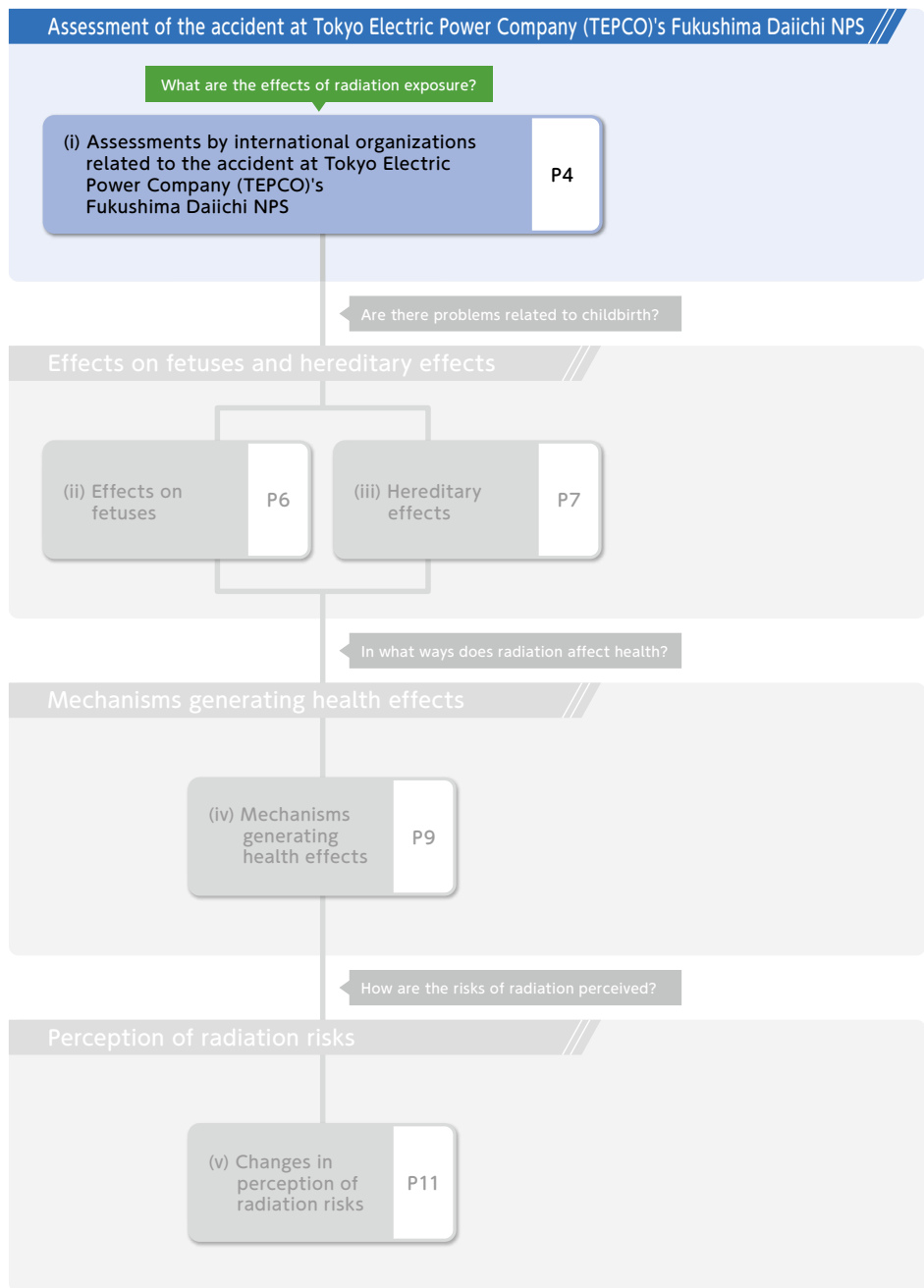




Assessment of the accident at Theme: Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS

In this section, you can learn about the assessments of the health effects of radiation exposure following the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS conducted by international organizations.



Effects on Fetuses and Hereditary Effects

Assessment of the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS

Effects on fetuses and hereditary effects

Mechanisms generating health effects

Perception of radiation risks



(i) Assessments by international organizations related to the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS

Effects on Fetuses and Hereditary Effects

Assessment of the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS

Effects on fetuses and hereditary effects

Mechanisms generating health effects

Perception of radiation risks

What kind of viewpoints have international organizations expressed on the health effects of radiation exposure resulting from the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS?

● Assessment of the Effects of Atomic Radiation by the United Nations Scientific Committee (UNSCEAR)

The 2020 and 2021 reports by UNSCEAR evaluate public health effects as follows, based on exposure dose evaluations.

- In the years since the UNSCEAR 2013 Report, there has been no documentation claiming adverse health effects on residents of Fukushima Prefecture directly caused by radiation exposure from the accident at TEPCO's Fukushima Daiichi NPS.
- Acute health effects caused by radiation exposure have not been reported.
- Currently available methods are not expected to be able to demonstrate an increase in irradiation-related incidence rates in future disease statistics.
- It is suggested that identification of an excessive risk of thyroid cancer, inferred from radiation exposure, will be highly unlikely in any of the observed age groups.
- It is suggested that the increase in the incidence of thyroid cancer observed in thyroid examinations following the nuclear accident may have been due to overdiagnosis (i.e., detection of thyroid cancer that would not have been detected without screening and that would not have resulted in symptoms or death during the individuals' lifetimes).

In addition, there has been no confirmation of reliable evidence for radiation exposure-related excessive congenital disorders, stillbirths, premature births, or low birth weight. An increase in the incidence of cardiovascular disease and metabolic abnormalities was observed in persons who evacuated following the accident, but this is believed to be an effect of social and lifestyle changes, and has been ruled to be not due to radiation exposure.

For more information about the UNSCEAR 2013 Report, see page 198 of Vol. 1, FY2022 edition (available in Japanese only).

Source: Fukushima Prefecture resident health survey results

● **What has become clear from survey of expecting and nursing mothers**

Radiation effects on newborn babies had been worried about, but percentages of premature births, low birth-weight babies, and congenital abnormalities or anomalies in Fukushima Prefecture after the earthquake were found to be almost the same as generally available data, including Vital Statistics collected nationally. This survey of pregnant women ended with the 2020 survey.

For more information about pregnancy and birth surveys, see page 161 of Vol. 2, FY2022 edition.



● **Findings related to childhood thyroid cancer**

Although internal exposure dose due to radioactive iodine is said to be at a lower level than Chernobyl in Fukushima Prefecture, thyroid examinations have been continued under the framework of the Fukushima Health Management Survey with the aim of ascertaining children's current thyroid status and promoting their health into the future. In June 2019, the thyroid examination evaluation working group under the Fukushima Health Management Survey Oversight Committee released a summary indicating no observation of a link between thyroid cancer found in full-scale examinations (the second round of examinations) and radiation exposure caused by the accident at TEPCO's Fukushima Daiichi NPS.

For more information about surveys related to thyroid cancer in children, see page 144 of Vol. 2, FY2022 edition.