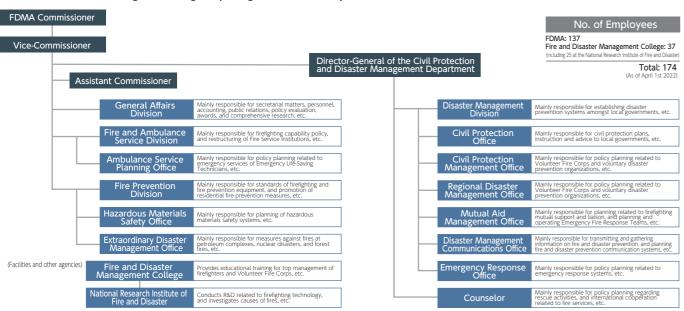
# We are the Fire and Disaster Management Agency (FDMA).

私たちは『消防庁』です

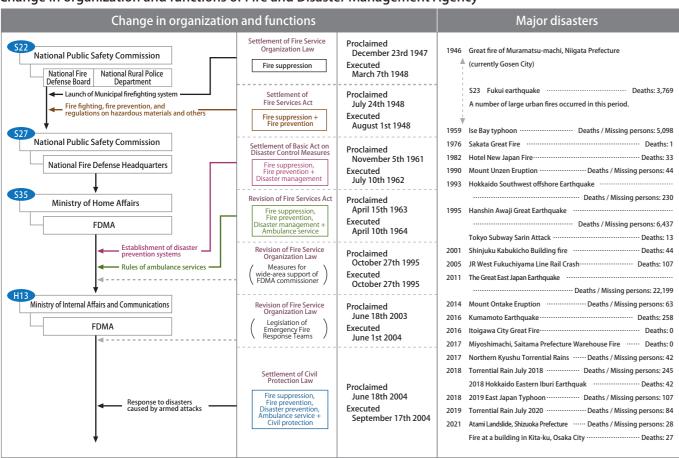
After the foundation of the National Fire Defense Board in 1948 and the National Fire Defense Headquarters in 1952, FDMA started as an affiliated agency of the Ministry of Home Affairs in 1960, and now operates as an affiliated agency of the Ministry of Internal Affairs and Communications. Since many large-scale fires, disasters, and accidents have occurred in the past, FDMA has enhanced its organization accordingly. We will continue our efforts to minimize the damage caused by fires, earthquakes, storms, floods, and other disasters, in order to realize a safe and secure society.

消防庁は、昭和23年の国家消防庁、昭和27年の国家消防本部を経て、昭和35年に自治省の外局として発足し、現在は総務省の外局となっています。現在までの間、多くの大規模な火災や災害、事故が発生したことを受け、組織体制も充実強化してきました。これからも、安全・安心な社会を実現するため、火災・地震・風水害などの災害による被害を最小限にとどめる努力を続けていきます。

### Fire and Disaster Management Agency: Organization and jurisdiction



### Change in organization and functions of Fire and Disaster Management Agency

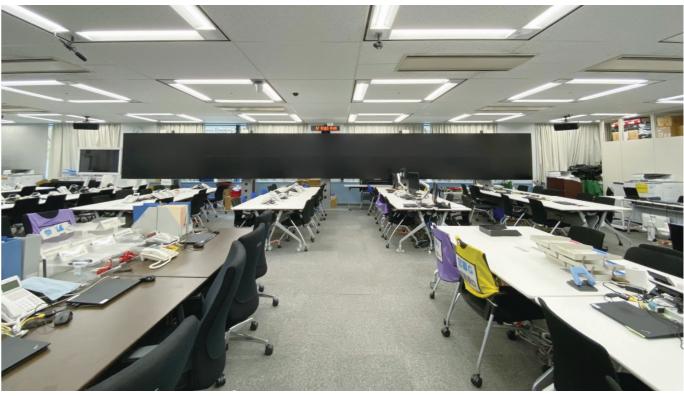


### **Emergency Management Center**

消防防災・危機管理センター

To prevent and minimize disaster damage, FDMA arranges the necessary procedures including the legislative aspect, and prepares materials and equipment. Also, when a large-scale disaster occurs, the FDMA commissioner sets up headquarters for the disaster management to gather information on the disaster damage and operate the Emergency Fire Response Teams.

消防庁は、災害を未然に防ぎ、災害が発生した場合の被害を最小限に抑えるため、法令の整備や資機材の配備などを行っています。また、大規模な災害が発生した場合には、速やかに消防庁 長官を本部長とする災害対策本部を設置し、情報収集や緊急消防援助隊のオペレーションなどを行います。



The Emergency Management Center, which is built in FDMA office, is the operations room. The center has the fire and disaster prevention wireless communication network, a regional satellite communication network and a helicopter TV broadcasting system so that we can share various kinds of disaster information with the Prime Minister's Office, the Cabinet Office, local governments and Fire Service Institutions in the event of a large-scale disaster.

消防庁内に設置されている消防防災・危機管理センターは、災害対応を行う消防庁のオペレーションルームです。有事の際、総理大臣官邸や内閣府をはじめ、都道府県や市町村、消防本部など の関係機関との情報共有が行えるよう、消防防災無線、地域衛星通信ネットワーク、ヘリコプターテレビ伝送システムなどを整備しています。

### ● FDMA vehicles and helicopter 消防庁の車両等



nmand vehicle 指揮車



Personnel transit vehicle 人員輸送車



Satellite communication vehicle 衛星車載局車



Command support vehicle 指揮支援車



FDMA helicopter 消防庁へリコプター