# Community storage of anthrax-preventing antibiotics should be determined by state

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As part of preparations for a possible large-scale anthrax attack, public health officials on the state and local levels should determine where and how anthrax-preventing antibiotics should be stored in their communities, says a new report from the Institute of Medicine. The report recommends that state, local, and tribal health officials work with the federal government to assess the benefits and costs of strategies that preposition antibiotics close to or in the hands of people who will need quick access to them should an attack occur. These locations include local stockpiles, workplace caches, or possibly homes. However, the report discourages broad use of a home storage strategy for the general population due to possible antibiotic misuse and higher costs.

"Delivering antibiotics effectively following an anthrax attack is a tremendous public health challenge," said Robert Bass, chair of the committee that wrote the report and executive director, Maryland Institute for Emergency Medical Services Systems. "The Strategic National Stockpile has ample supplies of the antibiotics. The issue is not whether inventory is adequate but how to get the medication into people's hands soon enough to be effective. Because needs and capabilities vary across the country, state and local governments will have to examine which strategies would work best for them should an attack occur."

Antibiotics are most effective at preventing anthrax if taken before symptoms begin to occur -- a timeframe likely to be four days or longer, according to the report. Current federal, state, and local plans for

dispensing antibiotics rely heavily on post-attack delivery from state stockpiles or the Centers for Disease Control and Prevention's Strategic National Stockpile, a national repository of medicine and medical supplies that can be deployed rapidly. Antibiotics from these stockpiles are dispensed to the public primarily at points of distribution (PODs) located throughout a region. The goal is to get antibiotics to all individuals in need within 48 hours of a decision to dispense. To complement these current plans, each jurisdiction should assess the benefits and costs of different strategies for storing antibiotics locally and determine which ones would be most appropriate for their communities, the report concludes.

For areas that are at higher risk for an attack and have limited dispensing capability through the current POD system, the report recommends considering "prepositioning strategies" to keep medicine stockpiled near where people work and live. These strategies may help individuals receive antibiotics more quickly. However, prepositioning strategies will cost more than centralized distribution systems, and once implemented, these plans may be difficult to alter. In areas where the risk of an attack is low and/or dispensing capability is sufficient, existing PODs likely already fulfill the needs of a community and prepositioning strategies may offer little additional value, the report says.

The report also considers predispensing antibiotics, a form of prepositioning in which the intended end-users are given possession of the antibiotics prior to an attack. This could take the form of personal stockpiling where individuals obtain antibiotics pre-event from a standard prescription or emergency MedKits with special packaging that should only be opened in case of an attack. The report discourages predispensing for the general public because it is unlikely to be cost-effective and carries significant risks, including a possible high rate of inappropriate antibiotic use. Examples of inappropriate use include taking the antibiotics to treat an unrelated condition or when it is not

needed, such as in response to a false alarm or distant anthrax attack. The report found limited evidence to suggest that a MedKit approved by the FDA would lower that risk. A MedKit would also be likely to cost significantly more than a standard antibiotic prescription. However, the report finds some cases in which targeted personal stockpiles might be helpful. For example, communities may consider predispensing for some first responders, health care providers, and other workers who support critical infrastructure. Predispensing may also be appropriate for individuals who cannot travel to PODs to receive antibiotics because of a medical condition.

In addition, the report provides guidance for state, local, and tribal policymakers and public health authorities on how to assess the benefits of prepositioning strategies. Factors to consider include the risk of an anthrax attack; the ability to detect an attack quickly; an assessment of the current dispensing system; and an evaluation of the costs, risks, and benefits of prepositioning strategies like local stockpiling.

The report recommends that the government coordinate with private-sector organizations to alleviate the burden on the PODs and better reach every person who requires antibiotics. Although the responsibility for responding to an anthrax attack traditionally lies with the public sector, private-sector organizations have relevant expertise and resources that could be useful in case of an attack. These organizations may be interested in playing a greater role in distributing and dispensing antibiotics to ensure business continuity and help protect employees and their families.

The report does not address the priority of stockpiling anthrax-preventing antibiotics relative to other disaster preparedness activities, such as planning for other kinds of terrorist attacks, natural disasters, and infectious diseases.