

## **Purpose**

The purpose of school syndromic surveillance is to support the monitoring of the burden of diseases on the population, and to help in timely detection of any unusual occurrence or increase in selected symptoms of diseases mostly common in school-aged children. Large proportions of health problems are subclinical, unreported, or not known, therefore it becomes important for public health to use multiple methods in keeping track of disease occurrence in different groups. Information from the system is used to supplement other information available to the local health system and to implement immediate control measures when necessary to contain and prevent further spread of the disease/condition and possible outbreak. Surveillance helps achieve several public health functions including case/outbreak detection, public health interventions, assessing the distribution and spread of illness, hypothesis generation, and planning guidance.<sup>1</sup>

## **Overview of the 2013-2014 School Year**

### **Process**

- During the 2013-2014 school year, five of the six public school districts in Clay County participated in surveillance (See map on page 4 of this document).<sup>2</sup> This includes 63 schools and approximately 39,189 students that were monitored.
- 34 reports were released for the school year beginning with Epi Week 36 (September 1-7, 2013) and ending with Epi Week 21 (May 18-24, 2014). A report was not released for the week all schools districts were closed during winter break.

### **Symptom trends and outbreak detection**

- No outbreaks were detected early from the school surveillance system, but outbreaks were reported to Clay County Public Health Center throughout the 2013-2014 school year in Clay County Schools.
- Most symptom rates followed trends of previous reporting years.
- Asthma rates were consistently higher in North Kansas City Schools compared to other schools in the district. The Epidemiologist and Epidemiology Specialist met with Dr. Paul Fregeau and Dana Fifer of North Kansas City School District to discuss the trends.

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<sup>1</sup> Buehler J.W., Hopkins R.S., Overhage J.M., Sosin D.M., Tong, V. (2004). Framework for evaluating public health surveillance systems for early detection of outbreaks. Centers for Disease Control and Prevention. MMWR. Retrieved from <http://www.cdc.gov/mmwr/PDF/RR/RR5305.pdf>

<sup>2</sup> Missouri City School District does not participate in surveillance due to its small enrollment (typically fewer than 20 students in the District).

The rates may be due to better case-finding through the partnership with Children's Hospital in Columbia and the Greater Kansas City Asthma and COPD Coalition on Asthma Control through the Asthma Ready Communities (ARC) program.

<http://asthmaready.org/> Dana Fifer collected environmental information about the schools with the highest rates, but the epidemiologist and the epidemiology specialist did not find any trends. The investigation is still in progress.

## Goals and Objectives

- The specific goals and objectives of our practice are as follows:
  - Achieve a minimum of a 70% response rate (percentages of schools who submit a reporting form) each week of school syndromic surveillance.
  - Conduct and complete reports for all weeks that school is in session. We aim for 90% of reports to be released on or before each Friday that school is in session.
  - Twice per school year (near the end of each semester) conduct a qualitative assessment of all users who participate in the system and/or read the weekly reports.
- Outcomes of goals and objectives for the 2013-2014 school year:
  - 91% of forms were received with districts ranging from a 84% overall reporting rate to a 100% reporting rate. The first objective was achieved.
  - School districts consistently request that school surveillance does not commence until after Labor Day in order to give their staff time to prepare for the year. The first week of reporting for the school year was Week 36 (Sep 1-7). 100% of the reports were released on or before each Friday that school was in session. The second objective was achieved.
  - Two qualitative assessments were conducted during the school year (December 2013 and May 2014). The third objective was achieved.

## Customer Feedback

- Per the SOP, Clay County Public Health Center evaluates the practice through a user survey twice per year. A link to an online survey is emailed to all people who send the reports.
- According to the results from this survey, a majority of stakeholders are highly satisfied with the current surveillance system. There were no pressing issues revealed through the results from this survey, but efforts will continue to be made to improve the system and the quality and usefulness of the data/reports.
- The surveys this year were conducted in December 2013 and May 2014.
- Please refer to the 2014 Reports for complete results from the surveys.

### **Sharing What Works**

On September 23, 2013 the Epidemiology Specialist presented a poster on the School Syndromic Surveillance Program at the 2013 Missouri Public Health Association, Missouri Association of Local Public Health Agencies, Missouri Association of Local Boards of Health, Missouri Institute for Community Health, and Missouri Department of Health and Senior Services Joint Annual Conference in Columbia Missouri.

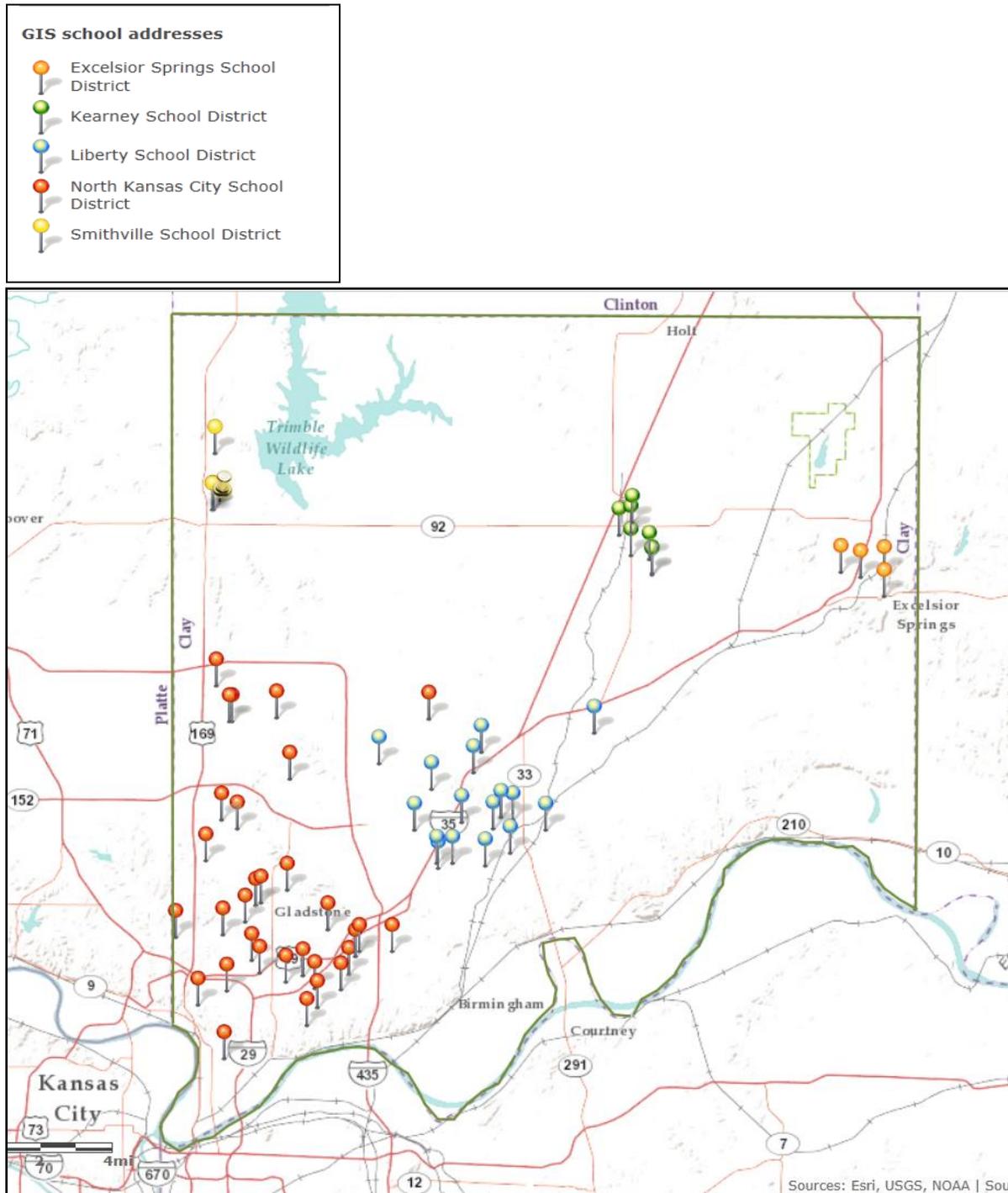
In October 2013, the Epidemiology Program Submitted a NACCHO Model Practice application for the School Syndromic Surveillance program. In March 2014, we received word that the program had been selected as a Model Practice. The CCPHC Director of Public Health and Epidemiology Specialist accepted the award at the NACCHO Annual Conference in Atlanta Georgia July 8-10, 2014. The Epidemiology Specialist also presented a poster at the NACCHO Grand Awards Ceremony on July 9, 2014. As winners of the Model Practice awards, we were offered the opportunity to provide a 20 minute presentation and Q&A on our school syndromic surveillance program. The Epidemiology Specialist is scheduled to present in the “NACCHO Lunch and Learn Webinar” on October 2, 2014.

### **Future needs/plans for the program**

- Cross-training of another staff member to serve as a back-up for the Epi Specialist.
- Possibly explore software that will make the system more streamlined and easy to use for our partners.
- Continue to seek ways to improve the system and the quality and usefulness of the data/reports.

# 2013-2014 School Surveillance Annual Summary Clay County Public Health Center

September 5, 2014



Above is a map of the geographic distribution of schools that participated in syndromic surveillance for the 2013-2014 school year, color-coded by district.

September 5, 2014  
C. Courtney