

Hemolytic Uremic Syndrome

Frequently Asked Questions

What is hemolytic uremic syndrome?

Hemolytic uremic (hee-mo-lit-ik yoo-ree-mik) syndrome, or HUS, is a serious illness that affects the kidneys and blood cells. Red blood cells become damaged or destroyed, resulting in anemia (low number of red blood cells). The kidneys can be damaged causing them to function poorly or even fail. Also, the blood may not be able to clot properly.

HUS is rare, but is more common in children under the age of five and is one of the most common causes of kidney failure in children.

What causes HUS?

Most cases of HUS occur after an infection of the digestive system that resulted in bloody diarrhea. Two bacteria called *Escherichia coli* (*E. coli* 0157:H7) and *Shigella* are the most common causes of infection that lead to HUS. People generally become infected with *E. coli* 0157:H7 by eating contaminated foods like meat, dairy products, and juice. It is also possible to become infected with *E. coli* 0157:H7 by swimming in contaminated pools or lakes.

HUS occurs most frequently between June and September when *E. coli* 0157:H7 infections are most common.

Can HUS be spread from person to person?

HUS is not an infection but is the result of a particular infection. Therefore, HUS is not spread from person to person. The bacteria that are involved in the development of HUS **are** easily transmitted from person to person.

E. coli 0157:H7 and *Shigella* are found in the stool of infected people. People become infected with *E. coli* 0157:H7 or *Shigella* by swallowing these bacteria. This can happen when infected people don't wash their hands properly after using the bathroom and then prepare food that is eaten by someone else. This can also happen when a child care provider changes an infected child's diaper and then touches another object, such as a toy, that another child may put in his/her mouth.

What are the symptoms of HUS?

General symptoms of HUS tend to follow a diarrheal illness and include:

- Weakness
- Fatigue
- Pale skin (due to anemia or blood loss)
- Decreased urine output
- Dark urine

HUS symptoms usually occur within 1 week of the onset of the diarrheal illness, with a range from 1 to 14 days.

How is HUS diagnosed?

There is no single test to diagnose HUS. If a health care provider suspects HUS, samples of the patient's blood and urine will be examined. Infection with *E. coli* or *Shigella* 0157:H7 can be diagnosed by a stool culture.

What is the treatment for HUS?

All patients with HUS must be in the hospital until their kidney function returns to normal. Patients may also be given intravenous (IV) fluids or blood transfusions. Dialysis may be needed for severe cases.

How can HUS be prevented?

There is no direct way to prevent HUS. However, there are ways to prevent infection with the bacteria that typically result in HUS. The following are good general guidelines:

- Thoroughly cook ground beef and other ground meats which may be contaminated with *E.coli* 0157:H7.
- Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw meat.
- Wash hands carefully after going to the bathroom, before preparing meals, and before eating.
- Wash ALL fresh fruit and vegetables carefully if they are to be eaten raw.

Where can I get more information?

- Your health care provider
- Your local health department
- NJ Department of Health www.nj.gov/health
- National Institutes of Health www.kidney.niddk.nih.gov

This information is intended for educational purposes only and is not intended to replace consultation with a health care professional. Adapted from Centers for Disease Control and Prevention

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