

# Activities of Firefighting Agencies during the 2016 Kumamoto Earthquakes

Mutual Aid Management Office/Regional Disaster Management Office,  
Fire and Disaster Management Agency (FDMA)

## 1 Emergency Fire Response Teams

After the foreshock on April 14, based on a call for service from the Commissioner of the FDMA, Emergency Fire Response Teams from a total of 10 prefectures centering on prefectures in the Kyushu region were immediately dispatched to Kumamoto Prefecture.

When the main shock occurred on April 16, the damage was expected to be even more severe. So, based on another call for service from the Commissioner of the FDMA, new Emergency Fire Response Teams from a total of 10 prefectures centering on prefectures in the Chugoku and Shikoku regions were dispatched, and reinforcement teams from the first 9 prefectures (excluding Oita) were dispatched.

During the main shock, a seismic intensity of 6 lower or more was registered in Kumamoto and Oita. The dispatch of new Emergency Fire Response Teams to Oita was also considered, but it was decided that the Oita Prefectural Team in action after the foreshock would respond to calls in its own prefecture and the other Emergency Fire Response Teams would be dispatched to Kumamoto.

### (1) Activity period

A total of 14 days from April 14 (Thu.) to April 27 (Wed.), 2016

### (2) Activity scale

(\*All figures are preliminary estimates as of May 1.)

Total of dispatched teams: Approx. 1,400

Total of dispatched personnel: Approx. 5,000

Actual totals of dispatched teams and personnel including replacements

Total of active teams: Approx. 4,300

Total of active personnel: Approx. 16,000

### (3) Main activities

- a. The activities focused on Kumamoto City, Mashiki Town, Nishihara Village, and Minamiaso Village.
- b. Ground teams conducted the following in cooperation with the relevant authorities including the police, Japan Self-Defense Forces (JSDF), the Ministry of Land, Infrastructure, Transport and Tourism: MLIT (TEC-FORCE) and DMAT: 1) search and rescue activities covering collapsed buildings in urban areas and residential areas, 2) search and rescue activities with shovels on the scene of landslide disasters, and 3) ambulance service for patients to change hospitals and for sick or injured persons in evacuation centers, etc.

Site videos were also effectively distributed by utilizing radio relay vehicles.

- c. Air teams gathered information and distributed videos by utilizing the helicopter video transmission system and the helicopter satellite communications system, and conducted rescue activities via helicopter hoist and ambulance services by helicopter.
- d. At the site of the collapse of the Aso Ohashi Bridge in Minamiaso Village, the width of the landslide made it impossible to get a clear understanding of the disaster situation from the ground. Therefore, landslide disaster experts boarded a fire helicopter to confirm the situation from above.
- e. Based on this data, the on-site joint coordination center consulted with the relevant organizations about the ground teams' course of action, and conducted search and rescue activities taking secondary disaster prevention into consideration by utilizing the earthquake alarms that rescue teams possess as part of their advanced rescue equipment as well as MLIT's unmanned heavy equipment.
- f. In Kumamoto Prefecture, the ground teams and air teams rescued 86 persons, and the ambulances rescued 388 persons in total.

	Emergency Fire Response Teams		
	Command response teams	Ground teams	Air teams
Dispatched due to the foreshock (April 14)	Fukuoka City, Kitakyushu City, Hiroshima City, Kobe City, and Okayama City	Fukuoka Pref., Saga Pref., Nagasaki Pref., Oita Pref., Miyazaki Pref., and Kagoshima Pref.	Fukuoka City, and Kochi Pref.
Dispatched due to the main shock (April 16)	Osaka City	Kyoto Pref., Osaka Pref., <u>Hyogo Pref.</u> , Tottori Pref., Shimane Pref., <u>Okayama Pref.</u> , <u>Hiroshima Pref.</u> , Yamaguchi Pref., Tokushima Pref., Kagawa Pref., Ehime Pref., <u>Kochi Pref.</u> , <u>Fukuoka Pref.</u> , <u>Saga Pref.</u> , <u>Nagasaki Pref.</u> , <u>Miyazaki Pref.</u> , <u>Kagoshima Pref.</u> , and Okinawa Pref.	Tokyo Fire Department, Kyoto City, Osaka City, Kobe City, Tottori Pref., Shimane Pref., Okayama City, Hiroshima Pref., Hiroshima City, Yamaguchi Pref., Kagawa Pref., Ehime Pref., Nagasaki Pref., Miyazaki Pref., and Kagoshima Pref.

\*The underlined prefectures dispatched a team of reinforcements due to the main shock.

## 2 Prefectural firefighting support teams and firefighting support teams from other prefectures (excluding Emergency Fire Response Teams)

To take over the activities of the Emergency Fire Response Teams after their withdrawal, prefectural firefighting support teams were dispatched based on the Mutual Assistance Agreement on firefighting in Kumamoto. Firefighting support teams from Kitakyushu Fire and Disaster Management Bureau and Fukuoka Fire Prevention Bureau were also dispatched based on Article 39 of the Fire and Disaster Management Organization Act and supported firefighting in Minamiaso Village. The situation surrounding their activities was as follows.

### (1) Prefectural firefighting support teams

- a. Active period: A total of 9 days from April 27 (Wed.) to May 5 (Thu.), 2016
- b. Total of active personnel: 186

### (2) Firefighting support teams from other prefectures (excluding Emergency Fire Response Teams)

- a. Active period: A total of 6 days from April 27 (Wed.) to May 2 (Mon.), 2016
- b. Total of active personnel: 36

## 3 Local fire departments

Local fire departments worked hard firefighting within their own jurisdictions. The peak activity conditions in Kumamoto and Oita, which were so devastated, were as follows.

- (1) Fire departments within Kumamoto Pref.: A total of 968 firefighters (April 16)
- (2) Fire departments within Oita Pref.: A total of 378 firefighters (April 16)

## 4 Volunteer fire corps

In this earthquake disaster, many volunteer fire corps became active immediately after the earthquakes in order to carry out a lot of activities, such as fighting fires just after the earthquakes, confirming safety and providing evacuation guidance for local residents, rescue activities for those trapped under collapsed houses, and operational support for evacuation centers after the earthquakes, and provided the core of regional disaster prevention capabilities by taking advantage of their unique characteristics.

The scale of the activities was as follows: a total of roughly 59,000 members (roughly 9,200 members at the peak on April 17) were active in Kumamoto between April 15 and May 4, and a total of roughly 4,700 members were active in Oita on April 16–17 (as of May 4, surveyed by the FDMA).

The main activities were as follows:

### (1) Activities just after the Earthquake

- a. Firefighting  
Volunteer fire corps rushed out early to the locations of fires just after the Earthquake and fought those fires. They also conducted activities to control the fires in cooperation with the fire departments.
- b. Safety confirmation  
Volunteer fire corps, which know the local conditions well, could promptly confirm safety.
- c. Rescue activities, etc.  
During these earthquakes, a lot of houses collapsed, and roads also collapsed in some areas. Amid concerns about the late arrival of rescue teams, the volunteer fire corps confirmed safety as described above

and rescued those trapped under the collapsed houses. They rescued 5 persons in Minamiaso Village, 7 persons in Nishihara Village and 47 persons in Mashiki Town.



Firefighting (Yatsushiro City volunteer fire corps)



Activities at the landslide site (Minamiaso Village volunteer fire corps)

## (2) Activities after the Earthquake

Even days after the earthquakes, volunteer fire corps conducted activities other than firefighting or rescue activities, such as doing rounds of evacuation centers which had a lot of evacuees and local community patrols.

a. Water service, hot meal service and assistance with carrying-in supplies.

b. Distributing flyers and talking to local residents both inside and outside the evacuation centers to prevent them from developing DVT.

c. Patrols and security activities in the affected areas to prevent theft including burglars sneaking into empty houses from which the inhabitants had evacuated, as well as inspecting disaster hazards.



Talking in an evacuation center (Uki City volunteer fire corps)



Debris removal (Nishihara Village volunteer fire corps)

The FDMA, applying the lessons learned from these activities, will further enhance and strengthen the fire and disaster management systems including the activity system for Emergency Fire Response Teams, and do its best to take appropriate measures against disasters.