

WHO forecasts no significant increase in cancer patients in Fukushima

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By YURI OIWA/ Staff Writer

Cases of cancer caused by radiation from the Fukushima nuclear accident will not increase significantly, although the risk facing infants near the plant has risen, a draft report by the World Health Organization said.

The WHO's draft report, obtained by The Asahi Shimbun, also said the health risks for people living outside Fukushima Prefecture were negligible, regardless of age.

The report, the WHO's first to assess potential long-term health problems related to last year's nuclear accident at the Fukushima No. 1 nuclear plant, will be released soon.

Due to uncertainties in determining the effects of radiation exposure, the WHO's predictions were based largely on studies of victims of the Chernobyl nuclear disaster in Ukraine in 1986 and the atomic bombings on Japan in 1945.

That data was used with the WHO's estimates on accumulative radiation exposure inside and outside of Fukushima Prefecture of among residents who were 1 year old, 10 years old and 20 years old at the time the accident occurred.

The WHO then calculated the chances of the residents developing thyroid cancer, breast cancer, colon cancer, and other cancers, including leukemia, within 15 years of the accident and during their lifetimes.

Among all local governments covered in the WHO report, the lifetime risk was the highest for 20-year-old men and women in Namie, a town near the stricken nuclear plant, according to the draft report.

The thyroid cancer incidence rate was 0.76 percent for 20-year-old women and 0.21 percent for 20-year-old men in the town before the accident. The rate was forecast to rise by roughly 10 percent among all 20-year-olds in Namie due to the radiation doses from the damaged nuclear plant.

The rate for other cancers was predicted to increase by 1 percent to 3 percent among this age group in Namie, according to the report.

As for 20-year-olds in other parts in Fukushima Prefecture, the overall incidence rate for other cancers will likely increase by less than 1 percent.

Based on these numbers, the WHO concluded that the overall increase in the cancer incidence rate for 20-year-olds following the Fukushima nuclear accident was statistically insignificant.

But for children, who are deemed more susceptible to radiation exposure than adults, the increases varied sharply depending on the location.

The incidence rate for 1-year-old girls in Namie for developing thyroid cancer by the age of 16 grew 9.1 times from 0.004 percent before the accident to 0.037 percent, according to the WHO report. That means 3.7 1-year-old girls out of 10,000 living in the town will develop thyroid cancer, compared with 0.4 girls before the accident.

For 1-year-old boys in Namie, the likelihood of developing leukemia was predicted to go up 1.8 times from 0.03 percent before the accident.

The thyroid cancer rate for 1-year-olds in Iitate, another town near the stricken nuclear plant, grew 5.9 times, while the rate in the prefectural capital of Fukushima increased 3.7 times.

The risks posed to fetuses were considered the same as those for 1-year-olds.

The report also said the chances of young people exposed to low-level radiation developing benign tumors or cysts will likely rise, and it urged continued monitoring of their health even though the tumors and cysts are unlikely to become cancerous.

Experts involved in the WHO's assessment said some of the figures could have been overrated as a precaution against possible failures in taking into account certain signs of health damage.

The WHO in May released its estimates of accumulative radiation doses for people in Fukushima Prefecture. These estimates assumed that people living near the Fukushima No. 1 plant remained in their homes for four months after the accident started and ate only locally produced food.

Indeed, some residents stayed within 20 to 30 kilometers of the plant for months after the meltdowns in March last year.

The WHO's estimates put the lifetime radiation exposure in the thyroid glands of 1-year-olds at 122 millisieverts in Namie, 74 in Iitate, 49 in Katsurao, 48 in Minami-Soma and 43 in Fukushima, Date, Kawamata, Naraha and other municipalities.

The international organization has said health risks could exist even with low-level radiation exposure of less than 100 millisieverts.

By comparison, evacuees from the Chernobyl accident were exposed to an average of 490 millisieverts of radiation, according to a U.N. report.

About 6,000 of the Chernobyl evacuees, most of them children, later developed thyroid cancer, a disease that is relatively easy to treat compared with other types of cancer. Of them, fewer than 20 died of thyroid cancer.

The WHO forecast does not mean that affected residents in Fukushima Prefecture will never develop cancer as a result of radiation exposure, but it does indicate that the rate of increase in cancer cases is so small that it does not present a statistically detectable risk.

Some health experts hailed the WHO report for spelling out the health risks in numbers.

Residents in Fukushima Prefecture became skeptical of the repeated reassurances by the central government and the Fukushima prefectural government that their health would probably not be affected if their radiation exposure was 100 millisieverts or less.

Epidemiologists and specialists of radiation-related illnesses from around the world were involved in calculating the WHO's assessments.

The Japanese participants were Otsura Niwa, professor of radiation biology at Fukushima Medical University, Roy Shore, vice chairman of the Radiation Effects Research Foundation, and Makoto Akashi, executive director at the National Institute of Radiological Sciences.

Although the experts were split on whether the WHO's predictions overrated the dangers, a specialist on radiation doses praised the precautionary approach.

"We cannot help it if the radiation estimates aimed for health purposes are inflated at the beginning," the specialist said. "The figures can be adjusted when we have more information available."

Shore also supported the WHO's stance, citing the results of radiation checks of atomic bomb survivors in Hiroshima and Nagasaki, as well as the results of epidemiologic studies of people working in facilities where relatively high levels of radiation are present, including hospitals.

Shore said that even if people are constantly exposed to low-level radiation exposure, their health could be affected depending on the actual level.

But Niwa argued that the WHO should have stuck to realistic radiation estimates because overblown figures could create unnecessary fears among the affected people.

"If people were told of risks higher than they really are, they will be concerned," he said. "Even if the figures were later downgraded, they will only harbor doubts."

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