



A Medical Glossary for Patients
and Families

Hemolytic Uremic Syndrome (HUS)

“When your child is hospitalized with *E. coli* and/or HUS, focus on your child and the information your doctors are sharing. Ask questions and ask them more than once if needed. The medical team will help you comprehend the things you need to know. Also, take care of yourselves through this stressful time. You can give the best care to your child only if you are rested and healthy.”

Barb Michelson
Mother of HUS survivor
Ashley Michelson

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Anemia – a deficiency of red blood cells, the oxygen-carrying component of blood

Anuric – (oligoanuric) – the state of producing no urine

Anuria – lack of urine production

Blood Urea Nitrogen (BUN) Test – blood work that measures the blood's content of urea. The BUN test is used primarily to evaluate renal kidney function. It may also indicate liver disease or dehydration. In HUS, BUN level rises well above normal, indicating that the kidneys are not filtering the blood properly.

Complete Blood Count (CBC) – a series of tests in which the numbers of red blood cells, white blood cells and platelets in a given volume of blood are counted. CBC also measures hemoglobin content and packed cell volume (hematocrit) of red blood cells, assesses the size and shape of the red blood cells (blood smear), and determines the types and percentages of white blood cells. Components of the complete blood count (hemoglobin, hematocrit, white blood cells, platelets, etc.) can also be tested separately when a doctor wants to monitor a specific condition.

Chem 10 or 20 – a battery of chemical tests (the number indicating how many tests are done) performed on serum (a portion of blood without cells). It is usually performed with a CBC to test for electrolytes, creatinine, BUN, etc. These tests measure/indicate the levels of different substances in the blood in order to get a better understanding of an individual's general health.

Central Nervous System (CNS) – the brain and spinal cord. In HUS, central nervous system involvement means that the brain and/or spinal cord has become involved.

Creatinine – waste product found in the bloodstream that is excreted in urine. In HUS, the creatinine rises well above normal, indicating kidneys are not filtering the blood properly.

E. coli – a bacterium found in the intestines of many animals, including humans. Normally, *E. coli* serves a useful function in the body by suppressing the growth of harmful bacterial species and by synthesizing essential vitamins. Few *E. coli* strains cause human illness.

***E. coli* O157:H7** – a strain of *E. coli* that, in humans, produces a toxin which ultimately causes severe damage to the lining of the intestine, blood vessels and blood cells. In the 1990s, *E. coli* O157:H7 outbreaks were most often linked to contaminated ground beef. In the 2000s outbreaks have been associated with leafy greens growing in the vicinity of cattle operations.

Enteric – relating to, or being within, the intestines

Gastroenterology – the study of the stomach and intestine and their diseases.

Hematuria – blood in the urine

Hemolytic Anemia – anemia that results from destruction of red blood cells

Hemolytic Uremic Syndrome (HUS)– a disorder marked by renal failure, hemolytic anemia, platelet deficiency, coagulation defects, and variable neurologic malfunction.

Hypertension – high blood pressure

Nephrology – the specialty of medicine dealing with the kidneys

Pathotype – a group of organisms (of the same species) that have the same properties of causing disease on a host or range of hosts.

Platelets (thrombocytes) – the tiny blood cells that initiate blood clotting. Platelets are necessary to form clotting in a healthy person. In HUS, platelets form into tiny clots in the bloodstream, thereby dramatically reducing platelets available for normal clotting and leaving the patient susceptible to excessive internal bleeding.

Platelet microthrombi – tiny blood clots

Protein synthesis – the process all cells use to make proteins, which are responsible for all cell structure and function.

Proteinuria – the presence of elevated levels of protein in the urine; may indicate damage to, or disease of, the kidneys.



Red Blood Cells (RBCs) – red blood cells carry oxygen to all parts of the body. In HUS, red blood cells are shredded faster than the body can replace them, so the body struggles to get oxygen to all necessary parts.

Renal – pertaining to the kidneys.

Sequelae – consequences or chronic complications due to a previous disease/injury.

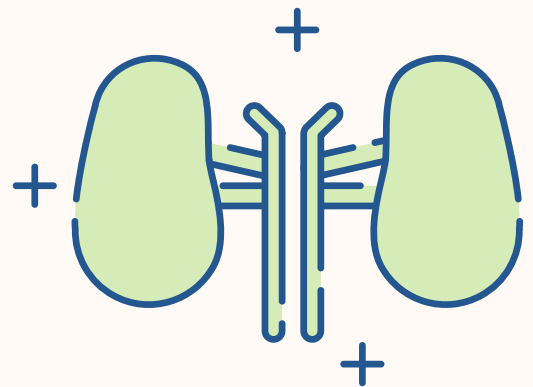
Shiga Toxin (Stx) – Is a family of toxins that cause cell damage by inhibiting protein synthesis. Stxs have a strong association with the development of hemolytic uremic syndrome (HUS). (Shiga toxin is also known as Verotoxin.)

Shiga toxin-producing *E. coli* or STEC (pronounced Ess-Tec) – Strains of *E. coli* that produce Shiga toxin fall under this category. STEC may also be referred to as Verocytotoxin-producing *E. coli* (VTEC) or enterohemorrhagic *E. coli* (EHEC). This pathotype is the one most commonly heard about in the news in association with foodborne outbreaks.

Thrombocytopenia – reduction of the number of platelets in the blood.

Thrombosis (thrombi, microthrombi) – blood clots

Urea – one of the nitrogenous waste products of protein metabolism. Urea is formed in the liver as the end product of protein metabolism. It is usually excreted in the urine.



If you or a loved one has been impacted by foodborne illness, please contact us at

info@stopfoodborneillness.org