



CLAY COUNTY

PUBLIC HEALTH CENTER



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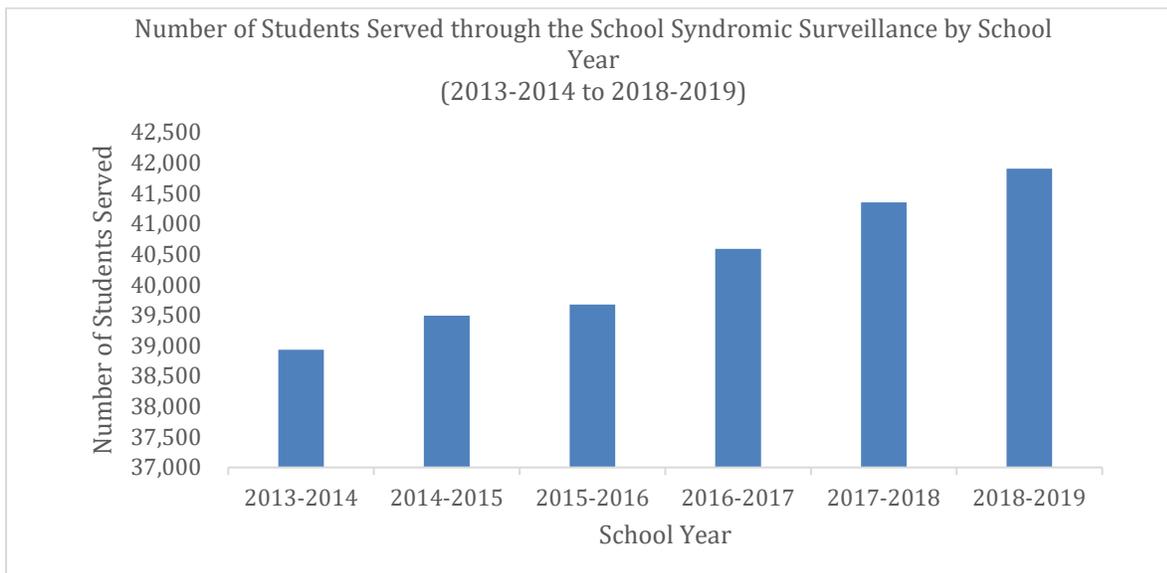
2018-2019 School Syndromic Surveillance Annual Summary

During the 2018-2019 elementary and secondary school year, the Clay County Public Health Center (CCPHC) conducted the School Syndromic Surveillance from Sept. 9, 2018 through May 11, 2019 (Week 37, 2018 – Week 19, 2019). The program released a total of 28 reports during the 34week span of the school year. We did not release reports in week 48 of 2018 or week 4 of 2019 when all school districts closed due to bad weather. We also did not release reports for weeks 47, 52 of 2018 or week 1 of 2019 due to Thanksgiving break and winter break respectively, or for week 12 due to Spring break. Therefore, all percentage calculations are based on 28 weeks.

Following the practice used for several years now, we released the first report of the school year after the Labor Day holiday, based on feedback from the district nurses that it allows enough time to address any problems early in the school year.

The School Syndromic Surveillance System supports the general disease surveillance in the county through monitoring of the burden of disease symptoms in the Clay County school-aged population. We achieved this through timely reporting and detection of any unusual occurrence or increase in selected symptoms or syndromes of diseases among school-aged children.

In 2018-2019, five out of six school districts continued to participate: Excelsior Springs School District, Kearney School District, Liberty Public Schools, North Kansas City School District, and Smithville School District. The sixth school district, Missouri City, due to low total enrollment numbers continues to opt out from participating and reporting. However, the district benefits from reports from a neighboring and bigger district (Excelsior Springs District). We monitored a total of 68 schools and approximately 41,908 students in the five major school districts.



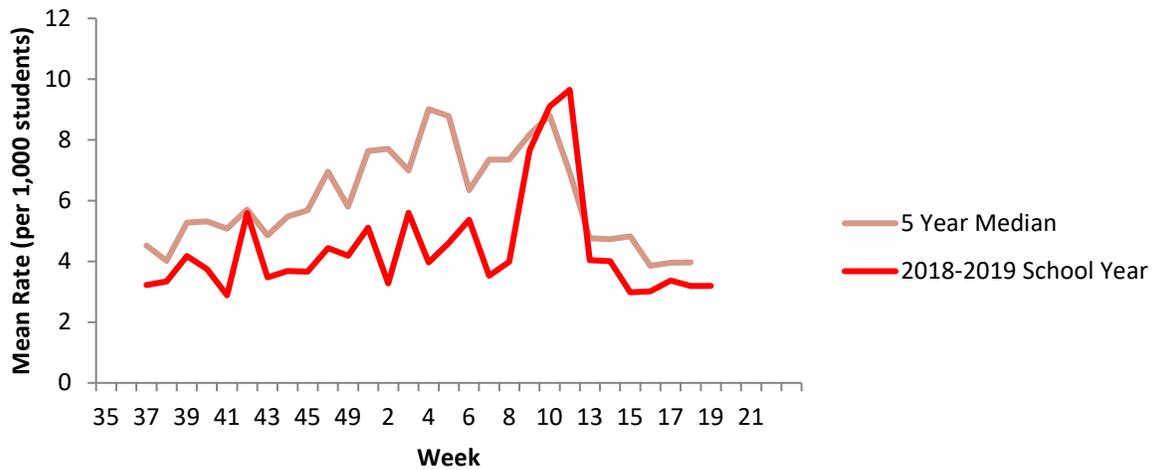
Symptom trends and outbreak detection

The School Syndromic Surveillance System helps keep school nurses engaged and aware of health issues in their schools and Clay County as a whole. Early notification from the school nurse through the surveillance system allows prompt follow-up and containment recommendations from CCPHC.

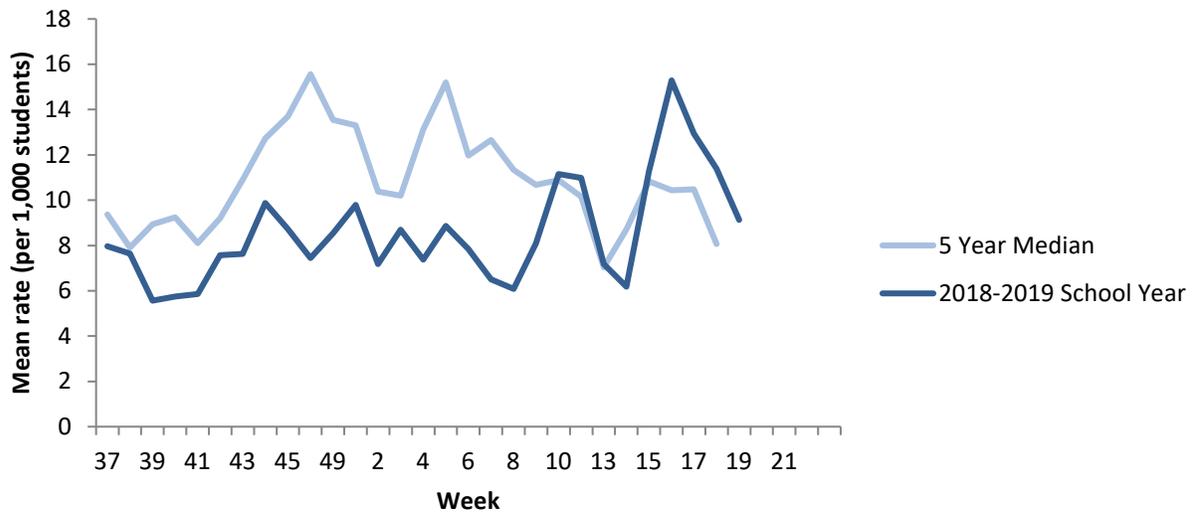
The mission of the Clay County Public Health Center is to deliver the essential public health services of prevention, promotion and protection to the communities of Clay County.

For 2018-2019, Clay County had an active influenza season and the school-aged groups were particularly impacted. Of the influenza cases reported to CCPHC, the 5 to14-year-old age group accounted for 30% and the 15 to 24-year-old age group for 12%. Influenza activity in Clay County peaked during Epi Weeks 9, 10, and 11 (Feb 24- March 10). The School Surveillance System also showed an increase in influenza symptoms such as fever, respiratory illness, and headache during those weeks. All the flu-like symptoms were above the 5-year median during the peak period. The Epidemiology Program provided recommendations on preventing influenza transmission for school use during the flu season and many schools elevated their regular cleaning and sanitation protocols to help contain the spread of flu and other respiratory illnesses.

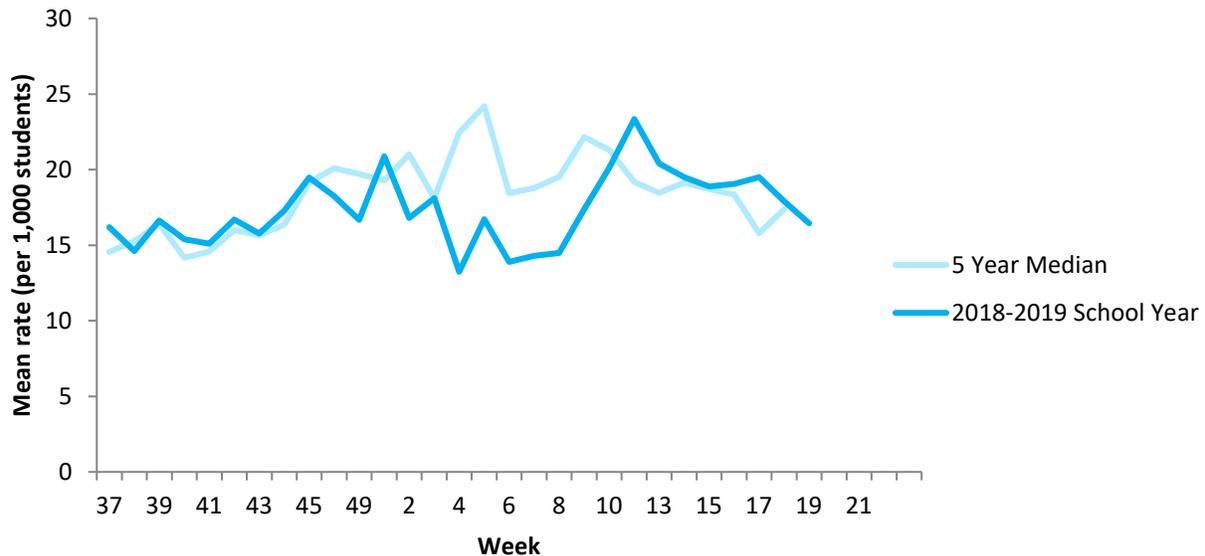
Fever Rates



Respiratory Rates



Headache Rates



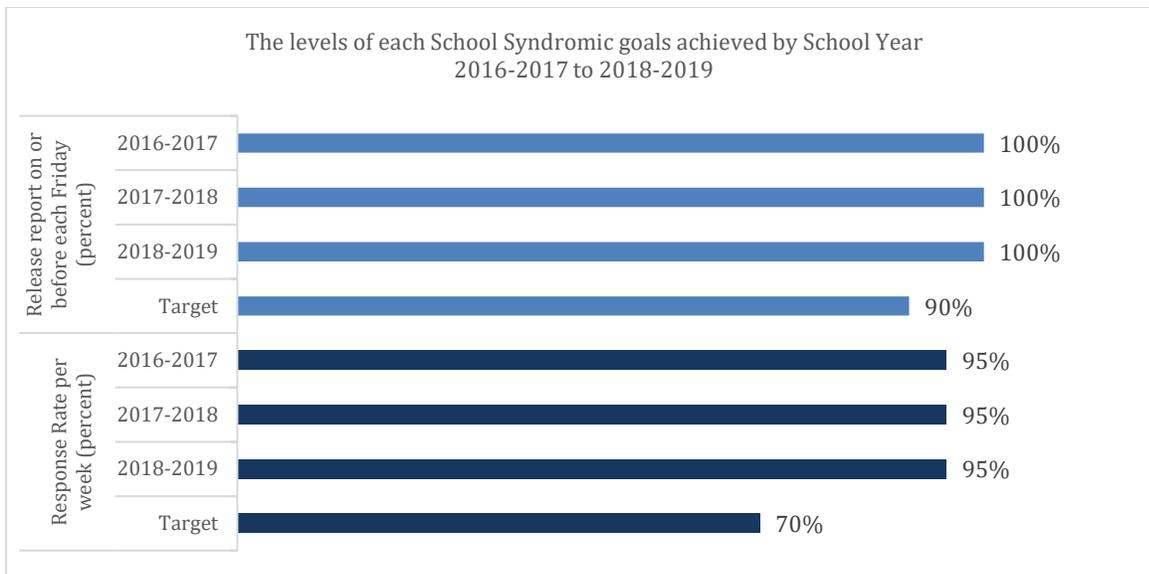
Goals and Objectives

The School Syndromic Program consistently met and exceeded its goal of achieving a minimum of a 70% response rate (percentages of schools who submit a reporting form) each week regardless of staff turnover. Our minimum response rate for the 2018-2019 school year was 76%. This excludes those weeks around major holidays and snow days when some school districts chose not to participate. The average response rate for the school year was 95% for the total 28 weeks. The program aimed to release 90% of reports on or before each Friday. We exceeded that goal by releasing 100% of the reports on or before Friday of each week.

The program goal is to conduct two qualitative assessments of all users who participated in the system and/or read the weekly reports; however, we did not conduct these assessments for the 2018-2019 school year because the response rates were low in the previous years. The Epidemiology Program is planning to reevaluate and develop a new system that would help increase the response rate from our users and get more valuable feedback.

Benefits of School Syndromic Surveillance information

Following any indication of an increase in cases or symptoms through the School Syndromic Surveillance System, the Epidemiology Program works in collaboration with the School Nurse Coordinator and the school nurses to identify any concerns and possible solutions. For example, the Epidemiology program may recommend emphasizing hand washing when an increase in symptoms occur. If we identify a case among the daycare population and they have a sibling in school, especially in the grade school, we notify the school nurse. This encourages active surveillance and monitoring of their school-aged siblings for early signs and symptoms. During the 2017-2018 school year, CCPHC initiated a new Daycare Syndromic Surveillance System. The addition of the Daycare Surveillance is a valuable addition to disease surveillance in the county, because increased symptoms noticed in the daycare population can act as an earlier warning for the initiation of preventive measures among the school-aged population.



The School Surveillance System helped foster a strong relationship between CCPHC and the school nurses in participating districts. The system facilitates regular communication with the school nurses and demonstrates that CCPHC and school nurses share a common goal of keeping children healthy and in school. CCPHC also hosts regular meetings with the School Nurse Coordinators to maintain partnership. These collaborative efforts have resulted in a stronger relationship, with the school partners being more comfortable and confident reaching out for support from CCPHC staff.

Future needs/plans for the program

- In the 2019-2020 school year, current software to run school surveillance system will no longer be available. The Epidemiology program is working on developing a new reporting system using Microsoft Forms in Office 365. This will not have any significant effect on the surveillance operations
- The Epidemiology program plans to maintain constant communication with users and actively seek out feedback for a smooth transition
- The program is researching more creative ways to recruit and maintain additional daycares for a more robust daycare syndromic surveillance system to compliment school syndromic surveillance system