The Antibiotic Argument

Healing Thyself, a Tempting Option With Serious Side Effects
Opinions Differ on Whether People Should Stockpile Antibiotics at Home

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You may be tempted to stock the medicine chest with drugs that could be used to defend against a biological agent such as anthrax, and you may even know...
a private doctor who would write prescriptions to help.

Bioterrorism experts are urging people not to do that because stockpiling drugs at home can create more health hazards than it combats. Yet some physicians are yielding to demands for antibiotics because they want to calm patients' fears.

One public health expert says those doctors are violating professional standards. "To prescribe antibiotics to stockpile for prophylactic purposes would be malpractice," said Peter Hotez, chairman of microbiology at George Washington University and an expert on vaccines and bioterrorism. "It's only inviting misuse that will lead to antimicrobial drug resistance in the community."

Hotez's view is not universally held in the medical community, and some people just don't trust the government's ability to quickly deliver drugs. For instance, Bill Bicknell, a public health professor at Boston University, said he has obtained a supply of the antibiotic Cipro for his family despite government warnings to the contrary.

"I've got enough Cipro in the house for my wife and me for a couple weeks," he said. "I'd rather not wait for distribution from the national stockpile. I'd rather have a little stuff, and if more is needed, then fine. I don't need to keep a bushelbasket, but I see no reason not to keep a couple weeks' supply."

Edward H. Kaplan, a professor of public health and management sciences at Yale University, said stockpiling should be a personal decision.

"How much individual action someone should take is completely related to how secure one feels in the face of public or government steps to prepare," Kaplan said. "It comes down to a measure of confidence. It's not only a question of plans on paper, but whether one believes that stated plans would work."

Many medical experts argue that the smart choice is to trust the government's expertise and have faith in its ability to deliver drugs rapidly wherever needed from secret storehouses. Public health officials have ample supplies and have refined distribution plans and local coordination in the past year, they say.

"This is a war, and people have to act together and stay in rank and follow orders," said Lynn Frank, Montgomery County's public health chief and chairwoman of a regional panel of city and county public health directors. "It's very counterintuitive for Americans to do that. We are a country of rebels . . . But you have to trust we'll have systems in place. The national pharmaceutical stockpile will be here, and we'll have the right drugs."

Some emergency workers have been given doxycycline, an antibiotic that would be used to counter anthrax, plague and other diseases, but the only pills health officials think most citizens should consider having on hand are potassium iodide. It would protect against radiation from a nuclear plant failure or the detonation of a nuclear device, but officials caution that potassium iodide is unlikely to offer protection against radiation from a "dirty bomb" that spreads radioactivity over a small area with conventional explosives.

The pills, which keep the thyroid gland from absorbing radiation, cost about $10 for a two-week supply and are sold in pharmacies under such over-the-
counter brand names as Iosat and Thyro-Block. Because of a risk of an allergic reaction, they are recommended only for people younger than 40 unless the radiation exposure is exceptionally great, in which case older people are advised to take potassium iodide as well.

Doses of potassium iodide were delivered to Southern Maryland residents who live near Calvert Cliffs Nuclear Plant, but federal officials have not determined how or whether to distribute potassium iodide more widely. They are scheduled to make those decisions by summer.

Atropine, a powerful antidote for some kinds of nerve agents, is carried by soldiers in the Persian Gulf and some civilian rescue workers here. It is available only by prescription, but doctors say the drug is extremely dangerous and potentially lethal if taken at the wrong time or in the wrong dosage. They recommend strongly against physicians writing prescriptions that would enable anyone to stockpile it.

One bioterrorism official in the Washington region said that thousands of people -- he called them "the worried well" -- are keeping caches of antibiotics at home, in effect acting as pharmacists. Speaking on condition of anonymity because he finds the practice so objectionable, he said any stockpiles should be used in accordance with these guidelines:

• Do not take an antibiotic on your own until officials have identified the pathogen and alerted the community that the particular drug you have is appropriate.

• If you get sick from other causes, do not take the antibiotic without consulting a physician. It is ineffective against a virus or a chemical attack.

• Before taking antibiotics, answer your physician's detailed questions about your medical history and any issues such as pregnancy or chronic illness. Make sure the doctor knows what other medications you are taking and whether you have a cold or other infection.

• Be aware that antibiotics, even used appropriately, can cause a wide range of side effects -- many unpleasant or even dangerous. Consult a doctor before abandoning a course of antibiotics.

• Store drugs in a dark space that is not too hot or too cold -- improper storage of prescription and over-the-counter drugs can change their strength and effectiveness. Never freeze drugs.

• Expect to spend $50, $100 or more for a prescription not covered by your health insurance plan.

One thing that has made members of the public consider stockpiling defensive drugs is that some public safety workers are being provided kits that include antibiotics.

Montgomery officials say they had reason to distribute the kits and stress that those who have them have received intensive training and been ordered not to use the pills unless they are told to. Frank said the county agreed to requests for the drugs from the police union after concluding that it was in the public interest for emergency workers to have drugs for themselves and their families if an emergency required them to remain on duty. Frank said 5,000 police, fire and ambulance workers were given doxycycline, known to be effective against anthrax and considered a good choice to defend against plague and the bacterial disease tularemia.

"When you take an oath to defend the citizens of your community, you're leaving your family at home against your own instinct to shelter in place or get out of town," she said. "We don't have escape routes. We have to be at work."

Another reason for the public to avoid stockpiling, officials say, is that a bioterror attack would not require instantaneous drug treatment -- there would be time for the government to respond.

In the anthrax situation in Washington 18 months ago, it took several days to get antibiotics to more than 20,000 people, but that was fast enough to keep anyone who received the drugs as a preventive measure from developing a full-blown infection, officials say.

It's a different story for nerve agents and chemical agents. Antidotes would be needed promptly.
The federal drug stockpile, managed by the U.S. Centers for Disease Control and Prevention, consists of a prepackaged supply of nearly everything local health officials will need to respond to a range of threats. CDC says it would deliver the goods by air or ground within 12 hours.

Frank said she practices what she preaches; her family keeps no drugs at home for a terror attack.

"Sometimes when you start thinking of all the things that could happen to us, it makes you want to build a fortress," she said. "You just have to go on and live your life."

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