

Congress of the United States
Washington, DC 20515

May 9, 2011

President Barack H. Obama
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear President Obama:

We write to urge you to implement the 2002 law requiring the distribution of potassium iodide to the people who live within 20 miles of nuclear power reactors in order to protect the Americans in at least 33 States against the possibility of a radioactive iodine release from a nearby nuclear reactor. Although this law has been on the books since 2002, it has, inexplicably, yet to be implemented.

Potassium iodide, known by its chemical symbol KI, protects the thyroid gland by flooding it with stable iodine so that the gland cannot take up the cancer-causing radioactive form.¹ Radioactive iodine can be released during nuclear reactor melt-downs such as the one now occurring in Japan.

If an earthquake, terrorist attack, or accident caused a radiation release in the United States, one of the greatest risks to health comes from radioactive forms of the chemical element iodine. Children are the most vulnerable because their thyroid glands concentrate more iodine on a mass basis than adults and are more sensitive to radiation because of their rapidly growing cells. Thyroid cancer was the biggest negative health impact caused by the Chernobyl nuclear reactor disaster.² More than 6,000 Russian, Ukrainian and Belarusian residents who were children at the time of the Chernobyl nuclear reactor disaster developed thyroid cancer. The incidence of thyroid cancer in the contaminated areas was triple that of normal thyroid cancer incidence in the area.³ Despite the elevated levels of radioactive iodine detected in Poland after the Chernobyl accident, exposed individuals in Poland did not experience such an increase in thyroid cancer because they were provided with prophylactic KI.⁴

Section 127 of the Bioterrorism Preparedness and Response Act of 2002 directed the President to establish a program to make KI available free to State and local governments for distribution to residents living within 20 miles of a nuclear power plant. Previously, distribution

¹http://www.birdflumanual.com/resources/Self_Defense/files/Guidance%20for%20use%20of%20KI%20for%20nuclear%20emergency%20USG.pdf

²http://www.unscear.org/docs/reports/2008/Advance_copy_Annex_D_Chernobyl_Report.pdf

³ http://www.unscear.org/docs/reports/2008/Advance_copy_Annex_D_Chernobyl_Report.pdf

⁴ Nauman J, Wolff J. (1993) Iodide prophylaxis in Poland after the Chernobyl reactor accident: Benefits and risks. *The American Journal of Medicine*, Volume 94, Issue 5, Pages 524-532.

was limited to just those within 10 miles, and only to States that requested it from the Nuclear Regulatory Commission (NRC).

The Congress' choice of a minimum 20-mile KI distribution radius was driven by its recognition that radiological exposure during a nuclear emergency is almost certain to exceed the "intervention level", set by the NRC to 5 rem, at distances greater than 10 miles from the event. Two NRC-commissioned technical studies predicted exposure at 25 miles from the event to be over 1000 rem, with the probability of thyroid damage to an adult outdoors to be 40%. For infants and children, the potential for damage is much higher.⁵ The Japanese government has evacuated residents within 19 miles of the Fukushima Daiichi reactors, and has distributed potassium iodide to protect against the radioactive iodine being released. The United States Nuclear Regulatory Commission is recommending evacuation out to 50 miles from Fukushima Daiichi, and KI is being provided to military personnel and U.S. citizens. Some experts, including the American Thyroid Association, believe that potassium iodide should be pre-distributed to households within 50 miles of a nuclear power plant.

Timing of KI distribution is critical as the drug is most effective if used within 3-4 hours of exposure.⁶ According to the Food and Drug Administration (FDA), inhalation of radioactive iodine is a significant contributor to exposure and is of particular concern for those residing in the immediate area of a nuclear accident or otherwise directly exposed to the radioactive plume. This means that it is critical to distribute KI to residents and local authorities before a radiation release happens, rather than scrambling to try to do it afterwards as happened during the 1979 Three Mile Island accident.

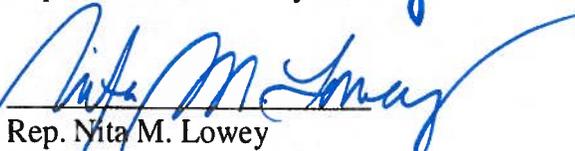
Additionally, rapid evacuation may not be a viable option for residents near many nuclear reactors. The only evacuation route may require driving right past the nuclear reactor for millions of people living near Turkey Point in Florida, the Indian Point reactor near New York City, the Pilgrim nuclear reactor in Massachusetts and for many millions more living near the 104 commercial nuclear reactor sites. Our experience with Hurricane Katrina, and the Japanese experience shows just how difficult it can be to rapidly evacuate large population centers. Distribution of potassium iodide now, before the unlikely event of a disaster, is the prudent course.

Thank you for your consideration of this important matter. We look forward to your prompt response regarding your plans to implement the law to protect Americans against radioactive iodine.

Sincerely,


Rep. Edward J. Markey


Rep. C.W. Bill Young


Rep. Nita M. Lowey


Rep. Gus Bilirakis

⁵ NUREG/CR-1433, Sandia National Laboratories, October 1980, and NUREG/CR-6310, S. Cohen & Associates, April 1992.

⁶ <http://www.fda.gov/Drugs/EmergencyPreparedness/BioterrorismandDrugPreparedness/ucm072265.htm>

Barney Frank

Rep. Barney Frank

Lois Capps

Rep. Lois Capps

Donna Christensen

Rep. Donna Christensen

John W. Olver

Rep. John Olver

Michael Honda

Rep. Mike Honda

John F. Tierney

Rep. John Tierney

Maurice Hinchey

Rep. Maurice Hinchey

Laura Richardson

Rep. Laura Richardson

Maxine Waters

Rep. Maxine Waters

Bill Keating

Rep. Bill Keating

Thomas J. Rooney

Rep. Thomas J. Rooney

Jerrold Nadler

Rep. Jerrold Nadler

Rush Holt

Rep. Rush Holt

John Conyers Jr.

Rep. John Conyers Jr.

Bob Filner

Rep. Bob Filner

Jim McGovern

Rep. Jim McGovern

Eliot L. Engel

Rep. Eliot Engel

Judy Chu

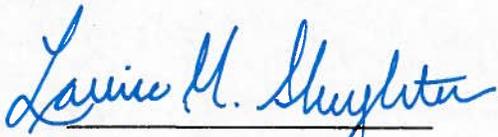
Rep. Judy Chu

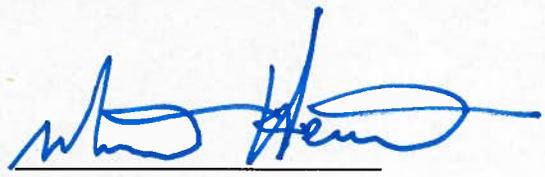
Peter A. DeFazio

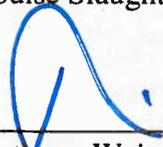
Rep. Peter A. DeFazio

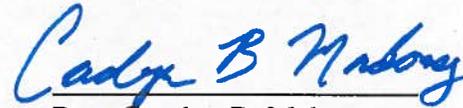
Niki Tsongas

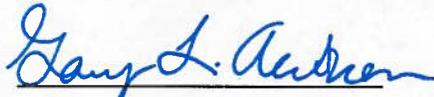
Rep. Niki Tsongas

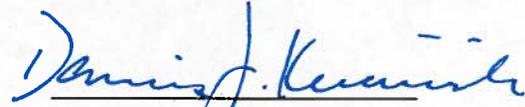

Rep. Louise Slaughter


Rep. Martin Heinrich


Rep. Anthony Weiner


Rep. Carolyn B. Maloney


Rep. Gary Ackerman


Rep. Dennis J. Kucinich