Basic Information on Thyroid Thyroid Exposure

Exposure of a Group of Evacuees

- Chornobyl NPS Accident -

| 4 | | Number of people (1,000 people) | Average effective dose (mSv) | | Avorago |
|---|-----------|--|------------------------------|--|----------------------------------|
| | Countries | | External exposure | Internal exposure (in organs other than the thyroid) | Average thyroid dose (mGy) |
| | Belarus | 25 | 30 | 6 | 1,100 |
| | Russia | 0.19 | 25 | 10 | 440 |
| | Ukraine | 90 | 20 | 10 | 330 |

mSv: millisieverts mGy: milligrays

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

Thyroid exposure doses are high for people who were forced to evacuate after the Chornobyl NPS Accident and the average is estimated to be approx. 490 mGy, which was far larger than the average thyroid exposure dose for people who resided outside evacuation areas in the former Soviet Union (approx. 20 mGy) and the average for people residing in other European countries (approx. 1 mGy).

The average thyroid exposure dose for children is estimated to be even higher. One of the major causes is that they drank milk contaminated with I-131 for two to three weeks after the accident.

The effective dose from internal exposure in organs other than the thyroid and from external exposure was approx. 31 mSv on average. The average effective dose was approx. 36 mSv in Belarus, approx. 35 mSv in Russia, and approx. 30 mSv in Ukraine. It is known that the average effective dose is larger in Belarus than in Ukraine and Russia as in the case of the average thyroid exposure dose.

(Related to p.138 of Vol. 1, "Time of Developing Childhood Thyroid Cancer - Chornobyl NPS Accident -")

Included in this reference material on March 31, 2013 Updated on March 31, 2019