

On June 10, 2011 the political news website CounterPunch published a story entitled “Is the Dramatic Increase in Baby Deaths in the US a Result of Fukushima Fallout?” by Janette Sherman and Joseph Mangano¹. The authors used weekly tables provided by the US Centers for Disease Control² to compare infant mortality (deaths in children less than one year old) between February 20th and March 19th, 2011 (four weeks before the crippled power plant started releasing emissions) with infant mortality between March 20th and May 28th, 2011 (the ten following weeks). Analyses were restricted to eight cities in the western United States (Table1). In the four week pre-emissions period a total of 37 infants died in these cities (a rate of 9.25/week), compared with 125 in the following ten weeks (a rate of 12.5/week). The authors reported that this 35% increase in the weekly death rate was “statistically significant” and they suggested that the increase was due to nuclear fallout from Fukushima. This news story was not checked for validity (i.e. peer reviewed) by other scientists before its publication and wide distribution.

The implications of this story are troubling, especially for those on the west coast of North America where prevailing winds would carry emissions from Fukushima. When the BCCDC received concerned inquiries we (amongst other investigators³) verified that Sherman and Mangano presented accurate numbers in a misleading way. The pink columns of Table 1 summarize the data used by the authors, while the green column highlights the information they omitted. If the pre-emissions period is expanded from four weeks to ten weeks the difference between the pre-emission infant mortality rate (12.9/week) and the rate in the following ten weeks (12.5/week) is reduced to negative 3%. It appears that infant mortality was unusually low in the four pre-emissions weeks selected for the original analyses. Furthermore, when we repeated the original analyses for all 122 cities, the most affected areas appeared to be in Iowa, Texas and Ohio, which are much farther from Japan.

Table 1: Infant mortality in the cities reported by Sherman and Mangano prior to the start of Fukushima emissions and in the ten following weeks.

	4 pre-emission weeks (Feb 20 – Mar 19, 2011)	10 pre-emission weeks (Jan 15 – Mar 19, 2011)	10 following weeks (Mar 20 – May 28, 2011)
Boise, ID	2	9	7
Seattle, WA	8	23	27
Portland, OR	5	18	11
Santa Cruz, CA	0	1	2
Sacramento, CA	7	26	28
San Francisco, CA	7	18	15
San Jose, CA	7	31	30
Berkeley, CA	1	3	5
Total	37 (9.25/week)	129 (12.9/week)	125 (12.5/week)

To further confirm these findings for the residents of British Columbia the BCCDC repeated the analyses using provincial Vital Statistics data. From January 15th to March 19th there were 29 infant deaths in BC, compared with 32 deaths between March 20th and May 28th. The minor difference in the number of deaths between these periods was most pronounced in the northern interior region, not along the coastal areas that are in closer proximity to Japan. Although the BCCDC has concluded that the Sherman and Mangano story was scientifically unsound, we remain vigilant about monitoring the situation at Fukushima and assessing possible impacts on the health of the BC population.

¹ <http://www.counterpunch.org/sherman06102011.html>

² http://www.cdc.gov/mmwr/mmwr_wk/wk_cvol.html

³ <http://www.scientificamerican.com/blog/post.cfm?id=are-babies-dying-in-the-pacific-nor-2011-06-21>