

Common Questions About Radiation Emergency Medication



How can I protect myself during a radiation emergency?

If there is a release of radioactive materials, local authorities will monitor the levels of radiation and determine what protective actions to take. The most appropriate action will depend on the situation.

Keep your radio tuned to the emergency response network or local news to find out what else you need to do.

Should I take potassium iodide (KI) during a radiation emergency?

Potassium iodide (KI) should only be taken in a radiation emergency that involves the release of radioactive iodine, such as an accident at a nuclear power plant or the explosion of a nuclear bomb.

Is there a benefit to taking potassium iodide if I haven't yet been exposed to radiation?

There is no benefit to taking potassium iodide if there has been no exposure to radiation containing radioactive iodine.

People who are allergic to iodine should not take potassium iodide because of possible risks and side effects.

If public health or emergency management officials tell the public to take potassium iodide during a radiation emergency, the benefits of taking this drug outweigh the risks. Check with your doctor about any concerns you have about potassium iodide.

What does potassium iodide do?

Potassium iodide works by blocking radioactive iodine from entering the thyroid gland. After a radiological or nuclear event, radioactive iodine may be released into the air and then breathed into the lungs. It may also contaminate the local food supply and get into the body through food or drink.

A person who has radiation enter the body in the form of radioactive iodine may have thyroid disease later in life.

What can't potassium iodide do?

Potassium iodide only protects the thyroid gland and does not provide protection from any other radiation exposure.

How well does potassium iodide work?

Potassium iodide may not give a person 100% protection against radioactive iodine. How well it works depends on:

- How much time passed between contamination and the taking of potassium iodide (the sooner the better)
- How fast potassium iodide is absorbed into the blood
- The total amount of radioactive iodine to which a person is exposed

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How often should potassium iodide be taken?

A single dose of potassium iodide (KI) protects the thyroid gland for 24 hours. A one-time dose is usually all that is needed to protect the thyroid gland. Taking a higher dose of potassium iodide does not offer more protection.

Taking a higher dose of potassium iodide, or taking it more often than recommended can cause severe illness or death.

In some cases, radioactive iodine might be in the environment for more than 24 hours. If that happens, local emergency management or public health officials may tell you to take one dose of potassium iodide every 24 hours for a few days. You should do this only on the advice of emergency management officials, public health officials, or your doctor.

Repeat dosing is not recommended for pregnant or breastfeeding women and newborn infants. Those individuals may need to be evacuated until levels of radioactive iodine in the environment fall.

Do I need a prescription to get potassium iodide?

Potassium iodide is available without a prescription. Talk to your pharmacist about potassium iodide and for directions about how to take it correctly. Your pharmacist can tell you which brands of potassium iodide have been approved by the FDA.

What are the possible risks and side effects of taking potassium iodide?

General side effects may include intestinal upset, allergic reactions (possibly severe) rashes, and inflammation of the salivary glands.

When taken as recommended, potassium iodide causes only rare negative health effects involving the thyroid gland. These rare side effects may happen if you:

- Take a higher than recommended dose of potassium iodide
- Take the drug for several days
- Have pre-existing thyroid disease

Newborn infants (less than 1 month old) who receive more than one dose of potassium iodide are at particular risk for developing a condition known as hypothyroidism (thyroid levels that are too low). If not treated, hypothyroidism can cause brain damage.

Infants who receive potassium iodide should have their thyroid hormone levels checked and monitored by a doctor. Avoid repeat dosing of potassium iodide to newborns.

In all cases, talk to your doctor if you are not sure if you or a loved one should take potassium iodide.

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