November 2024

Guidelines

For Returning to School and Work Following an E. Coli (STEC) Outbreak at Mánagarður Preschool

- **When children can return to school and adults can return to work**

Directorate of Health
Chief Epidemiologist for Iceland

These guidelines aim to prevent further outbreaks of STEC infection in the community.

1. **Children who have not been diagnosed with STEC**

   - Children who have not been tested for STEC **BUT** have had diarrhea or loose stools after October 17th **OR** have diarrhea (or get diarrhea in the next 2 weeks) should **not attend** kindergarten **AND** should submit a stool sample for PCR testing[a]. If the sample is positive, refer to section 2 below.
   - Completely asymptomatic[b] children who have not been diagnosed with STEC **can attend** the preschool. Handwashing and general hygiene must be strictly observed, especially around meals, toilet visits, and diaper changes.

2. **Children and adults who have been diagnosed with STEC**

   Those who have been diagnosed with STEC should **not** go to school or work until the following conditions are met:

   - Diarrhea and other signs of the infection have ceased and stools are normal (formed stools) for at least 2 consecutive days.
   - After 2 days without symptoms, **2 stool samples must be submitted** for a PCR test, both showing negative results (no signs of infection) to go to school/work. The first test should be taken at the earliest 2 days after symptoms (diarrhea/loose or frequent stools) have resolved. The second sample should be taken at least 2 days after the first.
   - If a test returns positive for STEC, continue to stay home and submit a new stool sample after 2 weeks. If that test is negative, returning to school or work is allowed.

3. Adult **employees of the preschool** and **adult household members of children**, who work in food handling or the health service in patient care, and who became ill or were diagnosed with STEC, should **submit 2 stool samples** for PCR testing and receive negative results before returning to work.

4. **Other household members** (children and adults) do **not** need to submit a stool sample, but anyone experiencing intestinal symptoms should be symptom-free for at least 2 days before returning to school or work.

a) Faecal samples: See Instructions on how to take a stool sample

b) Asymptomatic: No diarrhea, no looser stools than usual, and no increase in stool frequency.

The Chief Epidemiologist

Sources:

1. GuidanceShiga toxin-producing Escherichia coli: public health management UK Health Security Agency
2. E. coli enteritis (including EHEC infection and HUS) – handbook for healthcare professionals Norwegian Institute of Public Health

Selected references:

1. Dabke G and others. 'Duration of shedding of Verocytotoxin-producing *Escherichia coli* in children and risk of transmission in childcare facilities in England.' Epidemiology and Infection 2014: volume 142, issue 2, pages 327 to 334
2. Desai M and others. 'Factors associated with prolonged *Escherichia coli* O157 infection in a school outbreak.' Public Health 2013: volume 127, issue 6, pages 582 to 585
3. Launders N and others. 'Disease severity of Shiga toxin-producing *E. coli* O157 and factors influencing the development of typical hemolytic uraemic syndrome: a retrospective cohort study, 2009 to 2012.' BMJ Open 2016. doi:10.1136/bmjopen-2015009933
4. MacDonald E and others. 'Implications of screening and childcare exclusion policies for children with Shiga toxin-producing *Escherichia coli* infections: lessons learned from an outbreak in a daycare center, Norway, 2012.' BMC Infectious Diseases 2014: volume 14, page 673
5. Matussek A and others. 'Shiga toxin-producing *Escherichia coli* in the diarrheal stool of Swedish children: evaluation of polymerase chain reaction screening and duration of Shiga toxin shedding.' Journal of Pediatric Infectious Diseases Society 2016: volume 5, issue 2, pages 147 to 151
6. Sharp JCM, RW, Coia JE, Curnow J, Synge BA. '*Escherichia coli* O157 infection in Scotland: an epidemiological overview.' PHLS Microbiology Digest 1995: Volume 12: pages 134 to 140
7. Snedeker KG, S.D., Locking ME, Prescott RJ. 'Primary and secondary cases in *Escherichia coli* O157 outbreaks: a statistical analysis.' BMC Infectious Diseases 2009: 9
8. Tourdjman M and others. 'Duration of shedding and secondary household transmission of Shiga toxin-producing *Escherichia coli* O26 during an outbreak in a childcare center.' Oregon, October to December 2010. Journal of Pediatric Infectious Diseases Society 2012: volume 1, issue 4, pages 329 to 332
9. World Health Organization (WHO). *E. coli* fact sheet. October 2016 (cited 1 February 2017)