

Mercury Poisoning of the Grassy Narrows and White Dog Communities

Dr. Harada's Key Findings

The Grassy Narrows community has long fought against the neglect of their Treaty rights, the forced removal of their children to residential schools, hydro damming, the relocation of their community, the destruction of traditional hunting and trapping grounds by industry giants. Now a new English translation of a Japanese study published in 2005 reveals that the ongoing health impacts of mercury contamination on the health of Grassy Narrows people are worse now than in the 1970's.

Point of Contamination:

Between 1962 and 1970 Dryden Chemicals Inc., *part of the local paper mill*, dumped 20,000 pounds of mercury into the Wabigoon River, with the Province's permission. [p. 56, Hutchison]

On April 6, 1970 the Canadian government shut down the local fishing industry. Within a year unemployment rates in Grassy Narrows sky rocketed from 5% to 95%. [Shkilnyk 1985: 199-202]

Health Canada's Response:

Health Canada conducted studies on the Residents of Grassy Narrows and White Dog to assess risk for mercury contamination over a 15 year period. By the 1990's 0% of patients examined were deemed at risk due to the levels of mercury in their system. At this time Health Canada issued a statement declaring that poisoning due to methyl mercury contamination in these communities was a "minimal risk."

Dr. Harada's Research:

Dr. Harada, a world renowned mercury poisoning specialist from Japan, has studied the effects of mercury contamination on the two communities for over 30 years. In 1970 mercury levels in Dr. Harada's blood samples from the residents of Grassy Narrows averaged 46.37 ppb, the highest being 159 ppb. It was even higher in Whitedog, averaging 77.39 ppb (parts per billion) and the highest being 385 ppb. The Health Canada safety guideline is 50 ppb. [Harada et. al, 2005]

Quick Facts:

- Less than 1/50th of a teaspoon of mercury per 20 acre lake surface is enough to make fish unfit for human consumption [p. 2 toxic time bomb, report to UN]
- When mercury contaminated fish is consumed by humans, it is absorbed into the blood stream and attacks the central nervous system

Dr. Harada's Return in 2004

All of Dr. Harada's Grassy Narrows patients who indicated mercury levels higher than the safety guideline of 50 ppm in 1975 were deceased by 2004. [Harada et. al, 2005]

The report found that 79% of all people examined in 2002 and 2004 (including many not tested in 1975) had Minamata Disease (MD), MD with complications, and possibleMD. [Harada et. al, 2005]

Dr. Harada performed tests on patients who specifically had Mercury levels *below* the Health Canada guidelines in 1975. Of these people, in 2004, 89% were diagnosed with MD (mercury poisoning), MD with complications, or possible MD, even though their mercury levels were now even lower than before [Harada et. al, 2005].

Minimata Disease:

A condition that arises from exposure of humans to methylmercury. Symptoms include:

- Loss of sensation in extremities
- Ataxia (loss of muscular coordination)
- Tremors
- Impaired hearing, speach
- Tunnel vision

"[These] cases indicate that even being exposed *under* the safety guideline, if prolonged, it could cause Minamata Disease (chronic type)." [Harada et. al, 2005]

Other Findings:

Dr. Harada found that "[t]he possibility of congenital Minamata Disease occurrence is very high in these two communities. We examined 7 cases of cerebral palsy and 7 cases of mental deficiency.... Further epidemiological research on stillbirths and miscarriages needs to be done." [Harada et. al, 2005]

In total, the Mercury Disability Board acknowledged 38.1% of the people Dr. Harada diagnosed with MD, MD with complications and possible MD. [Harada et. al, 2005]

"[Dr Harada's] research implies that there are many patients still suffering that have not been acknowledged yet. It is a very familiar response by the state , as witnessed in Minamata over the course of 50 years." [Harada et. al, 2005]



Resources:

Mercury exposure: The World's Toxic Time Bomb. Prepared for 22nd United Nations Environment Programme. Nairobi. Harada, M., et. al. "Research on Environmental Disruption" Vol. 34 No. 4 Spring 2005. <u>Long-term study on the effects of mercury</u> <u>contamination on two indigenous communities in Canada (1975-2004).</u>

Hutchinson, G. Grassy Narrows. 1977. Toronto

Shkilnyk, A. A Poison Stronger Than Love: The Destruction of an Ojibwa Community. 1985 (New Haven: Yale University Press).