

## Thyroid Ultrasound Examination: Remarks on the Results of the Preliminary Baseline Survey

- The Thyroid Ultrasound Examination, which had no precedent for childhood screening, revealed thyroid cancers that might have otherwise gone unnoticed.  
Percentage of examinees whose tumors were diagnosed as malignant or suspicious for malignancy as a result of fine-needle aspiration cytology (against the total examinees of the Primary Examination)

FY2011	FY2012	FY2013
0.03%	0.04%	0.04%

Material for the 20th Prefectural Oversight Committee Meeting for Fukushima Health Management Survey

- Evaluation of thyroid cancers found in the Preliminary Baseline Survey, the Interim Report by the Prefectural Oversight Committee Meeting for Fukushima Health Management Survey (March 2016)  
"Comprehensively considering that: exposure doses due to the accident at the Fukushima Daiichi NPS were generally lower than those caused by the Chernobyl NPS Accident; the period of time from the exposure to the detection of cancers is short (mostly from one to four years); cancers have not been detected in those aged 5 or younger at the time of the accident; and there is no significant regional difference in detection rates, it can be concluded that thyroid cancers found so far through the Thyroid Examination cannot be attributed to radiation discharged due to the accident.  
However, the possibility of radiation effects may be small but cannot be completely denied at this point in time. Additionally, it is necessary to accumulate information in the long term for accurate evaluation of the effects. Therefore, the Thyroid Ultrasound Examination should be continued, while meticulously explaining the disadvantages of receiving the examination and obtaining the understanding of examinees."
- The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) reiterated in its 2017 White paper\* that excessive thyroid cancer risks due to radiation exposure do not need to be taken into consideration.  
\* Developments since the 2013 UNSCEAR Report on the levels and effects of radiation exposure due to the nuclear accident following the great east-Japan earthquake and tsunami (A 2017 White Paper to guide the Scientific Committee's future programme of work)

**In order to ascertain radiation effects,  
it is necessary to monitor developments over a long term.**

Thyroid cancers found so far through the Thyroid Ultrasound Examination being conducted in Fukushima Prefecture are considered to be unrelated to the radiation discharged due to the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS.

This evaluation is based on a comprehensive judgment of the following facts:

- (i) Exposure doses due to the accident at the Fukushima Daiichi NPS were generally lower compared with those caused by the Chernobyl NPS Accident.
- (ii) The period of time from the exposure to the detection of cancers is short, mostly from one to four years.
- (iii) Cancers have not been detected in those who were 5 years old or younger at the time of the accident.
- (iv) Age distribution of patients significantly differs in Fukushima Prefecture and Chernobyl (p.140 of Vol. 1, "Comparison between the Chernobyl NPS Accident and the TEPCO's Fukushima Daiichi NPS Accident (Ages at the Time of Radiation Exposure)").
- (v) There are no significant differences in detection rates among different regions.

However, it is necessary to monitor developments over a long term to ascertain radiation effects.

(Related to p.141 of Vol. 1, "Evaluation of the Interim Report on Thyroid Cancer Compiled by the Expert Meeting on Health Management After the TEPCO's Fukushima Daiichi NPS Accident")

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