



Microbe Monthly

Communicable Disease Report

February 2010

El Paso County Department
of Health & Environment

Latest Nationwide Foodborne Disease Outbreak—Salmonella Montevideo

CDC is collaborating with the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), the U.S. Food and Drug Administration (FDA), and public health officials in many states to investigate a multistate outbreak of Salmonella serotype Montevideo infections. Investigators are using DNA analysis of Salmonella bacteria obtained through diagnostic testing to identify cases of illness that may be part of this outbreak. Their preliminary analysis suggests salami as a possible source of illness. Ill persons (58%) were significantly more likely than well persons (16%) to report eating salami.

Historically, Salmonella infection has been associated with chickens and eggs, but advances in laboratory technology, namely the use of pulse field gel electrophoresis (PFGE) for fingerprinting, has epidemiologically linked outbreaks to many other food types. That coupled with improvements in culture techniques has resulted in successfully identifying strain-specific organisms in food. The side table lists a variety of Salmonella outbreaks and the associated contaminated food products.

While the American food supply is among the safest in the world, the federal government estimates that there are more than **76 million cases** of foodborne illness annually, resulting in **325,000 hospitalizations** and **5,000 deaths**.

The foods we eat today come from the global market including over 170 countries. Large multi-state foodborne outbreaks have become more common, in part because a food that becomes contaminated during harvest or production from a centralized food supplies can be rapidly shipped to consumers in many states causing a widespread outbreak. From a public health perspective, surveillance response time has greatly improved when a common organism is identified by PFGE, and states work closely with CDC to rapidly conduct patient interviews to detect common food exposures.

Food Associations in Salmonella Outbreaks

Date	Serotype	Associated with
Oct. 2006	typhimurium	tomatoes
Oct. 2007	4,5,12:l minus	frozen pot pies
Mar. 2008	Litchfield	cantaloupe
May 2008	Agona	puffed rice cereal
Nov. 2008	typhimurium	peanut butter
April 2009	St. Paul	alfalfa sprouts
Dec. 2009	typhimurium	water frogs
Jan. 2010	Montevideo	salami

El Paso County Disease Trends

In January, 26 communicable disease cases were reported and investigated: Campylobacter (1), cryptosporidiosis (1), Giardia (1), Haemophilus influenza (1), chronic hepatitis B (2), influenza-related hospitalizations (2), invasive pneumococcal disease (3), pertussis (2), Salmonella (3), Shigella (1), STEC – shiga toxin-producing E. coli (1), typhoid fever – foreign acquired (1), varicella (6) and viral meningitis (1).

Between August 30, 2009 and January 31, 2010, there have been 186 influenza-related hospitalizations, presumed to be due to H1N1 even if specific influenza typing was not completed.

Note: Due to low levels of flu activity, false positives rapid flu tests are more common; as of January 10, 2010, flu-associated hospitalizations will be counted as confirmed cases only if they are positive by PCR, viral culture or DFA.

Hot Topics—State and National

Outbreak of E. Coli: 248,000 lbs of beef products that may have been contaminated with E. coli O157:H7 have been recalled. Twenty-one cases of illnesses have been identified in 16 states, including one illness in Colorado. This is the second outbreak of E. Coli in which Colorado residents have been exposed by eating undercooked needle or blade tenderized steaks at restaurants. See: [www.fsis.usda.gov/News & Events Recall 067 2009 Release/index.asp](http://www.fsis.usda.gov/News%20&%20Events%20Recall%20067%202009%20Release/index.asp)

MMWR-Hantavirus Pulmonary Syndrome (HPS) in Five Pediatric Patients: The December 25th issue reviewed five pediatric HPS cases, with two cases from Colorado. Each year, among the 20-40 HPS cases in the U.S, patients ages <17 years make up fewer than 7%, and cases who are <10 years are extremely rare. Although reasons are unknown, this data shows that children are susceptible to HPS. See: www.cdc.gov/mmwr/preview/mmwrhtml/mm5850a3.htm.

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