



Rate of C. difficile infection increasing dramatically among children

By Alex Crees

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New statistics indicate the number of people—particularly children—who contract the bacterial infection Clostridium difficile (C. difficile) has increased dramatically over the past few years.

Mayo Clinic researchers found the incidence of C. difficile infection in children was more than 12 times higher between 2004 and 2009, compared to the rates between 1991 and 1997. The number of infections rose from 2.6 cases per every 100,000 children to 32.6 cases per 100,000 in the selected time periods.

C. difficile is a common bacterium found in the environment, especially in hospitals, that is hard to control and treat. Approximately 337,000 cases are diagnosed each year, causing 14,000 deaths, according to the Centers for Disease Control and Prevention.

Common symptoms include watery diarrhea two or more times a day for several days, as well as abdominal cramping and tenderness. More severe cases can cause inflammation of the colon, fever, blood in the stool, nausea, dehydration and weight loss.

"These were expected results with some surprising elements," lead study author Dr. Sahil Khanna, from the Mayo Clinic Division of Gastroenterology and Hepatology, told FoxNews.com. "They were expected because a similar study in adults published in January of this year showed the incidence of C. difficile was increasing, but the magnitude and the incidence of the increase were particularly striking."

According to Khanna, another surprising finding in the study was that approximately 75 percent of the C. difficile infections acquired by children were outside the hospital.

"C. difficile is usually thought to be a hospital-related infection," Khanna said. "Traditionally, C. difficile patients are those who are older than 65, who are admitted to the hospital and who have gotten antibiotics...We found three-quarters of children acquired the infection outside of the hospital."

He added the changing patient profile meant that patients and healthcare providers should be more aware that children who suffer from diarrhea and other related symptoms may need to be tested for C. difficile, even if they have not been hospitalized recently. There were no specific groups of children who were more at risk for C. difficile than others, though Khanna did say children who were sick with other diseases could be predisposed for the infection.

Khanna speculated that reasons for the increase of C. difficile infections may include indiscriminate use of antibiotics and more carriers of the infection spreading it from the hospital to the community.

"C. difficile is a colonizer in the gut that has other healthy bacteria working against it and keeping it down," Khanna explained. "But antibiotics preferentially kill healthy bacteria, and not C. difficile, so the C. difficile has the chance to multiply and causes disease."

In addition, C. difficile has been linked to some food sources, including ground beef and other processed meats.

On a positive note, according to Khanna, children appear to bounce back better from the infection than older populations because of their stronger immune systems. Researchers found the treatment failure rate was only 16 percent among children, while another study found the failure rate was nearly twice as high among older patients, at 30 percent.

To prevent C. difficile infection, the researcher recommended practicing prevention techniques, such as washing hands with soap and water, cleaning suspected contaminated surfaces with bleach solutions, avoiding contact with people who have C. difficile infections and taking extra hygiene precautions if living with a person with C. difficile or who works in a health care setting with potential exposure to C. difficile.

Khanna added in some cases, doctors should consider treating patients with narrow spectrum antibiotics, as opposed to broad spectrum drugs, in order to minimize the death of healthy gut bacteria.

Read more: <http://www.foxnews.com/health/2012/05/21/rate-c-difficile-infection-increasing-dramatically-among-children/print###ixzz1wFm1RT9e>