

NIRS's Support Measures and Activities to TEPCO Fukushima Daiichi Nuclear Power Station (1F)

1 . Sending Experts (as of August 1, 2011)

- (1)From March 12 NIRS began sending experts to Fukushima for radiation screening for residents at shelters, medical response to workers at the power plant and coordination between Fukushima Prefecture and institutions concerned with radiation exposure medicine.
- (2)With regard to residents' temporary home-visits to the non-entry zone from May 10, NIRS sent 6 members of its staff, including a physician, a nurse and a radiation control specialist to lead the contamination checks on the residents and their personal belongings they have brought back with them.
- (3)A total of 194 experts in radiation exposure medicine (physicians, nurses, radiation control officers) have worked; 6 currently working in Fukushima.
- (4)Experts sent to the Government's Disaster Control Headquarters and other governmental offices (MEXT, NSC, and Cabinet Office)

2 . Dealing with Residents at Shelters (Check for pediatric radiation exposure on the thyroid gland)

- (1)Cooperating with the local off-site center and Fukushima Prefecture government, NIRS experts measured radiation on the thyroid gland of children in the indoor sheltering zone.
(Measurements on 134 children in Iwaki city, 647 in Kawamata-cho and 299 in Iitate-mura showed no abnormalities.)

3 . Dealing with Plant Workers

- (1) Screening workers at the accident site: 2,342 of those working in the plant were measured for radiation exposure levels. No exposure that may cause immediate health effect was observed.
- (2)Enhancement of the Radiation Exposure Medical Network: To be prepared for the situation unfolding in the future, NIRS and the local Disaster Control

Headquarters have jointly established a system that will enable NIRS as the core center to work in tandem with 49 universities and 66 university hospitals so as to provide appropriate medical treatment for highly exposed patients (450 patients can be accepted).

(3) Response to exposure accidents

- 1) On March 14, one SDF officer who had been working at the time of the hydrogen explosion at 1F Reactor No. 3 was transferred to NIRS by SDF helicopter from Fukushima Univ. Hospital and discharged on 17.
- 2) 3 workers exposed during work at 1F Reactor No. 3 on March 24 left the NIRS hospital on March 28. (Diagnosis on their revisit on April 11 for a medical check-up showed no problem in their health condition.)

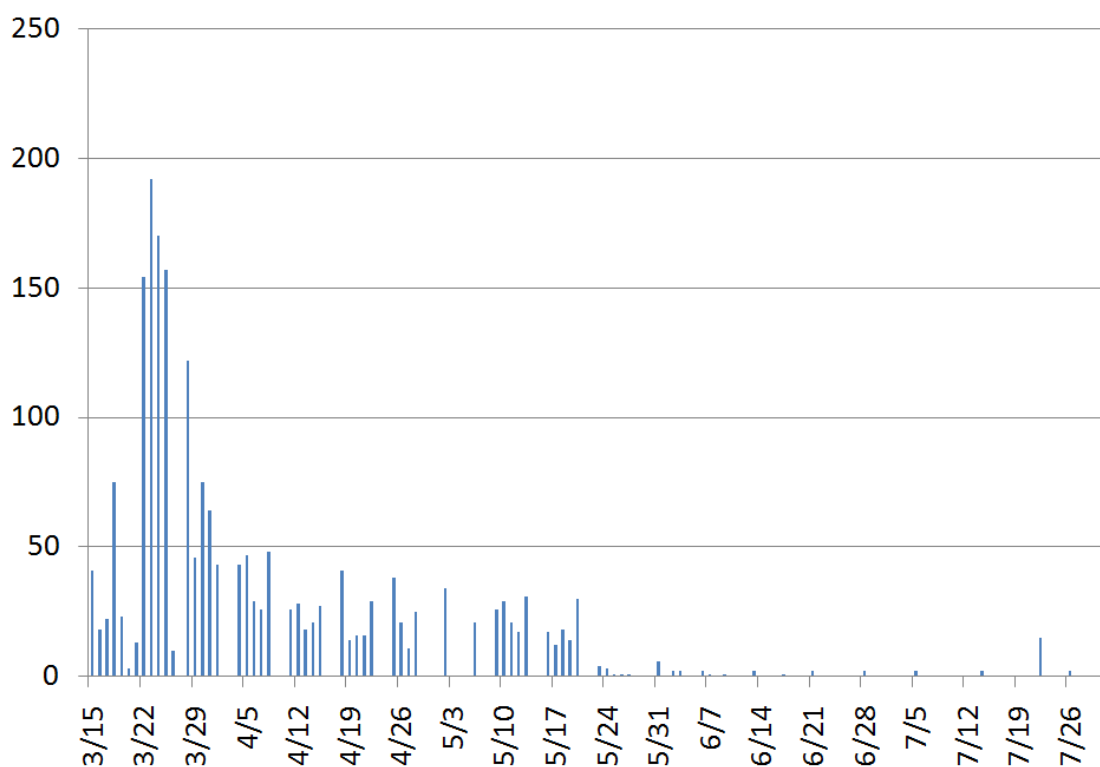


Fig.1. Transition of radiation screening for plant workers

4. Health monitoring survey of residents of Fukushima prefecture

- (1) As a part of health monitoring survey of Fukushima prefecture, NIRS conducted a series of methodological studies for the purpose of internal exposure dose evaluation of residents selected from caution zone and evacuated areas in Fukushima prefecture.

(2) From June 27th, NIRS has implemented body surface contaminant test, whole body counter measuring, thyroid monitoring evaluation, and bioassay of urine.

5. Telephone Consultation (as of August 1, 2011)

(1) For medical professionals and disaster prevention workers, NIRS has been operating a 24-hour radiation emergency medical hotline since Dec. 2007. This hotline was flooded with calls from the general public and thus set up a new telephone consultation line on March 13, targeting those not specialized in this field.

(2) Along with the MEXT 's health hotline opened on March 17, NIRS expanded its telephone consultation service for the general public, launching a “Help Desk on Radiation Exposure and Health Effects,” with 7 lines available at the maximum around the clock. Frequently-asked questions were compiled and posted on the NIRS website.

(3) The total number of calls received to present: about 13,000(including 10,000 as MEXT health consultation service for radiation exposure).

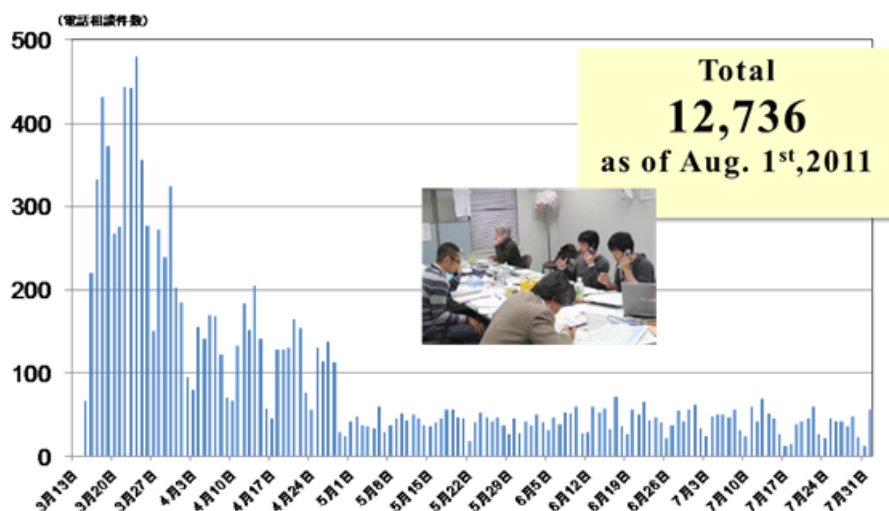


Fig.2. Trend of telephone consultation

6. Recovery and Rebuilding Activities

(1) Estimates of exposure doses of residents

1) Dr. Akashi, Director of Res. Center for Radiation Emergency Medicine, participated in Japan-US taskforce meeting of radiation medical experts held on March 27.

2) Developing a system to assess exposure doses of residents/ Preparations for carrying out a survey on evacuation behavior patterns in collaboration with NSC under the initiative of a nuclear disaster victims' support team.

7. Open Lectures for Residents (as of August 1, 2011)

(1) Open lectures were held in order to ease the anxiety about health effects caused by radiation exposure that many people had felt after the accident.

So far, there have been 35 lectures in Fukushima Prefecture since May 14 and 99 in other areas, attended by 144 NIRS experts as lecturers.

8. Evaluation of Radiation Exposure of Residents

(1) NIRS has cooperated Fukushima Prefecture in the evaluation of radiation exposure by about 2 million residents of the Prefecture. The survey has started for about 28 thousand people who live or lived around the Deliberate Evacuation Area.

(2) The radiation doses will be estimated from the combined analyses of the behavior of each resident after the earthquake to July 11th and time-sequential maps of radiation contamination in the vicinity of 1F which were made by MEXT, JAEA and others.