

Microbe Monthly

Communicable Disease Report

El Paso County Department
of Health & Environment

May 2010

Summer and Foodborne Illness

As Memorial Day ushers in the summer season, the Health Department anticipates the usual increase in gastrointestinal illnesses (GI) due to foodborne infections (See chart below). Outdoor cooking, warm temperatures and limited access to handwashing facilities create more opportunities for the growth and spread of intestinal pathogens through contaminated food. Clinicians may see increased numbers of patients with symptoms of diarrhea, vomiting, nausea and abdominal cramping. While the public frequently assign these symptoms to the general category of "food poisoning," the etiology of foodborne illness includes a variety of bacteria, viruses, chemicals or toxins. In 2009, the Health Department investigated 7 foodborne outbreaks (1 confirmed *Clostridium perfringens*, 3 other suspect bacterial toxins, 2 suspect norovirus, and 1 unknown agent). Additionally the Department fielded approximately 120 GI illness complaints and investigated 179 reportable enteric diseases, many of which were possibly foodborne in origin.

Many people attribute their foodborne illness to the last meal eaten, when in fact exposure to contaminated food may have occurred one to several days before illness onset. Diagnosis is often challenging because over 20 organisms can cause these symptoms and each has its own incubation period, high-risk food associations (e.g., *Bacillus cereus* and cooked rice), and diagnostic testing requirements. Additionally, some enteric diseases can also be transmitted person-to-person, such as norovirus, which is the most common cause of community-based GI outbreaks.

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 cultures may be helpful in diagnosing patients suffering from an acute diarrheal illness accompanied by fever, bloody stools, or other systemic illness. Testing is particularly important if clinicians or emergency departments see a cluster of patients with GI illness who report a similar exposure. Suspect outbreaks of GI illness should be promptly reported to the Health Department's Communicable Disease Program at 719-578-3220.

Testing for bacteria (stool culture), parasites (ova and parasite testing or rapid assays) 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, the 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.

Find detailed information on foodborne illness on the FDA's website: www.fda.gov/Food/FoodSafety/FoodborneIllness/default.htm



El Paso County Disease Trends

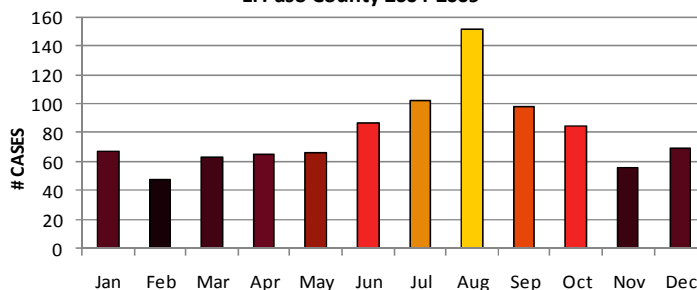
In April 2010, 42 communicable disease cases were reported and investigated: campylobacter (1), cryptosporidiosis (1), giardia (6), Haemophilus influenza (2), chronic hepatitis B (4), influenza-related hospitalizations (1), invasive pneumococcal disease (8), mumps (1), Salmonella (5), STEC—shiga toxin producing *E. coli* (1), varicella (7) and viral meningitis (5).

Communicable Disease Program staff investigated 4 GI illness outbreaks in long-term care facilities in April, and received 5 possible foodborne illness complaints.

Hospitalized flu cases from Aug. 30, 2009 to April 30, 2010: **188**

Positive tests for rabies since Jan. 1, 2010: **4** (3 skunks, 1 fox)

Selected Reportable Enteric Diseases* by Month
El Paso County 2004-2009



*Campylobacter, Salmonella, Giardia, STEC (shiga-toxin producing *E. coli*)

Hot Topics—State and National

- **The Colorado Immunization Manual** providing state guidelines for immunization screening, administration, documentation, reporting and resources has recently been revised (April 2010). The updated version can be found at www.cdphe.state.co.us/dc/immunization/immunmanual/immunmanual.html
- The Centers for Disease Control and Prevention (CDC) has received reports of **dengue fever** among relief workers returning from Haiti, where the disease is endemic. Healthcare providers should consider dengue in the differential diagnosis of febrile illness in any person who has recently been in Haiti or other countries where dengue is being transmitted, and are encouraged to call the Communicable Disease Program to arrange for submission of samples to the CDC Dengue Branch for proper laboratory testing.
- Pregnant women had a disproportionately high risk of mortality due to 2009 influenza A (H1N1). Among pregnant women with 2009 influenza A (H1N1) influenza reported to the CDC, early antiviral treatment appeared to be associated with fewer admissions to an ICU and fewer deaths. (JAMA. 2010;303(15):1517-1525)

Contact Information

CD/TB Program

Weekday Hours (M-Th)* 719-578-3220
After-Hours Emergency 719-385-9622

Immunizations 719-578-3272

Environmental Health 719-575-8636

***Note: Health Department regular hours are Monday—Thursday, 7 a.m. to 6 p.m.**

Colorado Department of Public Health and Environment

Weekday Hours (M-F) 303-692-2700
After-Hours 303-370-9395