State of Connecticut
Department of Public Health

Keeping Connecticut Healthy

IMPORTANT INFORMATION ON THE USE OF POTASSIUM IODIDE (KI) TABLETS

The State of Connecticut is making potassium iodide tablets (brand name IOSAT™) available to residents and workers within the 10-mile emergency planning zone (EPZ) around Millstone Power Station in Waterford, CT. The affected communities include: **East Lyme**, **Old Lyme**, **Waterford**, **New London**, **Groton City**, **Groton Town**, **Fishers Island, NY**, and portions of **Lyme**, **Montville**, and **Ledyard**.

What is potassium iodide (KI)?

Potassium iodide, also known as KI, is a form of iodine. KI helps protect your thyroid gland when there is a chance you might be exposed to a harmful amount of radioactive iodine.

Why is the thyroid gland important and why is radioactive iodine harmful?

The thyroid gland uses iodine to make hormones that control your body's metabolism. Radioactive iodine can harm your thyroid gland and can increase your risk of developing thyroid cancer years after exposure. Only operating nuclear power stations produce large amounts of the type of radioactive iodine that KI protects against. The Connecticut Yankee power station in Haddam, CT, no longer operates and does not produce this type of radioactive iodine.

How can I protect myself in the event of an emergency at Millstone Power Station?

You should leave the area or take shelter as state officials tell you. This is the only sure way to protect yourself from being exposed to radioactive materials that might be released in an accident at Millstone Power Station. You may also be told to take KI to increase your level of thyroid protection if radioactive iodine is present. Stay tuned to your local television and radio stations for any emergency instructions.

When should I take KI?

You will be told when to take KI through the Emergency Alert System (EAS) broadcast over your local television and radio stations. Not every radiation emergency will result in the release of radioactive iodine. To provide maximum effectiveness, KI should be taken four hours or less before exposure. This will allow time for the KI to be taken up into the bloodstream and to the thyroid before exposure. KI will still stop most of the radioactive iodine if taken up to four hours after exposure.

How much KI should I/my family members take?

Connecticut follows what the Food and Drug Administration (FDA) says to take during an emergency. You should take:

- 1 pill (130 mg) if you are 1 year old or older.
- ½ pill (65 mg) if you are under 1 year old.

Pills can be taken either whole or broken and mixed in with food or liquid. One dose of KI provides 24-hours of thyroid protection. Do not take extra pills after you leave the area. After you leave the area you are no longer exposed to radioactive iodine. **You may cause serious medical problems if you take extra pills. Extra pills will not protect you more.**

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The FDA has studied the safety of KI and concluded that small mistakes in dosing when you break or crush pills are not likely to cause serious illness. The FDA recently provided additional guidance on what is the smallest amount of KI you can take and still protect the thyroid. The smaller amounts may reduce the risk of side effects such as a minor upset stomach or rash. It may not be practical to administer very small doses during an emergency. If you want to use smaller doses, the FDA recommends taking the following minimum amount of KI:

- 1 pill (130 mg) for anyone over 18 years old.
- ½ pill (65 mg) for children between 3-18 years old.
- ¼ pill (32 mg) for children between 1 month and 3 years old.
- ⅛ pill (16 mg) for children under 1 month old.

Are there other concerns regarding taking KI?

- Do not take KI if you are allergic to iodine.
- Do not take KI if you have chronic hives, lupus, or other condition with hypocomplememic vasculitis.
- Persons with Graves disease and people taking certain heart medicines should talk with their doctor before there is an emergency to decide whether or not to use KI.

Who will benefit most from taking KI in the event of a release of radioactive iodine?

Children and young adults under 40 years old benefit the most. At younger ages a person's thyroid gland is going through faster changes. The faster changes increase the chance of thyroid cancer if exposed to radioactive iodine. Thyroid cancer can take years to show up after exposure to radioactive iodine. For people over 40, KI is mainly needed to stop a condition called hypothyroidism. This condition can develop after a very large exposure to radioactive iodine and cause the thyroid to not operate properly.

Does KI protect against other radioactive materials or devices, such as a "dirty bomb"?

No. KI does **NOT** protect against other radioactive materials that might be released during a nuclear power station emergency. Other radioactive materials harm other parts of your body. This is why you are told to evacuate or take shelter in an emergency. KI does not replace evacuation or sheltering. It only adds to your safety in certain cases.

KI will not protect you against a "dirty bomb". A dirty bomb is an ordinary bomb that spreads radioactive material when it explodes. The radioactive material used in a dirty bomb would not include radioactive iodine.

Where can I get KI?

People who live and work within a ten-mile area around Millstone Power Station will receive KI at no cost. If you live in this area, your household will receive KI in the mail. Large businesses in this area will also receive KI to distribute to their workers. If you work for a smaller business, or need additional pills for your household, you will be able to pick up KI at the local town hall. During an emergency, KI will only be available at your host community reception center. You do not need a prescription to purchase KI on your own. KI can be purchased over the Internet and at certain pharmacies. Please see the Department of Public Health website (www.dph.state.ct.us) or call the Office of Emergency Management at (860) 566-4586 for more information.