



HAMBURGER DISEASE (*E. coli* Infection)

What is Hamburger Disease or *E. coli* infection?

E. coli are bacteria that normally live in the intestines of humans and animals. Although most strains of this bacteria are harmless, several are known to produce toxins that can cause diarrhea. Some *E. coli* strains (ie. *E. coli* 0157:H7) can cause severe diarrhea and kidney damage. This disease is more commonly known as Hamburger Disease, because it is frequently associated with eating inadequately cooked ground beef.

Who gets *E. coli* infection?

Anyone of any age can become infected with *E. coli*, but children are more likely to develop serious complications.

How does one get infected with *E. coli*?

The bacteria is acquired by eating food containing the bacteria. The bacteria live in the intestines of some healthy cattle, and contamination of the meat may occur in the slaughtering process. Eating meat that is rare or inadequately cooked is the most common way of getting the infection. Person to person transmission can occur if infected people do not wash their hands after using the toilet. Contamination of the environment (ie, counter tops and dish cloths) may also be a source of infection, especially in young children.

What are the symptoms of *E. coli* infection?

People infected by *E. coli* can develop a range of symptoms. Some infected people may have mild diarrhea or no symptoms at all. Most identified cases develop severe diarrhea and abdominal cramps. Blood is often seen in the stool. Usually little or no fever is present.

How soon after the exposure do symptoms appear?

The symptoms usually appear about five days after exposure, with a range of two to ten days.

How is infection with *E. coli* diagnosed?

Infection with *E. coli* can only be diagnosed by a special stool culture performed in laboratories.

What is the treatment for infection with *E. coli*?

Most people recover without antibiotics or other specific treatment in five to ten days. Scientific studies have not yet determined whether antibiotics are useful or harmful in the treatment of *E. coli* infection. Therefore, antibiotics are not recommended.

What complications can result from infection with *E. coli*?

In some people, particularly children under five years of age, the infection can cause a complication called hemolytic uremic syndrome (HUS). This is a serious disease in which red blood cells are destroyed and the kidneys fail. Transfusions of blood or blood clotting factors as well as kidney dialysis may be necessary. A prolonged hospital stay is often required. Fortunately, most people with HUS recover completely, but it can be fatal.

How can infection with *E. coli* be prevented?

Make sure infected people, especially children, wash their hands carefully with soap after using the toilet to reduce the risk of spreading the disease. It is also important that caregivers wash their hands after changing diapers. Do not eat undercooked hamburger or other ground beef products. Cook all ground beef and hamburger thoroughly. Make sure the cooked meat is brown throughout (not pink), and the juices run clear. Drink only pasteurized milk and milk products. Make sure counter tops and dish cloths are properly cleaned after handling of raw ground beef products; and hands should be washed after handling of raw ground beef products.

If you have any further questions, please contact your Public Health Nurse.