

Outbreak of Norovirus Associated with an Elementary School— Sedgwick County, April 2016



Background

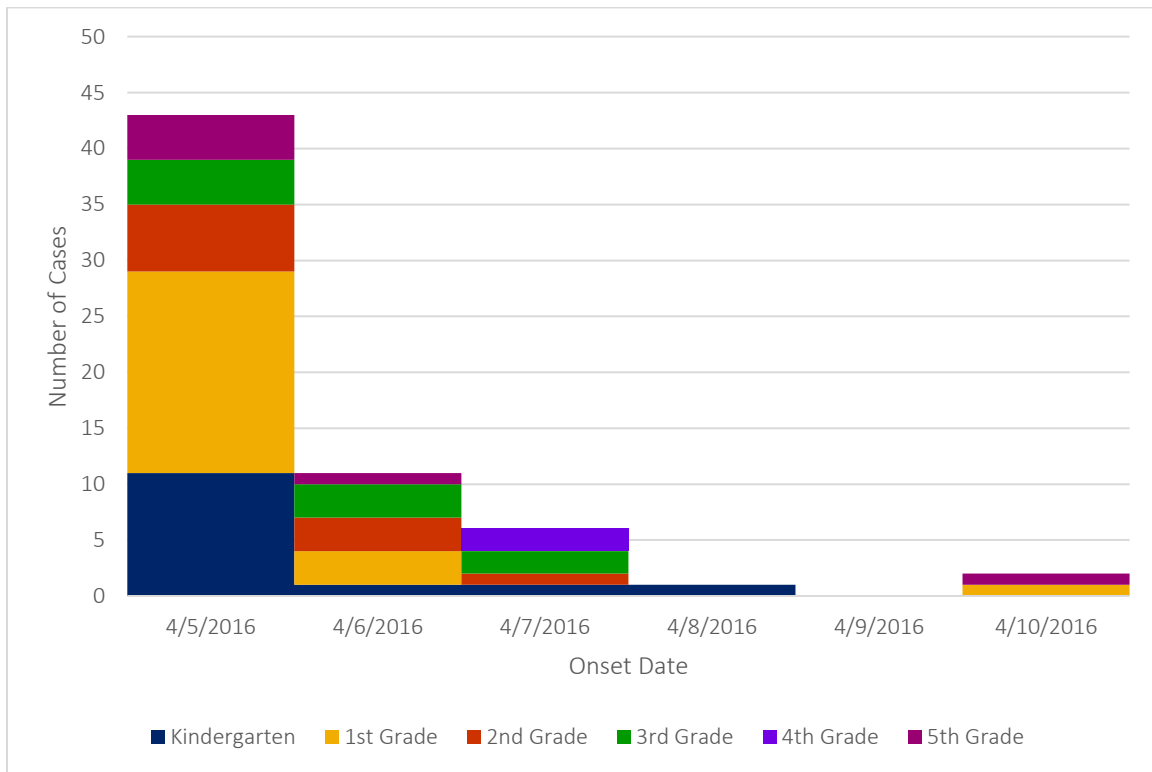
On April 6, 2016 at 3:20 pm, a citizen notified the Kansas Department of Health and Environment's Infectious Disease Epidemiology and Response section (KDHE) of gastrointestinal illness among students at an elementary school in Sedgwick County, Kansas. KDHE notified the Sedgwick County Health Department (SCHD) and an outbreak investigation was initiated at 3:32 pm to determine the cause of illness, scope of illness, and to implement prevention and control measures.

Key Investigation Findings

- Sixty-seven individuals in the elementary school reported illness, including 63 students and 4 staff members.
- Illness information was only available for students reporting illness with all 63 meeting case definition, which was defined as vomiting or diarrhea in an individual affiliated with the elementary school in Sedgwick County, Kansas from April 5 to April 10, 2016.
- Two cases were laboratory-confirmed as norovirus genogroup I.
- All 63 (100%) individuals experienced diarrhea, 63 (100%) had vomiting, and 63 (100%) had nausea. No other symptoms were reported among case-patients. No case-patients were hospitalized.

- Onset of illness ranged from April 5 to April 10, Figure 1.
- Ages of cases-patients ranged from 6-11 years (median = 8 years).
- Of the 63 case-patients, 40 (63.5%) were male.
- A majority of student case-patients were in either kindergarten or the 1st grade (57.1%).

Figure 1: Number of Cases by Grade and Onset Date (n=63)



Conclusions and Recommendations

Sixty-seven individuals (63 students and 4 staff) became ill with gastrointestinal illness and 63 met the case definition for this outbreak. Norovirus was confirmed as the causative agent of this outbreak.

A majority of illnesses occurred in children in Kindergarten and first grade. These two grades share a single bathroom. Of the 43 cases identified in this outbreak, 29 occurred among the two grades which could suggest that exposure to contaminated areas in the shared bathroom could have played a part in the spread of norovirus. School staff stressed the importance of proper handwashing to prevent the further spread of disease.

Ill students and staff were excluded from school for 48 hours after symptoms resolved. No additional individuals became ill after April 10.

Report by:

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