

June 28, 2002

To: State and Territorial Epidemiologists
State and Territorial Public Health Laboratory Directors
Through: Director, Division of Bacterial and Mycotic Diseases
Subject: Outbreaks caused by Shiga toxin-producing *Escherichia coli*
Summary of 2001 Surveillance Data

Attached is the annual summary of outbreaks caused by Shiga toxin-producing *Escherichia coli* (including serotype O157:H7) reported to CDC from January 1 through December 31, 2001. Please share this information with your personnel who investigate these outbreaks. If the information for your state is incomplete or inaccurate, please contact:

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Because of the potential for serious human illness, we appreciate rapid notification by telephone or fax of any outbreaks caused by Shiga toxin-producing *E. coli*, regardless of the suspected source. Detection of multi-state outbreaks is greatly enhanced by participation in PulseNet, and we strongly encourage you to perform routine molecular subtyping of all *E. coli* O157 isolates and to submit all isolate patterns promptly to the PulseNet system. When a food source is suspected, please submit the report to CDC via the Internet using the Electronic Foodborne Outbreak Reporting System (EFORS). For more information about EFORS, contact Nicole Tucker at (404) 639-2206.

We look forward to continuing to work together toward the control of this important public health problem.

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Enclosures

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APPENDIX A
Reported Outbreaks of Shiga toxin-producing *Escherichia coli* (including O157:H7)
occurring January 1 through December 31, 2001

In 2001, health officials in 23 states reported 36 confirmed outbreaks of Shiga toxin-producing *E. coli* infection to CDC. All outbreaks were caused by *E. coli* O157:H7; three involved multiple states. Overall, the outbreaks resulted in 925 illnesses, 359 culture-confirmed infections, 126 hospitalizations, 31 cases of hemolytic uremic syndrome (HUS), and 2 deaths. Compared with the previous year, there were fewer outbreaks reported in 2001 (36 compared with 69) but they were larger in size. The median outbreak size was 9 cases per outbreak in 2001, compared with 4 cases per outbreak in 2000.

A vehicle or mode of transmission was confirmed or suspected in 28 (78%) of the 36 outbreaks. Of these, 17 (61%) were attributed to food vehicles, 5 (18%) to animal contact or environmental contamination in an animal setting, 4 (14%) to person-to-person transmission, and 2 (7%) to swimming exposures. Five (14%) of the 36 outbreaks occurred at fairs or petting zoos, 4 (11%) in restaurants, 4 (11%) in daycare centers, 4 (11%) in prisons and correctional facilities, and 3 (8%) in elementary or middle schools.

In addition to the 36 confirmed outbreaks, 8 clusters of *E. coli* O157:H7 infection were identified. These clusters represent infections caused by *E. coli* O157:H7 strains that had indistinguishable pulsed-field gel electrophoresis patterns and that occurred in the absence of recognized epidemiologic links. Of the 8 clusters, one involved 4 states and each of the other seven involved 1 state. Overall, the 8 clusters accounted for an additional 59 culture-confirmed *E. coli* O157:H7 infections, 5 hospitalizations and 4 cases of HUS.

Table 1: *E. coli* O157:H7 outbreaks reported January 1, 2001 to December 31, 2001

Onset Month	State	City/County	Total Ill	Culture Confirmed	Hospitalized	HUS/TTP	Deaths	Setting	Suspected Vehicle
3	MI	Oakland	4	4	2	0	0	Home/restaurant	Ground beef
3	MI ¹	Multiple	5	5	4	1	0	Home/restaurant	Ground beef
4	SD	Sanborn	2	2	2	0	0	Daycare	Person to person
5	ME	York	2	2	1	1	0	Household	Raw Milk
5	MN	Braham/Isanti	3	3	2	2	1	Daycare	Person to person
5	WA	Multiple	17	17	17	1	0	Unknown	Ground beef
6	GA ²	Multiple	13	13	3	0	0	Community	Ground beef
6	IL	Charleston/Coles	2	2			0	Household	Ground beef
6	MA	Multiple	10	10	4	2	0	Lake	Lake water
6	MN	Two Harbors/Lake	3	2	1	0	0	Resort/family reunion	Hamburger
6	PA	Lancaster	12	6	3	0	0	Farm	Animal contact
7	CO	Denver/Denver	14	8	5	0	0	Prison	Ground beef patties
7	MI	Grand Traverse	3	1		0	0	Golf resort	Unknown
7	NV	Nye	3	1	3	3	0	Household	Unknown
7	NY	Multiple	7	7	4	0	0	Prison/correctional facility	Ground beef patties
7	SC	Multiple	45	5		0	0	Park	Lake water
8	HI	Oahu	3	3	0	0	0	Farm fair	Animal contact
8	IL ³	Multiple	30	30	10	0	0	Household	Ground beef
8	SD	Yankton	2	2	2	0		Convent	Unknown
8	WI	Ozaukee	140	19	5	3	0	Fair	Unknown
9	IL	Effingham/Effingham	7	7	7	1	0	School	Unknown
9	MA	Marblehead	12	12	2	0	0	Restaurant	Roast beef
9	OH	Upper Sandusky/Wyandot	92	41	6	3	0	Fair	Animal contact
9	OH	Wellington/Lorain	111	23	8	2	0	Fair	Environmental contamination
9	SC	Anderson	8	2	1	1	0	School	Unknown
9	VA	Charlottesville/Albemarle	5	3	2	1	0	Lake/park	Unknown
9	VA	Madison/Madison	7	2	0	0	0	Reunion/lodge	Hamburger
10	GA	Washington	35	11	4	0	0	Prison	Mashed potatoes
10	ID	Ada	4	3	1	0	0	Prison	Turkey
10	OR	Washington	8	3	0	0	0	Restaurant	Unknown
10	PA	Allegheny	13	10	2	1	0	Restaurant	Sirloin tips
10	WI	Madison/Dane	34	16	6	1	0	Barn/university campus	Environmental contamination
11	MN	Edina/Hennepin	27	27	3	3	1	Daycare	Person to person
11	NC	Lumberton/Robeson	202	33	11	3	0	School	Butter/unpasteurized milk
11	TX	Abilene/Taylor	20	11	2	0	0	Restaurant	Lettuce
12	OR	Pendelton/Umatilla	20	13	3	2	0	Daycare	Person to person

¹ Multistate outbreak involving MI and IL; initially reported in MI

² Multistate outbreak involving GA, MI, and OH initially reported in GA

³ Multistate outbreak involving IL, KY, MI, NC, NY, VA, and WV initially reported in IL