

Contamination Outside Fukushima 福島の範囲を超える汚染

Matthew Penney

Between 2012 and 2014 we posted a number of articles on contemporary affairs without giving them volume and issue numbers or dates. Often the date can be determined from internal evidence in the article, but sometimes not. We have decided retrospectively to list all of them as Volume 10, Issue 54 with a date of 2012 with the understanding that all were published between 2012 and 2014.

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The extent of radioactive contamination in Fukushima Prefecture is at the center of important debates as some scientists, NGOs, and citizen's groups argue that the Japanese government has not gone far enough in dealing with the fallout from the Fukushima Daiichi accident and has deliberately downplayed the potential health effects of radiation. With so much attention focused on Fukushima, however, there has been less consideration of the impact of the crisis, ongoing since March 11, on other parts of Japan. The August 22 issue of *AERA* magazine, published by Japan's major progressive newspaper *Asahi Shimbun*, ran a feature on contamination in the Kanto region entitled *Kanto no ko kara hoshano* (Radiation Detected from Kanto Children), which broadens discussions of the Fukushima Daiichi crisis' potential impact. Below is a summary of the *AERA* article, published under the byline of editor Yamane Yusaku.

The Kanto region is a large area of central Japan that includes Tokyo and nearly 1/3 of Japan's population including Tokyo. The Japanese government has taken the position that no one outside of the vicinity of the Fukushima Daiichi plant is likely to suffer health effects from the radiation that has been released since March. Many Japanese, especially parents of young children, are doubtful. The article begins by reiterating a point that has been made frequently by critics of the Japanese government - that we simply do not know what effects low levels of radiation and the presence of isotopes in the human body will have on long-term health. The piece tells the story of a mother in Saitama Prefecture who, in the absence of direct government support, arranged to have a sample of her daughter's urine tested. The test indicated that despite stringent efforts to protect her fifth grader from exposure to contaminated food and airborne radiation, the result was 0.4 Bq of Cesium 137 per kilogram of urine. Cesium 137, with a half-life of just over 30 years, is one of main radioactive isotopes released from the Fukushima Daiichi plant. "I felt a mixture of shock and a feeling that of course this is the case", laments the girl's mother.

Measures that the mother took to protect her daughter from exposure included hunting down produce from Kyushu - the southernmost of Japan's major islands and the furthest from Fukushima - even going so far as to buy 80 eggs at a time from a mail order company in the far south. She has also used bottled water exclusively and washes clothes, umbrellas, and the walls and floors of her home daily. Stories

like this one are by no means uncommon as many in the Kanto area have become increasingly mistrustful of the safety of their food supply, despite government claims that health risks are negligible. The story also alludes to the strength of alternative information networks in the wake of the March crisis - after announcing her daughter's test results on Twitter, the mother's number of followers jumped from a number of close acquaintances to 700 people asking for details and advice about how to have their own children tested. There are other reports of mothers who have strictly controlled their children's behavior (such as not allowing them to play in parks and making them always wear a mask outdoors) finding trace amounts of Cesium upon arranging urine tests with private companies.

Urine tests conducted on children in Fukushima show considerably higher levels of radioactive isotopes than anything that has been seen in Kanto - over three times as much in some cases. The Japanese Ministry of Education, Science and Technology has deemed these levels "extremely small" and claim that they will not result in health effects. Sakiyama Hisako, a doctor and influential radiation health researcher, disagrees, "We cannot simply state that there are no potential health problems because the amount detected is low. We simply do not know what happens when even extremely low levels of radiation move through internal organs, the nervous system, and the brain."

While airborne radiation has lessened as emissions from the Fukushima Daiichi plant have decreased, there are concerns across the Kanto region of radioactive buildup in the soil. Citizen's groups, taking radiation testing into their own hands, have conducted tests in 130 locations around Tokyo, Saitama, Chiba, and

Ibaraki. In over 30 places they have detected levels of radioactive cesium of over 37,000 Bq per square meter, a level greater than that found in the area designated contaminated after the Chernobyl disaster. Readings in one area of Saitama were over 900,000 Bq - a level greater than that which resulted in forced relocation after Chernobyl. Areas of Tokyo, Chiba, and Ibaraki resulted in measures of over 200,000 Bq - a level which would have qualified residents for voluntary relocation after Chernobyl. There are reports that some children are complaining of headaches, nosebleeds, sore throats, worsening allergies, and other symptoms. Dr. Yamada Makoto, who runs a family practice in Hachioji and heads the "National Network of Pediatricians for Protecting Children from Radiation", reports that parents face a dilemma - too much control or preventing children from going out can give rise to stress and related symptoms. On the other hand, parents must try their best to limit exposure. A balance between protection and the necessity of living in an environment with elevated levels or radiation must be struck. So far, however, the Japanese government's focus on Fukushima instead of heavily contaminated areas outside and insistence that levels of radiation detected are "safe", even when they exceed levels considered decidedly unsafe after Chernobyl, has not offered citizens outside of Fukushima adequate help in finding this balance.

Asia-Pacific Journal articles on related themes include:

Matthew Penney and Mark Selden, What Price the Fukushima Meltdown? Comparing Chernobyl and Fukushima (<https://apjff.org/-Mark-Selden/3535>)

Kodama Tatsuhiko, Radiation Effects on Health: Protect the Children of Fukushima (<https://apjff.org/-Kodama-Tatsuhiko/3587>)

Norimatsu Satoko, Worldwide Responses to the 20 Millisievert Controversy (<https://apjff.org/events/view/92>)

APJ Feature, 20 Millisieverts for Children and Kosako Toshiso's Resignation (<https://apjff.org/events/view/83>)

See [here](https://apjff.org/Japans-3.11-Earthquake-Tsunami-Atomic-Meltdown) (<https://apjff.org/Japans-3.11-Earthquake-Tsunami-Atomic-Meltdown>) for a complete list of APJ articles on 3.11.