**Clostridium difficile (C. diff)**

**What is it?** Clostridium difficile, often called C. difficile or "C. diff," is bacteria that can cause diarrhea and can be life-threatening. In recent years, C. difficile infections have become more frequent, more severe and more difficult to treat. Each year, tens of thousands of people in the United States get sick from C. difficile, including some otherwise healthy people.

**Why is it important to know about?** C. Difficile is not a common condition but it is happening more often. It is important to know what to watch for and what to do to protect yourself and your family.

**Where is it?** C. difficile bacteria can be found in soil, air, water, and feces. But illness caused by C. difficile is most common in hospitals and other health care facilities. Recently, a new aggressive strain of C. difficile has emerged that produces more deadly toxins. The new strain is more resistant to certain medications and has shown up in otherwise healthy people.

**How is it spread?** C. difficile bacteria are passed in feces and spread to food, surfaces and objects when infected people don't wash their hands thoroughly. The bacteria produce hardy spores that can cause infection disease for weeks or months. If you touch a surface contaminated with C. difficile, you may then unknowingly ingest the bacteria and get sick.

**Who is at risk?** People taking antibiotics to treat an infection. The drug can reduce the number of the normal, helpful bacteria in your colon and upset the balance of normal bacteria. Without enough healthy bacteria, C. difficile can quickly grow out of control. The antibiotics most often associated with C. difficile infections include fluoroquinolones, cephalosporins, and clindamycin.

**What does it do?** Once established, C. difficile can produce toxins that attack the lining of the intestine. The toxins destroy cells and produce patches of inflamed cells inside the colon.

**What are the symptoms?** Some people who have C. difficile never become sick, though they can still spread the infection. But signs and symptoms may not appear for weeks or even months after taking antibiotics. The most common symptoms of mild to moderate C. difficile disease are:
- Watery diarrhea three or more times a day for two or more days
- Mild abdominal cramping and tenderness
Signs and symptoms of severe infection include:

- Watery diarrhea 10 to 15 times a day
- Fever
- Blood or pus in the stool
- Abdominal cramping and pain, which may be severe
- Nausea
- Dehydration
- Loss of appetite
- Weight loss

When should you see a doctor? Many people have loose stools during or shortly after antibiotic therapy. See your doctor if your symptoms last more than three days or you have fever, severe pain or cramping, or blood in your stool, or more than three bowel movements a day.

If you develop severe diarrhea while taking antibiotics, you should contact your doctor right away.

What can I do? To help prevent the spread of C. difficile, hospitals and other health care facilities follow strict infection control guidelines. It is also important to use good hygiene at home. Preventive measures include:

- **Hand washing:** Clean your hands often. Make sure to wash your hands thoroughly with soap and warm water after using the bathroom and before eating.

- **Thorough cleaning:** Keep your bathroom and kitchen clean and sanitary. Cleaning with soap, water and scrubbing removes dirt and germs. When someone in the household has diarrhea using disinfectant cleaner with bleach kills C. difficile spores which can survive routine non-bleach household disinfectants.

- **Avoiding unnecessary use of antibiotics:** Antibiotics don’t work against viruses such as colds and flu. Unnecessary antibiotics can be harmful. Antibiotics should be taken exactly as prescribed by your doctor. If you do need an antibiotic, ask your doctor to prescribe one that has a narrow range and for the shortest time possible.

Shasta County Public Health: (530) 225-5591
www.shastapublichealth.net
See: Health Topics

References:
Centers for Disease Control & Prevention: www.cdc.gov/ncidod/dhqp/id_CdiffFAQ_general.html#
Mayo Clinic: www.mayoclinic.com/health/c-difficile/DS00736