

Disease Fact Sheet – Types of *E. coli*

South Dakota Department of Health
Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your healthcare provider concerning appropriate care, treatment or other medical advice.

What is it?

E. coli is a group of bacteria that are commonly found in the intestinal tract of many animals and people. Some strains are part of a healthy gut microbiome but can cause symptoms if they escape the intestinal tract and contaminate other parts of the body, such as the urinary tract.

Other types of *E. coli* can make you sick with diarrhea if you get them in your mouth. There are six types of *E. coli* that cause diarrheal illness in people. These include:

- [Shiga toxin-producing *E. coli* \(STEC\)](#)
 - Sometimes referred to as enterohemorrhagic *E. coli* (EHEC)
- Enterotoxigenic *E. coli* (ETEC)
- Enteropathogenic *E. coli* (EPEC)
- Enteroinvasive *E. coli* (EIEC)
- Enteroaggregative *E. coli* (EAEC)
- Diffusely adherent *E. coli* (DAEC)

Who gets *E. coli* infections?

Anyone can get diarrhea from various strains of *E. coli*, but children are usually at greater risk of infection. International travel can also increase the risk of exposure to *E. coli* and other germs that cause diarrhea.

How is the germ spread?

E. coli is spread from animals to people and between people. Contaminated food and water can also be sources of infection. *E. coli* can spread easily between people in certain settings, such as daycares and within households. This can be through contact with contaminated objects or direct contact with ill or recently ill persons.

What are the symptoms?

Watery and sometimes bloody diarrhea can be symptoms. For certain strains of *E. coli*, fever, and vomiting may also be present. For more specific information, see the [CDC's website](#).

Should infected persons be isolated or excluded from work or daycare?

If your child attends daycare, they must stay home while sick with diarrhea, vomiting, and/or fever. If your child tests positive for [Shiga toxin-producing *E. coli* \(STEC\)](#), keep them at home until symptoms resolve and they have two negative stool tests for STEC at least 24 hours apart and 48 hours after

ending antibiotic therapy. Most older children and adults can return to work after symptoms resolve, so long as they can practice good hand hygiene, and do not work as a food handler or in a healthcare setting. See the [STEC Fact Sheet](#) for more information.

For other types of *E. coli*, children and adults can return to work or the daycare setting after symptoms resolve.

What can be done to prevent the spread?

When someone in your household is sick with diarrhea, regularly clean and disinfect surfaces likely to be contaminated. This includes toilet seats and toilet handles, doorknobs, light switches, and diaper-changing tables. Be aware that *E. coli* strains that cause diarrhea (including STEC) can spread easily between people, in households, and childcare settings.

Good hand hygiene is one of the most important factors in preventing the spread of germs that cause vomiting and diarrhea. It is especially important to wash hands thoroughly with soap and water in the following situations:

- After using the bathroom
- Before preparing or eating food
- After changing diapers
- After contact with someone with diarrhea
- After contact with animals

For Healthcare Providers & Laboratories: Reportability in South Dakota

Shiga toxin-producing *E. coli* (STEC) is the only type of *E. coli* that is reportable in South Dakota. This type has been known to cause outbreaks from contaminated food and in daycare settings. STEC can cause severe illness that includes damage to the kidneys. Refer to the [STEC Fact Sheet](#) for more information.

*****Note: Enteroinvasive *E. coli* (EIEC) shares a target with [shigella](#) on some tests. Positive results for shigella are reportable to the South Dakota Department of Health.

Related sites:

[CDC – Kinds of E. coli](#)

[Childcare Exclusion Recommendations](#)

[Shiga toxin-producing E. coli \(STEC\) Fact Sheet](#)

[Shigella fact sheet](#)

[SD Reportable Communicable Disease List](#)