



Philadelphia Department of Public Health
Division of Disease Control

JAMES W. BUEHLER, MD
Health Commissioner

NAN FEYLER, JD, MPH
Chief of Staff

CAROLINE C. JOHNSON, MD
Director, Division of Disease Control

Health Advisory

Enterovirus D68 and Local Implications

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In August 2014, hospital officials in Kansas City, MO and Chicago, IL notified the Centers for Disease Control and Prevention (CDC) of an increase in severe respiratory illness among children seen in emergency rooms and admitted to hospitals. Specimens from these children initially tested positive for rhinovirus and/or enterovirus (certain lab methods are not able to distinguish between these pathogens). Upon further study at CDC, the infections were determined to be due to enterovirus D68 (EV-D68). CDC is working closely with MO, IL, and other state health departments as they continue to investigate suspected clusters of respiratory illness among children in other facilities.

The Philadelphia Department of Public Health (PDPH) recently reviewed surveillance data to assess for evidence of local EV-D68 activity. Since August 1st there have been no sustained increases in total emergency department (ED) visits or ED visits for respiratory illness (including asthma exacerbation) to Philadelphia's pediatric hospitals. In addition, the volume of respiratory specimens submitted to clinical laboratories has been stable. Because clinical laboratories cannot specifically detect EV-D68, we cannot say with certainty that this strain is not circulating in the community. However, **surveillance does not currently indicate the presence of a local outbreak**. With schools back in session, the likelihood of respiratory illness outbreaks among children will increase. PDPH continues to monitor emergency department and other types of surveillance data for emergence of local EV-D68 activity.

Enteroviruses are common sources of infection among children, although EV-D68 is rarely identified. The National Enterovirus Surveillance System received 79 EV-D68 reports during 2009–2013. Small clusters of EV-D68 associated with respiratory illness were reported in the United States during 2009–2010, including 28 cases identified in Philadelphia when a local outbreak was last identified. (*MMWR Sept 30, 2011;60:1301-04.*)

Health care providers should consider EV-D68 as a possible cause of acute, unexplained severe respiratory illness, particularly among children. The majority of cases have had a previous history of asthma or wheezing, indicating that children with asthma may pose as a high-risk group for severe illness. There are no available vaccines or specific treatments for EV-D68, and clinical care is supportive. To prevent transmission of EV-D68 and other common viral respiratory pathogens in healthcare settings, workers should adhere to standard precautions that include strict adherence to hand hygiene before and after patient care, use of non-sterile gloves for any contact with potentially infectious material, respiratory/cough etiquette, and use of gowns and eye protection for activities that may generate splashes of respiratory secretions or other infectious material. Additional droplet precautions should also be implemented for suspect and confirmed patients which include isolation of patients in a private room if able, wearing a facemask for all direct patient care activities, and masking patients if possible, before transporting to other patient care areas.

Enteroviral infections, including EV-D68, are generally not reportable; however, suspected clusters or outbreaks should be reported to the PDPH Division of Disease Control. The pathogen can be detected in standard nasopharyngeal and oropharyngeal specimens. However, there is presently no local capacity to specifically identify EV-D68. CDC can provide this typing on samples submitted from patients with severe respiratory illness who have a **clinical specimen positive for enterovirus**. The Division of Disease Control can assist with referring specimens to CDC. Further guidance on testing indications is expected from CDC soon.

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Philadelphia Department of Public Health

Division of Disease Control • 500 South Broad Street, Philadelphia, PA 19146
215-685-6740 (phone) • 215-686-4514 (after hours) • 215-238-6947 (fax) • www.phila.gov/health/DiseaseControl • hip.phila.gov/xv