



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

The State of Connecticut has made potassium iodide tablets 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. Taking KI saturates the thyroid with harmless iodine and prevents radioactive iodine from being absorbed.

### **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.

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

The main way to protect yourself and your family is to avoid exposure to radioactive materials. In the event that a release occurs or is imminent, state officials will notify the public via public alert sirens and information on the local television and radio stations. State officials will direct the public to shelter indoors or to evacuate the area, should it become necessary. Listen to the local television and radio stations for up-to-date information and emergency instructions.

### **When should I take KI?**

Connecticut State Health officials will direct the affected population to ingest KI if it is warranted. Not every radiation emergency will result in the release of radioactive iodine. You will be told when to take KI through state press conferences and news releases over your local television and radio stations. To provide maximum effectiveness, KI should be taken four hours or less before exposure. This will allow time for the KI to be absorbed into the bloodstream and the thyroid before exposure. KI will still stop most of the radioactive iodine if ingested 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:

- **Ages 18 and older: Take two (2) 65 mg tablets (130 mg).**
- **Ages 3 to 18 years old: Take one (1) tablet (65 mg). *(If 150 lbs or more – take two tablets).***
- **Ages 3 and under: Give one-half (1/2) tablet (32 mg). **Crush and add to formula or baby food.****

Tablets 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 tablets after you leave the area. After you leave the area, you are no longer actively

being exposed to radioactive iodine. **You may cause serious medical problems if you take additional KI tablets within a 24 hour period. Ingesting extra tablets will not protect you more.**

The FDA has studied the safety of KI and concluded that small mistakes in dosing when you break or crush tablets 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:

- 2- 65 mg tablets (130mg) for anyone over 18 years old.
- 1 tablet (65 mg) for children between 3-18 years old. If 150 lbs or more – take 2- 65 mg tablets (130 mg).
- 1/2 tablet (32 mg) for children between 1 month and 3 years old.
- 1/4 tablet (16 mg) for children under 1 month old.

### **Are there health concerns when ingesting KI?**

- Do not take KI if you are allergic to iodine (if you are unsure, consult your physician).
- Do not take KI if you have chronic hives, lupus, or other skin disorders such as dermatitis herpetiformis or urticarial 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.
- Repeated dosing of newborns and small children should be avoided.

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

Pregnant and nursing women, newborns, 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. Since all forms of iodine cross the placenta, pregnant women should take KI to protect the rapidly growing fetus. Breastfeeding women should take only one dose of KI if they have been or could become internally contaminated with 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 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. 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 state officials will direct people in affected areas to evacuate or take shelter, if exposure to radioactive materials is imminent or a potential. KI does not replace evacuation or sheltering. It only adds to your safety in certain cases.

### **Where can I get KI?**

People who live and work within a ten-mile area around Millstone Power Station will be able to obtain KI at no cost at their town's designated location. 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 State Department of Public Health website ([www.dph.state.ct.us](http://www.dph.state.ct.us)) or call the State Division of Emergency Management and Homeland Security at (860) 256-0800 for more information.

Additional guidance can be found at the Centers for Disease Control website: <http://emergency.cdc.gov/radiation/ki.asp>