

What "Ready" Really Means: An analysis of bioterrorism preparedness today and an evaluation of a proposed method to achieve minimum preparedness nation-wide | Breanna DiGiammarino

The events of 2001 drastically changed the way America views the threat of terrorism. Of particular note is the increased attention to bioterrorism that resulted from that year's anthrax attacks that caused 22 cases of human infection and 5 fatalities. A Congressional response to the newly recognized threat came quickly, and the Public Health Security and Bioterrorism Act of 2002 soon made funds available to all states, territories, and key cities in the United States.

Despite these efforts, significant deficiencies in preparedness remain. Most importantly, no definition of preparedness exists, so communities have no way to determine how secure they are with respect to their preparedness infrastructure, including areas such as their coordination and communication systems, outbreak surveillance methods, and laboratory resources.

Partnerships for Safe and Secure Communities (PASCOC) creates an all-hazards preparedness program that determines a community's vulnerabilities, finds its gaps in preparedness, and fulfills those needs. The Primary goal of PASCOC is to implement a standardized national system to assess a community's preparedness level and determine what that area needs to do to become prepared. It accomplishes this goal through an if/then algorithm. **IF** a community has certain assets, threats, and vulnerabilities, **THEN** it will be classified into one of several community profiles. Each profile will have clear standards that need to be met in order for the community to be considered minimally prepared. As an all-hazards program, PASCOC aims to prepare for all types of threats, including those posed by natural disasters, crime, and terrorism. As part of that approach, it should include benchmarks for bioterrorism preparedness. The development of these benchmarks is the focus of this thesis.

The goal of this thesis was to:

1. Examine bioterrorism's threat
2. Assess the nation's current preparedness
3. Propose the implementation of an if/then process of bioterrorism preparedness evaluation combined with financial incentives for the attainment of higher levels of preparedness
4. Answer the question: Will this method improve the current ability of communities in the US to prevent, respond to, and recover from a bioterrorist attack?

To accomplish these goals, I conducted a literature review and developed two online surveys. One was administered to members of Citizen Corps Councils, local organizations dedicated to preparing communities for all types of large scale emergencies. The other was given to public safety, biology, and terrorism prevention professionals. Analysis of the survey responses then guided the evaluation of the proposed method of preparedness.

A survey done by the American Red Cross, the George Washington University Homeland Security Policy Institute, the United States Department of Homeland Security, and the Council for Excellence in Government indicates that 76% of Americans believe there will be a

terrorist attack in the future. Another survey by the Council for Excellence in Government showed that of all attack types, Americans are most worried about bioterrorism.

Though bioterrorism is unlikely to cause widespread casualties, it is likely to incite severe localized damage and mass panic. There are six Class A agents of bioterrorism. These agents, anthrax, botulism, hemorrhagic fever viruses, plague, smallpox, and tularemia all have characteristics that make them especially dangerous as potential biological weapons.

Protecting the nation from terrorism is a costly endeavor. Currently, each state is given the same base amount of money, and funds above this amount are distributed according to population alone. This process has proved problematical because low population, high threat areas are not receiving adequate funds to protect their citizens. Consequently, there is a trend towards allocating preparedness dollars based on the receiving area's threat level as opposed to its population.

One of the most important aspects of the if/then methodology is that it incorporates this trend by taking into account each area's threat in the assessment stage of implementation. Areas determined to be at higher threat levels will be classified into a different profile than areas considered to have a low threat of attack. The higher threat profiles will be required to do more to be considered minimally prepared, and will be eligible for more funding to meet that need.

22 people participated in my survey, including eight Citizen Corps Council representatives and 14 preparedness professionals. One survey was discarded because the respondent data section was empty. Every single respondent wrote that the nation should be prepared for an attack of bioterrorism, yet they overwhelmingly believe that the nation is not yet prepared. Over 60% of respondents indicated that they believe the nation is less than half way to prepared on a scale of 1 to 6. 15 people unambiguously believe that there is a need for specific guidelines regarding bioterrorism preparedness. Over half of respondents ranked the viability of the if/then method as 4 or higher on a scale of 1 to 6, from not viable to very viable. All but two respondents ranked the likely effectiveness of financial incentives as level 4 or higher on a scale of 1 to 6, from not effective to very effective.

The survey elucidated the fact that bioterrorism is perceived by knowledgeable professionals to be a serious threat, as evidenced by the fact that all respondents indicated that the nation should be prepared for acts of bioterrorism. Though unlikely, they note that it would be irresponsible not to prepare as well as possible now.

Two parts of the survey indicate that there are needs for biopreparedness reform:

1. No one indicated that our current preparedness is at level 5 or 6
2. The many varied responses given to a question asked of Citizen Corps Councils regarding bioterrorism preparedness activities today and whether or not areas have set expectations for their council's preparedness level indicate that preparedness across areas is anything but standardized, and even preparedness levels within communities are less than clear.

The proposal originally included financial incentives as a way to encourage communities to reach ever-higher levels of preparedness. The questions some respondents expressed as to the proposal's ability to target the most at-risk areas made it clear that all areas should reach minimum preparedness for their threat level before any area is granted funding to become further prepared.

Perhaps most importantly, the surveys illuminated the fact that preparedness reforms will also benefit the nation's entire public health infrastructure and its ability to respond to emergencies of all types, from bioterrorism to influenza to SARS. The if/then methodology is a logical way to go about these reforms. Though it remains in the early stages of implementation, further studies and action along these lines is recommended and necessary. Bioterrorism is a serious threat. If we do not protect the nation now, we may be sorry in the future.