

**Basic Information on Thyroid
Thyroid Exposure**

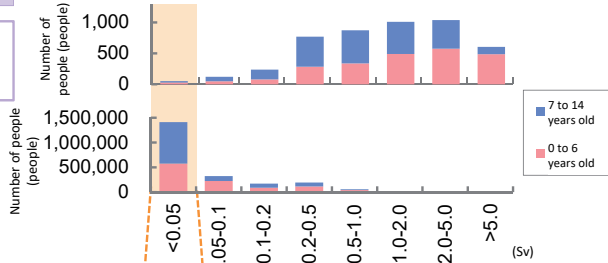
**Comparison between the Chernobyl Accident and the
Accident at Tokyo Electric Power Company (TEPCO)'s
Fukushima Daiichi NPS (Thyroid Doses)**

Children's thyroid exposure doses

Chernobyl accident

A group of people who evacuated in Belarus in 1986

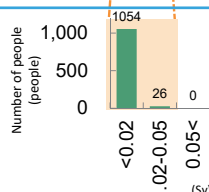
All people in Belarus (excluding evacuees)



Source: United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2008 Report

Accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS

* This data is based on a survey targeting a limited group of residents and does not reflect the overall circumstances.



Calculation method
For comparison, the "Results of the Simple Thyroid Screening for Children" contained in the "Outline of Children's Simple Measurement Test Results" (August 17, 2011; Team in Charge of Assisting the Lives of Disaster Victims (Medical Team)) is rearranged using "screening level of 0.2 μSv/h (equivalent to 100 mSv of thyroid dose equivalent for 1-year-old children)" (May 12, 2011; Nuclear Safety Commission of Japan) (Gy = Sv)
Source: "Safety of Fukushima-produced Foods," Nuclear Disaster Expert Group
Judging from the measurement method and ambient dose rates at the relevant locations, the detection limit is set at around 0.02 Sv.

It is very difficult to accurately assess the level of exposure of children's thyroids to radioactive iodine after the accident at TEPCO's Fukushima Daiichi NPS, but rough estimation is possible using the results of the thyroid screening conducted for children as of approx. two weeks after the accident.

This screening was conducted using survey meters for 1,080 children aged 15 or younger in Kawamata, Iwaki, and Iitate, where children's thyroid doses were suspected to be especially high.

As a result, thyroid doses exceeding the screening level set by the Nuclear Safety Commission of Japan (at that time) were not detected and measured thyroid doses were all below 50 mSv for those children who received the screening.

In the UNSCEAR's analysis of thyroid doses after the Chernobyl accident, the dose range below 50 mSv is considered to be the lowest dose range. Thyroid exposure doses for children in Belarus, where increased incidences of childhood thyroid cancer were later observed, were 0.2 to 5.0 Sv or over 5.0 Sv among a group of evacuees, showing two-digit larger values than the results of the screening in Fukushima Prefecture.

(Related to p.132 of Vol. 1, "Comparison between the Chernobyl Accident and the Accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS (Ages at the Time of Radiation Exposure)")

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