## The Dangerous Myths of Fukushima - Exposing the "No Harm" Mantra

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The myth that Fukushima radiation levels were too low to harm humans persists, a year after the meltdown. A March 2, 2012 New York Times article quoted Vanderbilt University professor John Boice: "there's no opportunity for conducting epidemiological studies that have any chance for success – the doses are just too low." Wolfgang Weiss of the UN Scientific Committee on the Effects of Atomic Radiation also recently said doses observed in screening of Japanese people "are very low."

Views like these are political, not scientific, virtually identical to what the nuclear industry cheerleaders claim. Nuclear Energy Institute spokesperson Tony Pietrangelo issued a statement in June that "no health effects are expected among the Japanese people as a result of the events at Fukushima."

In their haste to choke off all consideration of harm from Fukushima radiation, nuclear plant owners and their willing dupes in the scientific community built a castle against invaders – those openminded researchers who would first conduct objective research BEFORE rushing to judgment. The pro-nuclear chants of "no harm" and "no studies needed" are intended to be permanent, as part of damage control created by a dangerous technology that has produced yet another catastrophe.

But just one year after Fukushima, the "no harm" mantra is now being crowded by evidence – evidence to the contrary.

First, estimates of releases have soared. The first reports issued by the Japanese government stated that emissions equaled 10% of 1986 Chernobyl emissions. A few weeks later, they doubled that estimate to 20%. By October 2011, an article in the journal Nature estimated Fukushima emissions to be more than double that of Chernobyl. How anyone, let alone scientists, could call Fukushima doses "too low" to cause harm in the face of this evidence is astounding.

Where did the radioactive particles and gases go? Officials from national meteorological agencies in countries like France and Austria followed the plume, and made colorful maps available on the internet. Within six days of the meltdowns, the plume had reached the U.S., and within 18 days, it had circled the Northern Hemisphere.

How much radiation entered the U.S. environment? A July 2011 journal article by officials at Pacific Northwest National Lab in eastern Washington State measured airborne radioactive Xenon-133 up to 40,000 times greater than normal in the weeks following the fallout. Xenon-133 is a gas that travels rapidly and does not enter the body, but signals that other, more dangerous types of radioactive chemicals will follow.

A February 2012 journal article by the U.S. Geological Survey looked at radioactive Iodine-131 that entered soil from rainfall, and found levels hundreds of times above normal in places like Portland OR, Fresno CA, and Denver CO. The same places also had the highest levels of Cesium-134 and Cesium-137 in the U.S. While elevated radiation levels were found in all parts of the country, it

appears that the West Coast and Rocky Mountain states received the greatest amounts of Fukushima fallout.

Radiation in rainfall guarantees that humans will ingest a poisonous mix of chemicals. The rain enters reservoirs of drinking water, pastures where milk-giving cows graze, the soil of produce farms, and other sources of food and water.

Finally, how many people were harmed by Fukushima in the short term? Official studies have chipped away at the oft-repeated claim that nobody died from Fukushima. Last month brought the news that 573 deaths in the area near the stricken reactors were certified by coroners as related to the nuclear crisis, with dozens more deaths to be reviewed. Another survey showed that births near Fukushima declined 25% in the three months following the meltdowns. One physician speculated that many women chose to deliver away from Fukushima, but an increase in stillbirths remains as a potential factor. In British Columbia, the number of Sudden Infant Death Syndrome deaths was 10 in the first three months after Fukushima, up from just one a year before.

On December 19, 2011, we announced the publication of the first peer-reviewed scientific journal article examining potential health risks after Fukushima. In the 14 week period March 20 – June 25, 2011, there was an increase in deaths reported to the CDC by 122 U.S. cities. If final statistics (not available until late 2014) confirm this trend, about 14,000 "excess" deaths occurred among Americans in this period.

We made no statement that only Fukushima fallout caused these patterns. But we found some red flags: infants had the greatest excess (infants are most susceptible to radiation), and a similar increase occurred in the U.S. in the months following Chernobyl. Our study reinforced Fukushima health hazard concerns, and we hope to spur others to engage in research on both short-term and long-term effects.

For years, the assumption that low-dose radiation doesn't harm people has been used, only to fall flat on its face every time. X-rays to abdomens of pregnant women, exposure to atom bomb fallout, and exposures to nuclear weapons workers were all once presumed to be harmless due to low dose levels – until scientific studies proved otherwise. Officials have dropped their assumptions on theses types of exposures, but continue to claim that Fukushima was harmless.

Simply dismissing needed research on Fukushima health consequences because doses are "too low" is irresponsible, and contradictory to many scientific studies. There will most certainly be a fight over Fukushima health studies, much like there was after Chernobyl and Three Mile Island. However, we hope that the dialogue will be open minded and will use evidence over assumptions, rather than just scoffing at what may well turn out to be the worst nuclear disaster in history.

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 $\underline{http://www.counterpunch.org/2012/03/09/the-dangerous-myths-of-fukushima/}$