

Emergency preparedness and response

[Health & Medicine](#)



**ASSIGN
BUSTER**

Emergency Preparedness and Response A response to bioterrorism on behalf of health organizations can only be efficient if done in concert. Each member of the health chain is crucial. Family physicians diagnose the presence of a pathogen. State health authorities identify a possible covert or overt criminal activity, and federal health authorities then act to eliminate the threat through coordination and assistance. Anthrax is already known to the US health organizations through the 2001 attacks. Better communication and recognition still remain a problem in most states.

Family physicians and laboratory workers are the first to identify the pathogen. The laboratory workers identify the pathogen, and physicians notify the local health department and treat the patient (Hughes & Gerberding, 2002, p. 1013; Harris & Yeskey, 2011). The latter serve as the early warning system in the prevention and response system (Harris & Yeskey, 2011).

Once identified, state and national health agencies must be notified. Hughes and Gerberding (2002) stressed the importance of the “‘golden triangle’ of response between clinicians and clinical microbiologists, the health-care delivery system, and public health officials” (p. 1013). Centers for Disease Control and Prevention (CDC) oversee the golden triangle. They allocate funding across health agencies. In response to the 2001 anthrax attacks, CDC created “ rapid response teams composed of individuals with expertise in field operations, epidemiology, microbiology, data management, and communications” to assist affected areas (Hughes & Gerberding, 2002, p. 1014). CDC is in charge of disseminating knowledge of new infections and treatment methods.

However, communication is not well developed. Szpiro, Johnson and <https://assignbuster.com/emergency-preparedness-and-response/>

Buckeridge (2007) argued that early recognition and two - way communication between the health officials and clinics are insufficiently developed in the USA. As a result, a needed prophylactic distribution within three days after an attack cannot be achieved (Szpiro, Johnson & Buckeridge, 2007, 102, p. 103). They argue that the health system needs to incorporate syndrome surveillance of all possible biological pathogens affecting humans, so that in case of an attack, symptoms can be recognized. Following the current suit of only few pathogen recognition abilities, most pathogens go unrecognized (Szpiro, Johnson & Buckeridge, 2007, p. 103). However, in case of anthrax, since its occurrence dropped to zero after 1900, only one case would be necessary (Szpiro, Johnson & Buckeridge, 2007, p. 104). Syndromic surveillance focuses on symptoms, thus enabling health authorities at state and national level to cooperate and respond quickly. Still, focus on syndrome analysis is disadvantageous. Szpiro, Johnson and Buckeridge (2007) found that focus on syndrome analysis is a slow process and might fail in case of a moving line release (p. 105). As a result, they proposed a new system called BACTrack, where confirmation of a pathogen in one individual would be traced to all individuals with the same symptoms but still unconfirmed pathogen presence. This way, communication between the clinicians and the health officials would increase, and planning and distribution of aid would be improved.

The state of Florida is experienced in dealing with anthrax attacks. The first attack took place in Florida (The Florida Department of Health [FDH], 2001-3, p. 14). County health departments educate physicians and disseminate necessary information regarding bioterrorism (FDH, 2001-3, p14). The Bureau of Epidemiology cooperates with CHDs and physicians through <https://assignbuster.com/emergency-preparedness-and-response/>

surveillance and testing for pathogens. Channels of communications are too created through modern technology in case of an emergency (FDH, 2001-3, p. 15). One case is immediately known to other clinics, which can then act on time to prevent deaths.

Regardless of the state or city, recognition of symptoms is limited to a few pathogens, and is a slow process. Thus, ability to recognize all pathogens is needed, and BACTrack type of system needs to be incorporated. This way, misdiagnosis and lack of communication would decrease. Unlike in Florida, not all clinics can communicate quickly or even determine an infectious disease. In turn, in case of an attack, the pathogen will have spread before it is recognized and reported.

References

Harris, M. D. and Yeskey, K. (2011). Bioterrorism and the vital role of family physicians

[editorial]. American Family Physician. Retrieved from <http://www.aafp.org/afp/2011/0701/p18.html>

Hughes, J. M and Gerberding, J. L. (2002). Anthrax bioterrorism: Lessons learned and future directions. Emerging Infectious Diseases 8(10), 1013 - 1014.

Szpiro, A., Johnson, B. and Buckeridge, A. (2007). Health surveillance and diagnosis for

mitigating a bioterror attack. Lincoln Laboratory Journal 17 (1), 101 - 113.

The Florida Department of Health (2001 - 3). Healthy communities for a healthy Florida.

Retrieved from http://www.doh.state.fl.us/rw_webmaster/rev01-03.pdf

<https://assignbuster.com/emergency-preparedness-and-response/>