Enterovirus D68 FAQ

Sept. 15, 2016 Provincial Health Services Authority

What is enterovirus D68?

Enterovirus D68 (EV-D68) is a non-polio respiratory virus that causes mild to severe respiratory illness. It has been around for many years but has previously been an uncommon cause of enteroviral infection.

How serious is EV-D68?

In most people, enterovirus infections are associated with only mild common cold like symptoms or no symptoms at all. The risk of severe illness is low for most British Columbians. However, people of all ages with underlying conditions, notably asthma, may sometimes experience severe breathing difficulty during infections with respiratory viruses.

How many cases are there?

As of mid September 2016, there are eight confirmed cases of EV-D68 in children in British Columbia. These are the first new cases in nearly two years. In western Canada, Alberta has also reported EV-D68 detection this autumn. After no detections in the United States during 2015, the US CDC has also detected occasional cases of EV-D68 in 2016.

During the fall 2014 there were about 220 confirmed cases and about 140 hospitalizations reported in British Columbia. Cases were initially detected in August and peaked later in October. Several other provinces and US states also experienced outbreaks.

As monitoring continues through the autumn, case counts will be updated as necessary within the regular influenza surveillance bulletin, see:

http://www.bccdc.ca/health-professionals/data-reports/influenza-surveillance-reports

Has anyone died from EV-D68?

As of early September 2016, no.

Severe outcomes of EV-D68 have been noted previously. Three deaths were reported during outbreaks of EV-D68 in the Philippines in 2008-2009 and Japan in 2010 and were also reported in Canada and the United States during the 2014 outbreak, particularly in people with a history of asthma. EV-D68 was detected in specimens from 14 patients who died in the US in 2014.
During the fall 2014 there were also three deaths reported among people with laboratory-confirmed EV-D68 infection in BC, including a young adult with a prior history of severe asthma, an elderly adult with other underlying lung condition and a child who also had another bacterial infection. It is uncertain whether EV-D68 caused or contributed to these deaths.

**Should parents be concerned?**

The risk of severe EV-D68 infection is low for most British Columbians. People with respiratory illness, especially people with a history of asthma, should contact their doctor if their symptoms get worse or they have difficulty breathing. Severe cases may need to be hospitalized and occasionally may require intensive care.

**Is there a risk of paralysis?**

So far in 2016, one of the six children with laboratory-confirmed EV-D68 infection in BC has had paralysis involving the arm. There has also been a child with arm paralysis associated with EV-D68 reported in Alberta.

Five confirmed cases of EV-D68 associated with paralysis were previously reported in BC during the 2014 outbreak, and paralysis associated with EV-D68 cases was also noted elsewhere in Canada and the United States, though it is a rare feature of this infection. However, it is unclear to what extent EV-D68 infection causes or contributes to these paralytic symptoms. The BCCDC is gathering more information to better understand the spectrum of illness associated with EV-D68.

**What should I do to prevent EV-D68?**

The public is reminded of the following simple measures to help prevent the spread of respiratory viruses, including enteroviruses and influenza:

- Wash hands often with soap and water for 20 seconds
- If sick with respiratory illness, cough into elbow sleeve rather than hands to minimize contaminating hands
- Dispose of used tissues appropriately.
- Avoid touching eyes, nose and mouth with unwashed hands.
- Avoid kissing, hugging, and sharing cups or utensils with people who are sick.
- Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick.
- Stay at home and minimize contact with others when sick with respiratory illness that could be due to a virus infection.
- Seek medical care in the event of difficulty breathing, wheezing, and in the event of accompanying muscle weakness or paralysis.

**What is BCCDC doing to monitor for new cases?**

BCCDC has a robust surveillance program for influenza-like illnesses that involves regular reporting from sentinel physicians, laboratories and health authorities. Diagnostic testing for influenza and other respiratory viruses, and to confirm EV-D68 infection is performed at the BC Public Health Microbiology and Reference Laboratory (BC’s provincial laboratory).

**Where can I get more information?**
For more information on EV-D68:
http://www.bccdc.ca/health-info/diseases-conditions/enterovirus-d68