

- It is not likely that any significant changes attributable to radiation exposure due to the accident would arise in future cancer statistics.
- There is the possibility that thyroid cancer risks may theoretically increase among the group of children whose estimated exposure doses were at the highest level. Therefore, their situations need to be closely followed up and assessed.
- Congenital abnormalities and heritable effects are not detected.

Source: Prepared based on the UNSCEAR's "Fact sheet on UNSCEAR 2013 Report: Japanese (Evaluating Radiation Science for Informed Decision-Making)"
(https://www.unscear.org/docs/publications/2016/factsheet_jp_2016_web.pdf)

The UNSCEAR assessed public health effects as indicated above based on its exposure dose assessment.

Assessment concerning risks of specific types of cancer and other diseases is as follows.

- **Thyroid cancer:** Most of the doses were in a range for which an excess incidence of thyroid cancer due to radiation exposure has not been confirmed. However, absorbed doses to the thyroid towards the upper bounds could lead to a discernible increase in the incidence of thyroid cancer among sufficiently large population groups. Nevertheless, the occurrence of a large number of radiation induced thyroid cancers in Fukushima Prefecture—such as occurred after the Chornobyl NPS Accident—can be discounted, because absorbed doses to the thyroid after the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS were substantially lower than those after the Chornobyl NPS Accident.
- **Leukemia:** The UNSCEAR considered the risk to those exposed as fetus embryo during pregnancy, and during infancy and childhood, and concluded that no discernible increases in the incidence of leukemia among those groups are expected.
- **Breast cancer:** The UNSCEAR considered the risk to those exposed at the stage of youth, and concluded that no discernible increases in the incidence of breast cancer among those groups are expected.
- **Exposure during pregnancy:** The UNSCEAR does not expect any increases in spontaneous abortion, miscarriages, perinatal mortality, congenital effects or cognitive impairment resulting from exposure during pregnancy, nor does it expect any discernible increases in heritable diseases among the descendants of those exposed from the accident at TEPCO's Fukushima Daiichi NPS.

The UNSCEAR states that their assessment of public exposure doses due to radioactive materials from the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS contains uncertainties because the assessment was premised on certain assumptions based on insufficient knowledge and information.

[Relevant parts in the Report]

- UNSCEAR 2013 Report (prepared based on paragraphs 220 and 222 to 224 on page 89, Scientific Annex A)

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