

Microbe Monthly

Communicable Disease Report

February 2008

El Paso County Department
of Health & Environment (EPCDHE)

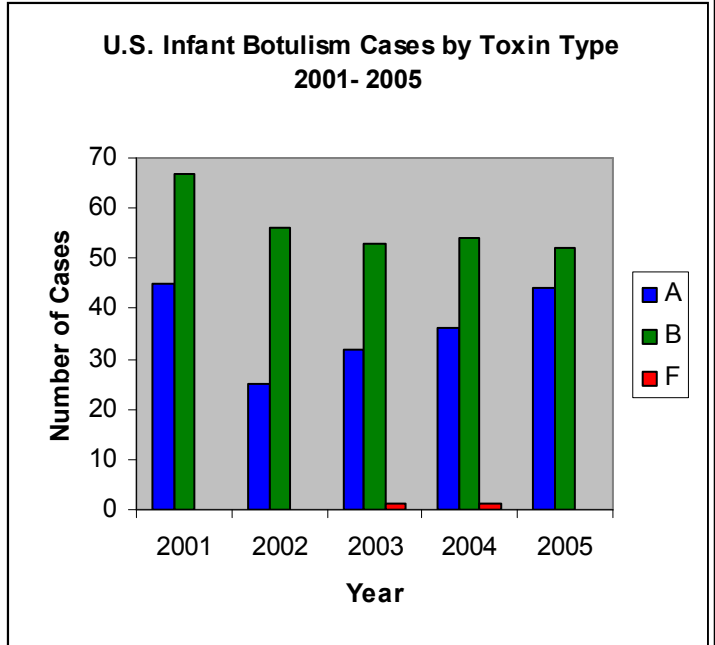
Botulism

Botulism is a paralytic disease that is caused by a neurotoxin produced by the bacterium *Clostridium botulinum*. There are 7 types of *C. botulinum* (A-G) based on the neurotoxins they produce. Other toxin-producing strains of *Clostridium* have rarely caused a similar clinical syndrome as *Clostridium botulinum* in both adults and infants, including *C. baratii* and *C. butyricum*. Botulism can present in three primary forms: infant, foodborne and wound botulism. In food-borne botulism, the person ingests pre-formed toxin already present in a food product (such as home-canned foods). Wound botulism is caused by organisms that multiply and produce toxin in a contaminated wound.

Infant botulism is the most prevalent form of botulism, representing about 66% of the cases of botulism reported each year in the U.S. In 2005, there were 96 infant botulism cases nationally and 1 in Colorado. The disease is acquired when an infant ingests botulism spores from the environment, which then propagate in the infant's intestine and produce botulinum neurotoxin. The presence of toxin causes symptoms of constipation, weakness, loss of muscle tone and flaccid paralysis. The affected infant has difficulty feeding and often requires respiratory support. Many patients recover completely from the disease. Keep in mind that infants can also develop food-borne botulism after ingesting contaminated foods such as honey or corn syrup.

In January, EPCDHE in collaboration with Colorado Department of Public Health and Environment (CDPHE) and CDC, investigated a rare case of infant botulism (type F) in a 3-day-old. The disease was caused by infection with *C. baratii* and is only the 10th reported case of type F infant botulism in the world. Interestingly, 7 of 9 previous type F cases from the U.S. were also associated with *C. baratii* and were characterized clinically by the rapid onset of symptoms, severe paralysis and young age at time of presentation.

For additional online information about infant botulism, access: www.infantbotulism.org/



El Paso County Disease Trends

- In January 2008, 65 communicable disease cases were reported—including cases of **botulism-foodborne (1), botulism-infant (1), campylobacter (5), giardia (2), Haemophilus influenzae (1), influenza-hospitalized (22), Kawasaki syndrome (1), malaria-imported (1), meningitis-aseptic/viral (3), pertussis (4), salmonellosis (3), typhoid fever-imported (1), invasive strep pneumo (9) and varicella (11).**
- January saw an expected increase in flu cases. The 22 cases reported bring our season total to 29, of which 76% are type A and 24% type B. Age breakdown for El Paso County influenza cases to date is: Infants – 14%, Children – 27% and adults – 59%. Forty-seven percent of the adults are over age 60. **It's not too late to vaccinate for flu!**
- EPCDHE's CD Program investigated three separate illness **outbreaks in long-term care facilities** during January, one due to influenza and two due to norovirus.

Hot Topics—State and National

- CDPHE and Eagle County are currently investigating a confirmed case of hepatitis A in a child who attends child care and lives in Eagle County. To date, no further cases have been identified in the community or child-care center. Eagle County offered immune globulin and vaccine to all staff and attendees at the center. Hepatitis A vaccine is now approved for post-exposure prophylaxis of contacts of a hepatitis A case, who are ages 1-40 years; immune globulin can be used for other exposed persons.
- To prevent turtle-associated *Salmonella* infections in humans, the sale and distribution of small turtles (i.e., with a carapace length of less than 4 inches) has been prohibited in the United States since 1975. Despite this prohibition, small turtles remain available to the public from various sources. A recent investigation describes an ongoing, multi-state outbreak of *Salmonella* Paratyphi B var. Java infections. Many of these infections have occurred in young children and have been associated with exposure to small turtles. To view the full report online, access: www.cdc.gov/mmwr/preview/mmwrhtml/mm5703a3.htm

Contact Information

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