

Good evening. My name is Dr. Thomas Giordano. I live at [REDACTED], Ann Arbor. I am a Professor of Pathology and Internal Medicine at Michigan Medicine. My area of clinical expertise is endocrine pathology, including pathology of the thyroid gland. My area of research expertise is cancer genetics and genomics, with emphasis on cancers of the thyroid and adrenal glands. I was fortunate to serve as Disease Co-Chair of two large cancer genome projects of the National Cancer Institute's program called The Cancer Genome Atlas.

I am also a member of the Board of Directors of the American Thyroid Association, abbreviated ATA. I am here tonight at the request of the ATA to support the resolution before the council tonight entitled "A Resolution To Strengthen Nuclear Emergency Planning for the Population of the city of Ann Arbor, Michigan", agenda item DB-2 and ordinance 19-0192.

The ATA supports this Resolution. The ATA, a leading public health organization dedicated to the prevention and population-level risk reduction of thyroid disease, has called for the international harmonization of best-practice standards for direct pre-distribution and stockpiling of non-prescription potassium iodide (KI) around nuclear power plants.

The major reasons for the pre-distribution of KI to be consumed in the event of a nuclear emergency include the following:

- KI effectively reduces thyroidal exposure to 131I isotope.
- To be effective, KI must be taken within a few hours of 131I exposure.
- If evacuation, sheltering in place, and avoidance of contaminated food are not possible, KI ingestion is effective in reducing thyroid exposure to 131I and is associated with very few possible side effects.
- The primary purpose of KI pre-distribution is to reduce 131I exposure to the thyroid from inhalation.

- Even if radiation exposure thresholds are not exceeded and public health officials do not recommend it, demand for KI will be high following a nuclear emergency.

Please also noted that following the Fukushima accident the US Embassy advised Americans living in Japan within 50 mi of the reactor to 1) evacuate and 2) take KI; in fact, KI was made available to all Americans living in or visiting Japan.

The ATA supports the following recommendations:

- The KI use should be part of an emergency plan that includes evacuation, sheltering, and the avoidance of contaminated food, milk, and water ingestion in the event of a nuclear emergency.
- The highest priority for KI use and all other emergency measures should be given to babies, children up to 18 years of age, and pregnant women.
- Within a minimum of 10 miles of an actively operating nuclear power plant, KI should be pre-distributed to individual households. Emergency reception areas immediately outside of this radius should also be equipped with extra KI stockpiles. This should be a required rather than an optional measure.
- For individual households within 50 miles of an operating nuclear power plant, KI should be stockpiled in local public facilities such as schools, hospitals, clinics, post offices, pharmacies, and police and fire stations for distribution upon notification by local health officials.

Thank you for the opportunity to speak and your attention.