

## **CENTERS FOR DISEASE CONTROL AND PREVENTION**

### **Potassium Iodide (KI)**

Recent terrorist events have many people concerned about potential future attacks using radioactive materials. Taking potassium iodide (KI) tablets after an incident involving radioactive materials may or may not limit the risk of damage to a person's thyroid gland from ionizing radiation. The Centers for Disease Control and Prevention (CDC) have prepared this fact sheet to further explain when KI might be appropriate and what people should consider before making a decision to take KI.

**When to take KI:** Local emergency management officials will tell people when to take KI. If a nuclear incident occurs, officials will have to find out which radioactive substances are present before recommending that people take KI. If radioactive iodine is not present, then taking KI will not protect people. If radioactive iodine is present, then taking KI will help protect a person's thyroid gland from the radioactive iodine. Taking KI will not protect people from other radioactive substances that may be present along with the radioactive 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 may still have some protective effect even if it is taken 3 to 4 hours after exposure to radioactive iodine. Because the radioactive iodine will be present in the initial blast and decays quickly, a single dose of KI may be all that is required. The FDA recommendations on KI can be reviewed on the Web at <http://www.fda.gov/cder/guidance/4825fn1.htm>.

**Forms of KI, and How Much Should Be Taken:** KI comes in tablets of 130 mg. A one-time dose at the levels recommended in this fact sheet is usually all that is required. However, if a person expects to be exposed to radioactive iodine for more than 24 hours, another dose should be taken every 24 hours. People should listen to emergency management officials for recommendations after an incident. According to the FDA:

- Adults should take one 130 mg tablet.
- Children between 3 and 18 years of age should take one-half of a 130 mg tablet (65 mg).
- Children between 1 month and 3 years of age should take one-fourth of a 130 mg tablet (32 mg).
- Women who are breastfeeding should take the adult dose, and their infants should receive the recommended infant dose.
- Children who are approaching adult size (greater than or equal to 150 pounds) should take the adult dose regardless of their age.

KI tablets can be stored for at least 5 years without losing their potency.

**People should remember that taking a higher dose of KI, or taking KI more often than recommended, will not offer more protection and can cause severe illness and death due to allergic reaction.**

**Reporting/Coordination Link:** Call the Poison Center (1 800 222 1222) for information on specific patients. Contact the local or state public health authority to report a mass casualty incident (see attached contact list).