

## **Botulism**

Agent: Neurotoxin produced by the spore-forming organism *Clostridium botulinum* (bacteria)

Mode of Transmission: Foodborne botulism occurs when *Clostridium botulinum* is allowed to grow and produce toxin in food which is then eaten without sufficient heating to inactivate the toxin. In intestinal (infant) botulism, ingested spores germinate, multiply and produce toxin in the intestine.

Signs/Symptoms: Foodborne symptoms include fatigue, weakness, vertigo, and sometimes diarrhea and vomiting. Descending, flaccid paralysis can also occur, which may lead to cessation of breathing and death unless respiration is aided. Patients with intestinal botulism show weakness, loss of appetite, an altered cry and loss of head control.

Prevention: All canned and preserved food should be properly processed and prepared. Boiling food for 10 minutes will destroy the toxin, but much higher temperatures are required to kill the spores. Honey and corn syrup should not be given to children younger than 12 months of age.

Other Important Information: The case-fatality rate is 5%-10%. Botulism is listed by the CDC as a potential bioweapon because an aerosolized or foodborne botulinum-toxin weapon could cause severe disease and would require swift public health action to control.

## **Foodborne**

No cases of foodborne botulism were reported in Virginia during 2008. The only case in the preceding 5 years in Virginia occurred in 2007 in an adult female from the southwest region. The 5 year average is 0.2 cases per year.

## **Intestinal (Infant)**

Three cases of intestinal botulism were reported in Virginia during 2008. This is noticeably higher than the zero cases reported in 2006 and 2007, and three times the five year average of 1.0 cases per year. Among the cases reported in 2008, two were male and one was female. Two cases were reported from the northern region, and one from the southwest region. One case was linked to ingestion of corn syrup.