

## **Fearful of radiation, Americans look to pill**

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By Evan Osnos

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From New York to California--wherever there is a nuclear power plant and fears of terrorism--Americans are grasping for potassium iodide, a little white pill that promises a dose of self-defense.

Distributed free by the government or sold over the Internet, stowed in wallets and medicine cabinets for an unthinkable day, the tablets protect against thyroid cancer in the event of radiation exposure. This week, federal agencies in Washington ordered a new batch of 350,000 potassium iodide pills, adding to a federal stockpile of undisclosed size. Though health officials emphasize that the pill does not protect against many other deadly nuclear effects, 14 states have accepted millions of free pills from the federal government to be stored or distributed. Those state caches are set to grow under a bioterror bill signed this week by President Bush that earmarks pill supplies for any community within 20 miles of a nuclear power plant that requests them.

Illinois officials refuse the federal pill giveaway because they dispute the dosage level in the pills currently approved by the Food and Drug Administration. Pressured by lawmakers to acquire the pills, state officials now say they will buy thousands of lower-dosage tablets that they prefer, but only if the FDA approves their use.

Potassium iodide, or KI, is hardly a shield or antidote to radiation exposure, a fact its proponents acknowledge. Yet the pills are increasingly popular nationwide, if for no other reason than that they offer anxious Americans a tangible measure of control in uncertain times.

"It is one of the only things out there that we can use to protect ourselves," said Phillip Pinkney, one of more than 2,600 people who lined up for a recent pill giveaway in this New York suburb, just up the road from the Indian Point nuclear power plant.

"Even if it is not a solution, living near this facility, it is better for my family to be safe than sorry," Pinkney said.

### **Attack fears raise pill's profile**

To public health and nuclear safety experts, the sudden popularity of KI reflects a free-form fear of nuclear crisis, which is being stoked by talk of potential dangers, from a terrorist attack on a

nuclear plant, to this week's news of a possible "dirty bomb" plot. Overall, experts agree, the pills could be lifesaving in some scenarios, but irrelevant in others.

"If there is an attack with a conventional fission bomb, or a breach of fuel in a reactor, then taking KI would help because there is a lot of iodine release," said Andrew Karam, head of nuclear safety at the University of Rochester. "But a full-fledged nuclear attack is probably much less likely than a 'dirty' bomb, and in that case . . . the KI would probably not do any good."

Also available over the counter at pharmacies for \$1 a tablet, the drug works by flooding the thyroid with a harmless form of iodine, which keeps it from absorbing the radioactive iodine that can be released in a nuclear explosion or reactor leak. Infants and children, whose thyroids are growing, are at particular risk of developing cancer.

The FDA updated guidelines last year for using the pill in a radiation emergency, based on studies of the 1986 nuclear reactor accident at Chernobyl in the Soviet Union. Victims who received potassium iodide had lower rates of thyroid cancer compared to those who did not take it.

To function, the drug must be taken before or within an hour after exposure to radioactive iodine. The pill's benefits last approximately 24 hours. Experts point out that the pills are useless against other nuclear materials, such as plutonium or cesium.

The Indian Point plant here in Westchester County, 30 miles from midtown Manhattan, is in the most densely populated area of any U.S. reactor. Health officials expect to distribute at least 40,000 tablets by the end of June to residents within 10 miles of the plant. Thousands more pills have been bought by residents in a run on local pharmacies.

### Psychological benefits

Westchester County Health Commissioner Joshua Lipsman, who is overseeing the local pill giveaway, notes that some of the benefits are psychological. "Not only does it have a medical benefit, but you also feel a little better having something to take," he said.

Kathleen McCormack does. The 56-year-old Yorktown grandmother always carries a pill in her handbag. She keeps extra pills at home, in case her children and grandchildren are visiting at the time of an emergency.

"I don't think there's too much you can do, but at least you know the pill gives you a chance," McCormack said.

Elsewhere, other Americans are putting their faith in the pill. NukePills.com, a North Carolina-based online distributor of KI, has seen its revenues increase more than tenfold since Sept. 11, said owner Troy Jones.

California recently became the 14th state to join the federal government's free-pill program, which has shipped 5 million tablets since January. California requested 886,000 pills, enough

for every resident living near the state's two nuclear power plants.

California has not determined whether it will store the pills or distribute them, as officials are doing in New York, Maryland and Vermont.

Illinois officials think differently. Thomas Ortziger, director of the Department of Nuclear Safety, rejects the free federal pills, arguing that they might deter residents from following evacuation plans and that the 130-milligram tablets distributed by the government are unsuitable for infants and children.

"If 100 people fail to respond to the state [evacuation] plan because they fail to understand what the pill does for them, we have failed the state population," Ortziger said.

That stance baffles some lawmakers.

"I am completely unpersuaded by their feeble argument that people will become complacent," said Rep. Jan Schakowsky (D-Ill.), who heads a coalition of state and federal legislators urging Illinois to join the federal program. "The reality is that people would take their pills and head for the hills."

The FDA routinely advises splitting the 130-milligram tablets to give smaller doses to babies and children. Though the FDA guidelines specifically note that a full tablet is "extremely safe" for most children, Ortziger says the state will buy pills only if the FDA approves the use of pills in lower dosages. If those tablets are approved, the state is prepared to buy 360,000 pills, Ortziger said. Those pills would have an estimated cost of \$65,000, to be gleaned from fees on power companies, he added.

Schakowsky, however, finds the state's proposal hard to justify.

"I don't understand why the offer of free pills, which are approved by the FDA, should not be taken," she said. "To me this just seems like foot dragging."