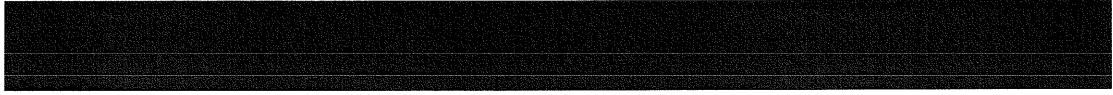


Group D: Request 3.38



[Answer from NIRS]

The 7 workers above complained of anxiety for radiation exposure. However, no abnormal symptom of radiation exposure was observed in the workers.

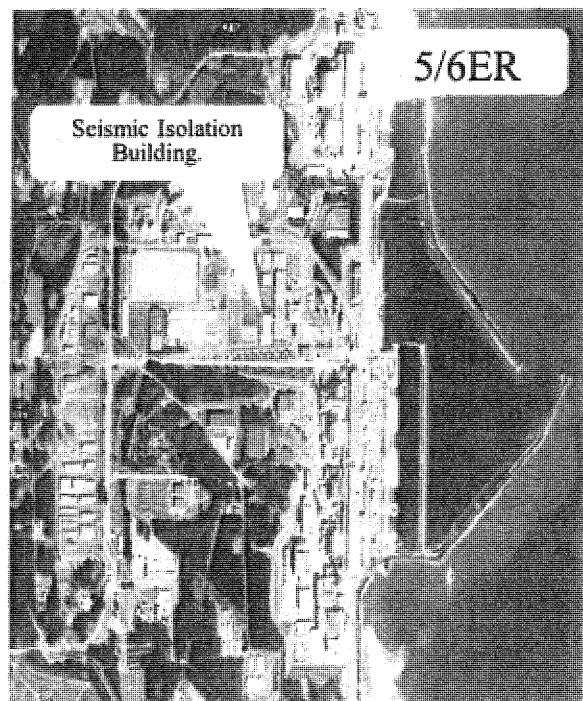
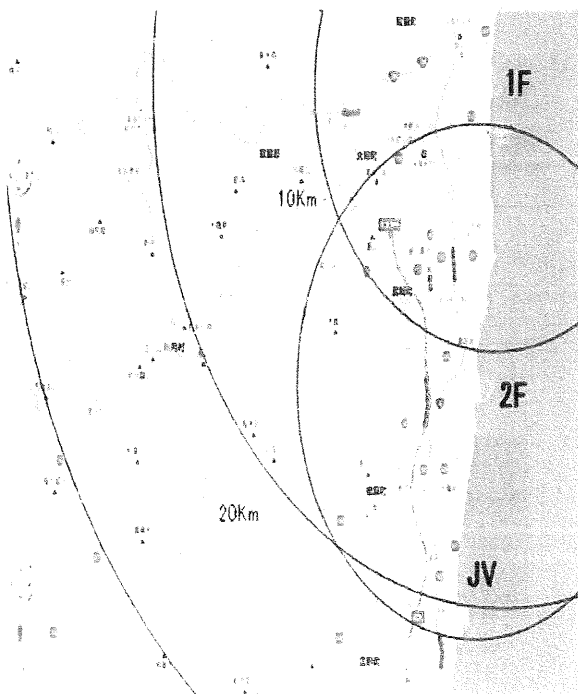
Iodine Prophylaxis for Emergency Workers in Fukushima Daiichi NPS of TEPCO

Tokyo Electric Power Company

Industrial Physician of Head Office Hiroshi Kikuchi

1

The Seismic Isolated Building of 1F and J VILLAGE



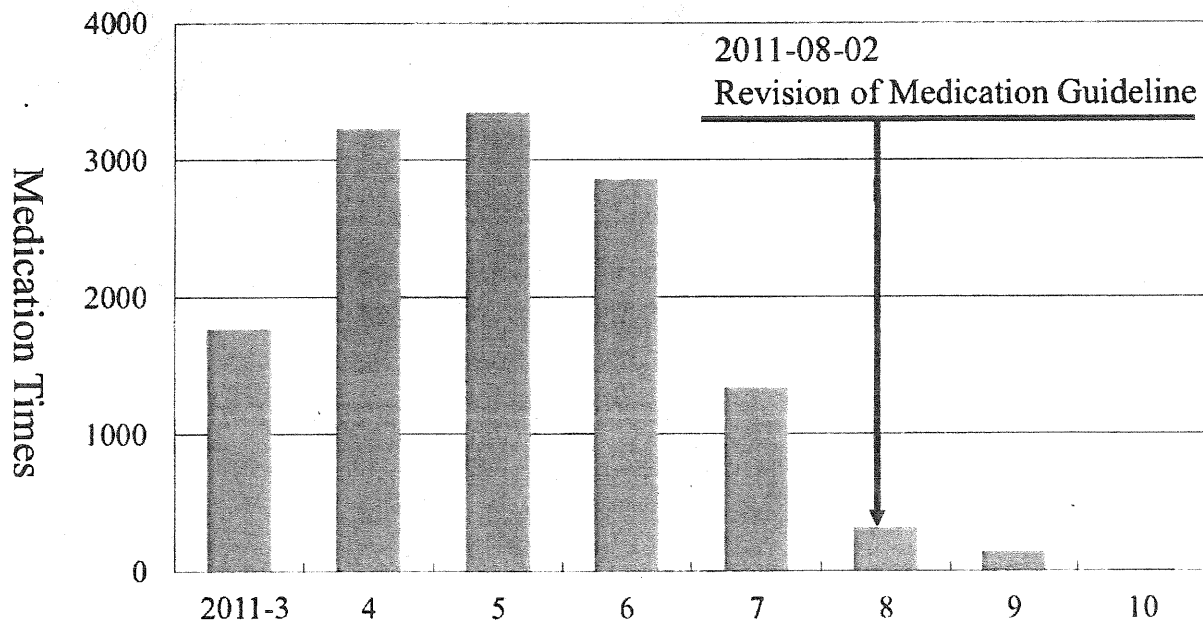
2

Stable Iodine Medication Record in Fukushima Daiichi NPS

- 7 months, from 2011-03-13 to 2011-10-12
- Medication was started following the emergency response plan of medical team. Medicated group were reduced to workers in some particular buildings on 2011-08-02, then suspended completely on 2011-11-21
- From the stockpiles of 30,000 tablets of stable iodine, one or two of 50mg stable iodine tablets were medicated each time.
- Cost free for all workers despite affiliation.
- Medicated mainly from the medical team of the emergency response headquarter at 2nd floor of the Seismic Isolation Building.
- Workers were consulted about anamnesis or contraindication, such as thyroid diseases or iodine hypersensitivity, and requested the consent with their signature.
- About 2,000 people including TEPCO workers and contractors took stable iodine. Age distribution is not known. More than 10 females took stable iodine by 2011-03-14
- Stable iodine medications were made almost 13,000 times, and total number of medicated tablets were almost 17,500
- Cumulative dosage of 75% of workers were less than 10 tablets per person, even the maximum dosage is 87 tablets.

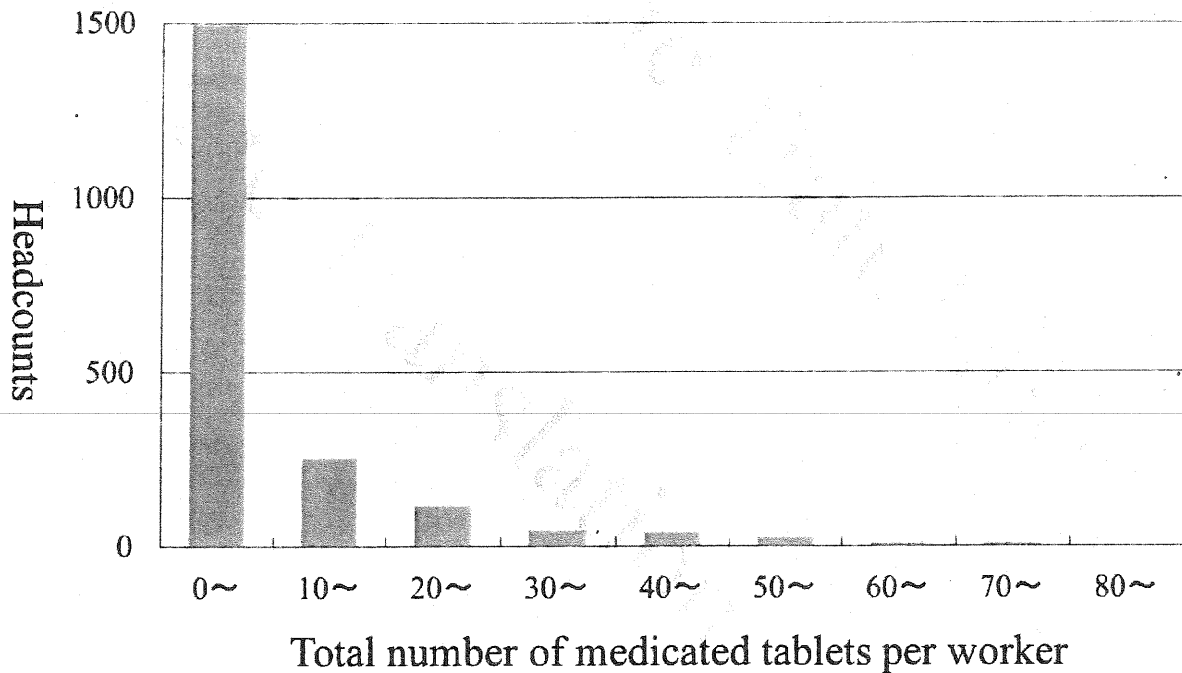
3

Stable Iodine Medication Times in Fukushima Daiichi NPS



4

Headcount of Stable Iodine Medicated Workers



5

Health Checkup for Workers Medicated Stable Iodine

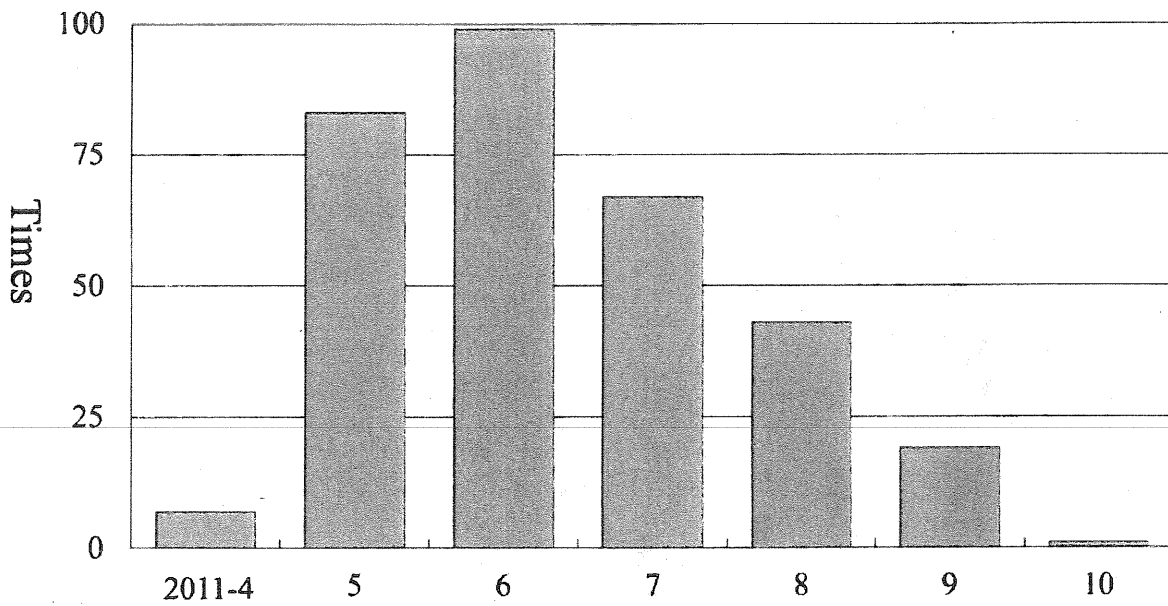
- Health checkup started from 2011-04-13 and the latest checkup was on 2011-10-03.
- Objective workers are either,
 - (1) medicated stable iodine continuously more than 14 days, or
 - (2) more than 20 tablets of accumulated dosage in the first time or after the last health checkup.

Medical team of Fukushima Daiichi examined the medication record and notified to workers about health checkup guidance.

- Health Checkup were basically performed by J VILLAGE Medical Center or Health Management Group of TEPCO Head Office.
- Blood tests were performed. TSH, FT₃, FT₄, K were measured.
- The results were sent from investigation institutes to the health management group of TEPCO head office. The blood test results and status were notified to workers.
- Cost for health checkup were covered by TEPCO.

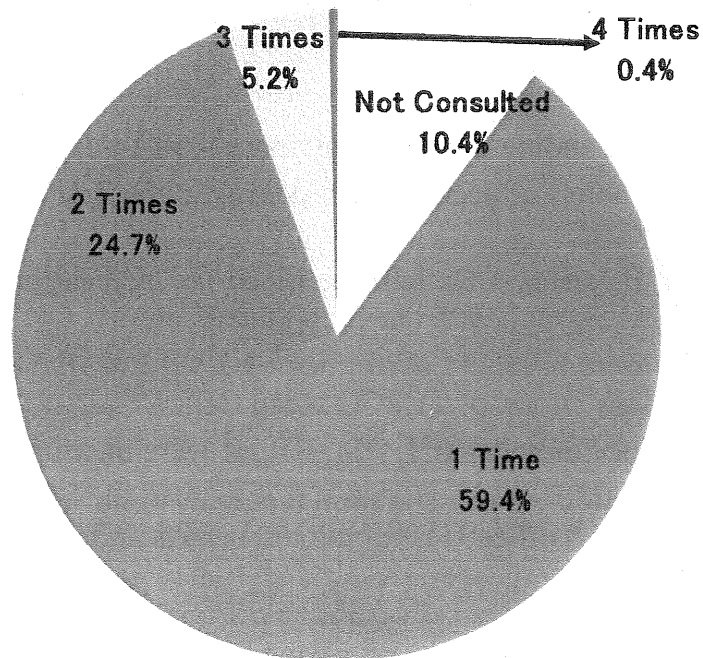
6

Health Checkup for Workers Medicated Stable Iodine



7

Health Checkup Times of Workers medicated more than 20 stable iodine tablets provided in 1F



8

Health Condition of Stable Iodine Medicated Workers

- There are no declaration about side effects with stable iodine prophylaxis including anaphylaxis with iodine hypersensitivity and no suspected case of side effect among the injured and sick persons in Fukushima Daiichi.
- All of the 229 examinees are male and about 20% are over 40 years old.
- Health checkups were performed about 300 times. The most frequent person got checkups 4 times. About 10% of examinees did not get checkup. A little less than 90% of persons they were medicated stable iodine were not listed on the health checkup based on the criterion as mentioned before.
- Two of workers in 20s and one of 30s were with evidence of both high TSH and low FT₄. Transient hypothyroidism were suspected for these three workers because the re-examine of all of them after the suspend of stable iodine prophylaxis indicated the normal level of TSH and FT₄. Another one in 20s with evidence of both high TSH and low FT₄ got thorough reexamination and the absence of any abnormality was confirmed.
- 1.8% (four persons) of examinees were both TSH>5.0 and normal level of FT₄. It was not recognized as increase of hypothyroidism because it was reported that almost 1 to 3.5% of male are with potential hypothyroidism.

9

Committed Thyroid Equivalent Dose and Record of Stable Iodine Prophylaxis

- 178 workers were evaluated as received more than 100mSv committed thyroid equivalent dose by the examinations made by the National Institute of Radiological Sciences or by the Japan Atomic Energy Agency. Age construction and stable iodine prophylaxis is as shown in table below.

	Stable Iodine Prophylaxis		Total
	Medicated	Not medicated	
Under 40	76	25	101
Over 40	25	52	77
Total	101	77	178

10