Recommendations for Potassium Iodide (KI) Use During a Nuclear Power Plant Emergency

Read this information carefully and keep it with your tablets.

What could happen following a radiation release?
Nuclear power plants produce radioactive materials, including radioactive iodine. A nuclear power plant could release radioactive materials into the environment. If this happens, radioactive iodine can get into your body. If you breathe contaminated air, eat contaminated food or have direct contact with something that is contaminated with radioactive iodine, you could become sick. Exposure can damage your thyroid gland, which is important for body functions.

What actions should I take following a radiation release?
In a radiological emergency, **evacuation could be the best action** to protect yourself. If you cannot leave the area, shelter-in-place/stay indoors to limit your exposure. Monitor TV or radio broadcasts for updates from emergency management and public health officials. The radio, TV and Emergency Alert System will tell you what to do to protect yourself and your family. Authorities might advise you to evacuate or shelter-in-place/stay indoors, and will announce if potassium iodide (KI) is recommended.

What is Potassium Iodide (KI)?
Potassium iodide (KI) is an over-the-counter medicine that can protect one part of the body – the thyroid – if a person is exposed to radioactive iodine during a nuclear power plant emergency. In a nuclear power plant emergency, public health officials may advise you to take the KI if you are unable to leave the area.

How does KI work?
The thyroid gland uses KI as a stable iodine that prevents radioactive iodine from being absorbed. Taking KI before or shortly after exposure to radioactive iodine protects the thyroid from damage by radioactive iodine.

Will KI protect me from all types of radiation exposure?
No, KI will only protect your thyroid from radioactive iodine. The best way to reduce the risk of radiation exposure to your body is to evacuate the area and avoid eating contaminated food. **KI should be used when evacuation is not possible.**

When should I take KI?
Do not take KI unless public health officials recommend it. If a potentially harmful radioactive release occurs, or is likely, during a nuclear power plant emergency, listen to the Emergency Alert System on television and radio stations for information about protective measures and the use of KI. Local or state emergency management officials may order you to evacuate the area to protect yourself, or public health officials may advise you to take KI. **Evacuation may be the most effective way to protect yourself.**

How much KI should I take?
Take only one dose of KI every 24 hours until you are able to leave the contaminated area or until public health officials advise it is no longer needed. Taking more than one dose will not increase your protection and it may increase the risk of side effects.

The dose depends on a person's age. See the table on the back for the recommended doses.

If the tablet must be cut into smaller pieces for the correct dose, use a pill cutter or a sharp knife on a hard surface. To get the correct dose for young children and infants, crush the entire tablet into a fine powder, divide the powder into four equal piles, and mix the needed portion into applesauce, pudding or another favorite food or liquid.

Recommended Doses of KI

Age Group	Total KI Dosage	Number of 65mg Tablets
Adults	130mg	2 tablets
Children 3-18 yrs (Under 150 lbs.)*	65mg	1 tablet
Infants (1 month – 3 yrs)**	32mg	1/2 tablet
Infants (Birth – 1 month)**	16mg	1/4 tablet

* Adolescents approaching adult size (150 pounds) should receive the adult dose (130mg).

** KI tablets may be crushed to form a powder. Powdered KI may be mixed in milk, water, formula, or soft foods.

Where should I store my KI pills?
KI should be stored in a dry place at room temperature and kept out of reach of children.

Does KI have side effects?
The FDA has determined that KI is safe for most people. Some people may have mild side effects such as nausea, upset stomach and skin rash. Side effects may also include salivary gland swelling, a metallic taste in the mouth, a burning sensation in the mouth and throat, sore teeth and gums, or head cold symptoms. If side effects are severe or you experience fever, joint pain, swelling, or shortness of breath, seek medical attention immediately.

Individuals who are taking thyroid medications, are pregnant, are breastfeeding, or are under one month of age should take only one dose of KI (see table above). These individuals should consult their physician about having their thyroid function checked if repeat dosing is needed.

Who should not take KI?
If you are allergic to iodine, X-ray dye, or shellfish (such as shrimp, oysters, and crab), do NOT take KI unless your doctor says it is safe for you. People with dermatitis herpetiformis, hypocomplementemic vasculitis, multinodular goiter, Graves' disease or autoimmune thyroiditis, should not take KI unless their doctor says it is safe.

Remember — KI must be taken within the first few hours of a radioactive exposure to be effective, and you may be unable to reach your physician quickly during a nuclear emergency. If you have one of the above conditions or are unsure if you can safely take KI, ask your physician BEFORE an emergency.

WARNING: Keep out of the reach of children. In case of an allergic reaction (difficulty breathing, speaking or swallowing, wheezing, shortness of breath or swelling of the mouth or throat), call 911 or get medical care right away. In case of overdose, get medical help or call a Poison Control Center right away at 1-800-222-1222. Call your doctor for medical advice about side effects. You may report side effects to the U.S. Food and Drug Administration at 1-800-332-1088.

For additional information about KI and how you can protect yourself from harmful radiation, call your county public health department or the DHEC Nuclear Response and Emergency Environmental Surveillance Section at 1-844-723-7377. You can also find information about KI and nuclear power plants at http://www.scdhec.gov/HomeAndEnvironment/DisasterPreparedness/RadiationNuclearSafety/.