

Potassium Iodide (KI) Questions & Answers

What is Potassium Iodide (KI)? Potassium Iodide is a simple mineral salt that can help prevent thyroid cancer in a nuclear accident that releases radioactive iodine. KI does not protect any part of the body other than the thyroid.

Why is there interest in KI today? Nuclear power plant accidents may release radioactive iodine and other radioactive substances. Although KI may help protect you from absorbing radioactive iodine into your thyroid, the best protection in an emergency at Indian Point is to carefully listen to and follow directions from public officials. The officials will utilize Emergency Alert System (EAS) Radio and Television stations, press releases and news briefings to broadcast instructions and information which may include directions to take KI; to evacuate a particular area; or to take no action, but to stay tuned for more information and updates. If ordered to evacuate, you should not delay evacuation while trying to locate or purchase KI.

How effective is the use of KI? KI is most effective when taken no earlier than 24 hours before, or within two to four hours after, exposure to radioactive iodine. It is less effective when taken earlier or later than that. KI effectively “floods” the thyroid with “good iodine,” occupying the space where any radioactive iodine might be absorbed. This may reduce the risk of thyroid cancer in individuals who breathe or swallow radioactive iodine. Because children have more active thyroid glands, they may particularly benefit from taking KI when exposed to radioactive iodine.

Is KI safe for everybody? People who have iodine sensitivity or are allergic to shellfish should avoid KI. People with thyroid disorders should consult their doctors and be treated cautiously, especially if taking KI for more than a few days. Pregnant women should be given KI for their own protection and for that of the fetus only if exposure to radioactive iodine is imminent. Pregnant women or women who are breastfeeding should avoid taking more than one dose of KI.

How will I know if I should take KI in an emergency? Taking KI is only recommended in emergencies during which the public is likely to be exposed to radioactive iodine. State and County health department officials will monitor the radiation emergency and will immediately notify the public to take KI if necessary. The Westchester County Health Department will make immediate public announcements, notify the media, and broadcast emergency alert system messages. Information will also be posted to the Internet at <http://jic.semo.state.ny.us/>. Instructions to take additional doses or to stop taking KI will be widely publicized as well.

Where is KI available? Free KI is available for people who live in the 10-mile radius of Indian Point, at their local Village Halls. It can also be picked up at the Westchester County Department of Emergency Services, 4 Dana Road in Valhalla, during regular business hours. For directions, go to www.westchestergov.com/emergserv. KI is also available over the counter in many pharmacies. It can be purchased on the Internet or in retail outlets without a prescription. People planning to take KI should consult their doctors for proper dosing information.

What are the recommended doses of KI? Recommended KI doses are based on age, exposure, pregnancy and breast-feeding status. Consult the package label/insert and your physician for the correct dose for you and your family members. Never take more KI than directed. Never take KI until officials recommend doing so, and never take more often than directed. Taking more KI does not offer better protection. It may result in a greater chance of side effects. The FDA recommends the following lowest effective doses (**less than one month of age** – 0.3 ml liquid or 16 mg; **one month to three years of age** – 0.5 ml liquid or 32 mg; **three years to eight years of age** – 1 ml liquid or 65 mg; **eight years to 18 years of age** - 1 ml liquid or 65 mg; **adolescents weighing over 150 pounds and adults** – 130 mg tablet). KI is available in 65mg tablets, 130 mg tablets, and also in liquid form (65mg/ml).

If I am told to take KI, and I only have 130 mg tablets, what should I do? If you are told to take KI, adults and children one year and older can take one 130 mg KI tablet. Children less than one year of age can be given one half of the 130 mg tablet (which is 65 mg). According to the FDA, “the overall benefit of taking 130 mg of KI (instead of 65 mg) to reduce long-term risk of thyroid cancer far exceeds the small risk from overdosing.” One dose protects for up to 24 hours, which should be more than enough time to leave the area. You will no longer need to take KI once you are outside the area where the radioactive iodine exposure is. For this reason, officials are providing only one dose of KI for each person living in the 10 mile area around Indian Point. KI will also be available at reception centers and other selected sites outside the EPZ.

