



Photo 24 Arrival of Helicopters
Helicopters were to be used for transport of serious patients
Hyogo Prefectural Government



Photo 25 Professional SAR Team On Site
Japanese rescue teams trained for international search & rescue
photo by Yokohama Municipal Office

school grounds, children's play areas, outdoor parking lots and small courtyards in front of temples and shrines. Along with traffic jams, this lack of open space also posed serious difficulties for relief and rescue operations.

Since aftershocks were continuing, people (even if their houses were not structurally damaged) wanted to evacuate to where there were no falling objects. Many went to designated evacuation centers, but soon these were all full. Any scarce open spaces were immediately occupied by evacuees. Some even brought their cars to sleep in.

Helicopters from various fire services throughout Japan were assembled at Itami Airport by 13:25 hours on 17 January. Their first mission was aerial reconnaissance on the spread of the fires. Their second was the establishment of an air bridge to evacuate the seriously wounded to hospitals outside the affected area. But there were no large empty spaces in the collapsed area on which to land!

It was also necessary to set up on-site command posts at major rescue sites, but rescue workers were hardly able to park their vehicles. There was not a piece of land anywhere for them to set up tents or to lie down and rest.

Clearing roads was also an urgent priority, but there was no place to put the debris that had fallen onto the roads and no place to temporarily put the cars parked on the streets.

If there had been enough open space and green areas in the built-up blocks, the fires could have been stopped at their edges. On the contrary, in Nagata Ward, where there was a dense, mixed land use of small houses and small factories manufacturing shoes with synthetic rubber (which added fuel to the fire), the fire kept spreading until it hit a large, reinforced-concrete building.

C. Lack of Water

Firefighters arrived in numbers by the late afternoon of 17 January. They then faced a serious shortage of water, since the water mains had been damaged and the pressure had gone down. Fire cisterns in Kobe had not been designed to be earthquake resistant. They cracked and leaked. Water which had been left in swimming pools or undamaged fire cisterns was used up mostly during the initial firefighting. As the city's population had grown, Kobe's rivers had been modified to let heavy rains flow out quickly to Osaka Bay and avoid flooding the built-up area. Therefore, when it is not raining, the water level is kept low. Firefighters used sandbags to dam up the riverbed in order to contain and pump up the small amount of flowing water. At fire sites near the port, ten fire engines were connected to each other to pump up and carry sea water for 2 km. Despite all these efforts, many fire sites could not be extinguished.

The tap water supply was cut to 1.27 million users, and hospitals were deprived of clean water. Nurses boiled water to sterilize medical equipment. Potable water was running short in many households which survived the first blow. Rescue workers had no water to wipe their hands and faces.