

Lessons Learned from a National Capitol Region Syndromic Surveillance Tabletop Exercise, Spring 2005

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OBJECTIVE

This paper describes lessons learned from a regional tabletop exercise (TTX) of the National Capital Region (NCR) Syndromic Surveillance Network, from the perspective of the Maryland Department of Health and Mental Hygiene (DHMH).

BACKGROUND

The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE), developed by The Johns Hopkins University Applied Physics Lab (JHU/APL) in collaboration with public health, is an electronic syndromic surveillance network which is used for cross-jurisdictional analysis of multiple traditional and non-traditional surveillance data sources for purposes of detecting potential public health emergencies.

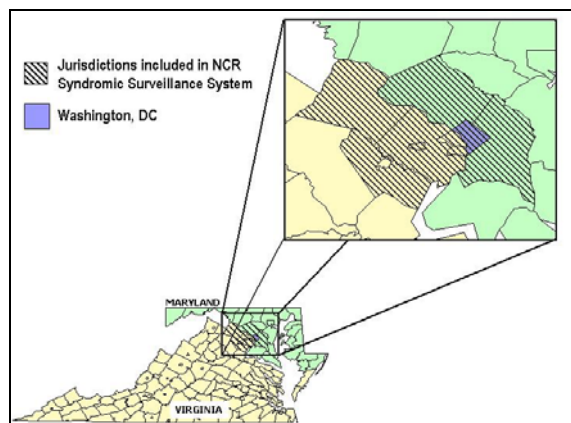


Figure 1 – Map of ESSENCE NCR surveillance area.

METHODS

The NCR TTX simulated an airborne release of a bioterrorist (BT) agent during a large-scale public event. Clinical data were simulated to mimic as closely as possible the resulting outbreak in the population. Participants in the exercise included local, state and federal partners from public health. Observers of the exercise included emergency management and policy makers, from all jurisdictions in the NCR participating in the syndromic surveillance network. Objectives for the exercise included: 1.) Educate responding partners outside of the public health community about the regional surveillance network and public health practice in general; 2.) Bring together local and state health department per-

sonnel who may be involved in the daily review and use of syndromic data; 3.) Provide a framework for developing formal communications between participating jurisdictions about network alerts; 4.) Identify need for communications protocols between public health and non-public health partners who may respond to a potential BT threat.

RESULTS

The NCR TTX was able to successfully bring together participants from local, state and federal partners representing all jurisdictions in the NCR for a practical experience which was then used to glean future enhancements to the system. While the TTX was designed to evaluate the response only of those within the public health community, it was important to have non-public health observers for the purposes of strengthening partnerships, and education. The exercise revealed a few current needs of the system, when using syndromic surveillance data to make decisions about public health emergencies: formal follow-up procedures for individual unusual or suspect cases; cross-jurisdictional investigation protocol; cross-jurisdictional alerting protocol; more extensive training of those who monitor ESSENCE, such as alerting to “unusual” clinical cases; protocols for all users to consistently look at key features in the absence of alerts. We feel that syndromic surveillance may: help provide early signal of a problem; be used to monitor the effectiveness of an intervention; be used to follow patterns of illness in the general population; help recognize multiple agents/exposures; allow us to look at data from a regional standpoint. Syndromic surveillance may not necessarily be used to identify new individual cases.

CONCLUSIONS

As a regional disease surveillance network, ESSENCE, when used appropriately, may be a useful informational tool for public health practitioners and policy makers. A practical exercise which involves all partners from multiple jurisdictions is useful as an assessment of the alerting system, evaluation of current usage, and demonstration of the utility and limitations of modern disease surveillance.

Further Information:
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