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THYROID  
ASSOCIATION**

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Dr. John P. Holdren  
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Executive Office of the President  
725 17<sup>th</sup> Street NW, Room 5228  
Washington, DC 20502  
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Dear Dr. Holdren,

In light of the recent events in Japan, the American Thyroid Association again urges the White House to take this opportunity to revisit the issue of potassium iodide (KI) distribution around nuclear facilities in the United States of America. The need for advance preparations is obvious as we experience the catastrophe at the Fukushima Nuclear plant. The Chernobyl accident illustrates Poland (about 200 miles away) was the only country to distribute KI to its population and was the only radiation exposed country that did not have an increase in the subsequent development of thyroid nodules and thyroid cancer. Additionally, an increased incidence of thyroid cancer was seen in exposed countries more than 200 miles away that did not utilize KI.

Since 1984, the American Thyroid Association has advocated that:

- Potassium iodide should be part of an emergency plan that includes evacuation, sheltering, and avoiding contaminated food, milk, and water.
- Potassium iodide should be made available to populations living within 200 miles of a nuclear power plant.
- Potassium iodide should be "predistributed" to households within 50 miles of a plant.
- Potassium iodide should be used only under regulatory guidance.

The ATA regards the legislative efforts of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 and Congressman Markey to extend the radius for KI distribution to 20 miles as steps in the right direction.

Others have felt that using the Chernobyl disaster as the standard by which to guide American policy was too extreme. We agree that Chernobyl may be a unique example, with extreme consequences. As a result of that catastrophe the incidence of thyroid cancer in children rose 100-fold. While an American accident may be substantially less severe, say for example only one-twentieth the magnitude, one may still expect a 5-fold rise in the incidence of thyroid cancer in iodine-replete

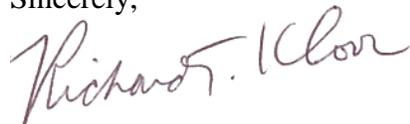
American children to be a cause worthy of prevention with KI. Indeed, the WHO and FDA in their guidance for KI use recommend that children be given KI when the expected thyroid radiation dose is as low as 1cGy or 5cGy, respectively. At these levels the added thyroid cancer risk would be lower than 5-fold.

A second point raised by others is that most nuclear accident consequences would usually be maximal in a radius within 10 miles of a power plant, and that it would be unlikely to have a radiation release extend beyond the 10 mile zone. We agree that risk is directly related to proximity but we would argue in favor of planning for the worst case scenario to best protect the public, rather than to regret an underestimation when the costs and risks associated with the use of KI are so nominal. The events in Fukushima have demonstrated the limits of the 10 mile zone, and the US has 23 operating reactors with the same design as those in Fukushima. A wider range of distribution would also be indicated when considering alternative scenarios that might require KI protection. For example, an atom bomb explosion near ground level anywhere in the US could result in heavy fallout of radioiodine on populations distant from the explosion.

A third concern is the lack of uniformly effective distribution within the current 10-mile zone. We feel this is a serious problem that needs a solution. We believe that the American public needs both more effective KI distribution, and a wider zone of KI distribution. Creative work is needed to ensure protection to all citizens at risk, which may include the use of distribution to homes, preschools, schools and universities, and multiple public facilities such as police stations, fire stations, and post-offices to create a redundant multiplicity of stockpiles in appropriate places within and well beyond the current 10-mile zone. Rapid ingestion of KI is crucial to its effectiveness. The unfortunate event in Fukushima has raised the interest in nuclear preparedness and education among our population. Now may be an opportunity to turn the negative lessons of Fukushima and Chernobyl into a positive outcome for our citizens.

We are hopeful that you agree with the validity of these issues in regard to the distribution of KI to populations living in the proximity of our nation's nuclear reactors. We would welcome the opportunity to interact with you further regarding this topic which we believe is of critical importance to the American public, and most importantly, its children.

Sincerely,



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