INFECTIOUS DIARRHEA (CAMPYLOBACTER, SALMONELLA, SHIGELLA, E. COLI)

What Is It?

Infectious diarrhea is caused by ingestion of bacteria such as Campylobacter, Salmonella, Shigella, or E. Coli. Fire fighters may acquire the infection following contact with an infected person.

How can you get it?

Infectious diarrhea is transmitted through contact with infected stool. Bacteria are spread through eating contaminated food or water or direct contact with infected stool. Bacteria can spread from person to person if someone does not wash their hands after a bowel movement and then touches other objects or someone else’s hands.

You can get infectious diarrhea by:

- Eating meat or poultry contaminated with bacteria during processing of the food or preparation of the food
- Drinking contaminated water
- Consuming foods that have been unrefrigerated for too long (dairy products or mayonnaise containing foods such as coleslaw or potato salad)
- Raw fish or oysters
- Undercooked meats or eggs
- Unwashed fruits or vegetables
- Unpasteurized milk
- A pet iguana or other lizards, turtles, or snakes (reptiles are carriers of salmonella)
- Travel to countries without proper water or food sanitation

What are the symptoms?

The signs and symptoms of infectious diarrhea may include:

- Sudden and severe diarrhea
- Sometimes bloody diarrhea, especially with E. coli
- Fever
- Gas
- Stomach cramping
- Nausea and/or Vomiting
Muscle pain
Severe E. coli may reduce the amount of urine, make bloody urine or easy bruising

The time for symptoms to develop and resolve:

- E. coli: Symptoms 1 – 3 days after infection; recovery is in 1 – 2 days
- Campylobacter: Symptoms 2 - 4 days after exposure; lasts about a week
- Salmonella: Symptoms in 8 - 48 hours and lasts 2 – 5 days
- Shigella: Symptoms in 1 - 7 days and lasts 2 – 7 days

Depending on the bacteria, complications include dehydration, anemia, kidney failure, and meningitis. Rarely, Campylobacter infection is linked with Guillain-Barre syndrome which is a form of paralysis.

**How do you prevent it?**

Prevention:

- Contact precautions
- Careful hand washing
- Do not eat or drink contaminated food or water.
- Cook meats well, especially ground meats which are more likely to be contaminated.
- If you own a reptile, wear gloves when handling the animal or its feces because animals can easily pass Salmonella to humans.

**What should you do if you are exposed to the disease or get the disease?**

You should see a health care provider if you have blood in your urine or stool. If you can not stay hydrated or your diarrhea persists you should also seek medical care. Your physician will perform a physical exam and may perform laboratory tests of your food and or stools to isolate the bacteria.

Treatment is directed at making the patient feel better and avoid dehydration. Antibiotics are typically not used as these infections usually resolve without them. Antibiotics may be used for more severe infections such as those that spread outside the gastrointestinal tract and severe Shigella infections. Antidiarrheal medication may prolong the infection by slowing the transit of the bacteria through the intestine.
These things may help you feel better if you have diarrhea: (http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001341/)

- Drink 8 to 10 glasses of clear fluids every day. Water is best along with the drinks noted below.
- Drink at least 1 cup of liquid every time you have a loose bowel movement.
- Eat small meals throughout the day, instead of three big meals.
- Eat some salty foods, such as pretzels, soup, and sports drinks.
- Eat some high potassium foods, such as bananas, potatoes without the skin, and watered-down fruit juices.

For More Information and Frequently Asked Questions (FAQs), Check Out:

- **E. coli:**
  - Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/ecoli/
  - National Institute of Allergy and Infectious Diseases (NIAID): http://www.niaid.nih.gov/topics/ecoli/Pages/default.aspx

- **Salmonella:**
  - Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/salmonella/
  - National Institute of Allergy and Infectious Diseases (NIAID): http://www.niaid.nih.gov/topics/salmonellosis/Pages/Default.aspx

- **Campylobacter:**
  - Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/nczved/divisions/dfbmd/diseases/campylobacter/
  - National Institute of Allergy and Infectious Diseases (NIAID): http://www.niaid.nih.gov/topics/campylobacteriosis/Pages/default.aspx