



#4 Predicted Areas Warranting Administration of Potassium Iodide (KI)

Based on dose to the thyroid due to radioiodine

Applicable only if radioactive cloud is present or imminent

Key Points

- Utilization of KI is a supplemental action. Evacuation is the primary protective action.
- Use of KI may be an effective alternative to evacuation in cases involving radioiodine releases, if evacuation cannot be implemented or exposure occurs during evacuation. See Predicted Evacuation and Sheltering Areas products for evacuation/shelter guidance.
- Leaving shelter to seek KI may result in increased radiation dose.
- The simplified approach under consideration would suggest KI administration for all members of the entire public at a single dose level, rather than four tiered dose levels.
- Potassium Iodide only protects the thyroid from radioiodine. It has not protective value for other radionuclides or for any other organ.
- Radiation dose to the thyroid increases the risk of thyroid cancer.
- KI is most effective when administered immediately prior to exposure to the plume, but significant protection can be provided even if administration is delayed 3 or 4 hours after initial exposure.
- Predicted thyroid dose is accumulated from the start of the release for a period of 96 hours (4 days), specifically 14 Apr 2014 23:00 UTC to 0 hr.