Microbe Monthly

Communicable Disease Report

El Paso County Department of Health & Environment (EPCDHE)

June 2008

Summer is Enteric Disease Season

As we enter summer, there is often an increase in gastrointestinal illnesses due to foodborne disease. Clinicians may see more patients with symptoms of diarrhea, vomiting, nausea and abdominal cramps. While the public frequently attributes these symptoms to "food poisoning," the etiology of foodborne illness includes a variety of bacteria, viruses, chemicals or toxins. Diagnosis is challenging because over 20 organisms can cause these symptoms and each have their own incubation period, high-risk food associations (e.g., *Bacillus cereus* and cooked rice), and diagnostic testing requirements. Additionally, enteric diseases can be transmitted person-to-person, like norovirus, which is the most common cause of community gastrointestinal illness outbreaks.

Many people attribute a food-borne illness to the last meal eaten, when in fact exposure to contaminated food may have occurred one or more days before illness onset.

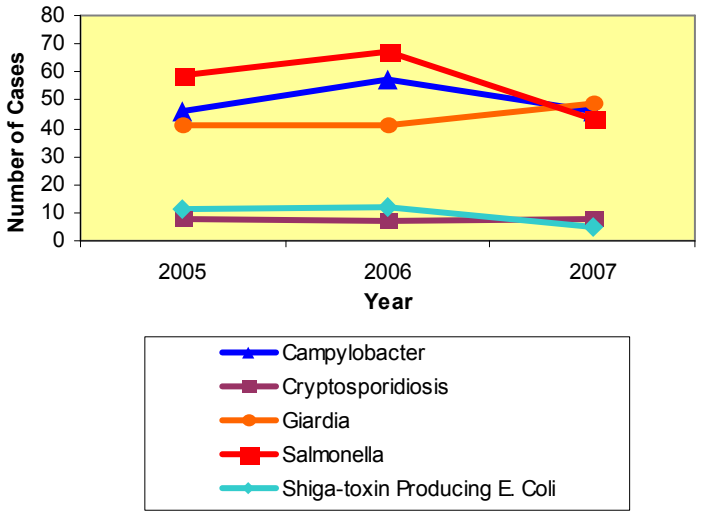
Selective stool testing of patients with a diarrheal illness can inform clinical management and treatment, as well as identify cases of infectious diseases that are reportable to public health. Stool culture may be helpful in diagnosing patients suffering from an acute diarrheal illness accompanied by fever, bloody stools, systemic illness, recent use of antibiotics, child-care attendance, hospitalization or dehydration. Testing is particularly important if clinicians or emergency departments see a cluster of patients with gastrointestinal illness who report a similar exposure. Suspect outbreaks of gastrointestinal illness should be promptly reported to the El Paso County Department of Health and Environment's Communicable Disease Program at 719-578-3220.

Testing for bacteria (stool culture), parasites (ova and parasite testing) and shiga-toxin is readily available at hospital-based and commercial laboratories. However, testing for norovirus may be limited to larger commercial laboratories and reliable testing for bacterial toxin is only available through public health laboratories. In the setting of a suspected outbreak, EPCDHE's Communicable Disease Program can arrange for human and/or food testing as indicated by the investigation. Prompt collection of specimens and appropriate collection techniques are extremely important to successfully identify the etiology of an outbreak.

El Paso County Disease Trends

- In May 2008, 52 communicable diseases were reported: **campylobacter** (2), **cryptosporidiosis** (2), **giardia** (1), **acute hepatitis B** (1), **chronic hepatitis B** (6), **viral meningitis** (4), **salmonella** (6), **invasive pneumococcal diseases** (9) and **varicella** (21).
- **Influenza** surveillance officially ended in late May. Season hospitalized flu case totals were 152 for El Paso County (58% type A and 41% type B) and 1,005 for Colorado.
- There were 5 outbreaks investigated in May: one suspect **norovirus outbreak** in a long-term care facility and four **foodborne disease outbreaks** (etiology unknown) associated with an elementary school field trip, a catered office event and group meals at two retail food establishments. Thus far in 2008, there have been 30 illness outbreaks investigated by the Health Department.

Enteric Diseases, El Paso County, 2005-2007



Hot Topics—State and National

- FDA warns consumers NOT to eat certain types of raw red tomatoes. A national outbreak of *Salmonella Saintpaul* has been preliminary linked to eating raw red plum, red Roma or round red tomatoes. Since April, 228 cases have been reported from 23 states, with at least 25 hospitalizations and possibly one death. Tomatoes not linked to illness include cherry tomatoes, grape tomatoes, tomatoes sold with the vines still attached and home grown tomatoes.
- Neonatal systemic enterovirus disease is among the most serious, potentially fatal conditions associated with enterovirus infection. Typical clinical presentations include encephalomyocarditis (characteristic of group B coxsackieviruses) and hemorrhage-hepatitis syndrome. In 2007, CDC investigated increased reports of severe neonatal illness and death due to coxsackievirus B1 (CVB1) infection. Data indicated that in 2007, CVB1 was the predominant enterovirus in the United States for the first time , accounting for 113 (25%) of 444 enterovirus infections with known serotypes. Prior to 2007, no fatal infection had been reported due to CVB1.

Contact Information

CD/TB Program	
Weekday Hours	719-578-3220
After-Hours Emergency	719-385-9622
Immunizations	719-578-3272
Environmental Health	719-575-8636
STD Program	719-578-3296
(Sexually Transmitted Diseases, Hep C, HIV/AIDS, Blood-borne Exposures)	
Colorado Department of Public Health and Environment	
Weekday Hours	303-692-2700
After Hours	303-370-9395