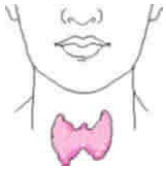
POTASSIUM IODIDE (KI)
INFORMATION STATEMENT

***What is the thyroid gland*?**

The thyroid gland is a small gland located in a person's n either side of the breathing tube. The main function of the gland is to manufacture, store, and release hormones. These hormones regulate the body's metabolism.



Why is Iodine important to the thyroid gland?

Iodine is needed to make the hormones. The thyroid gland takes iodine from the bloodstream. Most of the iodine comes from the food that you eat. Some reactive events release radioactive iodide. The thyroid cannot tell the difference between radioactive and non-radioactive iodine. The radioactive form of the iodine can cause damage to the thyroid cells.

What is KI?

Potassium Iodide (KI) is one of several ingredients that can be added to table salt to iodize it. KI prevents the thyroid gland from absorbing radioactive iodine. Iodized salt will not provide enough iodine to protect the thyroid and should not be used as a substitute.

How can exposure occur?

- You are exposed to small amounts of radiation every day both from natural elements (soils or sun rays), man-made sources (microwaves, ovens, TV sets) and medical sources (x-rays certain diagnostic tests and treatments).
- The amount of radiation from natural or man-made sources to which people are exposed is usually small.
- A radiation emergency (nuclear plant accident, terrorist event) could expose people to small or large doses of radiation.
- Exposure through an internal source can occur through breathing, eating or drinking materials that are contaminated with radioactivity.
- External exposure refers to contamination by particles of radioactive material that are outside of our bodies.

Who is at risk?

- Anyone who is exposed to radiation is at risk.
- Young children are especially susceptible to thyroid cancer.
- Young adults - between the ages of 18 and 40 have a smaller chance of developing thyroid cancer or thyroid disease from exposure to radioactive iodine but should still take the recommended dose of KI.
- Adults over 40 have the smallest chance of developing thyroid cancer or thyroid disease after an exposure. They have a greater chance of having allergic reaction.

Why is KI treatment important in a nuclear exposure?

- The KI will saturate the thyroid gland with iodine and help prevent it from absorbing the radioactive form of iodine.
- The Food and Drug Administration (FDA) recommends that KI be taken as soon as the radioactive cloud containing iodine from the explosion is close by.
- KI dose may still have some protective effect even if it is taken 3 to 4 hours after exposure to radioactive iodine. The protective effect lasts about 24 hours and should be repeated daily, as long as there is a risk of exposure.
- Taking a higher dose of KI, or taking more often than recommended will not offer more protection and can cause severe illness and death due to an allergic reaction.

You should not take KI if you have:

- Thyroid disease (i.e. hyper thyroidism, nodule, goiter)
- Allergy to shellfish or x-ray dye.
- Skin disorders (i.e. dermatitis, herpetiformis, or urticaria vasculitis)

You should take KI if you are:

- Pregnant - take the adult dose.
- Breastfeeding - take the adult dose and your infant should receive the recommended infant dose. Newborns should not get repeated doses of KI to prevent hyperthyroidism in the baby.
- Child who is approaching adult size (greater than or equal to 150 lbs), take the adult dose regardless of age.