As a Tertiary Radiation Emergency Medical Institution, Hiroshima University plays a pivotal role in radiation medicine in the disaster-stricken area. No. of medical professionals dispatched from HU: 1,327 As of February 2013

A Tertiary Radiation Emergency Medical Institution refers to an institution capable of providing high-level emergency medicine for radiation exposure and of final acceptance patients with severe symptoms. Hiroshima University has been selected as a tertiary radiation emergency medical institution for the Western Japan Block, and the National Institute of Radiological Sciences (NIRS) for the Eastern Japan Block. Ever since the Fukushima No. 1 nuclear plant accident, Hiroshima power University—mainly its Hospital, Research Institute for Radiation Biology and Medicine, Radiation Emergency Medicine Promotion Center—has conducted a wide range of supporting activities. coordination with NIRS.

19:05, March 11

About five hours after the occurrence of the earthquake, the Hiroshima University Hospital Disaster Medical Assistance Team (DMAT), comprising two physicians, two nurses and one pharmacist left for the devastated regions. After providing medical services, the team returned to the Hospital on March 15.



March 12 - the present

In response to the declaration of a nuclear emergency situation, the Radiation Emergency Medicine Committee was set up on March 12, starting disaster victim support activities centering on radiation emergency medical care. On the same day, Hiroshima University dispatched the Radiation Emergency Medical Assistance Team (REMAT) No. 1, led by Prof. Koichi Tanigawa. Subsequently a series of REMAT were sent for supporting activities mainly at such places as the Fukushima Prefecture Government Hall, the Fukushima Offsite Center in the Fukushima Prefectural Government Office, Fukushima Medical University, and J Village. At present, our medical staff are working at the emergency medical room of the Fukushima No. 1 nuclear power plant.

14:46, March 11, 2011 Earthquake occurred.

March

April •

May

June

July (

11/ March 16

completed preparations for accepting four serious cases and four moderate cases, so as to ensure that a total of 21 radiation-exposed patients (10 serious cases and 11 moderate cases) could be treated at the six hospitals in Hiroshima Prefecture that had concluded agreements as Radiation Emergency Medicine Cooperation Organizations.

April 1

Prof. Kenji Kamiya was appointed as a Radiation Health Risk Management Adviser to Fukushima Prefecture. He has been working to provide Fukushima Prefecture with advice mainly on health management. April 12 - the present

To impart accurate knowledge to residents worried about exposure to radiation, we held 41 lectures in Fukushima Prefecture and 42 lectures outside the prefecture (as of August 2012).

April 19

To disseminate accurate information on radiation to more people, Hiroshima University opened the Radiation Protection Fundamental Information Portal Site (in Japanese, English and Chinese).

March 20 - May 9 / April 12 - December 27

A professor at the Graduate School of Engineering made measurements independently. In addition, in response to a request from the Ministry of Education, Culture, Sports, Science and Technology, we conducted radioactive material measurements and reported the results.

April 2

Hiroshima University concluded the Cooperation Agreement with Fukushima Medical University, to establish closer coordination and cooperation in the fields of education, research and medical care.

July 28

Hiroshima University concluded the Cooperation Agreement with Fukushima University, with the objective of strengthening research, support and literary education of radiation medicine.





#### ■ Major Activities

On March 12 Hiroshima University REMAT attended a conference of the NIRS nuclear emergency response headquarters, and flew to Fukushima in the helicopters of Self-Defense Forces on March 13, together with the REMAT of NIRS and experts from the Nuclear Safety Research Association (NIRSA)

- (1) At the Fukushima Prefectural Government Hall: Set up the Radiation Emergency Medicine Coordination Conference, to make plans for radioactive contamination screening and to compile and manage the data, while working as experts by offering health consultations for residents and conducting thyroid screenings for children.
- (2) At the Offsite Center in the Fukushima Prefectural Government Office (nuclear emergency response headquarters): Determined the triage points, patient evaluation criteria, decontamination procedures and first medical response.

- (3) Decided the patient transportation methods, transportation routes, medical facilities that would accept patients, and created a flowchart for patient transportation.
- (4) At Fukushima Medical University: Provided physicians and nurses with advice and guidance on patient acceptance, etc., and supported special medical examination for internal exposure using the wholebody counter.
- (5) At J Village: Provided expert guidance on the initial evaluation of radiation-exposed patients, and on radioactive decontamination; determined the patient transportation methods; and accompanied the patients when they were hospitalized.
- (6) At a relay point for residents' temporary return to areas within 20 km from the Fukushima No. 1 nuclear power plant: Engaged in on-site progress management and guidance as a medical team, and treated the sick and wounded.
- \* Two station wagons were deployed to secure on-site mobility (on March 12 and from the departure on March 15 to October 7). One local person was hired as an administrative staff member who provided logistic support for the dispatched DMAT. (April 18 September 30)

August September October November December January February March April May June July August

July 1 - the present

At the Fukushima No. 1 nuclear power plant, an emergency medical room was set up, where emergency physicians are stationed. The Hiroshima University Radiation Emergency Medicine Promotion Center serves as the Secretariat of the Emergency Medical Service System Network to coordinate planning of the dispatch of medical professionals. At the emergency room. four emergency doctors from Hiroshima University work in rotation, together with nurses who are also dispatched from our university.

September 28 and 29 / October 19 and 20 / November 30 – December 1

Faculty members and students from the Graduate School of Engineering and the Graduate School of Biosphere Science were dispatched to Minamisoma City on three occasions to sample atmospheric dust and soil.

February 29 – March 2 / March 23 – March 26 / April 1 – 5 / May 1 – 4 / August 8 – 10, 2012

- (1) Dispatched a Professor and an Associate Professor of the Graduate School of Engineering to Minamisoma City, where they conducted environmental radioactivity measurements and sampling of atmospheric dust, groundwater, river water and soil.
- (2) Dispatched a Professor of the Pr

#### August 8 – the present

At Hiroshima University Hospital, we have been conducting medical examinations of internal exposure to radiation using the whole body counter. The intended examination takers are residents of Fukushima Prefecture, including evacuees from the Prefecture, as well as those who have entered the evacuation zones designated by the national government.

## Relief supplies

Dispatch of relief supplies, including food, medicine and information appliances

In response to a request from Tohoku University, Fukushima University and other various institutes, Hiroshima University sent relief supplies to the disaster-stricken areas. These supplies were sent in six batches, starting from March 19. Among the items included were daily necessities such as food and heaters, medical products such as denture cleaners, and information appliances such as notebook computers and printers.



#### Acceptance of Disaster Victims

Acceptance of affected undergraduate and postgraduate students and a researcher from Tohoku Gakuin University, Tohoku University and Kitasato University

Hiroshima University Law School accepted one student from Tohoku Gakuin University Law School. Our Graduate School for International Development and Cooperation accepted one researcher from Tohoku Gakuin University. Our Faculty of Applied Biological Science accepted one student from Kitasato University. Hiroshima University offered its Yamanaka Hall and other facilities as accommodations for these students.

## Fundraising for the Great East Japan Earthquake

Fundraising and Donations through the Japanese Red Cross Society

We asked our faculty members, students and others concerned with the University for their cooperation in donating to disaster victims. As a result, we raised donations totaling 19,822,748 yen as of the end of August 2011. These donations were all sent to the Japanese Red Cross Society.

Donations raised between March and August 2011: 19,822,748 yen

### Support for Affected Students

# Exemption from Entrance/Tuition Fees

As part of its support for affected students, Hiroshima University granted five students total exemption from the entrance fee, 24 students total exemption from the tuition fee for the first semester, and 12 students total exemption from the tuition fee for the second semester. Moreover, we set up a financial counseling window for students affected by the disaster.

- Dispatch of doctors, pharmacists, etc.
- Dispatched doctors, nurses and other medical professionals to the affected areas to assist medical services at evacuation centers, etc.
- Screening surveys, radiation measurements, etc.
  Dispatched radiation experts who conducted radioactive screening and radiation dose measurements in Fukushima Prefecture.
- Dispatch of lecturers to deliver lectures on radiation-related themes Dispatched experts who delivered lectures or seminars for farmers in the disaster-stricken areas
- Overseas dispatch of investigators Dispatched investigators to Thailand where they conducted surveys to support recovery from earthquake and tsunami disasters.
- Creation of a map of tsunami-hit regions Created a map of tsunami-hit regions upon the request of the Association of Japanese Geographers. Our students also participated in map-making.