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The Citizen as First Responder

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FOX NEWS

Defending against bioterror (search)--the deliberate release of biological agents such as anthrax, botulism, plague, ricin, or smallpox with intent to kill--is not an easy task. The damage caused by such an event depends upon the time required to distribute antibiotics (search), medicines or vaccines (search) to the affected population--the faster the better.

Yet, although our security today rests with government's ability to respond quickly to a bioterror event, unfortunately, current bioterror preparedness plans in the United States fail to recognize how crucial **rapid response** (search) can be.

Take **anthrax** (search), for example. While plans exist to ship medications from the strategic national pharmaceutical stockpile to any location required within 6-12 hours, as many as four additional days could be required to get pills into people's mouths. Now consider that an airborne release of just 1 kilogram of weapons-grade anthrax in a large city could infect 1.5 million people. Even if the attack were recognized as soon as the first symptomatic cases occur, the call to the national stockpile would not happen until two days after the attack. From this point, each additional day of delay in distributing the required antibiotics to the population would cost an additional 10,000 lives.

Smallpox (search) is another case. The time from infection until a physician might suspect smallpox could span 15 to 20 days, while confirming the diagnosis in the laboratory and beginning vaccination adds another day or two. Vaccination would be too late to prevent any first generation cases, but could, if implemented rapidly, prevent some second generation cases and most third generation cases, controlling the outbreak within a month. However, such rapid vaccination is only possible if a sufficient number of already vaccinated personnel are ready to respond immediately upon the detection of the attack. With only 36,000 doctors and nurses immunized thus far in the current **smallpox vaccination plan** (search), we are far from a comfortable state of readiness.

The question is, what do we do until better plans for bioterror preparedness and protection are created, and how to make them as bulletproof as possible?

A new approach is needed. Consistent with the principles of robustness and public choice, our suggestion is simple: Let the citizen be the first responder. As an anthrax example, allow citizens to purchase antibiotics such as **cipro** (search) and **doxycycline** (search) for the prescribed purpose of bioterror preparedness. This would break the antibiotic distribution bottleneck. Those who choose to purchase such medications would not require delivery in the event of an attack, while the distribution queue would be shortened for those who had not previously obtained antibiotics, quickening the response and saving lives.

Self-service (search) has been employed with great success in manufacturing and service organizations, and we see no reason why these managerial principles cannot be transferred to bioterror response. In the electronics industries, the cost of field service has been greatly reduced by leaving spare parts with customers and allowing

them to make simple repairs. In many large companies, departments pursue their own purchasing, rather than relying on cumbersome centralized procurement procedures. Both of these examples reveal the win-win nature of self-service: Customers feel empowered while their service delay is greatly reduced, and expert servers are freed to focus on more important activities.

The customers in a bioterror attack are our citizens. The citizen as first responder will reduce delays in receiving service-protection or care after an attack-while not further burdening the expert servers in our public health system.

People will object to this approach. Many doctors will argue that medical decisions should not be ceded to a public unable to weigh risks and benefits. Others will argue that **antibiotic resistance** (**search**) is a danger because the public cannot be trusted to use prescription medications only in the event of an actual attack. We, however, have greater faith in the ability of ordinary citizens to act responsibly when trusted with medications and medical devices.

For years, the **Peace Corps** (**search**) gave their volunteers medical kits that included antibiotics and encountered no serious problems. Travelers going overseas are often given medicines, including antibiotics, for use only under prescribed conditions. Furthermore, with appropriate incentives, even those who might consider irresponsible use can be dissuaded. For example, rather than prescribing a full 60-day course of cipro, enough pills for only the first week could be prescribed for bioterror preparedness, and once filled, the prescription would not be continued within the **shelf-life** (**search**) of the drug unless an actual attack occurs and the remaining course of medication becomes necessary. With responsible use, worries about antibiotic resistance evaporate.

By allowing citizens voluntary access to appropriate drugs and vaccines now, our proposal strengthens any proposed response plan by reducing delay and panic in the event of an attack while providing a margin of safety for anyone who wishes to invest in personal prevention. This is a form of life insurance. With a small expenditure, an individual can self-protect against a potentially catastrophic event of unknown probability--and make others better off in the process.

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