

Preparing for the Pandemic: A Review of State Pandemic Influenza Preparedness Plans Reveals Increased Reliance on Advanced Surveillance; Recommendations for Pandemic Influenza Surveillance

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OBJECTIVE

This paper summarizes the results of a continued review of state pandemic influenza preparedness plans and compares various approaches for routine influenza surveillance during interpandemic periods with approaches for enhanced surveillance during pandemic alerts. The increased reliance of syndromic and other advanced surveillance systems by U.S. states for seasonal influenza tracking and pandemic preparedness planning is documented.

BACKGROUND

In response to increasing reports of avian influenza being identified throughout the eastern hemisphere, the U.S. Homeland Security Council [1], the Infectious Disease Society of America [2], and others have called for expansion of enhanced, real-time electronic syndromic and other advanced surveillance systems to supplement the traditional surveillance systems recommended in U.S. Department of Health & Human Services pandemic influenza preparedness plan guidance [3]. Like many states, the Connecticut Department of Public Health (DPH), has updated its own Pandemic Influenza Response Plan to reflect its expanding arsenal of surveillance systems [4]. These systems include a syndromic surveillance system, known as the Hospital Admissions Surveillance System (HASS), developed in September 2001 to monitor for possible bioterrorism events and emerging infections [5]. HASS data has been utilized to supplement information received from laboratory-confirmed influenza test (LCT) results, influenza-like-illness (ILI) reporting, and pneumonia influenza mortality (PIM) to track seasonal influenza since 2003 [6].

METHODS

U.S. state pandemic influenza preparedness plans were reviewed to compare approaches for routine influenza surveillance during interpandemic periods with the enhanced and automated surveillance needed during international, national, and local pandemic alerts.

RESULTS

The state pandemic influenza preparedness plan review revealed that, while most states rely on

traditional laboratory based influenza testing combined with influenza-like-illness surveillance, an increasing number of states have proposed use of automated syndromic surveillance and other advanced systems to identify and track the presence of novel influenza strains during pandemic alerts. During the 2006-2007 influenza season, the Connecticut DPH completed additional evaluations of the effectiveness of its multiple statewide influenza surveillance systems to track seasonal influenza in Connecticut. The experience derived from these evaluations was used to enhance our own state Pandemic Influenza Response Plan.

CONCLUSIONS

Most existing state health department surveillance systems provide sufficient data to track influenza during the interpandemic periods. While national systems can provide information on regional outbreaks, enhanced automated state and local surveillance systems are recommended to quickly identify and track novel influenza strains and characterize the impact of influenza on local populations during regional pandemic influenza alerts.

REFERENCES

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