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ABSTRACT

Use of a public health working group to coordinate multi-jurisdiction response to bioterrorism surveillance signals and influenza outbreaks

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Objective
The rapid and effective coordination of the multi-jurisdictional communications and response to a surveillance system signal are an important goal of public health preparedness planning. This goal is particularly challenging if the signal indicates a possible risk that could adversely affect populations in multiple states and municipalities. This paper examines the value of a regional workgroup in the activation, integration, and coordination of multiple surveillance systems along with efforts to coordinate risk communication messaging. Recommendations for the development of similar groups in other regions are discussed.

Introduction
The use of syndromic surveillance systems to detect illness and outbreaks in the mid 1990s in New York City resulted in recommendations for increased use of these systems for detection of bioterrorist agents, and tracking influenza throughout the region.[1,2] Discussions on approaches to best respond to surveillance system signals led to initial efforts to organize a coordinating group of various public health agencies throughout the New York City region. These efforts were strengthened after the events of September 11, 2001, and resulted in the development of a regional workgroup consisting of epidemiologists and other staff from all state, county, and municipal health departments who operate, respond to, or oversee public health preparedness surveillance systems throughout the greater New York City metropolitan area.

Methods
Syndromic surveillance system data from hospital-based networks in state and large municipal public health jurisdictions are reviewed on a daily basis along with information from laboratory-based and remote-sensing systems. Information on surveillance system signals and other indicators of bioterrorism events or emerging infectious disease outbreaks are shared among members of the workgroup, as appropriate. This information can be used for an enhanced review of syndromic surveillance system data in other jurisdictions, notification of emergency department staff to look for patterns of illness, and recommendations for increased laboratory testing. Findings of laboratory-confirmed bioterrorist agents and evidence of outbreaks of emerging illness would result in development of coordinated messaging among member jurisdictions of the work group. Periodic meetings and exercises are scheduled among members that include representatives of federal, state, and local law enforcement agencies. Joint public health and law enforcement emergency response protocols have also been developed and tested.

Results
Members of the work group have coordinated a number of joint multi-jurisdictional surveillance system signal response investigations. These include the regional response to the 2001 anthrax mail attacks (Amerithrax),[3] the identification of inhalation[4] and cutaneous[5] anthrax cases in individuals exposed to contaminated goatskins used in African drums, targeted regional surveillance for detection of influenza and other disease events following the 2009 US Presidential Inauguration[6] and tracking of the novel 2009 influenza A (H1N1) pandemic.[6]

Conclusions
The use of a multi-jurisdictional public health working group has resulted in the enhanced coordination of a regional response to various surveillance system signals and emerging disease outbreaks. Development of similar working groups is recommended for other regions.

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