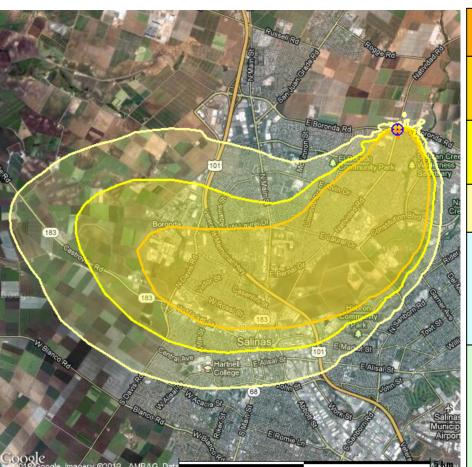


Hypothetical NPP: Testing (36.7158,-121.623) NPP Release at 30 Jun 2011 13:00 UTC

## #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



KI administration warranted for all individuals. Exceeds predicted 500 rem {5,000 mSv} adult thyroid dose. Est. pop.: 10 Area: 0.008 km2 Extent: 0.2 km

KI administration warranted for all individuals under 40 yr. and all pregnant/lactating females. Exceeds predicted 10 rem {100 mSv} adult thyroid dose. Est. pop.: 30,500 Area: 12.7 km2 Extent: 5.8 km

KI administration warranted for children under 18 yr. and all pregnant/lactating females. Exceeds predicted 5 rem {50 mSv} adult thyroid dose. Est. pop.: 39,500 Area 19.6 km2 Extent: 6.8 km

KI administration warranted for children under 18 yr. Exceeds predicted 5 rem {50 mSv} child thyroid dose. Est. pop.: 64,400 Area: 33.1 km2 Extent: 8.0 km

## Notes:

- •Some individuals with certain medical conditions are not candidates for KI administration.
- •The protective value of KI administration is time sensitive. If at all possible, administer KI before exposure to the radioactive cloud. Benefit diminishes rapidly after exposure to the cloud.
- •Contact the Advisory Team for simplification of these guidelines.

## **Assumptions:**

- •Areas shown are model predictions based on an estimated release of airborne radioactivity, but no measurements yet available.
- •Plume Phase Radioactive cloud may be present or imminent.
- •Prediction assumes max. dose to an adult. Includes dose from inhalation of contamination in the radioactive cloud and dose from inhalation of resuspended contaminated dust over first 4 days.
- •Based on 2001 FDA KI Guidance & ICRP 60+ Dosimetry.

Briefing Product for Public Officials Produced: 21 Aug 2014 23:04 UTC Check for updates