What are Escherichia coli?
E. coli are a large group of bacteria and normally found in the digestive tracts of humans and animals. Most strains of E. coli are harmless, but others can cause illness. Some kinds cause diarrhea, while others cause urinary tract infections, respiratory illness, pneumonia and other illnesses.

What are Shiga toxin-producing E. coli?
Some kinds of E. coli make a toxin called Shiga toxin. The bacteria that make these toxins are called Shiga-toxin producing E. coli (STEC) or enterohemorrhagic E. coli (EHEC).

What are the complications of STEC infections?
About 5-10% of those who are diagnosed with STEC infection develop a potentially life-threatening complication known as hemolytic uremic syndrome (HUS). Signs of HUS include decreased frequency of urination, feeling very tired, and losing pink color in cheeks and inside the lower eyelids. People with HUS should be hospitalized because their kidney may stop working.

What are the symptoms of STEC infections?
Symptoms can range from mild to severe and include diarrhea (often bloody), severe stomach cramps and vomiting.

If there is a fever it is usually not very high (less than 101°F). Most people get better within 5 – 7 days. Some infections are very mild but others are severe or even life-threatening.

How soon do symptoms appear after exposure?
The time between exposure and feeling sick is usually 3 – 4 days but may be as short as 1 day or as long as 10 days. The symptoms often begin slowly with mild belly pain or non-bloody diarrhea that worsens over several days.

HUS, if it occurs, develops an average of 7 days after the first symptoms, when the diarrhea is improving.

How is E. coli spread?
E. coli can be spread by eating or drinking items that are contaminated by the feces of infected people or animals including:

- Poorly cooked meat, especially beef
- Unpasteurized milk or juices
- Swimming in or drinking contaminated water
- Mouthing objects that are contaminated
How are STEC infections diagnosed?
STEC infections are usually diagnosed through lab testing of stool specimens.

Who gets STEC infections?
People of any age can become infested. Very young children and the elderly are more likely to develop severe illness and HUS than others but even healthy older children and young adults can become seriously ill.

What is the treatment for E. coli?
There is no vaccine for E. coli, however, most people recover without treatment. There is no evidence that antibiotics improve the course of the disease and taking antibiotics may increase the risk of this. Antidiarrheal medications may also increase that risk.

Individuals with E. coli should drink plenty of liquids to prevent dehydration.

How can E. coli be prevented?

• Always refrigerate meat products. Do not leave them at room temperature
• Cook ground meat completely to an internal temperate of 155° F
• Clean thoroughly with bleach any surfaces meat has touched
• Avoid drinking unpasteurized products, such as milk and juices
• Wash hands with soap and water before and after preparing food
• Teach children how to wash hands properly

For more information, please call the Tulsa Health Department at 918 582 WELL (9355).

Sources:
Centers for Disease Control and Prevention (CDC) and Oklahoma State Department of Health (OSDH)