

KI Emergency Consent

The Mentor Exempted Village School District, in coordination with the Lake County Emergency Management Agency, has developed plans to protect students should an emergency at the Perry Nuclear Power Plant require protective response by our district.

ATTENTION PARENTS

Please read both the Mentor District KI Letter and the St. Gabriel School KI Student Consent Form documents before signing the KI consent form below:

St. Gabriel School KI Student Consent

Purpose: To enable parents/ guardians to authorize the administration of potassium iodide to children in an emergency at the Perry Nuclear Power Plant while under school authority.

Background: Potassium iodide (chemical symbol KI) is a stable compound of iodide in the form of a salt. KI is useful for radiological emergency response; it can be taken orally to saturate the thyroid gland with nonradioactive iodide. It blocks the gland's ability to absorb radioactive released following a nuclear reactor accident. The NRXC has offered to fund the purchase of KI to states who request KI for the general public within the 10 mile EPZ's around nuclear power plants.

Effectiveness: A delay in taking KI will reduce or eliminate its effectiveness in blocking the uptake of radioactive iodine by the thyroid. This increases the radiation dose to the thyroid, which increases the risk of thyroid cancer. KI is about 95% effective in blocking radioiodine deposition in the thyroid if taken several hours before, during, or immediately after inhalation or ingestion. The effectiveness of KI drops to about 50% when taken about 4 hours after exposure. After about 8 hours from exposure, the ability to block radioiodine is essentially nonexistent.

KI is only effective against radioiodine and provides no protection from the other inhaled or ingested mixed fission products that are also released during a nuclear power plant loss of containment accident. KI provides no protection against external radiation exposure from an airborne release of radioactive material, or from radioactive material that has fallen from the ground. Prolonged external radiation exposure dose can cause serious health consequences. Typically buildings do not provide adequate shelter from

penetrating radiation exposure during a release. Evacuation is the primary protective action in the event of a release of radioactive material to the environment.

Sensitivity: The administration of KI at thyroid blocking doses is generally safe for most adults and children if taken in appropriate doses for only a few days. Potential side effects of KI are small: however, persons with known iodine-sensitive conditions should avoid KI. The guidance from the FDA indicated that iodine-sensitive conditions include dermatitis associated with complications from celiac disease (dermatitis herpetiformis), Graves' disease, enlargement of the thyroid (multinodular goiter), auto-immune thyroiditis (which causes low thyroid reserve), and inflammation of the blood vessels due to lack of immune response mechanism in the blood hypocomplementemic vasculitis). Individuals with a seafood allergy could also be affected. Check with your personal physician if you have questions or concerns.
