

North Texas School Health Surveillance: First-Year Progress and Next Steps

Tabatha Powell¹, MPH, Dean Lampman², MBA, Bill Stephens²; Dave Heinbaugh²
¹University of North Texas Health Science Center, School of Public Health (Fort Worth, TX)
²Southwest Center for Advanced Public Health Practice (Fort Worth, TX)

Objective

This oral presentation will share key findings and next steps following the first year of a pilot project in which Tarrant County, Texas schools used a Web-based system to share their daily health data with Tarrant County Public Health (TCPH) epidemiologists, who can use ESSENCE¹ to analyze the data. The project's ongoing goal is to reduce the magnitude of flu outbreaks by focusing on school-aged children and youth, where infectious diseases often emerge first and spread rapidly.²

Background

Recognizing the threat of pandemic influenza and new or emerging disease such as SARS, the U.S. Department of Health and Human Services has recommended that schools work in partnership with their local health departments "to develop a surveillance system that would alert the local health department to substantial increases in absenteeism among students."³ Tarrant County's pilot project system meets that need and transcends absenteeism data; it seeks to quantify ILI in schools and lets school nurses view daily maps of changing disease patterns, access flu prevention resources, and receive and respond to action items suggested by TCPH.

While the focus is on seasonal flu, best practices for mitigating seasonal flu also apply to pandemic flu. Because the system uses open source software⁴, it's affordable and replicable for other public health agencies seeking to strengthen their school partnerships as well as their local or regional biosurveillance capabilities.

Methods

The evaluation report that is the basis for this presentation⁵ follows guidance from the Centers for Disease Control and Prevention (CDC) on evaluating public health surveillance systems⁶ to evaluate operational aspects of the system and also reflects "key informant" interviews.

Results

The Web-based communications portal was found to be a viable way to collect school health data in a

rapid, automated manner. More than 200 school nurses in seven of Tarrant County's 16 Independent School Districts (ISDs) were trained to use a system that let them share data via an online report form they could complete in less than five minutes.

Based on the program's first-year success, the system is being expanded regionally, covering three of the four largest counties in the Dallas-Fort Worth area, while work continues to engage more Tarrant County schools in sharing health data. School-based health clinics and child care centers are being approached to participate, too. Finally, plans call for broadening the system to address diseases other than flu.

Conclusions

The system has shown potential, if used with other biosurveillance systems and data, to help public health monitor community health trends and respond to findings in a focused partnership with schools. As participation grows, the system will be increasingly useful for both its current and future applications.

References

1. Learn more about the Electronic Surveillance System for the Early Notification of Community-based Epidemics, developed by the John Hopkins APL, at: <http://essence.jhuapl.edu/ESSENCE/>.
2. CDC. Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*. 2003;52 (No.RR-8):1-34
3. HHS. School District (K-12) Pandemic Influenza Planning Checklist. www.pandemicflu.gov/plan/school/schoolchecklist.html.
4. For information about DotNetNuke or to download the software, visit www.dotnetnuke.com.
5. Powell T, Tarrant County School Health Surveillance Project, First Year Evaluation Report, 5-31-08. Accessible at: www.texasapc.net/Portals/0/Surveillance/Schools/TCSHSS_Evaluation_Report.pdf.
6. CDC. Guidelines for Evaluating Public Health Surveillance Systems. *MMWR Supplements*. May 6, 1988. 37(S-5); 1-18.