

# Public Health Update

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## Summertime Gastroenteritis

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### Overview

Summertime means picnics, pool parties, camping and outdoor activities – all of which typically involve food that may sit unrefrigerated, leading to an increased opportunity for gastrointestinal illness and infection. Every summer, Tri-County Health Department notices an increase in gastrointestinal illness among its residents. Often these illnesses are due to viruses such as norovirus or rotavirus; however, there are several non-viral organisms that are common in the summertime. Primary sources of non-viral illness include *Campylobacter*, *Cryptosporidium*, *Giardia*, *Shigella*, *Salmonella* and shiga-toxin producing *E.coli*; a description of symptoms and infectious periods of each of these agents can be found in Table 1. Often an infection of this type goes undetected because the severity of illness is minimal. However, because people can spread these infections to others it is important to consider testing individuals presenting with symptoms of diarrhea and/or vomiting.

### **Testing for non-viral agents should be considered when your patient has:**

- Symptoms lasting >3 days
- Severe symptoms (e.g. bloody diarrhea)
- Recent travel history - local (e.g. camping), out-of-state, or international
- Exposure to raw meat/poultry
- Exposure to farm animals/manure
- Exposure to surface waters (e.g. lakes, streams etc.)
- Immunocompromising conditions
- History of recent immigration or a refugee
- High-risk occupation (healthcare, childcare or foodservice worker)

Additionally, if a patient is planning on traveling, remind them to avoid any untreated water, or foods that are uncooked or undercooked. In particular, when traveling to a foreign country it is best to follow the traveler's mantra - "Cook it, wash it, peel it or forget it." In other words, it is important to avoid salads, raw vegetables, and fruits, unless they are self-peeled. *For more travel safety information contact Tri-County Health Department's Travel Clinic at 303-784-7866.*



Patients diagnosed with non-viral gastroenteritis agents may require special instructions with regards to returning to work or childcare, preparing foods, swimming, or using household cleaning products. These instructions are summarized in the box below.

**Special instructions for patients diagnosed with non-viral gastroenteritis:**

- If the patient works in a retail food establishment, childcare, or healthcare he/she should not return to work until 24 hours **after** symptoms have resolved.
- If the patient is a child, remind parents that children should not attend childcare until 48 hours **after** symptoms have resolved.
- Patients should be reminded of the importance of proper hand washing, especially after using the restroom or changing a diaper.
- Patients should not prepare food for others while symptomatic.
- *For patients with Cryptosporidiosis:*  
Cryptosporidium is resistant to chlorine. Therefore, household cleaning products with bleach are not sufficient in killing the organism. Proper cleaning requires the use of 3% hydrogen peroxide.
- *For patients with Cryptosporidiosis or Giardiasis:*  
The patient should not swim for **two weeks** after symptoms have resolved. This applies, in particular, children who are still in diapers or potty training.
- *For patients with E.coli, Giardiasis or Shigellosis:*  
The health department may require that the individual submit **two consecutive negative stool samples** before returning to work in a high-risk occupation or childcare center. *Call 303-220-9200 and ask for a Disease Intervention Specialist for more information.*



**Table 1: Primary sources of non-viral gastroenteritis for Tri-County Health Department residents**

Suspected Agent	Common Sources	Symptoms <sup>†</sup>	Incubation Period	Symptom Duration	Infectious Period	Mode of Transmission
<i>Campylobacter</i>	raw meats (especially poultry) and unpasteurized milk	diarrhea (sometimes bloody), fever, dehydration, stomach pain, nausea, and tiredness	1-10 days (usually 2-5 days)	3-10 days	Several days to several weeks	Ingestion of organisms in contaminated foods and undercooked meats, contact with infected pets, or contact with the feces of an infected person.
<i>Cryptosporidium</i> *♦	Contaminated surface waters (lakes, streams etc.) and swimming pools	diarrhea (often watery), stomach pain and cramping, some people may experience fever, nausea and vomiting	1-12 days (usually 7 days)	1-3 weeks	Up to several weeks after symptoms resolve. Oocysts can survive up to 6 months in a moist environment.	Contact with infected pets, or contact with the feces of an infected person. Ingestion of contaminated water.
<i>Giardia</i> *	Contaminated surface waters (lakes, streams etc.)	diarrhea and greasy stools, stomach cramping, bloating, passing gas, fatigue, loss of appetite, and weight loss	3-25 days (usually 7-10 days)	Weeks to months	Weeks to months	Contact with infected pets, or contact with the feces of an infected person. Ingestion of contaminated water.
<i>Shigella</i>	Persons infected with shigella	diarrhea (sometimes bloody), fever, stomach pain and cramping, nausea (sometimes vomiting) and dehydration	12-96 hours (usually 1-3 days)	4-7 days	During acute infection and up to 4 weeks after symptoms resolve.	Spread from person-to-person through the fecal-oral route
<i>Salmonella</i>	Raw meats (especially poultry), raw eggs, and unpasteurized milk	diarrhea (sometimes bloody, fever, nausea (sometimes vomiting), dehydration, stomach pain and cramping	6-72 hours (usually 12-36 hours)	Several days	Days to weeks	Ingestion of organisms in contaminated foods and undercooked meats, contact with infected pets, or contact with the feces of an infected person.
<i>E.coli (shiga-toxin producing)</i>	raw meats (especially ground beef), unpasteurized milk, unpasteurized juice and contaminated water	diarrhea (often becomes bloody), severe stomach pains, fever, and vomiting (for some people). Can cause complications like Hemolytic Uremic Syndrome (HUS)	2-10 days (usually 3-4 days)	1-12 days	Usually up to three weeks after onset of symptoms for children, one week for adults.	Ingestion of organisms in contaminated foods and undercooked meats, contact with infected pets, or contact with the feces of an infected person.

\*This organism is a parasite. Patients diagnosed with this organism should not swim for 2 weeks after symptoms have resolved to prevent spreading the infection to others.

♦ This organism is resistant to chlorine. A 3% solution of hydrogen peroxide is recommended for cleaning.

† Sometimes people may be infected without ever showing symptoms.

Information for this table was obtained from: *Control of Communicable Diseases Manual, 18th Edition. David L. Heymann, MD.*



**REMINDER TO PHYSICIANS:**

**Any individual with Campylobacter, Cryptosporidium, Giardia, Shigella, Salmonella or E.coli infection must be reported to Tri-County Health Department.**

**For a complete list of illnesses reportable by physicians please visit:**

<http://www.cdphe.state.co.us/dc/Medlist.pdf>

**For more information or questions, please contact:**

Colorado Department of Public Health and Environment:

(303) 692-2700 / (303) 370-9395 (after hours)

Fax: (303) 782-0338

Tri-County Health Department:

(303) 220-9200 / 303-461-2342 (after hours)

Fax: (303) 220-9208

*Tri-County Health Department has fact sheets available on our website at [www.tchd.org](http://www.tchd.org)*



