

# Radiation Reaches California: But Don't Rush for the Iodide Tabs

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AP Stop the panicking! "Minuscule" amounts of radiation -- "about a billion times beneath levels that would be health threatening" -- have been detected in Southern California, fallout from the developing nuclear disaster in Japan. The U.N. keeps many measuring stations throughout the world, and the Comprehensive Test Ban Treaty Organization, which keeps all its test results private, detected radiation Friday in a California station. The diplomat who released the news asked for anonymity.

The CTBTO stations run by the U.N. are interesting, set up around the world to monitor atmospheric nuclear testing. Those that have capability to detect radionuclides are scattered throughout the world, from Tahiti to Sand Point, Alaska to Macquarie Island, south of New Zealand, to St. Johns, Newfoundland.

There is also one in Sacramento, likely the only place that this reading could have been taken (although Sacramento is in Northern California). It is no surprise, of course, that low levels of radiation might be detected in the U.S.; Thursday, a CTBTO graphic predicted that a radioactive plume would reach Southern California late Friday. Sources show, it was early.

What many consumers are doing in a state of fear -- despite official statements explaining how minimal the radioactive exposure is, even in Japan outside the immediate vicinity of the failing reactor -- is rushing out to buy iodide tabs. Potassium iodide tablets, or K-1, are taken by victims of high levels of radioactive exposure to prevent the thyroid gland from absorbing radioactive iodine, reducing the likelihood of radiation sickness and thyroid cancer, both potential effects of radiation.

Radiation can damage cells in the body, and the more radiation to which one is exposed, the harder it is to recover from that damage. The most sensitive cells are damaged first -- a reason why the treatment can sometimes be useful against cancerous cells -- but also a reason why radiation sickness leads to nausea, dehydration, and thyroid diseases. The most sensitive cells are the active cells in the lining of the intestine (called crypt cells), white blood cells, the cells that make red and white blood cells, and the cells in the thyroid gland.

We're exposed to a lot of radiation in our daily lives, from obvious places like X-rays and cell phones, and less obvious places like food irradiation, television screens, smoke detectors, long-lasting light bulbs, and natural environmental sources like radon gas.

Radon, [produced by the natural decay of uranium](#) in the soil, can move up from the ground, seeping through foundations and becoming trapped in buildings -- especially private homes. It's believed to be a cause of lung cancer, killing 10,000 Americans a year (second to cigarette smoking, but no minor risk at all).

Given the danger of iodide tablets -- they can be harmful to those with allergies to shellfish and compromised thyroids -- and the tiny amount of radiation coming from Japan, purchasing them in the wake of this disaster hardly makes sense.

Worrying about the environmental exposure to radon (which can be abated by companies specializing in home radon gas elimination) and other unknown radiation sources, like in your fruits and vegetables, is a better place to spend your mental energy, and your money.

Environmental chemicals and radiation can cause a lot of problems; the ones from Japan are probably the least of your worries. It's smart to think about where your food is coming from (try small, nearby organic farms that don't have the technology or need to irradiate your produce); which dangerous gases and elements are in your home (test for radon in the air and lead in your soil); what are the legal but dangerous chemicals and gases coming from nearby factories, military bases, and highways (try lobbying your local government for more restrictions, maybe?).

There are lots of ways you can take more control over your family's exposure by opening your wallet.

Don't make it iodide tablets or, as Bonnie McCarthy reports, [iodized table salt](#), however; as with so many human behaviors, reacting in panic to a global crisis is usually the worst way to use your resources. Don't run out and spend your money just because your neighbors are; take your time, consider the real risks, and start there first.