



## Enterovirus D68

The CDC today released an early report on a cluster of children with severe respiratory complaints in the Midwest.

The Children's Mercy Hospital in Kansas City, MO notified the CDC of an unusual increase in the number of pediatric patients that needed hospitalization after suffering from a respiratory illness. A couple of days later, the University of Chicago Comer Children's Hospital in Illinois also contacted the CDC to report an increase in patients presenting to the hospital with respiratory distress.

Nasopharyngeal swabs from the clusters identified the causative agent as Enterovirus D68 (EV-D68). The patients have ranged from 6 weeks to 16 years old, nearly equal distribution between males and females with the majority having a history of asthma or wheezing. All of the patients had difficulty breathing and were hypoxic on admission. Most interesting only a small percentage of the patients had a fever.

All but one of the patients had to be admitted to the pediatric intensive care unit with a small percentage requiring BIPAP and one needing extracorporeal membrane oxygenation (ECMO). No patients had a bacterial pneumonia.

Enterovirus can cause many different infections including aseptic meningitis and encephalitis, however the D-68 almost always causes respiratory illnesses. There are no vaccines for this virus and care is mostly supportive.

### **What does this mean for EMS?**

EMS agencies should be aware that this virus is circulating in the Midwest community presently, but will most likely spread throughout the country rapidly and should be prepared for an increase in pediatric respiratory calls.

EMS personnel should be aware that pediatric patients with a history of asthma or wheezing and in respiratory distress may be infected with EV-D68 and may present with hypoxia.

Treatment for these patients is unchanged for patients with wheezing including nebulized bronchodilators and oxygen support for hypoxia.

Of equal importance is the judicious use of personal protective equipment and appropriate disinfection of equipment and the ambulance.

EMS agencies should also track respiratory complaints within their communities to check for unexplained increases in the pediatric population as well as work with receiving hospitals if a patient has a suspected case of EV-D68.

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