Enterovirus D68

A respiratory illness associated with Enterovirus D68 (EV-D68) is most likely present in Southwestern Michigan. This past Sunday A.M. the pediatric hospitalists, Dr. Barbara Boyd and Desire Hurst, at Lakeland Hospital in St. Joseph contacted me about an unusual increase in the number of children admitted with respiratory illness, and we began collecting respiratory specimens. Preliminary tests suggested that it could be EV-D68. Monday A.M., I began discussion with the Michigan Department of Community Health to send these to the CDC for EV-D68 testing, and they are on their way. As of today (09-10-14), the number of children hospitalized is approaching two dozen. Physicians offices and the ER’s have been seeing increasing numbers of children with respiratory disease. Most children are NOT seriously ill and DO NOT require hospitalization.

EVD-68

- Enterovirus D68 (EV-D68) infections are thought to occur less commonly than infections with other Enteroviruses.
- EV-D68 usually can cause mild to severe respiratory illness. However, the full spectrum of EV-68 illness is not well-defined.
- EV-D68, like other Enteroviruses, appears to spread through close contact with infected people.

Background on Enteroviruses

- Enteroviruses are very common viruses; there are more than 100 types.
- It is estimated that 10 to 105 million enterovirus infections occur in the United States each year.
- Most people infected with enteroviruses have no symptoms or only mild symptoms, but come infections can be serious.
- Infants, children, and teenagers are most likely to get infected with enteroviruses and become sick.
- Most enterovirus infections in the United States occur seasonally during the summer and fall.

Treatment

- There is no specific treatment for EV-D68 infections.
  - Many infections will be mild and self-limited, requiring only treatment of the symptoms.
  - Some people with severe respiratory illness caused by EV-D68 may need to be hospitalized and receive intensive supportive therapy.
- No anti-viral medications are currently available for treating of EV-D68 infections.

Prevention

- There are no vaccines for preventing EV-D68 infections
- Ways to help reduce the risk of getting infected with EV-D68:
  - Wash hands often with soap and water for 20 seconds
  - Avoid kissing, hugging, and sharing cups or eating utensils with people who are sick.
  - Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick.
Surveillance

- There will not be a daily count of cases as U.S. healthcare professionals are not required to report known or suspected cases of EV-D68 infection to health departments because it is not a reportable disease in the United States. Also, CDC does not have a surveillance system that specifically collects information on EV-D68 infections.
- No data is currently available regarding the overall burden of morbidity or mortality from EV-D68 in the United States. Any data CDC receives about EV-D68 infections or outbreaks are voluntarily provided by labs to CDC’s National Enterovirus Surveillance System (NESS). NESS collects limited data, focusing on circulating types of Enteroviruses.

Laboratory Testing

- CDC allows for a few samples from each hospital to help confirm the presence of disease in the community.
- In the next few days, a few samples will be submitted. Once the results are back, if positive, we (PH) will confirm the presence of HEV D68 in our community.
- After this confirmation, we would likely provide guidance to physicians. Clinicians will go on to do clinical diagnosis, much like we do with a cold, flu or even mumps. Therefore, it is likely that no further testing will be warranted once the presence of the virus in our community is confirmed.
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Thank you for working together,

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