

## Gastroenteritis Outbreak Pathogen Identified

*The last issue of DPN (Vol. 59, No. 14) publicized a June outbreak of gastroenteritis among teenagers in North Texas. At that time the causative pathogen had not been identified. The Texas Department of Health and the Centers for Disease Control and Prevention have now identified the bacteria responsible for this outbreak.*

**E***scherichia coli* O111 has been identified as the cause of diarrheal illness in 52 persons who attended a drill team camp at the University of North Texas in Denton early last month. The Texas Department of Health Bureau of Laboratories identified the bacteria as *E. coli*. On July 2, the Centers for Disease Control and Prevention determined that the serotype was O111. *E. coli* O111 has caused isolated illnesses in the United States and outbreaks in Europe and Australia. Although one family cluster has been identified in the United States, this is the first reported *E. coli* O111 outbreak in the US.

Similar to *E. coli* O157:H7, which has caused several illness outbreaks in the US in recent years, *E. coli* O111 lives in the intestinal tract of cattle. Infected humans can spread the bacteria via a fecal-oral route. Infection most commonly occurs, however, through consumption of contaminated food. Meat for human consumption can be contaminated with *E. coli* during initial processing of the carcass. Human illness can result when people eat contaminated beef that has not been cooked to a temperature high enough to kill the bacteria. Illness can also occur when any food is consumed that has been cross contaminated through improper food preparation and handling techniques.

The North Texas *E. coli* O111 outbreak is still under investigation by the Tarrant County and Denton County Health Departments, TDH, CDC, and the US Food Safety Inspection Service to determine the source of infection. Health providers are asked to continue to submit stool cultures through August 1 for new patients presenting with bloody diarrhea but no fever. (See the July 5, 1999, DPN or call 512/ 458-7582 for complete submission instructions.)

### Prevention

The following general precautions help prevent *E. coli* infections:

- Wash hands well before and after preparing foods and drinks and changing diapers. Use hot water, lather for 20 seconds, rinse completely, and dry on a clean towel. Disposable paper towels are best.
- Wash raw fruits and vegetables well.
- Avoid using the same cutting boards, dishes, and utensils for meat that are used for fruits and vegetables. If you must use the same kitchen items, wash them well with hot, soapy water between each use.
- **Cook all meat to the right temperature!**
  - > Cook ground meat for another 15 seconds after the temperature inside the meat reaches 155°F.
  - > Cook steaks for another 15 seconds after the temperature inside the meat reaches 145°F.

**Note:** You **cannot** tell for sure if the meat is safe to eat by looking at its color or juices.

*Health professionals should promptly report new cases to the local health authority by calling (800) 705-8868.*

#### Also in this issue

CDC Reports Outbreak of Influenza-like Illness  
 Sentinel Physicians Needed for Influenza Surveillance  
 Bimonthly Statistical Summary  
 Vaccine Preventable Disease News Update

## CDC Reports Recent Outbreak of Influenza-Like Illness

From May 22 through June 28, 1999, 428 cases were reported of acute respiratory illness (ARI) among travelers and tourist industry workers in Alaska and Yukon Territory (July 2, 1999, *MMWR*). Of these cases, 132 persons had an influenza-like illness (ILI). Four individuals were hospitalized for pneumonia. No deaths have been reported. The Centers for Disease Control and Prevention (CDC) has identified influenza A (H3N2) Sydney /5/97-like strain in two isolates from Alaska. This outbreak compares with almost 2,200 cases of ARI reported during a 1998 summer outbreak in a similar population (August 28, 1998, *MMWR*).

Worldwide, influenza occurrence usually follows seasonal patterns unique to the area. Most influenza in the Northern Hemisphere occurs from November through March. However, as air and ground travel increases globally, exceptions to influenza seasonality will probably become increasingly common. There has been an increasing volume of travelers from all over the world who visit the Northern hemisphere; these

recent reports of respiratory illness are associated with groups of tourists sharing transportation and accommodation on overland tours in the region. That some ill travelers boarded cruise ships after touring inland could have facilitated transmission of illness among crew members and other travelers.

Immune status of the travelers also could have been an important factor in this outbreak. Immunity to the strains of influenza virus covered by the vaccine administered in the late fall and early winter probably wanes after 4 to 6 months. Therefore, some vaccinated persons are likely to be susceptible again the following summer. Also, vaccinated persons remain susceptible to the influenza strains not covered by the vaccine, and to noninfluenza organisms that cause ILI. Following advice given by public health authorities from Canada and the United States, the cruise ship industry has taken measures to reduce the risk of influenza transmission (eg, through vaccination of cruise staff), establish ongoing surveillance, and reduce the severity of illness among passengers and crew.

---

## Sentinel Physicians Sought for Influenza Surveillance

Last December Disease Prevention News published a Texas Department of Health request for physicians to participate in the Centers for Disease Control and Prevention (CDC) Sentinel Physician Surveillance Network for influenza. Sixty primary care physicians are still needed to represent various populations and geographic areas of the state.

Data collected through the national CDC surveillance system supplements TDH data collected through influenza surveillance activities in 15 Texas counties. Local surveillance efforts are the most effective means of collecting data that enable health agencies to prepare new vaccines, assess the severity of the annual epidemic, and detect new strains of the virus before a pandemic strain can emerge.

CDC asks participating physicians to provide the following information regarding their patients: the number of patients with influenza-like illness grouped into four age groups and the total number of patients seen for any reason. Weekly reports are made by telephone or fax. This reporting period begins October 3, 1999.

CDC will send participating physicians a complimentary subscription to the *Morbidity and Mortality Weekly Report* and a certificate of participation. *To obtain additional information or to participate in this important public health activity, contact Neil Pascoe, RN, at (512) 458-7328.*





*Disease Prevention News (DPN)*  
 Texas Department of Health  
 1100 West 49th Street  
 Austin, TX 78756-3199  
 Phone: (512) 458-7677  
 Fax: (512) 458-7340  
 Email: [dpn@discon.tdh.state.tx.us](mailto:dpn@discon.tdh.state.tx.us)

The electronic versions of *Disease Prevention News* are available at the following locations:  
<http://www.tdh.state.tx.us/phpep/dpnhome.htm>  
 TDH Healthy Texans BBS: (800) 858-5833

Walter D. Wilkerson, Jr., MD, Chair  
 Texas Board of Health  
 William R. Archer III, MD, Commissioner of Health  
 Debra Stabeno, Deputy Commissioner for Public Health Sciences and Quality  
 Diane Simpson, PhD, MD, State Epidemiologist, Associate Commissioner for Disease Control and Prevention  
 Mark Gregg, MA, Director, Public Health Professional Education

**DPN Staff**

Kate Hendricks, MD, MPH&TM, Medical Editor  
 Susan Hammack, MEd, Managing Editor  
 Linda Darlington, Production Assistant

**DPN Editorial Board**

Suzanne Barth, PhD  
 Susan Carozza, PhD  
 Peter Langlois, PhD  
 Susan Neill, MBA, PhD  
 Peter Pendergrass, MD, MPH  
 Sharilyn, Stanley, MD  
 Lucina Suarez, PhD

**Vaccine-Preventable Disease Update  
 Reported Cases with Onset From 5/1/99 - 6/30/99**

Condition	County	Number of Cases	Date of Onset	Condition	County	Date of Cases	Date of Onset
<b>Mumps</b>	Dallas	1	5/04	<b>Pertussis</b>	Hidalgo	2	5/21
	Harris	1	5/14		Hunt	1	5/25
	Lubbock	1	5/19		Johnson	1	5/4
	Maverick	1	5/8		Johnson	1	5/9
	Maverick	1	5/28		Montague	1	5/7
	Wise	1	5/3		<b>Tetanus</b>	Travis	1
<b>Pertussis</b>	Dallas	1	5/5	Kendall		1	6/14
	Harris	1	6/9				
<b>YTD</b>	<b>Measles</b>	<b>Mumps</b>	<b>Pertussis</b>	<b>Rubella</b>	<b>Tetanus</b>	<b>H Flu Infect</b>	<b>Hep B</b>
	2	19	49	4	2	2	149