

Can a Pill Save You From Radiation Poisoning?

By Lisa Collier Cool

Faster than merchants can keep it stocked, potassium iodide (KI), the so-called “anti-radiation” pill, is flying off drugstore shelves in the U.S., especially along the West Coast. One supplier, [Nukepills.com](#), reportedly sold out its entire supply of 250,000 pills over the weekend and has back-ordered another 1 million pills. The KI was purchased by pharmacies, corporations, hospitals and nuclear labs serving Americans who, in spite of assurances by the [U.S. government](#) that its citizens are safe, fear that radiation from the damaged Japanese nuclear reactors will travel across the Pacific Ocean and contaminate them and their families. A company spokesman told the Wall Street Journal that Nukepills has donated 50,000 pills to Japan.

Only two U.S. companies are approved by the [FDA](#) to manufacture KI. The other producer, Virginia-based [Anbex Inc.](#), is reported to have sold its entire supply of 10,000 packages, each containing 14 pills and selling for \$10, on Saturday. Anbex says their offices are getting about three orders per minute for their KI pills, sold under the brand name of losat.

Radiation Exposure and Japan

What is potassium iodide (KI)?

Actually a [salt](#) of stable iodine—a substance our bodies need in order to produce thyroid hormones—KI is a [tablet or liquid medicine](#) that protects the thyroid from absorbing radioactive iodine, which is released into the air following a nuclear event. It is able to block radioactive iodine because the thyroid recognizes both KI and radioactive iodine as the same substance. KI “fills up” the organ with its daily iodine quota, thus blocking the radioactive version from being absorbed. For this reason, people are generally advised to take KI as soon as the possibility of radiation contamination is known, before the damage can occur. Without such protection, the thyroid gland would quickly absorb the radioactive iodine, an internal injury that often results in thyroid cancer.

However, KI protects *only* the thyroid. It does not prevent radioactive iodine from entering the body through breathing, or by eating contaminated food. KI also does not protect other parts of the body besides the thyroid, and it cannot protect even the thyroid from other radioactive materials besides iodine. Nor can it reverse damage once the thyroid has been exposed to radioactive iodine. One dose of KI is effective for 24 hours.

Using Potassium Iodide After a Nuclear Radiation Emergency

Although iodized table salt also contains iodine, it doesn’t contain enough to block radioactive iodine and should not be used as a substitute for KI.

In most instances of radiation exposure, the benefits of taking KI outweigh any known risks or side effects. Newborn infants taking a repeat dose of KI increase their risk of developing [hypothyroidism](#), or underactive thyroid.

KI is available over-the-counter and is sold without a prescription.

Radioactive poisoning.

[Radiation exposure](#) produces a number of symptoms, including [hair loss](#), skin redness, radiation burns and, in extreme cases, acute radiation syndrome (ARS). A

common effect is an increased cancer risk that can continue more than a decade after the exposure. After the atomic bomb was dropped over Japan during World War II, some survivors developed **leukemia** within a few years.

In the event of a nuclear accident, no one who is advised to take KI should hesitate to do so. It's especially important for pregnant women, whose thyroids absorb radioactive iodine more quickly than those of other adults—and when the mother protects herself with KI, the thyroid of the fetus is protected as well