



Foodborne Diseases Active Surveillance Network (FoodNet) Emerging Infections Program Report on Foodborne Pathogens, 2003



What is FoodNet?

As the principal foodborne disease component of CDC's Emerging Infections Program (EIP), FoodNet is a collaborative project among CDC, the EIP sites, the Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA), and the Center for Food Safety and Applied Nutrition of the United States Food and Drug Administration (FDA). It augments longstanding activities at CDC, USDA, FDA, and in states to identify, control, and prevent foodborne disease hazards. FoodNet produces national estimates of the burden, trends and sources of specific foodborne diseases in the United States through active surveillance and epidemiologic studies.

FoodNet Areas

Connecticut, Georgia, Maryland, Minnesota, Oregon, and Tennessee and select counties in California (3 county San Francisco Bay area), Colorado (7 county Denver area) and New York (27 county Rochester/Albany areas).

FoodNet Population

The surveillance areas represent 42 million persons; 14% of the U.S. population. (Source: U.S. Census Bureau)

FoodNet Case Definition

A case is defined as a laboratory-confirmed *Campylobacter*, *Cryptosporidium*, *Cyclospora*, Shiga toxin-producing *Escherichia coli*, *Listeria*, *Salmonella*, *Shigella*, *Vibrio*, or *Yersinia* infection in a resident of the surveillance area.

FoodNet Methods

FoodNet personnel within each site contact clinical laboratories within that site's catchment area at least once a month to ascertain all laboratory-confirmed cases of infection. A case report form is completed for each case, which includes information on demographics, clinical outcomes, and the pathogen. Laboratory audits to assess completeness of data and to ascertain additional cases are conducted. All rates are calculated using population estimates for the appropriate years.

For more information, visit our web site

<http://www.cdc.gov/FoodNet>
2003 FoodNet Annual Report
<http://www.cdc.gov/foodnet/reports.htm>

Figure 1. FoodNet Surveillance Area

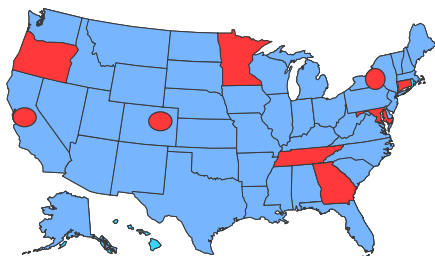


Table 1. Incidence and death rate by organism, FoodNet 2003

Organism	Cases		Deaths	
	No.	(Rate*)	No.	(Rate [†])
<i>Campylobacter</i>	5273	(12.60)	9	(0.22)
<i>Cryptosporidium</i>	481	(1.09)	3	(0.68)
<i>Cyclospora</i>	15	(0.03)	0	(0)
<i>E. coli</i> O157	444	(1.06)	4	(0.94)
<i>Listeria</i>	139	(0.33)	22	(16.54)
<i>Salmonella</i>	6043	(14.43)	34	(0.68)
<i>Shigella</i>	3041	(7.27)	2	(0.08)
<i>Vibrio</i>	110	(0.26)	7	(7.69)
<i>Yersinia</i>	162	(0.39)	2	(1.53)

* Cases per 100,000 population for FoodNet areas

[†] Deaths per 100 cases with known outcome

Table 2. Incidence in 2003 of FoodNet organisms and their respective Healthy People 2010 objective incidence

Objective: A 50% reduction from the 1997 baseline in the incidence of selected bacterial foodborne diseases among all age groups.

Organism	Cases per 100,000 population in FoodNet	
	2003	2010 Objective
<i>Campylobacter</i>	12.6	12.3
<i>Salmonella</i>	14.4	6.8
<i>E. coli</i> O157	1.06	1.0
Hemolytic uremic syndrome (HUS) [^]	1.75	0.9

[^] HUS rate is for children <5 years old and this rate is for 2002

Table 3. Incidence in 2003 of *Listeria* and the respective *Listeria* Action Plan incidence

Objective: A 50% reduction from the 1997 baseline in the incidence of *Listeria* among all age groups.

Organism	Cases per 100,000 population in FoodNet	
	2003 Rate	2005 Objective
<i>Listeria</i>	0.33	0.25

Table 4. Incidence of infection by age group and organism, FoodNet 2003

Organism	Age group and cases per 100,000 population in FoodNet					
	<1yr	1-9 yr	10-19 yr	20-39 yr	40-59 yr	>60 yr
<i>Campylobacter</i>	27.21	15.54	7.75	13.69	13.6	9.59
<i>Cryptosporidium</i>	1.84	2.27	1.1	1.2	0.82	0.39
<i>Cyclospora</i>	0	0.02	0.02	0.06	0.04	0.01
<i>E. coli</i> O157	1.6	3.2	1.24	0.7	0.52	0.85
<i>Listeria</i>	2.31	0.04	0.02	0.08	0.21	1.33
<i>Salmonella</i>	131.94	33.49	9.93	9.94	9.06	11.38
<i>Shigella</i>	9.78	33.19	4.01	5.45	2.89	1.32
<i>Vibrio</i>	0	0.04	0.14	0.27	0.35	0.41
<i>Yersinia</i>	9.6	0.8	0.17	0.13	0.18	0.33