FoodNet Active Manuscripts

Status	#	Lead	Coauthors	Title	Journal	Updated	Comment
9							
	461	Jones, Timothy F.	Scallan, Elaine, Angulo, Fredrick J.	FoodNet: Overview of a Decade of Achievement	Foodborne Pathogens and Disease	6/29/2007	
	121	Samuel, Michael C.	Vugia, Duc J., Koehler, Kathleen M., Marcus, Ruthanne, Deneen, Valerie C., Damaske, Barbara, Shiferaw, Beletshachew, Hadler, James L., Henao, Olga L., Angulo, Fredrick J.	Consumption of Risky Foods Among Adults at High Risk for Severe Foodborne Diseases: Room for Improved Targeted Prevention Messages	Journal of Food Safety	6/29/2007	Journal of Food Safety
	465	Scallan, Elaine		Activities, Achievements, and Lessons Learned During the First 10 Years of FoodNet	CID	6/29/2007	Published - March publication
	113	Varma, Jay K.	Samuel, Michael C., Marcus, Ruthanne, Hoekstra, Robert M., Medus, Carlota, Segler, Suzanne D., Anderson, Bridget J., Jones, Timothy F., Shiferaw, Beletshachew, Haubert, Nicole, Megginson, Melanie, McCarthy, Patrick V., Graves, Lewis M., Van Gilder, Thomas J., Angulo, Fredrick J.	Listeria Monocytogenes Infection From Food in the Regulatory Era: A Case-Control Study of Risk Factors for Sporadic Illness in the United States	CID	6/29/2007	Published Jan. 2007
	107	Voetsch, Andrew C.	Angulo, Fredrick J., Jones, Timothy F., Moore, Matthew R., Nadon, Celine, McCarthy, Patrick V., Shiferaw, Beletshachew, Megginson, Melanie, Hurd, Sharon, Anderson, Bridget J., Cronquist, Alicia B., Vugia, Duc J., Medus, Carlota, Segler, Suzanne D., Graves, Lewis M., Hoekstra, Robert M., Griffin, Patricia M., EIP FoodNet Working Group	Reduction in the Incidence of Invasive Listeriosis in the FoodNet Sites, 1996-2003	CID	6/29/2007	Published Jan. 2007
8							
	394	Nelson, Jennifer M.	Nadle, Joelle, Daniels, Allison, Clogher, Paula, Gillespie, Jennifer, Furuno, Jon P., Plantenga, Melissa, Bernarczyk, Robert, Ingram, Amanda	FoodNet Survey of Food Use and Practices in Long-Term Care Facilities		7/10/2007	Accepted at Journal of Food Protection

0=proposal, 1=analysis, 2=writing, 3=draft being reviewed by coauthors, 4=incorp coauthor comments, 5=NCID/CDC clearance, 6= incorp NCID/CDC comments, 7=at journal, 8=in press, 9=published, 10=posted to website

Status	#	Lead	Coauthors	Title	Journal	Updated	Comment
	117	Patrick, Mary	Griffin, Patricia M., Mead, Paul S., Voetsch, Andrew C.	The Effectiveness of Recall Notification: Community Response to a Nationwide Recall of Hot Dogs and Deli Meats		6/29/2007	Accepted to Journal of Food Protection
7							
	363	Hassan,Valley	Kirk, Martyn D., Scallan, Elaine, Angulo, Fredrick J., Hall, Gillian,	Reporting Rates of Campylobacter Infections in Australia and the United States - Exploring Reasons for the Difference		7/10/2007	
	325	Shiferaw, Beletshachew		Comparison of Three Surveillance Systems for Hemolytic Uremic Syndrome in Oregon		6/29/2007	Submitted to AJPH.
6							
	606	Jones, Timothy F.	Ingram, Amanda, Cieslak, Paul R., Vugia, Duc J., Tobin-D'Angelo, Melissa, Hurd, Sharon, Angulo, Fredrick J., FoodNet Salmonella Working Group	Salmonellosis Outcomes Differ Substantially by Serotype		9/12/2007	
5							
	600	Clarkson, Lydia S.	Tobin-D'Angelo, Melissa, Shuler, Carrie, Hanna, Samir S., Benson, James A., Voetsch, Andrew C.	Sporadic Salmonella enterica serotype Javiana Infections in Georgia and Tennessee: An Emerging Zoonotic Disease?		8/31/2007	
	22	Crump, John A.	, Joyce, Kevin W., Vugia, Duc J., Megginson, Melanie, Segler, Suzanne D., Hurd, Sharon, Luedeman, Jeff, Shiferaw, Beletshachew, Hanna, Samir S., Stevenson, Jennifer E., Angulo, Fredrick J.	Clinical Consequences of Typhoid Fever due to Salmonella Typhi with Decreased Susceptibility to Ciprofloxacin		6/29/2007	
	381	Demma, Linda	Vugia, Duc J., Hurd, Sharon, Segler, Suzanne D., Kielbauch, Julie, Leano, Fe, Dumas, Nellie B., Hatch, Julie, Hanna, Samir S., Angulo, Fredrick J.,	Campylobacter species in FoodNet and NARMS 1997-2004: is the incidence of Campylobacter coli infection increasing?		6/29/2007	

0=proposal, 1=analysis, 2=writing, 3=draft being reviewed by coauthors, 4=incorp coauthor comments, 5=NCID/CDC clearance, 6= incorp NCID/CDC comments, 7=at journal, 8=in press, 9=published, 10=posted to website

Status	#	Lead	Coauthors	Title	Journal	Updated	Comment
	124	Dunne, Eileen F.	Griffin, Patricia M., Henao, Olga L., Bender, Jeffrey B., Beletshachew, Shiferaw, Vugia, Duc J., Dembek, Zygmunt F., Wesolowski, Laura G., Carter, Michael A., Zansky, Shelley M., Boothe, Effie J., Burnite, Steve, Wells, Joy G., Bibb, William, Mead, Paul S., Henao, Olga L., EIP FoodNet Working Group, Snider, Cynthia J.	Pediatric Hemolytic Uremic Syndrome in the United States, 1997-2002: A Study of 379 Cases		7/10/2007	
	508	Haley, Clinton C.	Hedberg, Katrina, Cieslak, Paul R., Scallan, Elaine, Ong, Kanyin Liane, Marcus, Ruthanne, Shin, Sam, Cronquist, Alicia B., Gillespie, Jennifer, Jones, Timothy F., Shiferaw, Beletshachew, Fuller, Candace, Edge, Karen, Anderson, Bridget J., Ryan, Patricia A., Mintz, Eric D.	Sporadic Shigellosis: Population-Based Risk Factors Revealed, FoodNet, 2005		6/29/2007	
	26	Majowicz, Shannon E.	Scallan, Elaine, Hall, Gillian, Banerjee, Anyana, Kirk, Martyn D., Angulo, Fredrick J.	Respiratory Symptoms Among Persons with Gastrointestinal Illness		6/29/2007	
	459	Voetsch, Andrew C.	Poole, Charles, Hedberg, Craig W., Ryder, Robert W., Weber, David J., Angulo, Fredrick J.	The effect of alternative control selection in the FoodNet case-control study of sporadic Salmonella serotype Enteritidis using other serotypes as a comparison group		7/10/2007	
4							
	432	Maldonado, George		Blending Project		7/10/2007	
	341	Rosenblum, Ida E.	Lynch, Michael, Cronquist, Alicia B., Phan, Quyen, Vugia, Duc J., Burnett, Cindy, Morse, Dale L., Keene, William E., Edwards, Leslie, Swanson, Ellen, Jones, Timothy F., EIP FoodNet Working Group,	Factors Associated with Confirming an Etiology During Foodborne Outbreak Investigations, FoodNet Sites, 2001-2006		8/6/2007	
3							
	103	Ailes, Elizabeth	Demma, Linda, Scallan, Elaine	Continued Decline in the Incidence of Campylobacter Infections, FoodNet 1996-2006		7/10/2007	

0=proposal, 1=analysis, 2=writing, 3=draft being reviewed by coauthors, 4=incorp coauthor comments, 5=NCID/CDC clearance, 6= incorp NCID/CDC comments, 7=at journal, 8=in press, 9=published, 10=posted to website

Status	#	Lead	Coauthors	Title	Journal	Updated	Comment
	109	Demma, Linda	Snider, Cynthia J., Shiferaw, Beletshachew, Vugia, Duc J., Hurd, Sharon, Zansky, Shelley M., Scheftel, Joni, Voetsch, Andrew C., Angulo, Fredrick J., Griffin, Patricia M., EIP FoodNet Working Group	Risk Factors for Developing Hemolytic Uremic Syndrome or Death Among Persons with Escherchia coli O157 Infection, FoodNet sites, 1997-2002			
	491	Guo, Chuanfa	Hartnett, Emma, Harman, Jane, Ong, Kanyin Liane, Naugle, Alecia L., Bennett, Patricia, Hoekstra, Robert M., Cieslak, Paul R., Holt, Kristen G., Schlosser, Wayne D., Rose, Bonnie E., Schroeder, Carl M., Scallan, Elaine, Angulo, Fredrick J.	Human Infections from Salmonella in Meat, Poultry, and Eggs, United States, 1998 - 2003: Estimates from a Bayesian Model		7/10/2007	
	331	Long, Cherie	Hayes, Tameka, Vugia, Duc J., Ryan, Patricia A., Scheftel, Joni, Shiferaw, Beletshachew, Jones, Timothy F., Demma, Linda, EIP FoodNet Working Group	Yersenia pseudotuberculosis infections in FoodNet, 1996-2005		6/29/2007	
	607	Nelson, Jennifer M.	Jones, Timothy F.	Antimotility and Antimicrobial Use in Persons with Shiga toxin-producing E. coli O157 Infection in FoodNet Sites		9/12/2007	
	343	Sharp, Lydia	Tobin-D'Angelo, Melissa, Shuler, Carrie, Voetsch, Andrew C.	Sporadic Salmonella serotype Javiana in Georgia: An Emerging Zoonotic Disease?		6/29/2007	
2							
	462	Gould, Hannah	Demma, Linda, Hoekstra, Robert M., Angulo, Fredrick J.	Higher Incidence of Escherichia coli O157:H7 Infection in Rural Counties and Possible Association with Animal Contact		8/6/2007	
	344	Henao, Olga L.	Ryan, Patricia A., Scallan, Elaine, Choudhuri, Julie, Norton, Dawn M., Edge, Karen, Ryan, Patricia A., Tobin-D'Angelo, Melissa, Nelson, Jennifer M., Hanna, Samir S., Jones, Timothy F., Angulo, Fredrick J., EIP FoodNet Working Group	Proportion of Visits to Health Care Providers Resulting in Request of Stool Samples: Data from the National Ambulatory Medical Care Survey (NAMCS) and the Foodborne Diseases Active Surveillance Network (FoodNet) Population Survey		6/29/2007	
	565	Henao, Olga L.	Moyer, Laura B., Hoefer, Dina, Holman, Robert, Jones, Timothy F., Marcus, Ruthanne, Medus, Carlota, Ryan, Patricia A., Tobin-D'Angelo, Melissa	Hospitalizations Due to Infections of Selected Foodborne Pathogens; NIS, NHDS, and FoodNet, 1998-2004		7/31/2007	

0=proposal, 1=analysis, 2=writing, 3=draft being reviewed by coauthors, 4=incorp coauthor comments, 5=NCID/CDC clearance, 6= incorp NCID/CDC comments, 7=at journal, 8=in press, 9=published, 10=posted to website

Status	#	Lead	Coauthors	Title	Journal	Updated	Comment
	386	Hurd, Sharon	Demma, Linda, Tong, Xin, Cronquist, Alicia B., Segler, Suzanne D., Kielbauch, Julie, Swanson Laine, Ellen, Smith, Glenda, Hatch, Julie, Hanna, Samir S., Fitzgerald, Collette, EIP FoodNet Working Group, Shin, Sam	Clinical Laboratory Practices for the Identification of Campylobacter in FoodNet Sites: Do Differences Explain Variation in Incidence Rates?		6/29/2007	
	101	Scallan, Elaine	Vugia, Duc J., Cronquist, Alicia B., Marcus, Ruthanne, Thomas, Stephanie M., Blythe, David, Fuller, Candace, Zansky, Shelley M., Cieslak, Paul R., Jones, Timothy F.	Burden of Bacterial Foodborne Illness in the United States		7/10/2007	
0							
	604	Shiferaw, Beletshachew		Are there gender differences in food consumption?		9/7/2007	

0=proposal, 1=analysis, 2=writing, 3=draft being reviewed by coauthors, 4=incorp coauthor comments, 5=NCID/CDC clearance, 6= incorp NCID/CDC comments, 7=at journal, 8=in press, 9=published, 10=posted to website

Top 15 Salmonella Serotypes Increasing 2004-2006								
Rank	Salmonella Serotype	YEAR						Total
		2004		2005		2006		
		Total	Rate	Total	Rate	Total	Rate	
1	Tennessee	14	0.03	26	0.06	73	0.16	113
2	Muenster	8	0.02	14	0.03	23	0.05	45
3	Sandiego	13	0.03	24	0.05	27	0.06	64
4	Senftenberg	13	0.03	19	0.04	26	0.06	58
5	Ohio*	5	0.01	20	0.04	10	0.02	35
6	Berta	26	0.06	30	0.07	47	0.10	103
7	Paratyphi A	19	0.04	25	0.06	33	0.07	77
8	Norwich	16	0.04	25	0.06	25	0.05	66
9	Montevideo*	168	0.38	152	0.34	249	0.55	569
10	I 4, [5], 12:i:-	199	0.45	235	0.52	293	0.64	727
11	Virchow	15	0.03	15	0.03	22	0.05	52
12	Hadar*	43	0.10	33	0.07	58	0.13	134
13	Stanley	35	0.08	35	0.08	45	0.10	115
14	Enteritidis	876	1.97	1097	2.44	1111	2.44	3084
15	Bareilly	44	0.10	37	0.08	53	0.12	134
	Total	1494		1787		2095		5376
*Serotypes not found in table below								

Top 15 Salmonella Serotypes Excluding Outbreak Related Cases Increasing 2004-2006								
Rank	Salmonella Serotype	YEAR						Total
		2004		2005		2006		
		Total	Rate	Total	Rate	Total	Rate	
1	Muenster	8	0.02	14	0.03	23	0.05	45
2	Sandiego	13	0.03	24	0.05	27	0.06	64
3	Senftenberg	13	0.03	19	0.04	26	0.06	58
4	Berta	26	0.06	30	0.07	47	0.10	103
5	Paratyphi A	19	0.04	25	0.06	33	0.07	77
6	Tennessee	14	0.03	26	0.06	23	0.05	63
7	I 4, [5], 12:i:-	180	0.40	234	0.52	288	0.63	702
8	Norwich	16	0.04	25	0.06	25	0.05	66
9	Anatum**	27	0.06	43	0.10	42	0.09	112
10	Virchow	15	0.03	15	0.03	22	0.05	52
11	Agona**	62	0.14	53	0.12	82	0.18	197
12	Thompson**	62	0.14	71	0.16	79	0.17	212
13	Enteritidis	833	1.87	987	2.19	1039	2.28	2859
14	Bareilly	43	0.10	37	0.08	53	0.12	133
15	Stanley	35	0.08	32	0.07	43	0.09	110
	Total	1366		1635		1852		4853
**Serotypes not found in table above								

FoodNet Data through June
(data transmitted 8/24/2007)

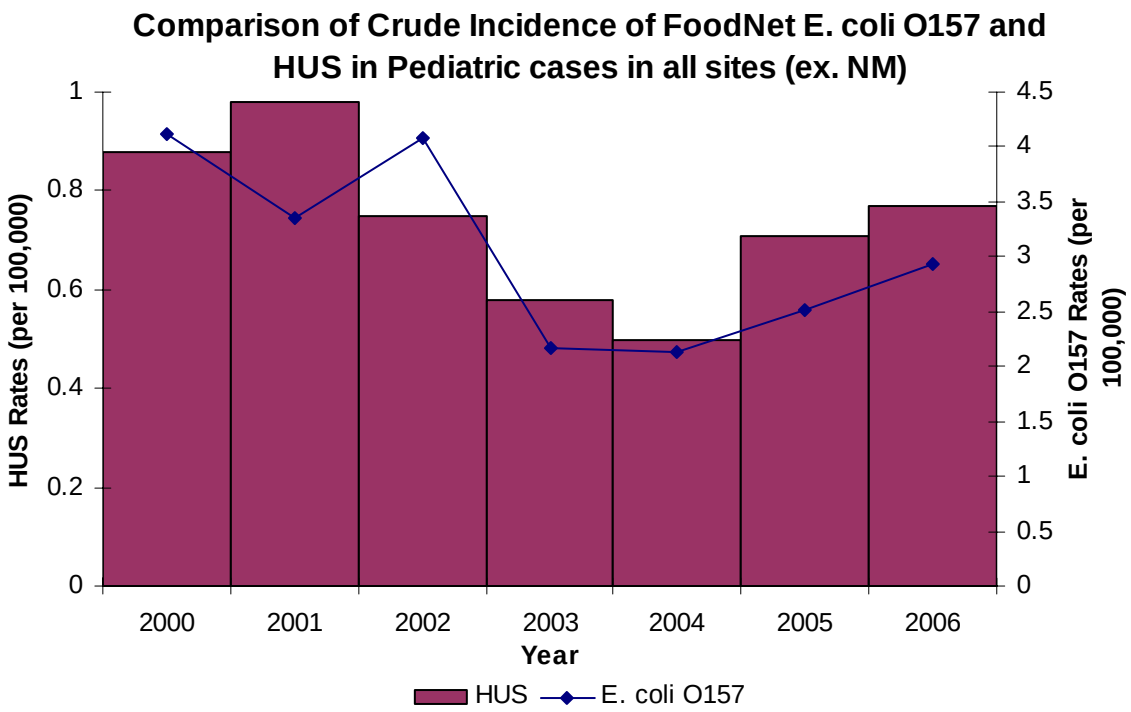
Top 20 *Salmonella* Serotypes (ranked by 2006 year end counts)	2006		2007		2007 vs 2006 p-value
	# (%)	Rate	# (%)	Rate	
***S.* Typhimurium**	467 (18.74)	1.04	387 (14.87)	0.86	0.0062
***S.* Enteritidis**	464 (18.62)	1.03	482 (18.52)	1.07	
***S.* Newport**	124 (4.98)	0.28	131 (5.03)	0.29	
***S.* Javiana**	50 (2.01)	0.11	40 (1.54)	0.09	
***S.* I 4,[5],12:i:-**	115 (4.61)	0.26	124 (4.77)	0.28	
***S.* Montevideo**	79 (3.17)	0.18	102 (3.92)	0.23	
***S.* Heidelberg**	101 (4.05)	0.22	121 (4.65)	0.27	
***S.* Muenchen**	40 (1.61)	0.09	59 (2.27)	0.13	
***S.* Mississippi**	52 (2.09)	0.12	8 (0.31)	0.02	0.0000
***S.* Saintpaul**	44 (1.77)	0.10	43 (1.65)	0.10	
***S.* Oranienburg**	37 (1.48)	0.08	40 (1.54)	0.09	
***S.* Infantis**	45 (1.81)	0.10	28 (1.08)	0.06	0.0474
***S.* Braenderup**	40 (1.61)	0.09	42 (1.61)	0.09	
***S.* Agona**	25 (1.00)	0.06	38 (1.46)	0.08	
***S.* Thompson**	30 (1.20)	0.07	18 (0.69)	0.04	
***S.* Paratyphi B var L(+) Tartrate+**	40 (1.61)	0.09	23 (0.88)	0.05	0.0328
***S.* Tennessee**	11 (0.44)	0.02	119 (4.57)	0.26	0.0000
***S.* Hadar**	35 (1.40)	0.08	20 (0.77)	0.04	0.0440
***S.* Bareilly**	11 (0.44)	0.02	8 (0.31)	0.02	
***S.* Anatum**	14 (0.56)	0.03	22 (0.85)	0.05	

Overall Summary	2006		2007	
	# (%)	Rate	# (%)	Rate
Total number of *Samonella* cases	2492	5.54	2602	5.79
Fully Serotyped	2286 (91.73)		2318 (89.09)	
Partially Serotyped	60 (2.41)		56 (2.15)	
Rough/Nonmotil	9 (0.36)		12 (0.46)	
Not Serotyped (missing or unknown)	137 (5.50)		216 (8.30)	

FoodNet HUS and *E. coli* O157 Crude Incidence

Case Count
HUS (N=492)
E. coli O157 (N=2024)

Comparison of Crude Incidence of FoodNet *E. coli* O157 and HUS for cases <18 years old in all sites (ex. NM)



* 2006 HUS data is not final.

All cases are in catchement

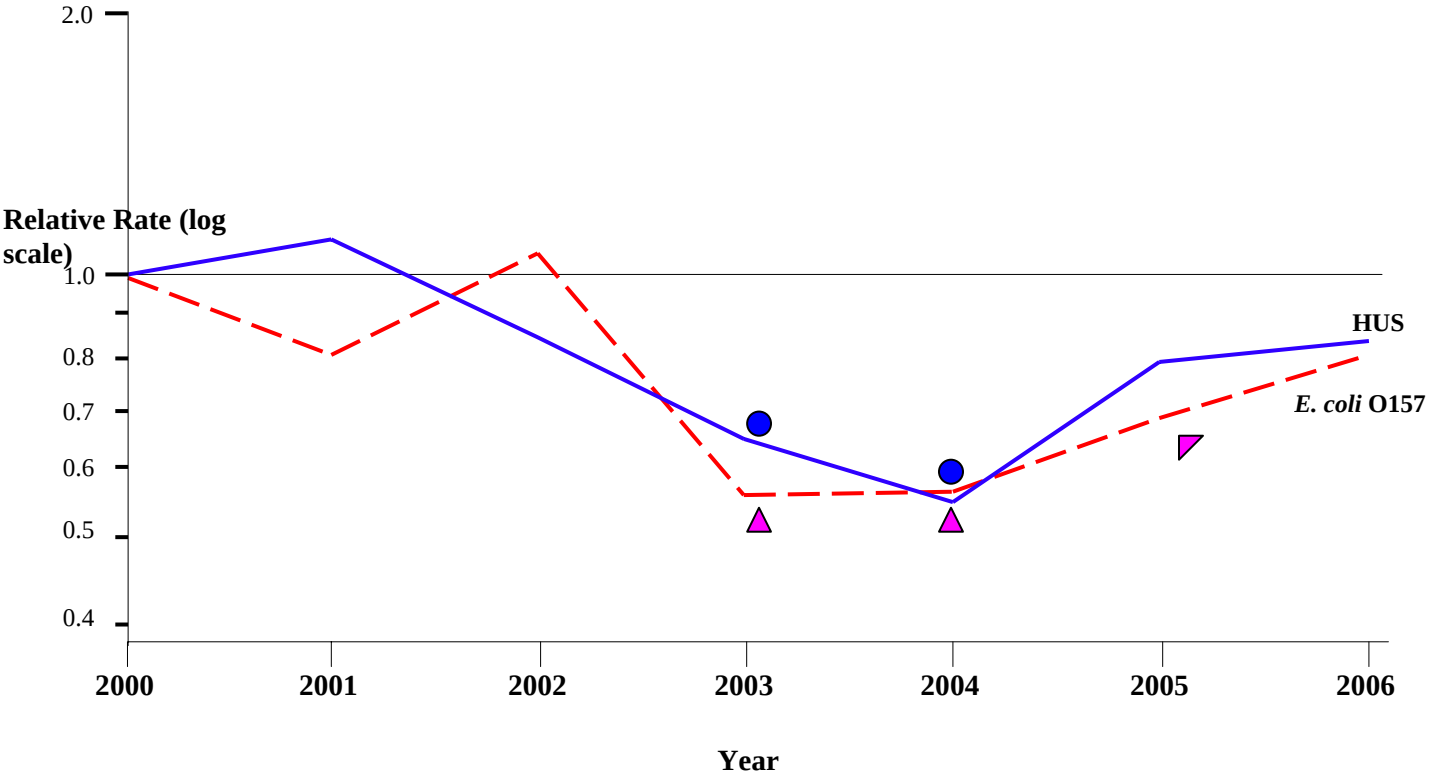
FoodNet *E. coli* O157 and HUS Trends

FoodNet can use the negative binomial model to assess trends of *E. coli* O157 and HUS. However, the HUS estimates are not as precise due to a small sample size.

Case Count
HUS (N=492)
E. coli O157 (N=2024)

Comparison of trends in *E. coli* O157 and HUS to 2000 Baseline in Cases < 18 years in all sites (ex. NM)

Relative rates compared with 2000 baseline period for *E. coli* O157 and HUS, by year



Significant change from 2000 baseline

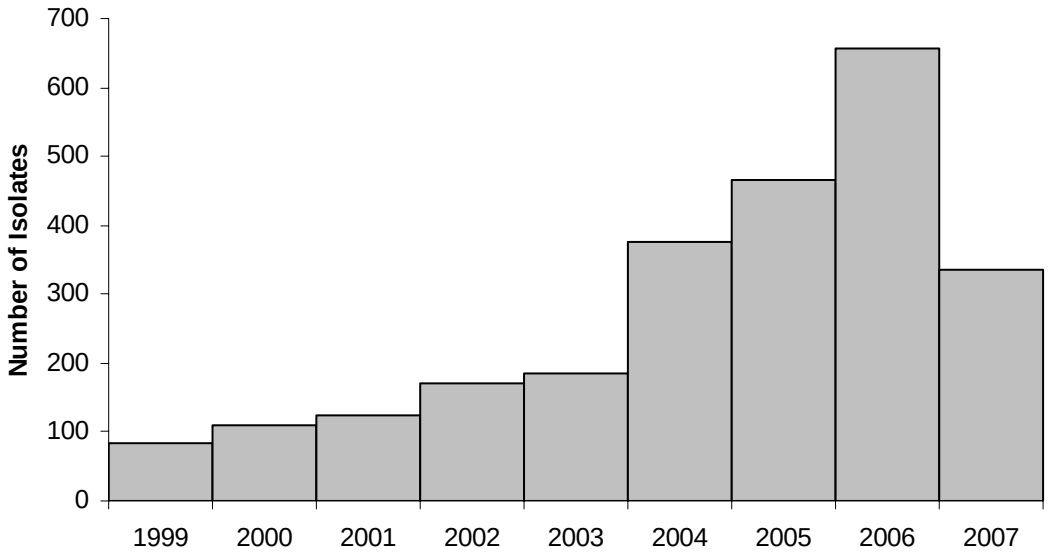
▲ E. coli O157
● HUS

Shiga toxin Profiles

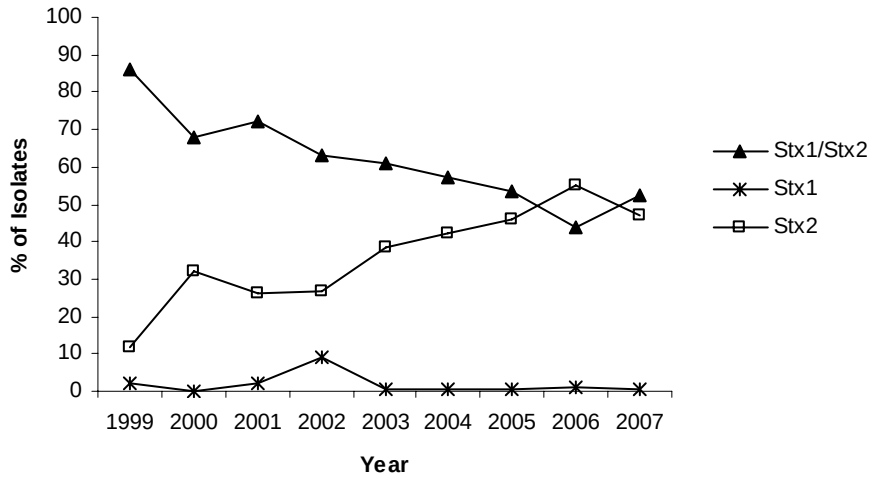
E. coli isolates in PulseNet Database, **1999-2007 (to date)**

- 5,024 *E. coli* isolates from 1983-present (4888 (97.3%) from 1999-present)
  - 3,459 (68.8%) isolates of *E. coli* O157 with shiga-toxin profile in the database
    - 2,510 (51.4%) have an isolation date available

Number of *E. coli* O157 isolates in PulseNet 1999-2007 (to date) by isolation date (n=2,510)



Shiga toxin type of *E. coli* O157 isolates by year (n=2,510)



- 1990-1992 "collection" (Slutzker et al 1997)
  Stx1/2: 86.9%
  Stx1: 1.6%
  Stx2: 11.5%

Selected Literature review on Shiga toxin types seen internationally

Country	Citation	Year	Number of Patients	Serotype	Stx1	Stx2	Stx1/Stx2	HUS	Comments
Argentina	Rivas et al. 2006 Foodborne Pathog Dis 3: 88-96	2001-2002	99 children, 103 isolates	59% O157:H7	10%	90%	none	13/99	
Australia	Fegan and Desmarchelier, Epidemiol Infect 2002; 128: 257		14 human isolates	14% O157:H7	14%	7% stx2c only + 7% stx2/2c	1/2-7%; 1/2c-50%		
Bangladesh	Islam et al 2007; J Med Micro 56: 380	2004-2005	410 patients (not just E. coli)		3/410	4/410	2/410		General study of patients with diarrhea
Brazil	Vaz et al, 2004 JCM 2:903-5	1976-1999	29 STEC strains analyzed	mostly O111, O26	93%	O157 strain only	O93:H19 only		Analysis by strain, not isolate?
Chile	Rios et al. 1999 JCM 37: 778	1995-1996	23 human isolates				82%	10 of 23	Study of clonal diversity in VTEC; selected specimens from persons with HUS and asymptomatic controls
Denmark	Ethelberg et al. 2004 EID 10: 842	1997-2003	343	several; O157 23.6%	68% (may be in combination w/stx2)	54% (may be in combination w/stx1)	didn't say what proportion both stx1/2	6.10%	
Finland	Eklund et al. Epidemiol Infect. 2005 133: 845-52	1998-2002	99	52/99 O157	21%	79%	did not specify overlap		
Germany	Friedrich et al. 2002 JID 185: 74	1996-2000			26.5	55.9	15.6		Interested in stx 2 variants so sample heavily biased towards persons with HUS
Germany	Werber et al. 2003 Eur J Clin Microbiol Infec Dis 22: 726	2000-2001	349 STEC	O157 18%; non-O157 82%	43% (O157); 84% (non-O157)	100% (O157); 27% (non-O157)	did not specifiy overlap	58%	Interested in stx2/eae clustering so sampled biased towards persons with HUS
Germany	Beutin et al. 2004 JCM 42: 1099	1997-1999	677	55 O groups isolated	70%	64%		3.50%	
Germany	Werber et al. 2002; JID 186: 419	2000	11	O26: H11	11 isolates (not all from patients)			0	Outbreak
Germany	Beutin et al. Diag Micro. 2002; Infect Dis. 44: 337	1996-1999	168	O157	1%	26% stx2 + 23% stx2/2c + 14% stx2c	1% stx1/2 + 35% stx1/2c	10%	O157 only
Germany, Austria	Gerber et al. 2002; JID 186:493-500	1997-2000	394 pediatric patients		1%	52% + 27% stx2/2c	13%		HUS patients only
Italy	Tozzi et al. 2001 , EID 9: 106	1988-2000	67/228 patients w/STEC	several; O157 6/19		75%	17%		HUS patients only
Netherlands	Van Duynhoven et al. 2002 Eur J Clin Microbiol Infec Dis 21: 513-522	1999-2001	93	O157 only	2%	64%	34%	15%	
Palestine	Adwan et al, J. Med. Microbiol, 2002 Apr;51(4):332-5.	1999	176/250 stool specimens STEC+	71% O157	20%		80%		
Spain	Blanco et al 2004 J. Clin Microbiol	1992-1999	126 with STEC identified from >5000 specimens	O157 most common (24/126)	34%	36%	30%	16/24 with O157:H7	
Tunisia	Al-Galls et al. 2006 Curr Microbiol 53: 483-90	2001-2004	316	O111 (n=67) most common, only one O157			100% (12/12)		

1) A review of contributing factors as reported to eFORS by FoodNet sites; 2005-2006 (Ida Rosenblum)
Beginning in 2005, FoodNet sites have collected additional information on all contributing factors (CFs) marked in eFORS reports. This abstract will link the supplemental information to the eFORS report and summarize the findings. Results will include the most common CFs reported, as well as who reported the CF and how the CF was determined.

2) Travel Associated Salmonellosis in FoodNet (Liane Ong)
Since 2004, FoodNet has collected information on travel histories of Salmonella cases in the 7 days prior to illness onset. This abstract will look at 3 years worth of data and analyze the travel exposure in Salmonella cases by serotype and various demographic features.

3) Trends in incidence of frequently identified non-typhoidal *Salmonella* serotypes, Foodborne Diseases Active Surveillance Network 1996-2006 (Cherie Long, Xin Tong, Olga Henao)
FoodNet has continually reported that there has not been a significant decrease seen in the incidence of Salmonella from the 1996-1998 baseline period. In hopes of explaining this, trends analysis is performed on the top 5 Salmonella serotypes (Typhimurium, Enteritidis, Newport, Heidelberg, and Javiana); but this is only 64% of Salmonella serotypes identified in the FoodNet data. This abstract will take a closer look at the epidemiology and trends of the frequently identified non-typhoidal *Salmonella* serotypes in FoodNet data to create a better understanding of what is hidden in the Salmonella FoodNet trend.

4) Epidemiology of non-O157 Shiga-toxin producing *E. coli* in FoodNet sites (Hannah Gould)
We would like to analyze changes in non-O157 STEC in FoodNet sites from 2000-2006. The abstract will look at the most frequently reported serotypes, demographics and descriptive epidemiology of persons with non-O157 infection, and possible differences between FoodNet sites.

5) Prevalence of exposures to meat and poultry products among children riding in shopping carts: increased risk of *Salmonella* and *Campylobacter* infection (Mary Patrick)

A previous FoodNet case-control study found that riding in shopping cart next to meat and poultry was a risk factor for infant *Salmonella* and *Campylobacter* infection. In order to assess the prevalence of this practice in the general population, FoodNet included questions on the 2006-2007 population survey. This abstract will analyze responses to these questions overall and by various demographics.

6) Patterns in incidence of diarrheal illness and associated symptoms, FoodNet Population Survey 1996-2006 (Olga Henao)

Using the 5 cycles of the Population Survey conducted by FoodNet, we will be examining the incidence of symptoms associated with diarrheal illness, by year, to determine any changes in patterns of such symptoms. Knowledge of the patterns in the population is useful in comparison to patterns in the incidence of foodborne illnesses in the same geographic region and inform current efforts to better understand the burden of foodborne illness in the United States.

7) Associated costs of gastrointestinal illness in the United States, FoodNet population survey, 2006-2007 (Laura Moyer)

Using the 2006-2007 FoodNet Population Survey, we will examine the associated burden and costs incurred by respondents who reported gastrointestinal illness. Questions of consideration will be medical office visits, emergency room visits, hospitalization, days missed of school or work, and medications taken for the illness.

8) Are there gender differences in food consumption? (Beletshachew Shiferaw)

The 2006-2007 population survey asked questions about various types of food. Previous analysis of population survey data have not addressed this issue systematically across foods. We want to examine if there are gender differences in food consumption. We also want to look at the prevalence of foodborne diseases among males and females and examine if there is correlation between consumption of high-risk foods and foodborne illnesses.

9) FoodNet *Listeria* Case Report Proposal (Michelle Soeters, Ruthanne Marcus, Sharon Hurd)

To conduct descriptive analysis of the data collected using the CSTE *Listeria* case report form by all states. The analysis will include analysis of the FoodNet site data only.
In 2003, the Council for State and Territorial Epidemiologists (CSTE) and the Centers for Disease Control and Prevention (CDC) recommended prompt routine interviewing of all patients with culture-confirmed listeriosis using a standardized questionnaire to facilitate investigation of outbreaks due to *Listeria* (CSTE 2003 position statement ID-01). Prospective interviewing of cases of listeriosis with a standardized questionnaire that includes questions about consumption of high-risk food, together with swift subtyping of

L. monocytogenes isolates through PulseNet, will shorten the time interval between outbreak detection and the identification and recall of contaminated foods, and reduce the resources required to investigate listeriosis outbreaks.

10) *E.coli* O157 and non-O157 Shiga Toxin-producing *E.coli* (STEC) testing among laboratories serving the FoodNet catchment area (Dina Hoefer, Sharon Hurd, Carlota Medus, Samir Hanna, Hannah Gould)
Determine the number of labs performing culture-based and non-culture based laboratory testing practices for the identification of STEC. Specific emphasis will be made on the process of STEC testing, including under what circumstances culture- versus non-culture based methods are used, the specific tests used as non-culture based methods, how non-culture based method test results are read and reported, and what follow up procedures are used in the event of a positive result from a non-culture based method. Follow-up procedures will be looked at, including topics such as transport media, packaging and shipping procedures, and the frequency of submission (batched, non-batched, *etc*) will be analyzed. Additionally, this write up will include the number of laboratories with future plans for adding non-culture based methods for the detection of STEC.

11) O157 STEC versus non O157 STEC, comparison of exposures and clinical variables (Melissa Tobin-D'Angelo)
Adapted from a presentation given at APHA includes a comparison over time, documenting an increase in non-O157 STEC. This analysis will also incorporate some preliminary GA data from the STEC lab survey.

12) Community-wide Shigella outbreak in NW GA (Melissa Tobin-D'Angelo)
In 2003, the Council for State and Territorial Epidemiologists (CSTE) and the Centers for Disease Control and Prevention (CDC) recommended prompt routine interviewing of all patients with culture-confirmed listeriosis using a standardized questionnaire to facilitate investigation of outbreaks due to *Listeria* (CSTE 2003 position statement ID-01). Prospective interviewing of cases of listeriosis with a standardized questionnaire that includes questions about consumption of high-risk food, together with swift subtyping of *L. monocytogenes* isolates through PulseNet, will shorten the time interval between outbreak detection and the identification and recall of contaminated foods, and reduce the resources required to investigate listeriosis outbreaks.

FoodNet Steering Committee Proposal

Title:	**Incidence and Trends of Foodborne Pathogens in FoodNet and Non-FoodNet Sites**
Proposed by:	M McMillian, T Jones, M Lynch, M Iwamoto
Submitted:	July 26, 2007
Data source:	National Surveillance Data (PHLIS and NETTS), FoodNet Surveillance Data
Purpose:	Examine national surveillance data to describe incidence and trends in *Salmonella*, *Shigella*, *E.coli* O157, *Listeria*, *Yersinia*, and *Cryptosporidium* in FoodNet versus non-FoodNet sites since 1996. Comparisons will include case counts by state, year, month, including proportions by sex, race, *Salmonella* serotype, and proportions of those variables that are unknown.
Timeline:	Begin analyses as soon as data are available, with preliminary analyses reviewed within one month.

Proposed by:	Beletshachew Shiferaw
Title:	Are there gender differences in food consumption?
Date submitted:	August 20, 2007
Purpose:	To examine if there are gender differences in food consumption.
Proposal:	The 2006-2007 population survey asked questions about various types of food. Previous analysis of population survey data have not addressed this issue systematically across foods. We want to examine if there are gender differences in food consumption. We also want to look at the prevalence of foodborne diseases among males and females and examine if there is correlation between consumption of high-risk foods and foodborne illnesses.
Data sources:	2006-2007 Population survey FoodNet surveillance data
Time line:	Submit an abstract for ICEID in March 2008.
Publication:	Write a manuscript for publication.

non-Typhi *Salmonella* Clinical Outcomes Cohort Study Status updated 8/23/2007

2006

State	Sampling Scheme	Study Start Date	FoodNet Cases	Eligible	Interviewed (% of eligible)	Pending (% of eligible)	Refused (% of eligible)	Other Not Enrolled (% of eligible)
CA	1/10	1/1/2006	473	52	31 (60%)	0 (0%)	5 (10%)	16 (31%)
CO	1/4	1/1/2006	352	87	64 (74%)	0 (0%)	17 (20%)	6 (7%)
CT	1/4	1/1/2006	502	109	98 (90%)	0 (0%)	9 (8%)	2 (2%)
GA	1/20	3/15/2006	1545	76	44 (58%)	0 (0%)	2 (3%)	30 (39%)
MD	1/10	5/1/2006	618	68	50 (74%)	0 (0%)	5 (7%)	13 (19%)
MN	1/5	1/1/2006	720	142	114 (80%)	2 (1%)	13 (9%)	13 (9%)
NM	1/5	1/1/2006	258	45	27 (60%)	0 (0%)	5 (11%)	13 (29%)
NY	1/5	1/1/2006	492	96	57 (59%)	0 (0%)	14 (15%)	25 (26%)
OR	1/20	1/1/2006	397	25	20 (80%)	0 (0%)	3 (12%)	2 (8%)
TN	1/10	1/1/2006	785	76	65 (86%)	0 (0%)	4 (5%)	7 (9%)
		Total	6142	776	570 (73%)	2 (0%)	77 (10%)	127 (16%)

2007

State	Sampling Scheme	Study Start Date	FoodNet Cases	Eligible	Interviewed (% of eligible)	Pending (% of eligible)	Refused (% of eligible)	Other Not Enrolled (% of eligible)
CA	1/10	1/1/2006	187	35	14 (40%)	8 (23%)	6 (17%)	7 (20%)
CO	1/10	1/1/2006	152	18	12 (67%)	4 (22%)	1 (6%)	1 (6%)
CT	1/20	1/1/2006	176	15	13 (87%)	1 (7%)	1 (7%)	0 (0%)
GA	1/20	3/15/2006	606	73	42 (58%)	13 (18%)	4 (5%)	15 (21%)
MD	1/10	5/1/2006	260	49	22 (45%)	12 (24%)	2 (4%)	13 (27%)
MN	1/20	1/1/2006	339	24	15 (63%)	2 (8%)	2 (8%)	5 (21%)
NM	1/5	1/1/2006	103	30	10 (33%)	2 (7%)	5 (17%)	13 (43%)
NY	1/5	1/1/2006	267	58	24 (41%)	14 (24%)	9 (16%)	11 (19%)
OR	1/10	1/1/2006	158	22	16 (73%)	1 (5%)	3 (14%)	2 (9%)
TN	1/10	1/1/2006	308	38	28 (74%)	4 (11%)	0 (0%)	6 (16%)
		Total	2556	362	196 (54%)	61 (17%)	33 (9%)	73 (20%)

Interviewed Total 2006-2007 = 766

E. *coli* O157 Cohort Study Status

State	Study Start Date	FoodNet Cases	Eligible	Interviewed (% of eligible)	Pending (% of eligible)	Refused (% of eligible)	Other Not Enrolled (% of eligible)
CA	3/1/2006	57	65	46 (71%)	2 (3%)	8 (12%)	9 (14%)
CO	2/1/2006	39	47	29 (62%)	6 (13%)	7 (15%)	5 (11%)
CT	6/1/2006	45	65	43 (66%)	4 (6%)	14 (22%)	4 (6%)
GA	1/22/2007	50	18	6 (33%)	7 (39%)	3 (17%)	2 (11%)
MD	5/1/2006	43	46	25 (54%)	2 (4%)	7 (15%)	12 (26%)
MN	3/1/2006	200	240	152 (63%)	15 (6%)	27 (11%)	46 (19%)
NM	6/1/2006	23	24	13 (54%)	0 (0%)	3 (13%)	8 (33%)
NY	3/1/2006	67	84	39 (46%)	5 (6%)	25 (30%)	15 (18%)
OR	3/1/2006	97	125	88 (70%)	20 (16%)	5 (4%)	12 (10%)
TN	1/1/2006	104	115	75 (65%)	2 (2%)	4 (3%)	34 (30%)
	Total	725	829	516 (62%)	63 (8%)	103 (12%)	147 (18%)

Updated 9/5/07

Enrollment Status for Selected *Salmonella* Serotypes Study, as of August 29, 2007

	# Eligible				Interviewed			Total Interviewed	Pending	Refused	Other Not Enrolled
	S. Javiana	*S.* Infantis	*S.* I 4,[5],12:i:-	Total	*S.* Javiana	*S.* Infantis	*S.* I 4,[5],12:i:-	# (% of Eligible)			
CA	1	3	14	18	1	1	6	8 (44)	0 (0)	2 (11)	8 (44)
CO	5	5	1	11	1	2	0	3 (27)	1 (9)	2 (18)	5 (45)
CT	1	4	12	17	1	2	9	12 (71)	1 (6)	1 (6)	3 (18)
GA	55	7	32	94	29	3	19	51 (54)	19 (20)	11 (12)	13 (14)
MD	5	0	28	33	5	0	16	21 (64)	0 (0)	2 (6)	10 (30)
MN	3	7	17	27	2	5	10	17 (63)	4 (15)	0 (0)	6 (22)
NM	6	1	6	13	2	0	1	3 (23)	1 (8)	4 (31)	5 (38)
NY	0	2	13	15	0	1	5	6 (40)	3 (20)	0 (0)	6 (40)
OR	1	4	19	24	1	2	9	12 (50)	3 (13)	4 (17)	5 (21)
TN	5	0	32	37	3	0	25	28 (76)	0 (0)	4 (11)	5 (14)
Total Cases	82	33	174	289	45	16	100	161 (56)	32 (11)	30 (10)	66 (23)
Controls	-	-	-	-	-	-	-	817	-	-	-

Enrollment Status for Validation Sub-Studies for Selected *Salmonella* Serotypes Study, as of August 29, 2007

	Selection Bias Sub-Study		Misclassification Bias Sub-Study	
	Eligible	Completed Questionnaires Received (% of eligible)	Eligible	Completed Questionnaires Received (% of eligible)
CA	9	0 (0)	0	N/A
CO	3	0	0	N/A
CT	0	N/A	0	N/A
GA	8	5 (63)	0	N/A
MD	2	1 (50)	0	N/A
MN	3	0 (0)	0	N/A
NM	7	1 (14)	0	N/A
NY	0	N/A	0	N/A
OR	3	1 (33)	0	N/A
TN	7	2 (29)	1	0 (0)
Total (Cases)	42	10 (24)	1	0 (0)
Controls	-	48	-	8

FoodNet Data through June

(data transmitted 8/24/2007)

Pathogen	2006		2007		2007 vs 2006	5 year Mean	
	count	rate	count	rate	p-value	count	Rate
Campylobacter	2534	5.64	2559	5.69		2511	5.73
Listeria	53	0.12	45	0.10		47	0.11
***Salmonella* , all serotypes**	2492	5.54	2602	5.79		2485	5.72
***S. T* yphimurium**	467	1.04	387	0.86	0.0062	489	1.13
***S.* Enteritidis**	464	1.03	482	1.07		432	1.00
S. Newport	124	0.28	131	0.29		156	0.37
***S.* Heidelberg**	101	0.22	121	0.27		130	0.31
***S.* Javiana**	50	0.11	40	0.09		62	0.14
***Salmonella* , all others**	1286	2.86	1441	3.21	0.0030	1216	2.78
***Shigella* , all species**	875	1.95	1189	2.65	0.0000	1172	2.74
Shigella sonnei	597	1.33	941	2.09	0.0000	905	2.12
Shigella flexneri	184	0.41	159	0.35		180	0.41
***Shigella* , all others**	94	0.21	89	0.20		87	0.20
STEC O157	159	0.35	149	0.33		152	0.36
STEC non-O157	88	0.20	47	0.10		39	0.08
***Vibrio* , all species**	39	0.09	23	0.05	0.0430	35	0.08
Vibrio parahaemolyticus	18	0.04	12	0.03		15	0.04
Vibrio vulnificus	6	0.01	3	0.01		4	0.01
***Vibrio* , all others**	15	0.03	8	0.02		16	0.04
Yersinia	87	0.19	89	0.20		82	0.19
Cryptosporidium	306	0.68	276	0.61		218	0.49
Cyclospora	18	0.04	5	0.01	0.0066	20	0.05

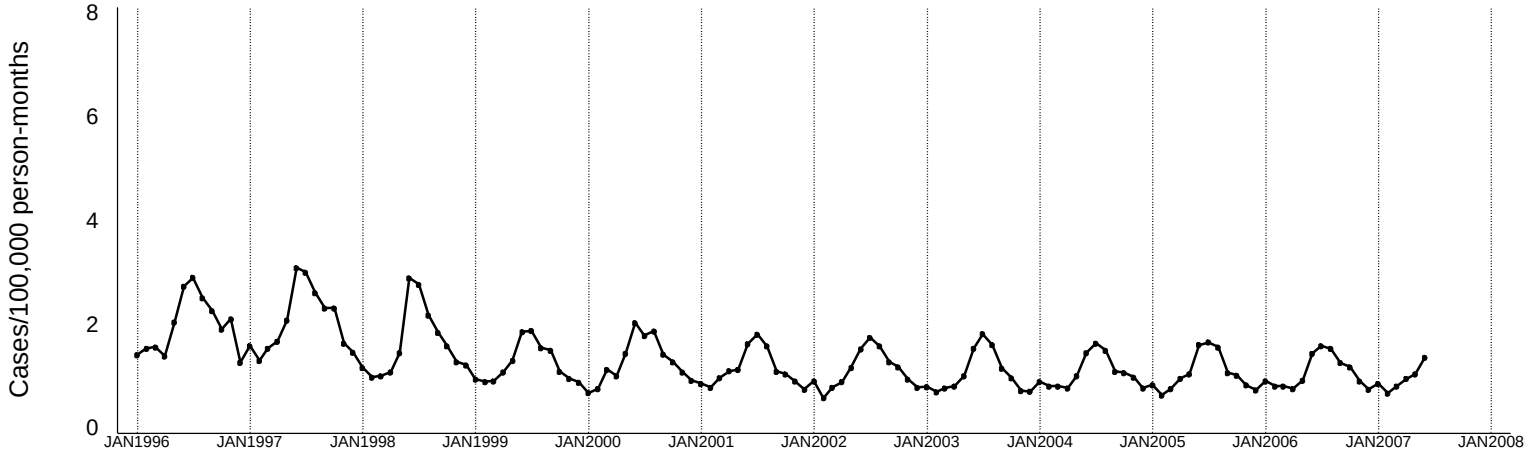
FoodNet Data through June
(data transmitted 8/24/2007)

Top 20 *Salmonella* Serotypes (ranked by 2006 year end counts)	2006		2007		2007 vs 2006
	# (%)	Rate	# (%)	Rate	p-value
***S.* Typhimurium**	467 (18.74)	1.04	387 (14.87)	0.86	0.0062
***S.* Enteritidis**	464 (18.62)	1.03	482 (18.52)	1.07	
***S.* Newport**	124 (4.98)	0.28	131 (5.03)	0.29	
***S.* Javiana**	50 (2.01)	0.11	40 (1.54)	0.09	
***S.* I 4,[5],12:i:-**	115 (4.61)	0.26	124 (4.77)	0.28	
***S.* Montevideo**	79 (3.17)	0.18	102 (3.92)	0.23	
***S.* Heidelberg**	101 (4.05)	0.22	121 (4.65)	0.27	
***S.* Muenchen**	40 (1.61)	0.09	59 (2.27)	0.13	
***S.* Mississippi**	52 (2.09)	0.12	8 (0.31)	0.02	0.0000
***S.* Saintpaul**	44 (1.77)	0.10	43 (1.65)	0.10	
***S.* Oranienburg**	37 (1.48)	0.08	40 (1.54)	0.09	
***S.* Infantis**	45 (1.81)	0.10	28 (1.08)	0.06	0.0474
***S.* Braenderup**	40 (1.61)	0.09	42 (1.61)	0.09	
***S.* Agona**	25 (1.00)	0.06	38 (1.46)	0.08	
***S.* Thompson**	30 (1.20)	0.07	18 (0.69)	0.04	
***S.* Paratyphi B var L(+) Tartrate+**	40 (1.61)	0.09	23 (0.88)	0.05	0.0328
***S.* Tennessee**	11 (0.44)	0.02	119 (4.57)	0.26	0.0000
***S.* Hadar**	35 (1.40)	0.08	20 (0.77)	0.04	0.0440
***S.* Bareilly**	11 (0.44)	0.02	8 (0.31)	0.02	
***S.* Anatum**	14 (0.56)	0.03	22 (0.85)	0.05	

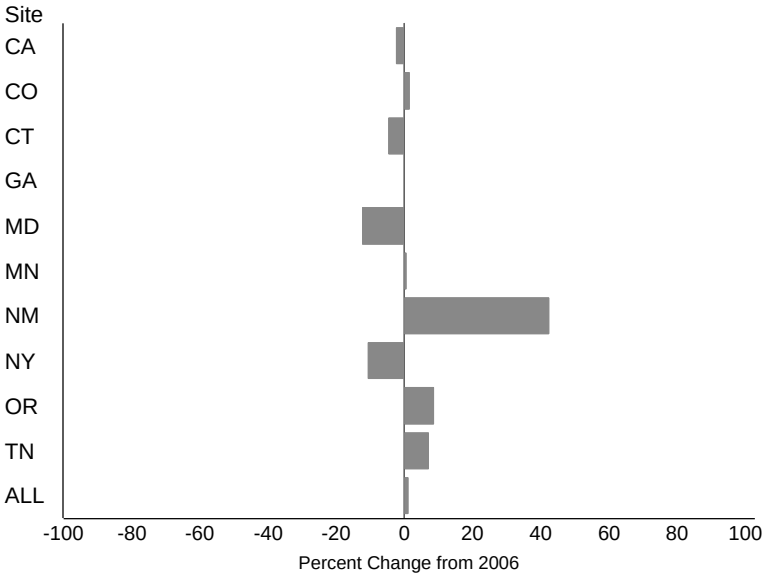
Overall Summary	2006		2007	
	# (%)	Rate	# (%)	Rate
Total number of *Samonella* cases	2492	5.54	2602	5.79
Fully Serotyped	2286 (91.73)		2318 (89.09)	
Partially Serotyped	60 (2.41)		56 (2.15)	
Rough/Nonmotil	9 (0.36)		12 (0.46)	
Not Serotyped (missing or unknown)	137 (5.50)		216 (8.30)	

Campylobacter

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

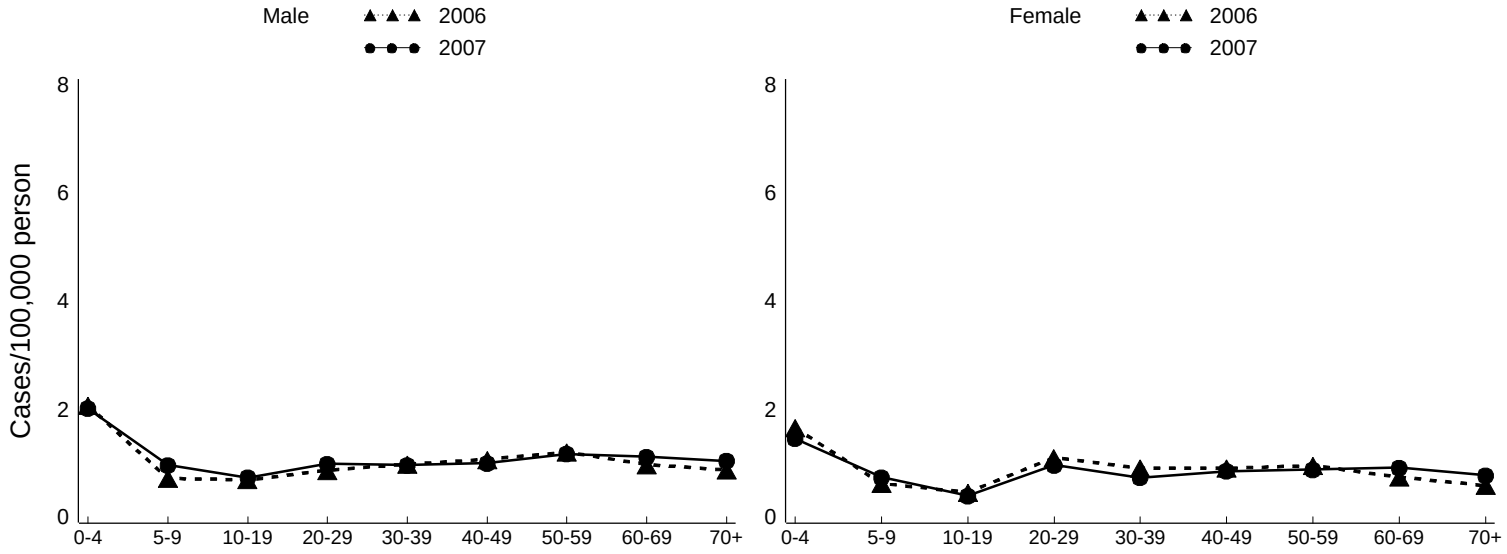


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	**Cases**	**Rate^**	**Cases**	**Rate^**	**Cases**	**Rate^**
CA	428	13.35	438	13.66	441	13.76
CO	204	7.887	201	7.771	188	7.370
CT	225	6.410	236	6.723	239	6.853
GA	274	3.020	274	3.020	280	3.159
MD	151	2.696	172	3.071	170	3.068
MN	411	8.007	409	7.968	387	7.605
NM	158	8.193	111	5.756	142	7.401
NY	195	4.527	218	5.060	204	5.061
OR	329	9.036	303	8.322	290	8.071
TN	184	3.086	172	2.884	169	3.145
ALL	2559	5.693	2534	5.637	2511	5.730

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

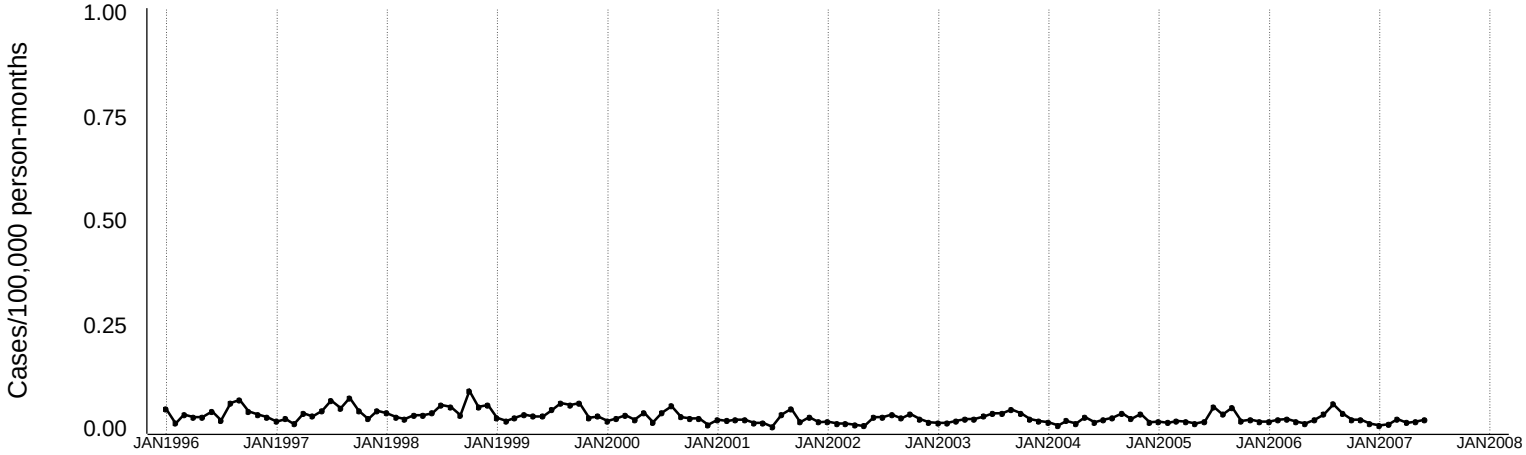


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

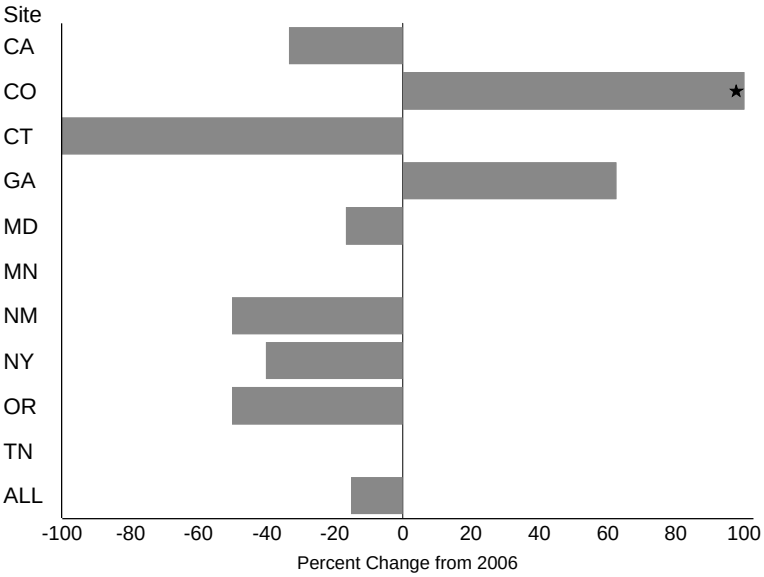
Report date: 06-September-2007

Listeria

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

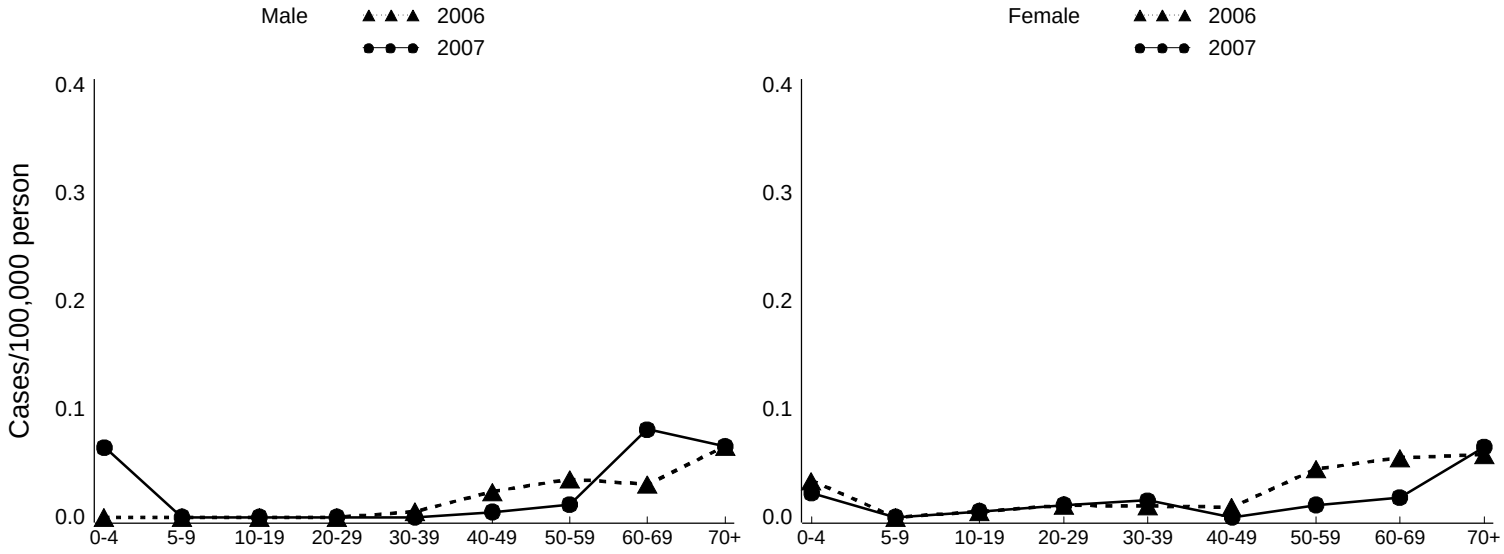


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	4	0.125	6	0.187	7	0.231
CO	5	0.193	1	0.039	1	0.055
CT	0	0.000	8	0.228	4	0.126
GA	13	0.143	8	0.088	10	0.117
MD	5	0.089	6	0.107	7	0.134
MN	4	0.078	4	0.078	2	0.043
NM	1	0.052	2	0.104	1	0.069
NY	3	0.070	5	0.116	4	0.111
OR	3	0.082	6	0.165	3	0.094
TN	7	0.117	7	0.117	5	0.085
ALL	45	0.100	53	0.118	47	0.108

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

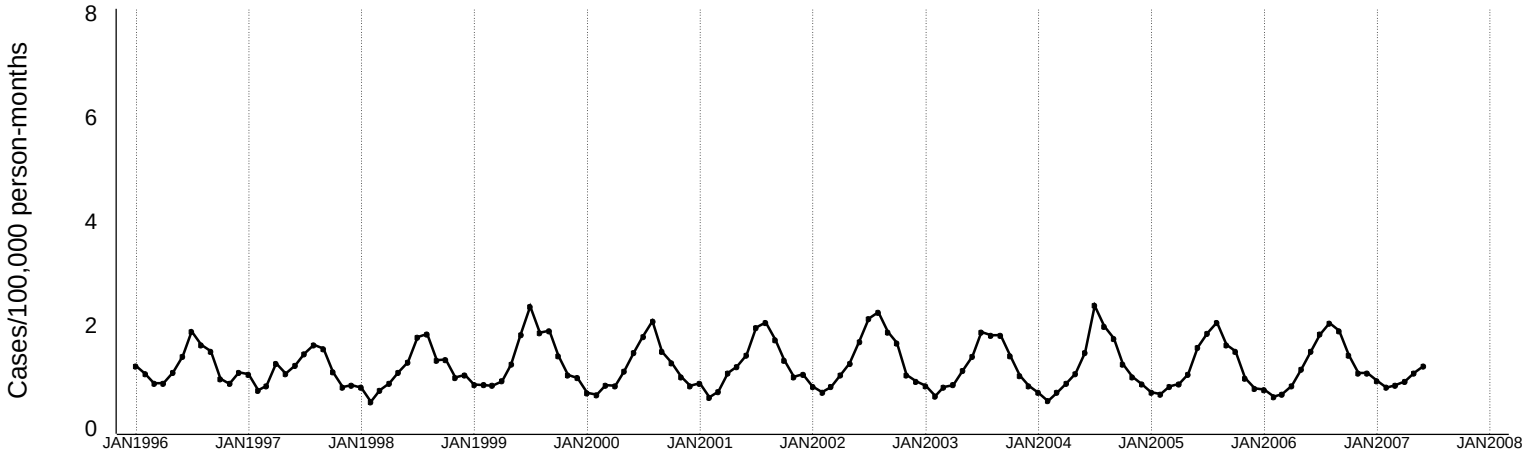


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

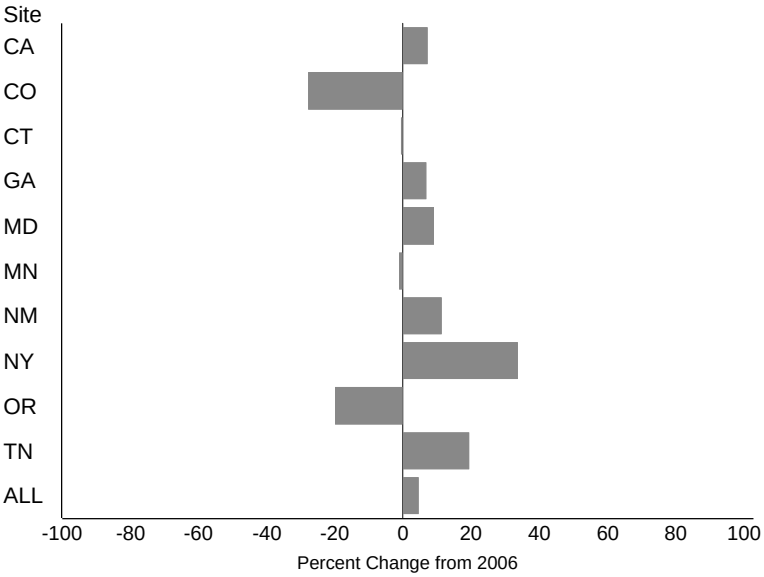
Report date: 06-September-2007

Salmonella, all serotypes

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

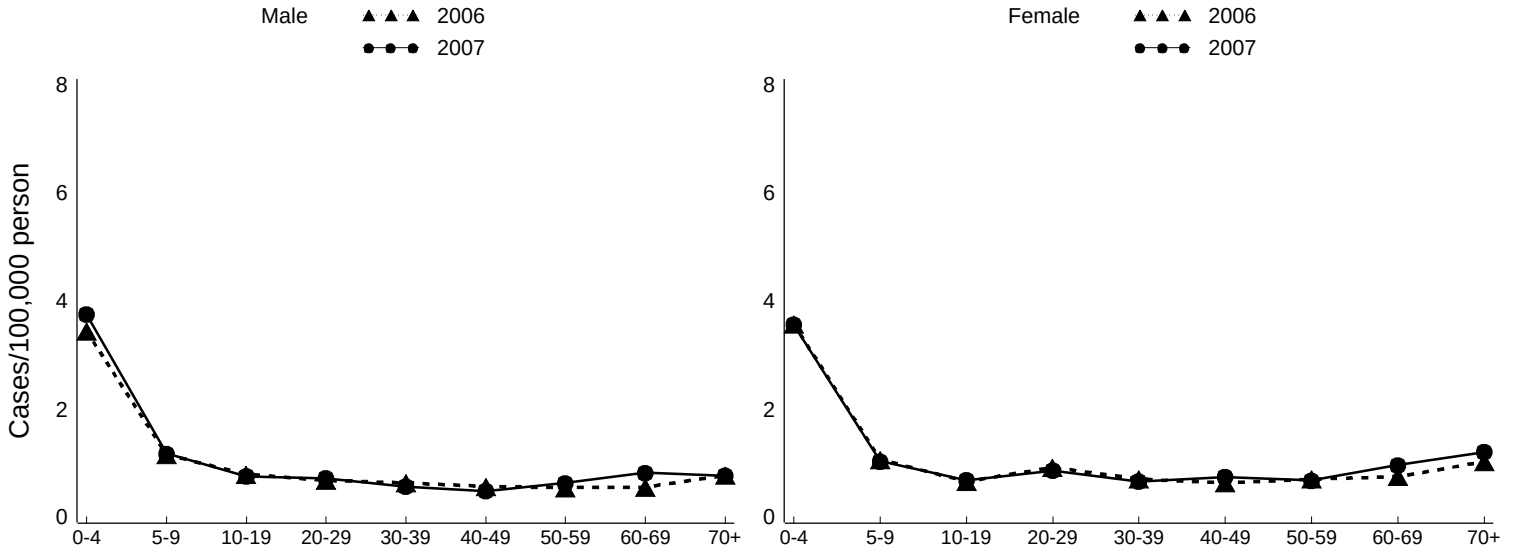


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	213	6.64	199	6.21	210	6.54
CO	144	5.57	199	7.69	143	5.60
CT	182	5.18	183	5.21	183	5.24
GA	605	6.67	567	6.25	582	6.56
MD	283	5.05	260	4.64	309	5.57
MN	320	6.23	323	6.29	271	5.32
NM	110	5.70	99	5.13	104	5.40
NY	251	5.83	188	4.36	202	5.15
OR	146	4.01	182	5.00	178	4.96
TN	348	5.84	292	4.90	303	5.84
ALL	2602	5.79	2492	5.54	2485	5.72

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

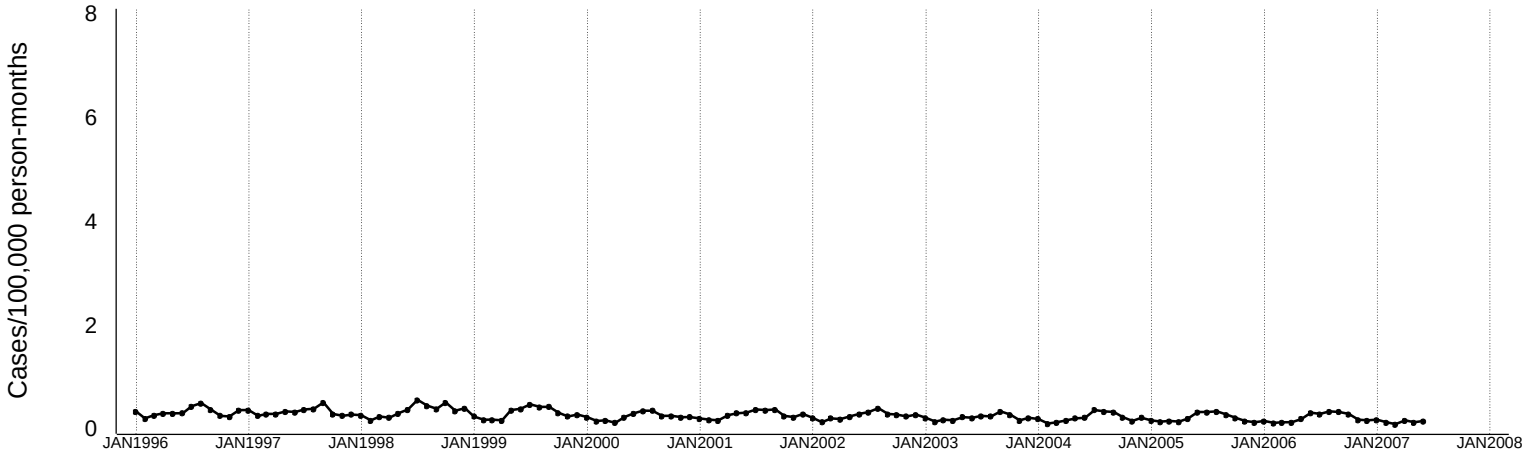


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

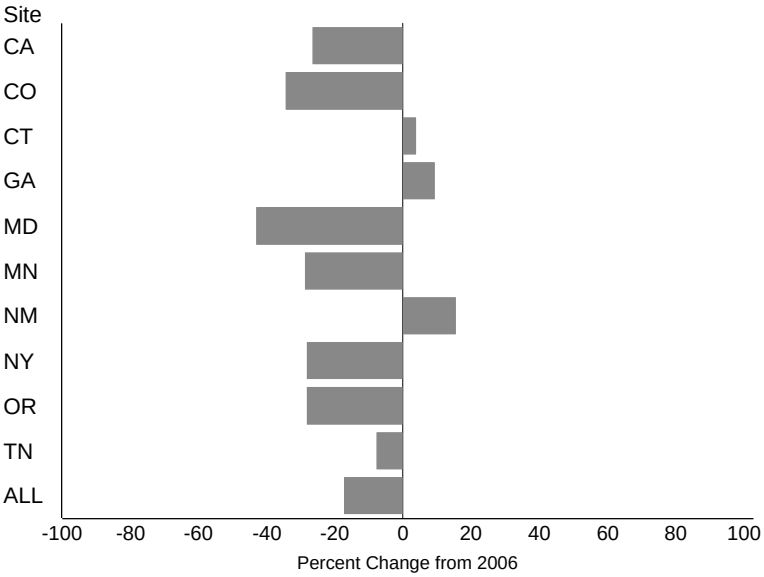
Report date: 06-September-2007

Salmonella Typhimurium

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

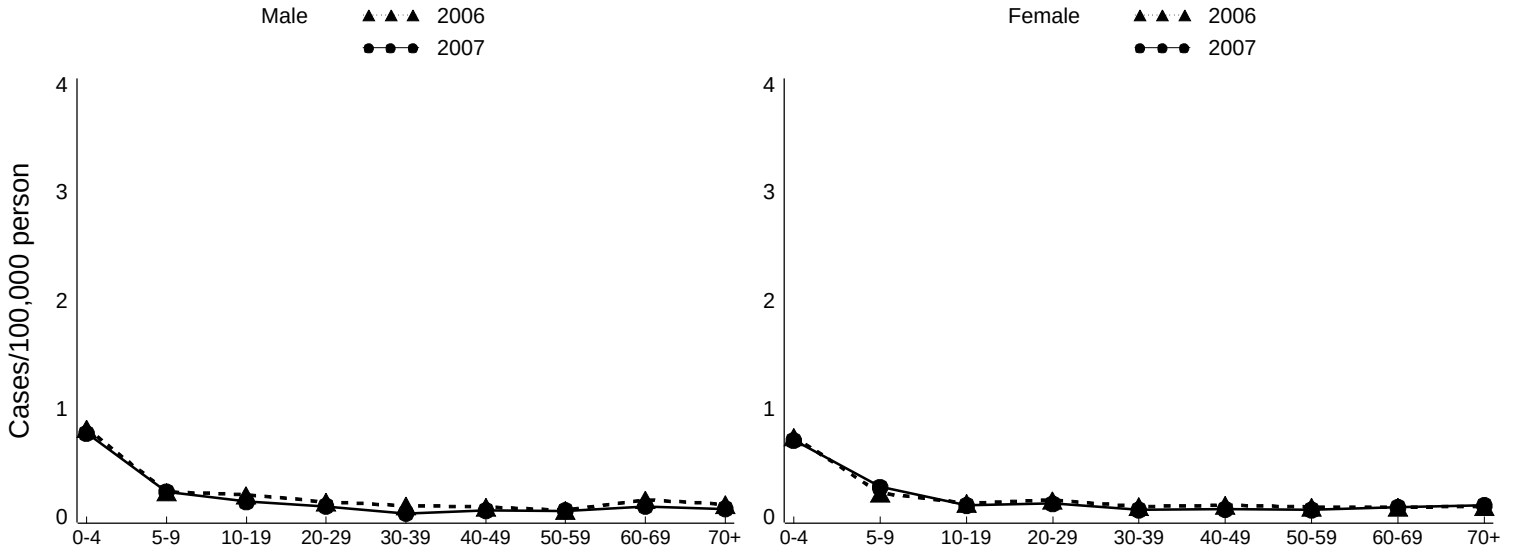


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	28	0.87	38	1.19	38	1.20
CO	27	1.04	41	1.59	32	1.24
CT	28	0.80	27	0.77	35	1.00
GA	107	1.18	98	1.08	109	1.23
MD	32	0.57	56	1.00	57	1.03
MN	55	1.07	77	1.50	62	1.23
NM	15	0.78	13	0.67	17	0.90
NY	23	0.53	32	0.74	33	0.82
OR	23	0.63	32	0.88	35	0.97
TN	49	0.82	53	0.89	71	1.40
ALL	387	0.86	467	1.04	489	1.13

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

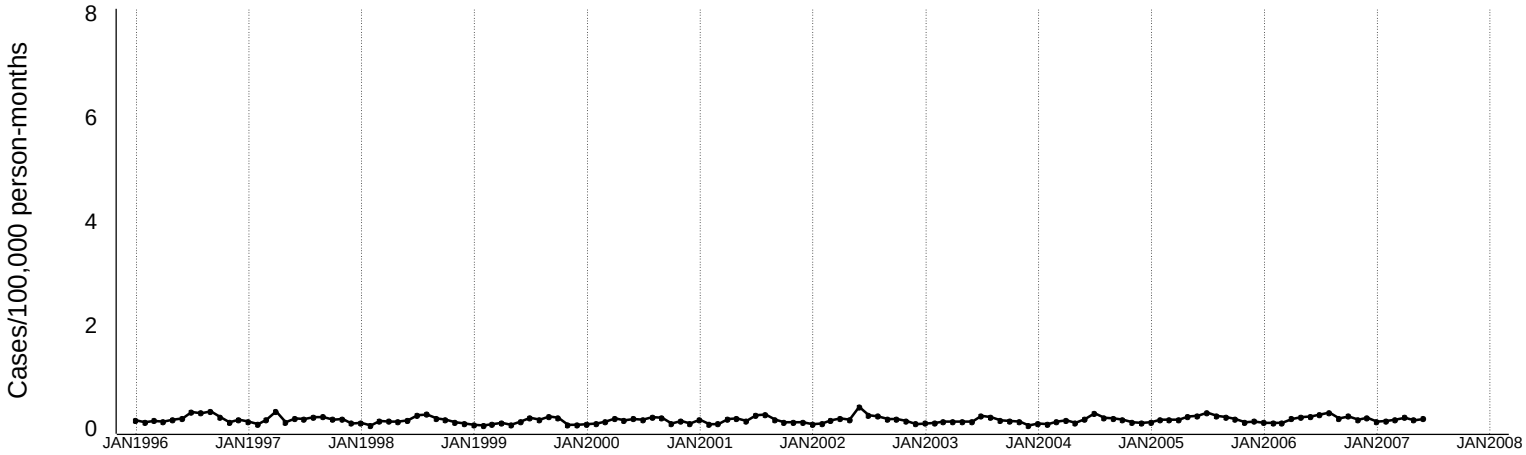


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

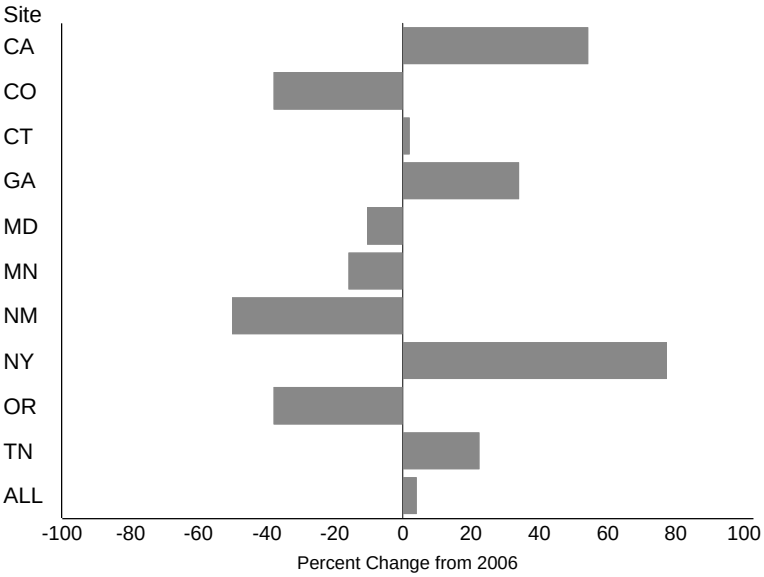
Report date: 06-September-2007

Salmonella Enteritidis

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

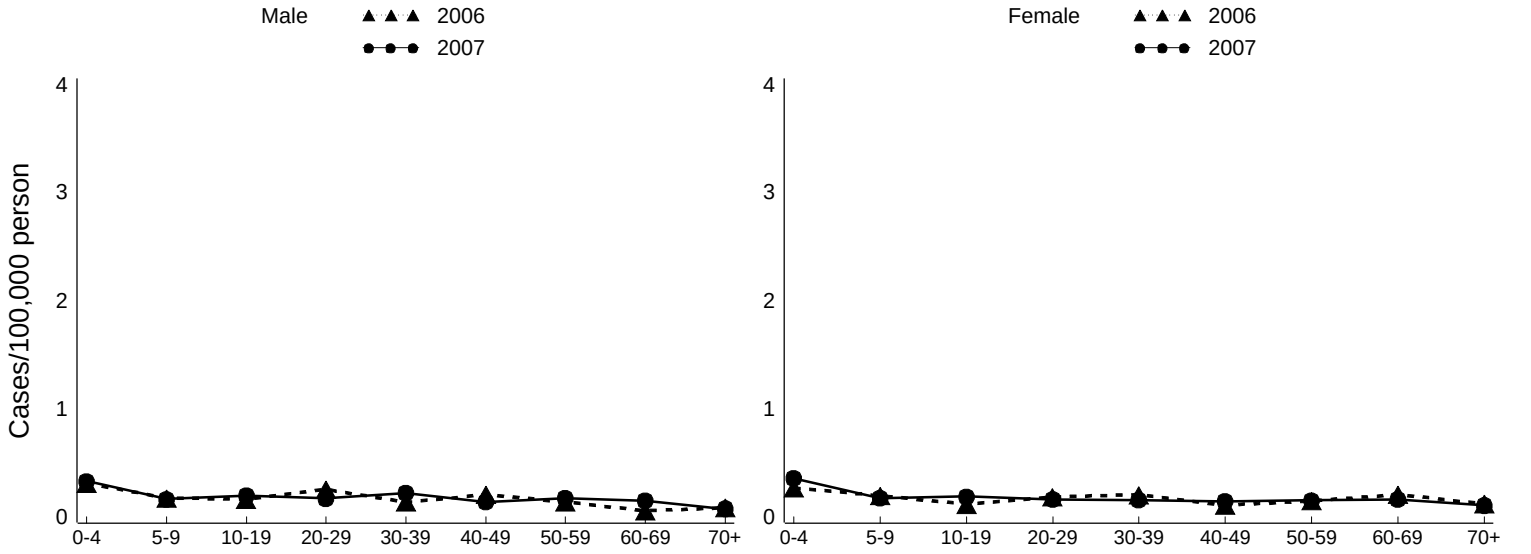


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	37	1.154	24	0.749	31	0.966
CO	23	0.889	37	1.430	28	1.097
CT	57	1.624	56	1.595	47	1.339
GA	71	0.783	53	0.584	44	0.490
MD	69	1.232	77	1.375	93	1.675
MN	74	1.442	88	1.714	59	1.150
NM	6	0.311	12	0.622	11	0.573
NY	78	1.811	44	1.021	56	1.496
OR	23	0.632	37	1.016	30	0.829
TN	44	0.738	36	0.604	34	0.613
ALL	482	1.072	464	1.032	432	1.000

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

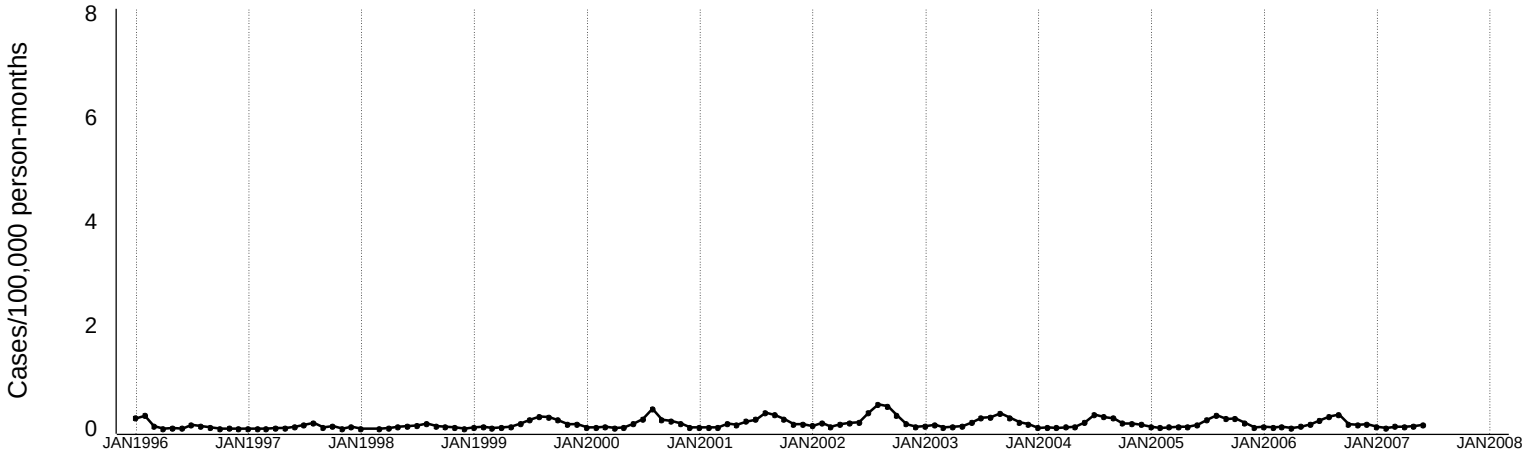


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

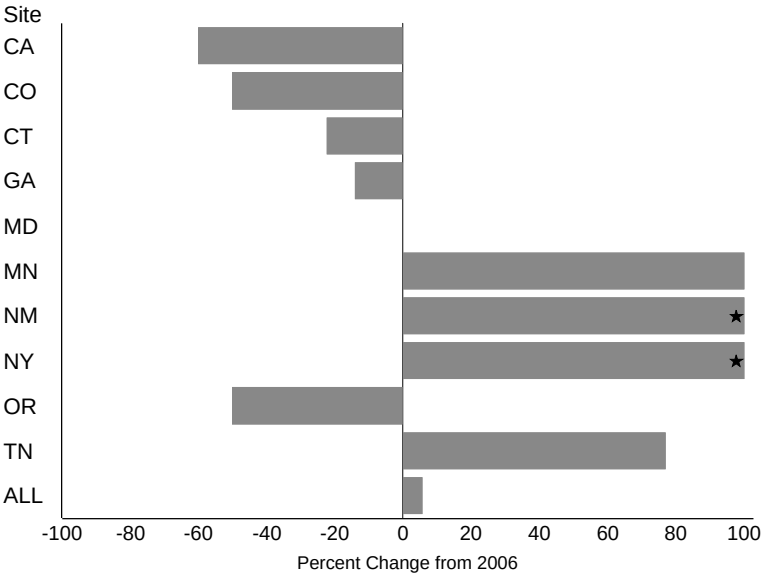
Report date: 06-September-2007

Salmonella Newport

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

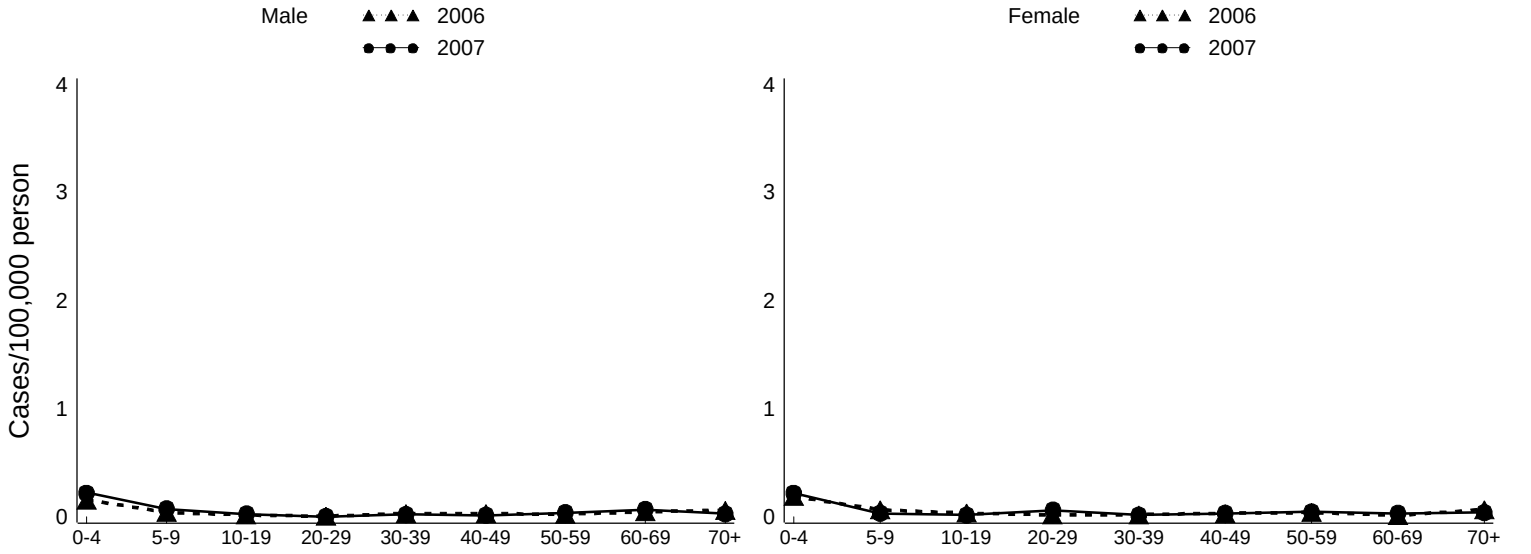


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	6	0.187	15	0.468	14	0.430
CO	6	0.232	12	0.464	8	0.314
CT	7	0.199	9	0.256	11	0.327
GA	37	0.408	43	0.474	53	0.594
MD	5	0.089	5	0.089	10	0.177
MN	12	0.234	6	0.117	13	0.256
NM	14	0.726	6	0.311	6	0.329
NY	16	0.371	5	0.116	14	0.376
OR	5	0.137	10	0.275	14	0.398
TN	23	0.386	13	0.218	13	0.248
ALL	131	0.291	124	0.276	156	0.365

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

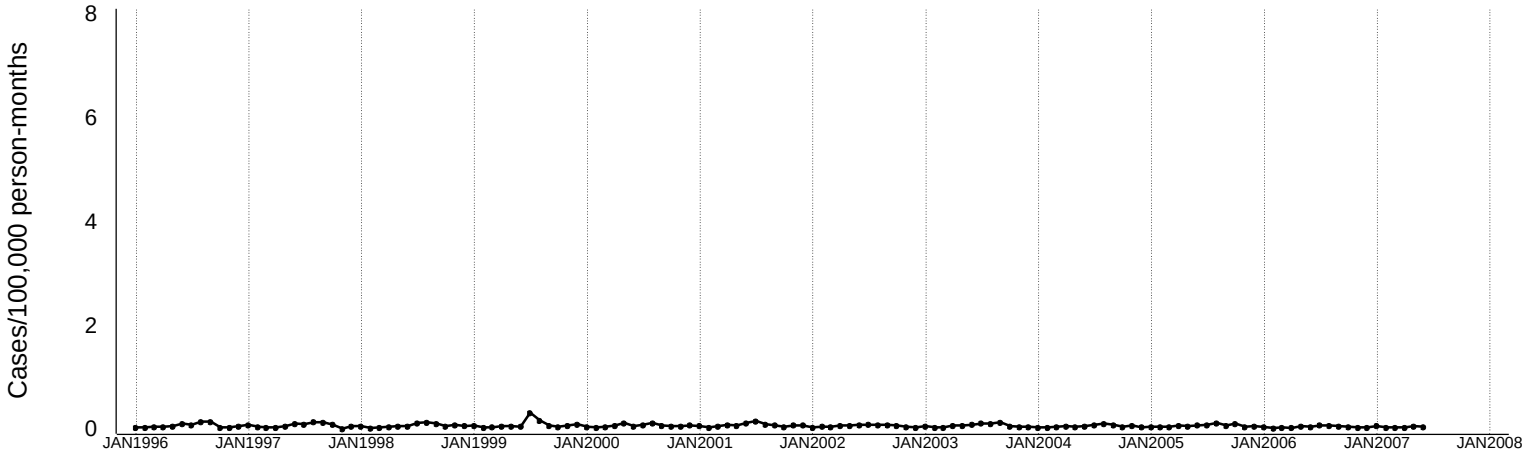


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

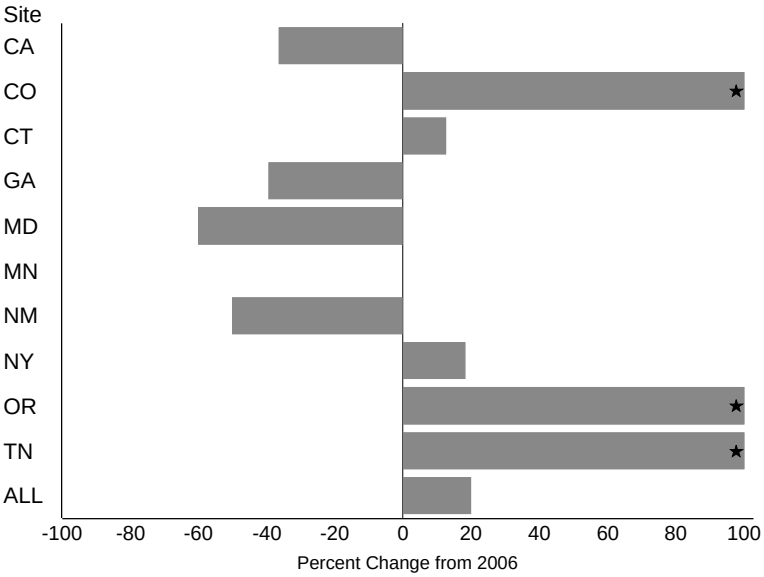
Report date: 06-September-2007

Salmonella Heidelberg

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

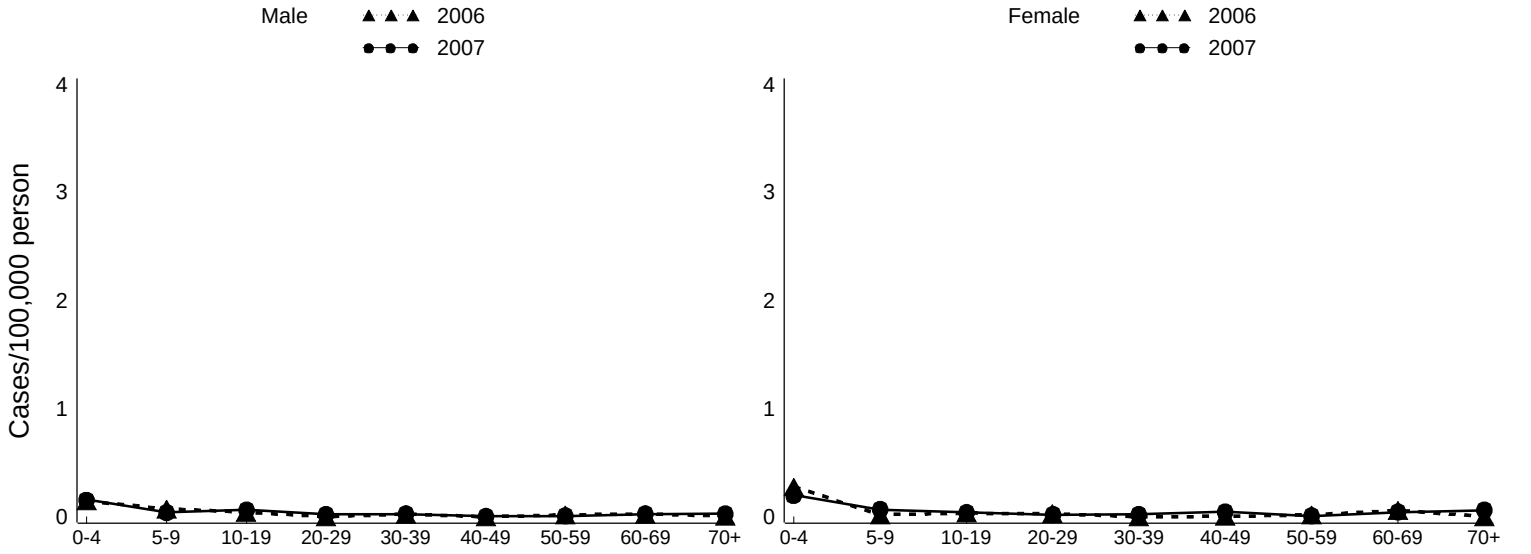


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	7	0.218	11	0.343	19	0.598
CO	10	0.387	4	0.155	6	0.221
CT	9	0.256	8	0.228	9	0.246
GA	17	0.187	28	0.309	32	0.356
MD	4	0.071	10	0.179	12	0.210
MN	10	0.195	10	0.195	12	0.236
NM	1	0.052	2	0.104	2	0.087
NY	13	0.302	11	0.255	14	0.349
OR	13	0.357	4	0.110	10	0.289
TN	37	0.620	13	0.218	16	0.311
ALL	121	0.269	101	0.225	130	0.305

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

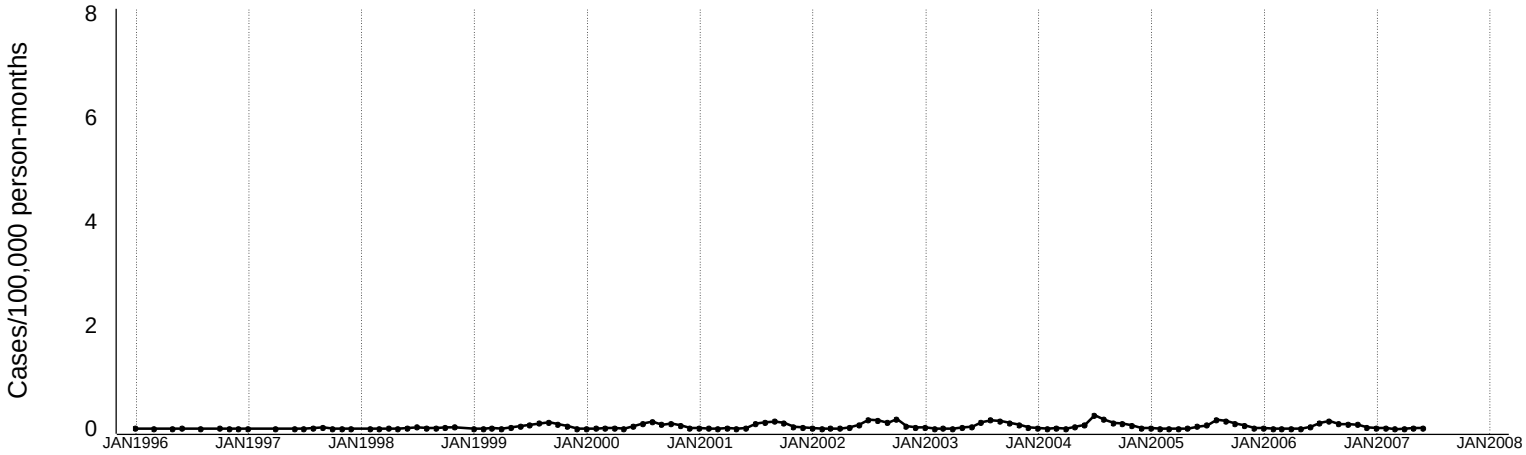


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

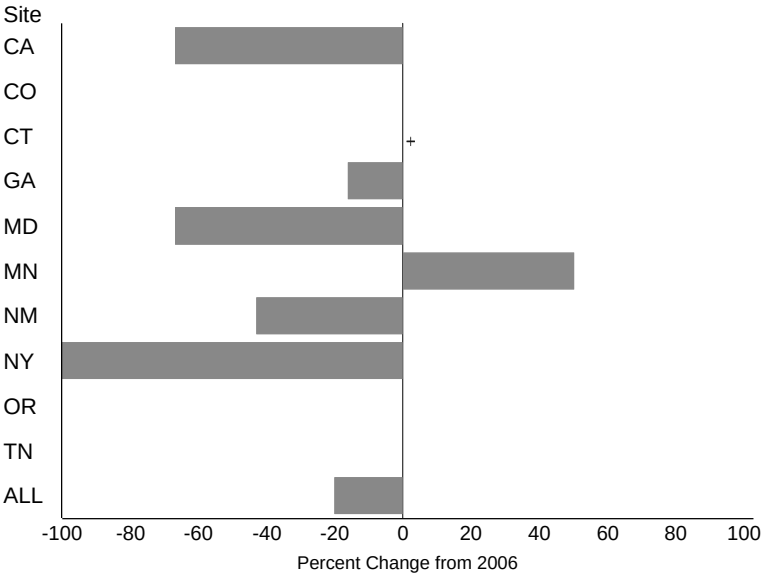
Report date: 06-September-2007

Salmonella Javiana

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

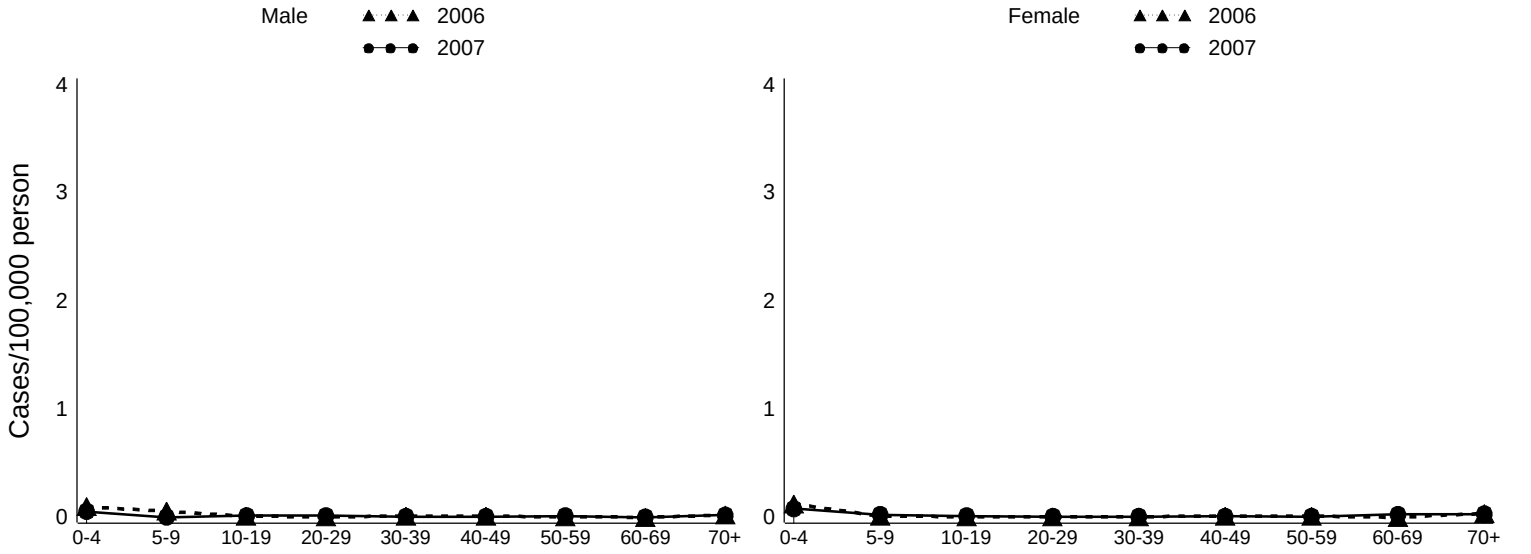


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	1	0.031	3	0.094	2	0.069
CO	3	0.116	3	0.116	1	0.039
CT	1	0.028	0	0.000	2	0.052
GA	21	0.231	25	0.276	36	0.407
MD	1	0.018	3	0.054	4	0.080
MN	3	0.058	2	0.039	2	0.047
NM	4	0.207	7	0.363	6	0.313
NY	0	0.000	1	0.023	2	0.045
OR	1	0.027	1	0.027	1	0.022
TN	5	0.084	5	0.084	6	0.113
ALL	40	0.089	50	0.111	62	0.140

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex



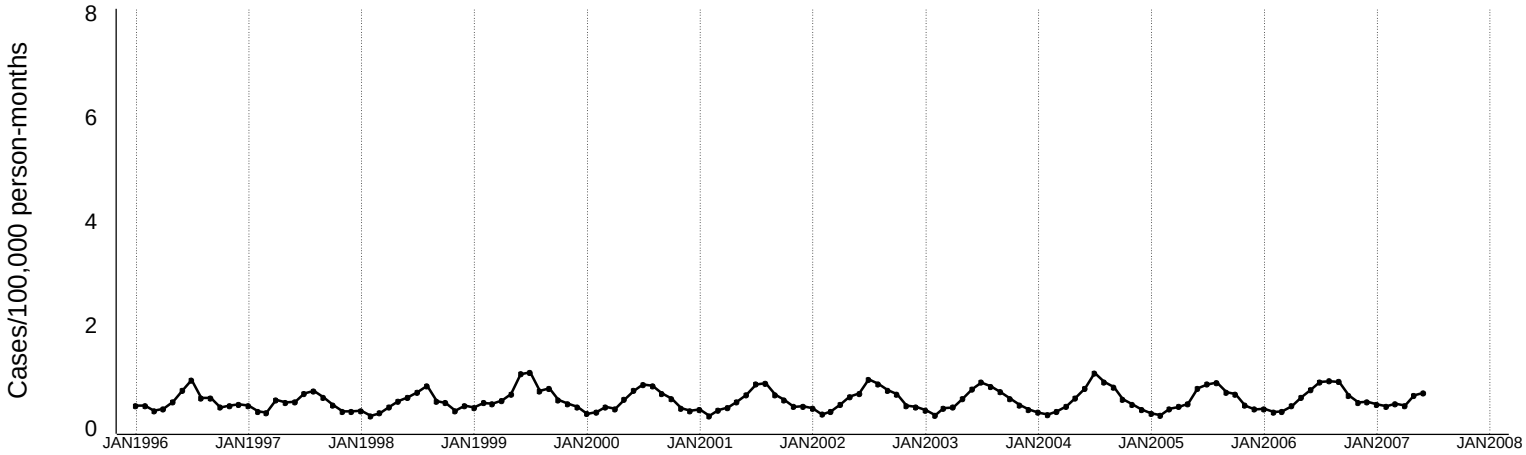
Data source: Preliminary FoodNet data, subject to change, not for public distribution.

Report date: 06-September-2007

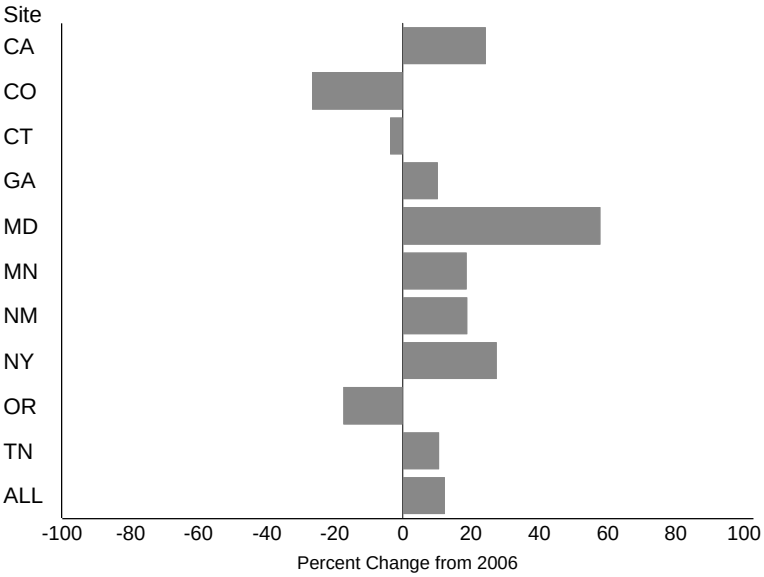
Salmonella, all others

30

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

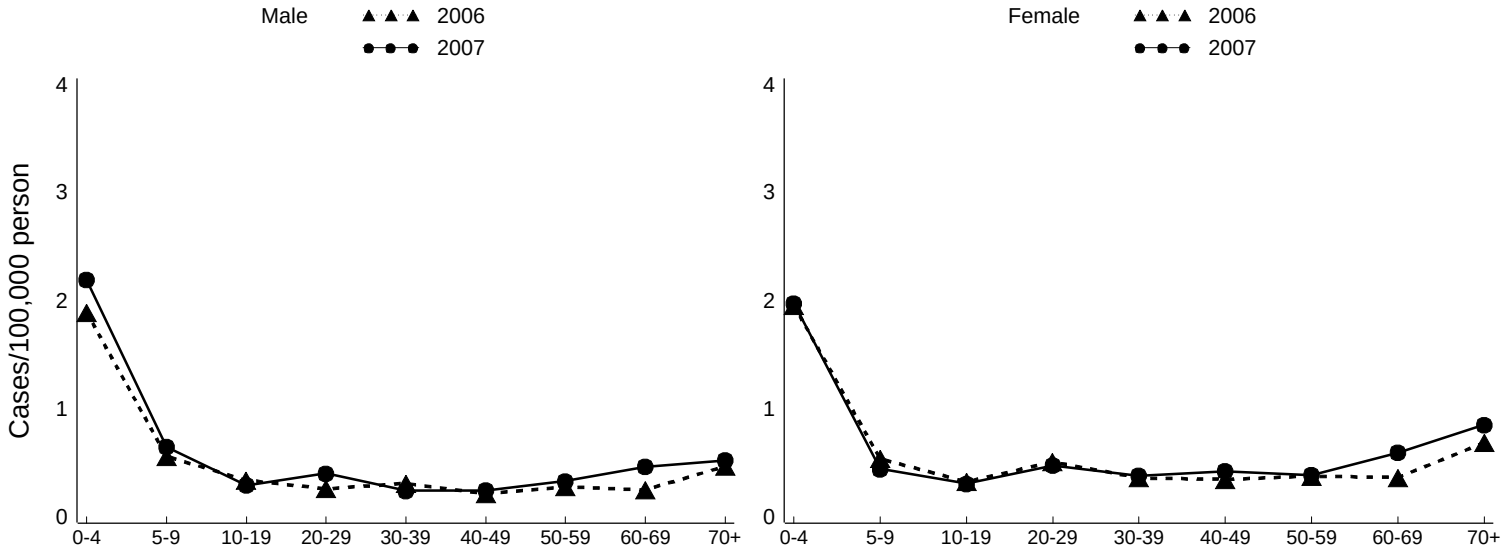


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	**Cases**	**Rate^**	**Cases**	**Rate^**	**Cases**	**Rate^**
CA	134	4.18	108	3.37	105	3.28
CO	75	2.90	102	3.94	69	2.68
CT	80	2.28	83	2.36	80	2.28
GA	352	3.88	320	3.53	310	3.49
MD	172	3.07	109	1.95	133	2.40
MN	166	3.23	140	2.73	122	2.40
NM	70	3.63	59	3.06	61	3.20
NY	121	2.81	95	2.21	84	2.06
OR	81	2.22	98	2.69	88	2.46
TN	190	3.19	172	2.88	164	3.16
ALL	1441	3.21	1286	2.86	1216	2.78

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

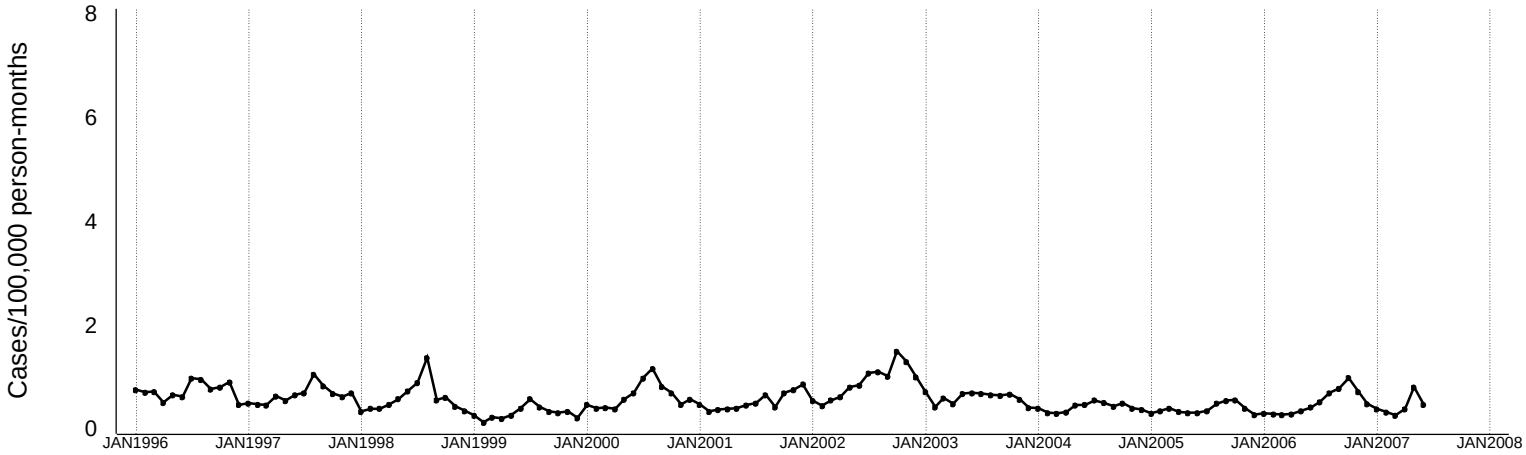


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

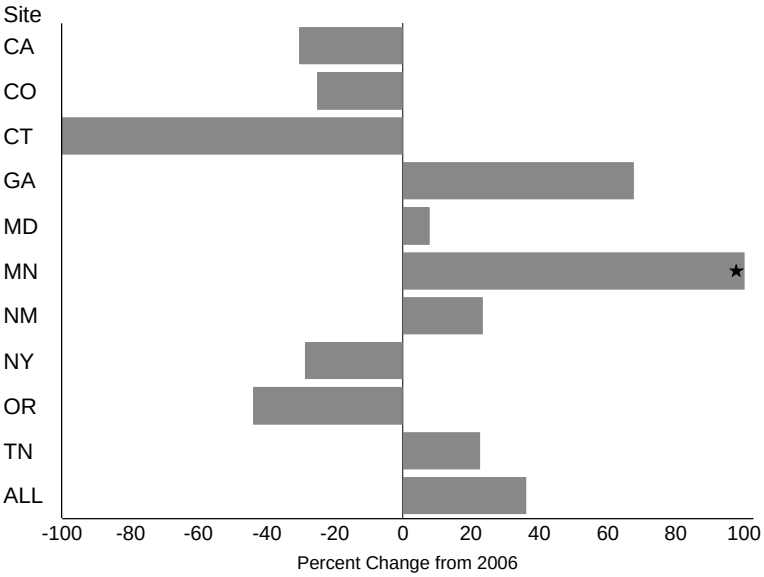
Report date: 06-September-2007

Shigella, all species

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

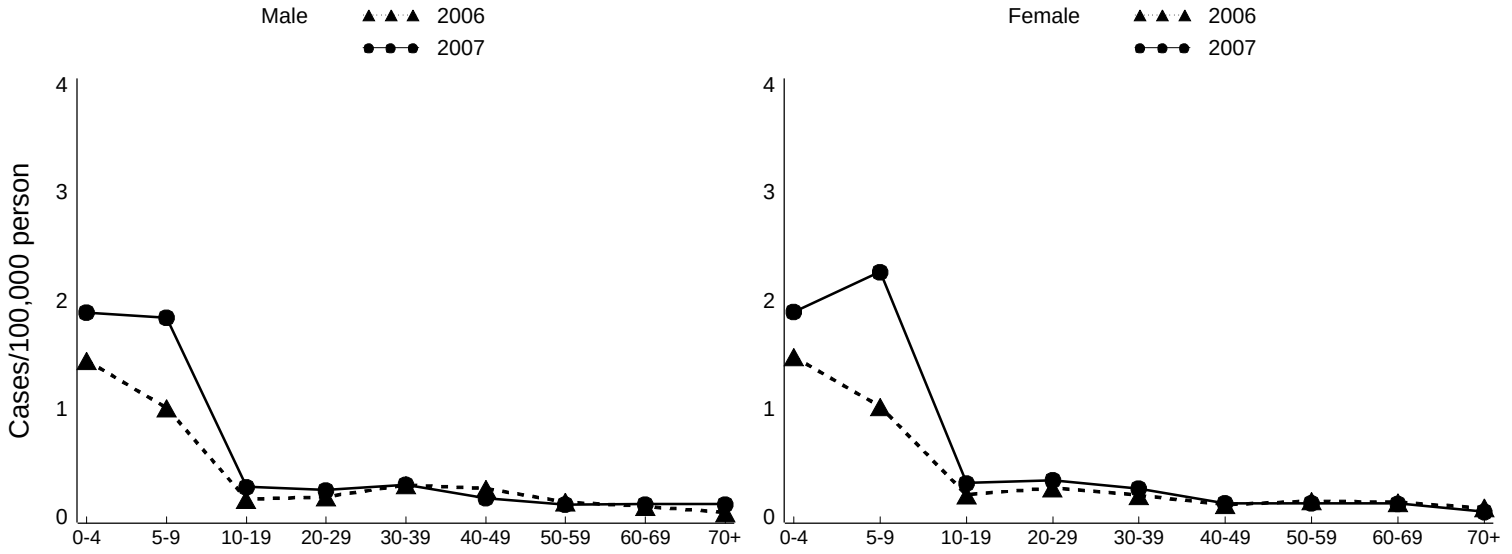


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	69	2.15	99	3.09	114	3.55
CO	36	1.39	48	1.86	38	1.50
CT	0	0.00	25	0.71	27	0.77
GA	744	8.20	444	4.89	471	5.34
MD	42	0.75	39	0.70	157	2.86
MN	132	2.57	50	0.97	54	1.07
NM	53	2.75	43	2.23	51	2.66
NY	15	0.35	21	0.49	56	1.34
OR	27	0.74	48	1.32	35	0.96
TN	71	1.19	58	0.97	171	3.00
ALL	1189	2.65	875	1.95	1172	2.74

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

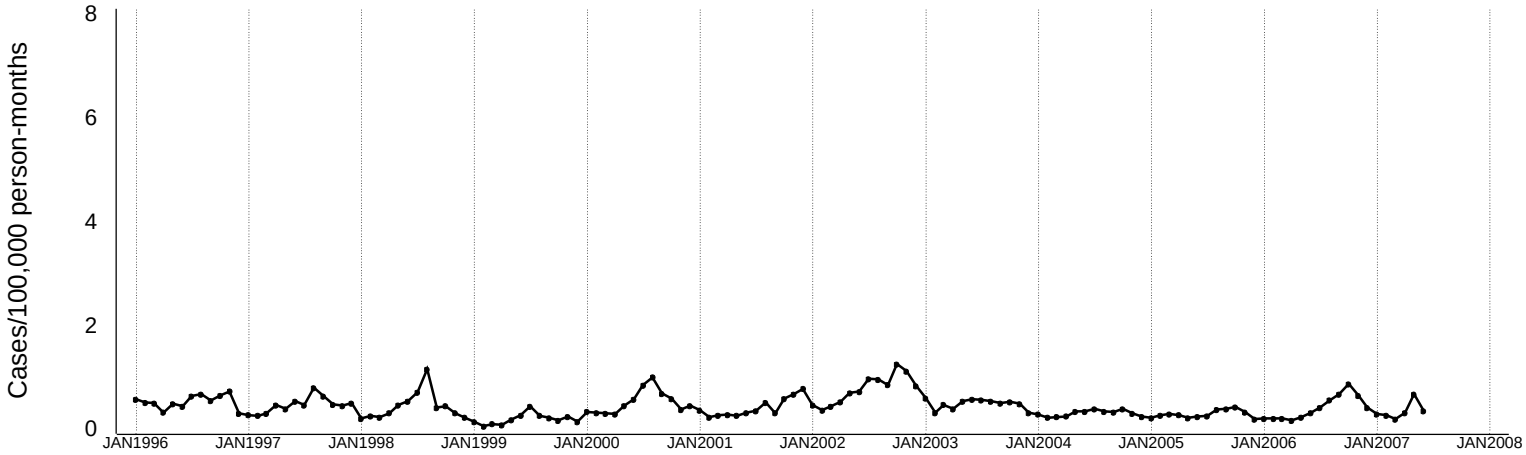


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

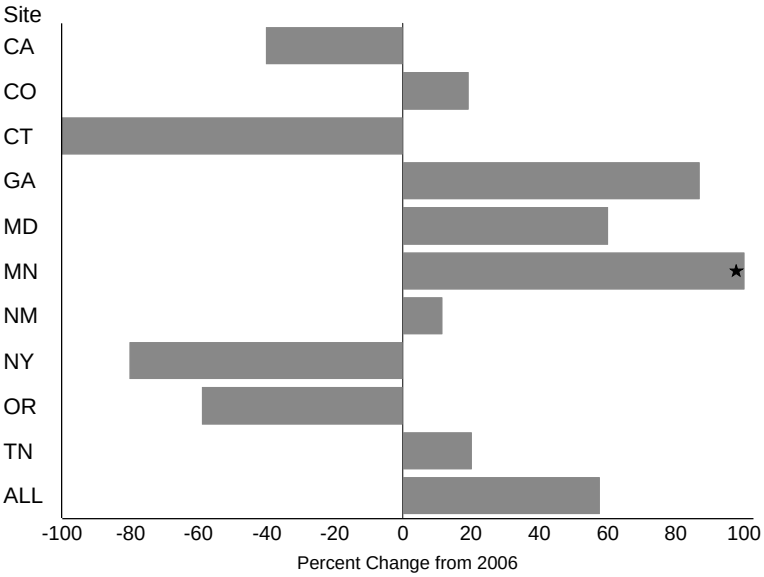
Report date: 06-September-2007

Shigella sonnei

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

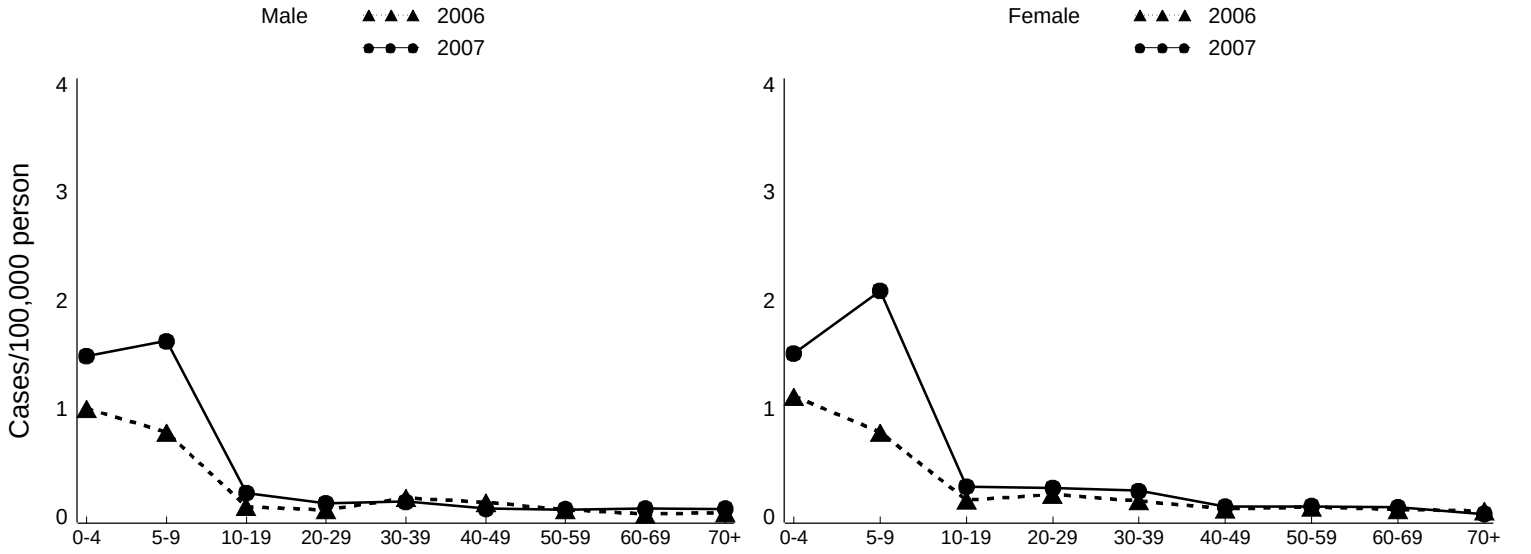


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	27	0.842	45	1.404	54	1.670
CO	25	0.967	21	0.812	22	0.866
CT	0	0.000	12	0.342	15	0.441
GA	637	7.021	341	3.759	384	4.359
MD	24	0.429	15	0.268	134	2.444
MN	117	2.279	29	0.565	39	0.774
NM	39	2.022	35	1.815	36	1.877
NY	4	0.093	20	0.464	50	1.200
OR	14	0.385	34	0.934	20	0.556
TN	54	0.906	45	0.755	151	2.607
ALL	941	2.093	597	1.328	905	2.123

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

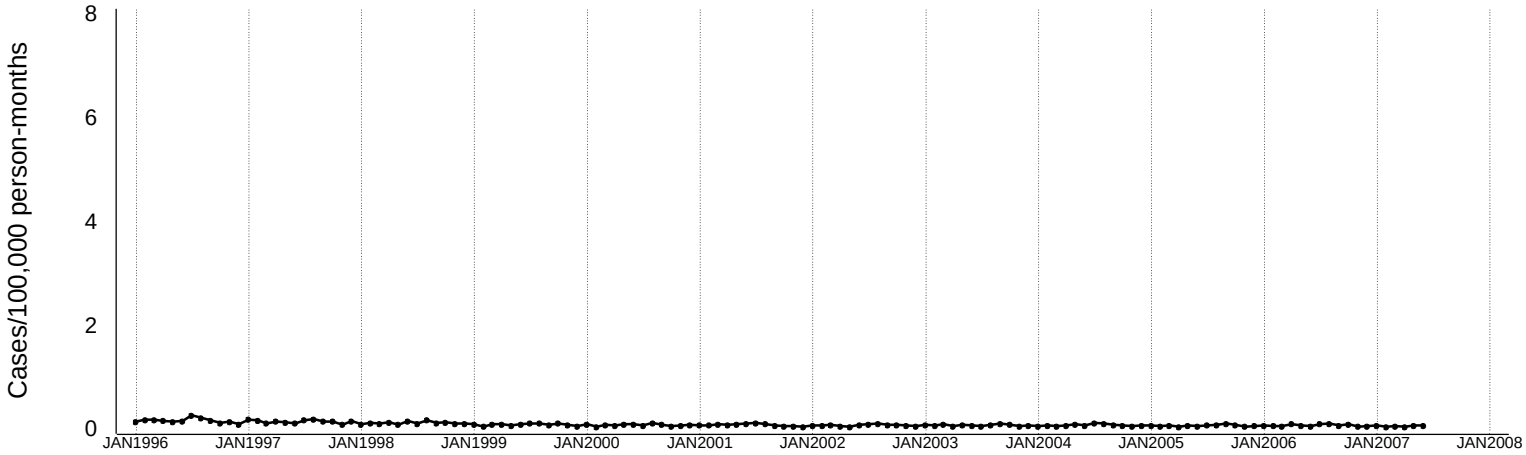


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

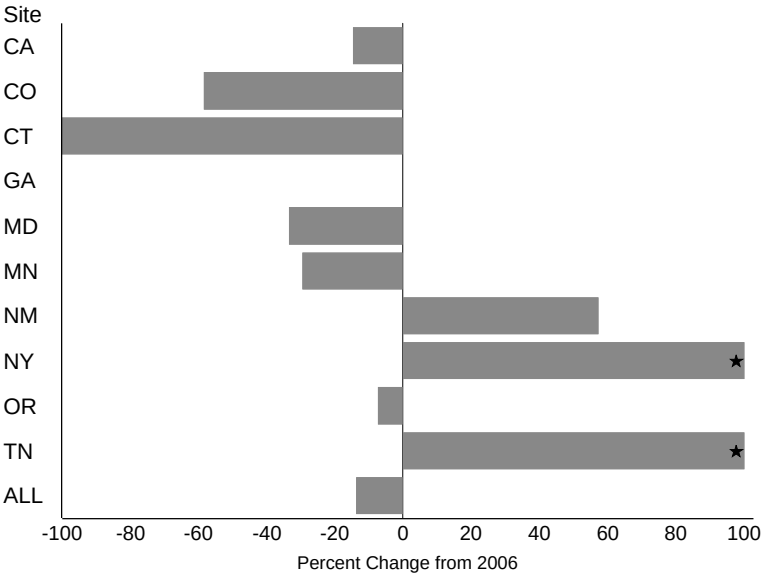
Report date: 06-September-2007

Shigella flexneri

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

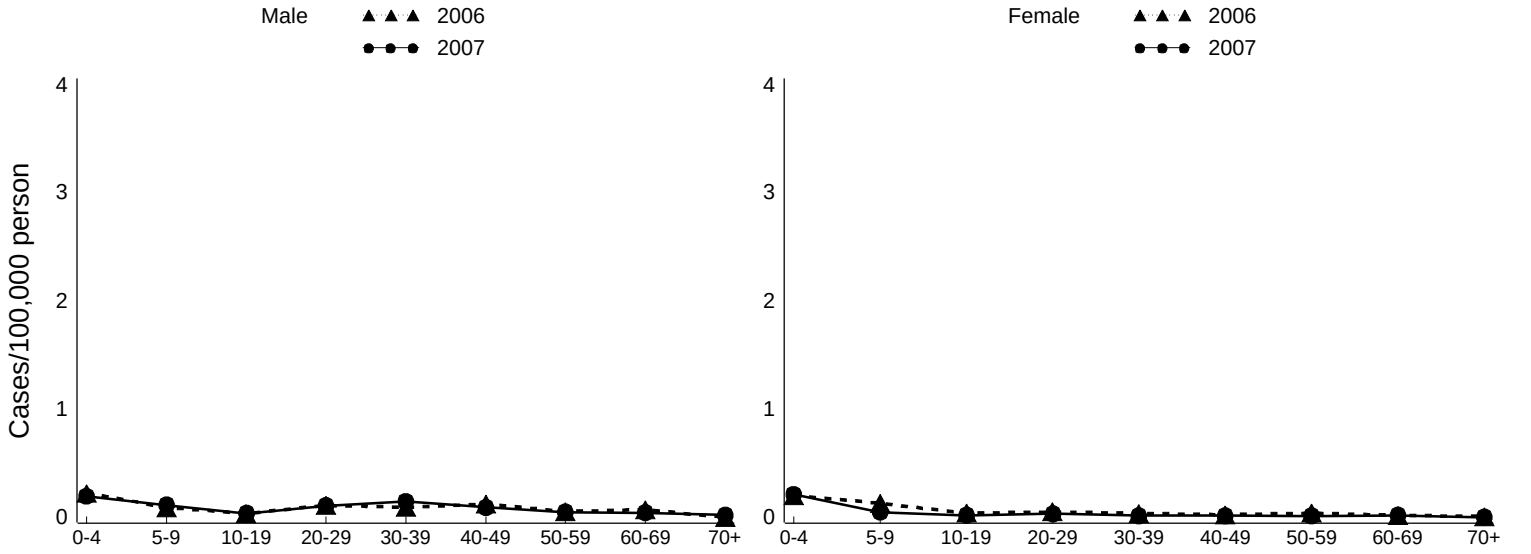


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	41	1.279	48	1.497	50	1.565
CO	10	0.387	24	0.928	15	0.571
CT	0	0.000	12	0.342	9	0.269
GA	36	0.397	36	0.397	38	0.426
MD	14	0.250	21	0.375	18	0.324
MN	12	0.234	17	0.331	13	0.256
NM	11	0.570	7	0.363	13	0.679
NY	9	0.209	1	0.023	5	0.114
OR	13	0.357	14	0.385	14	0.395
TN	13	0.218	4	0.067	6	0.120
ALL	159	0.354	184	0.409	180	0.409

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

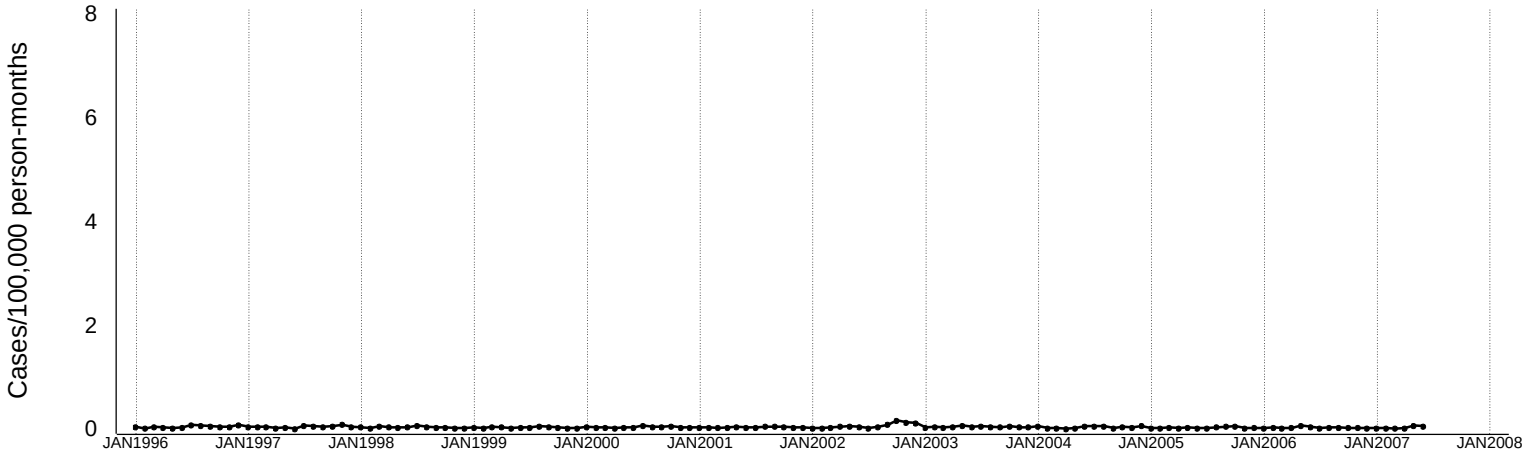


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

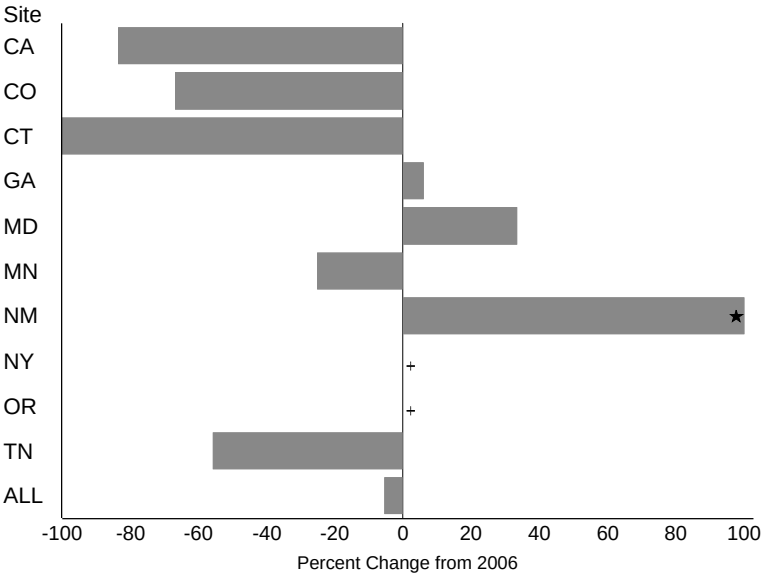
Report date: 06-September-2007

Shigella, all others

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

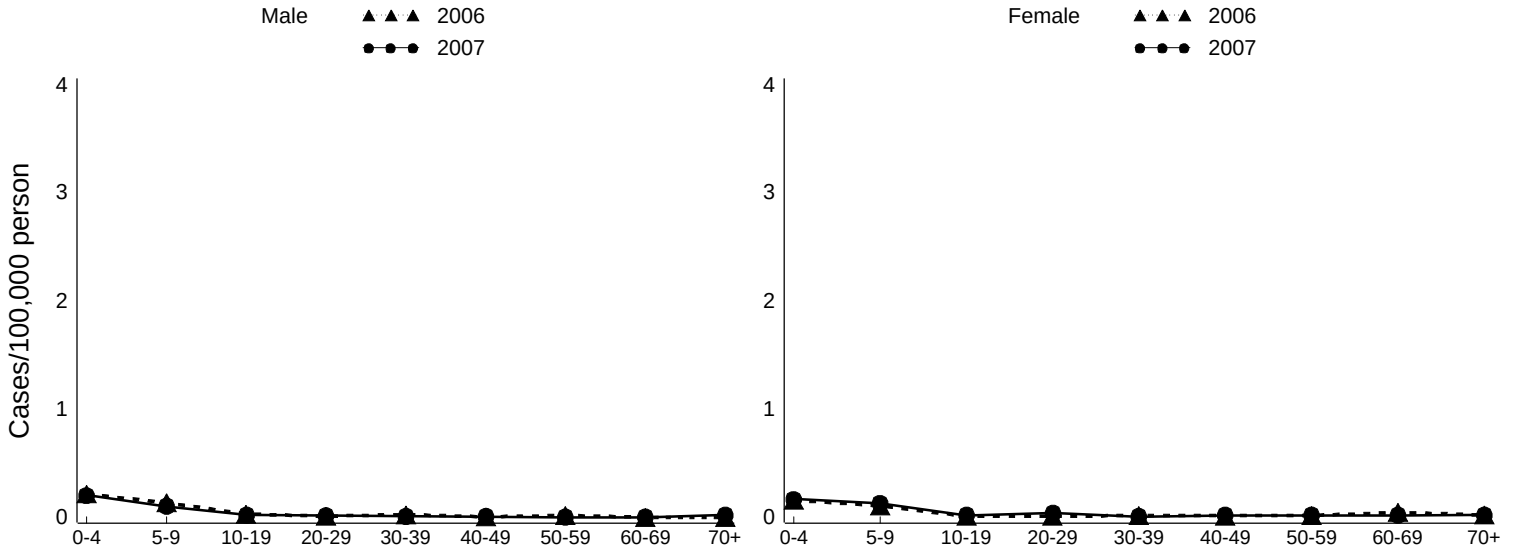


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	1	0.031	6	0.187	10	0.318
CO	1	0.039	3	0.116	2	0.063
CT	0	0.000	1	0.028	2	0.057
GA	71	0.783	67	0.738	49	0.552
MD	4	0.071	3	0.054	5	0.087
MN	3	0.058	4	0.078	2	0.039
NM	3	0.156	1	0.052	2	0.104
NY	2	0.046	0	0.000	1	0.024
OR	0	0.000	0	0.000	0	0.011
TN	4	0.067	9	0.151	14	0.276
ALL	89	0.198	94	0.209	87	0.203

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

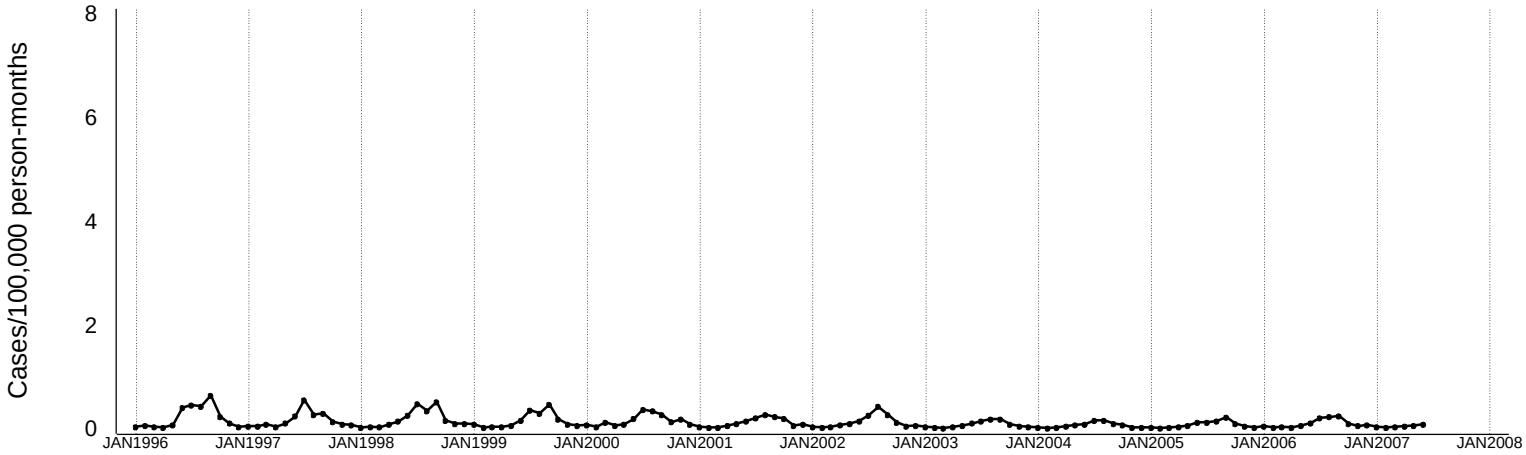


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

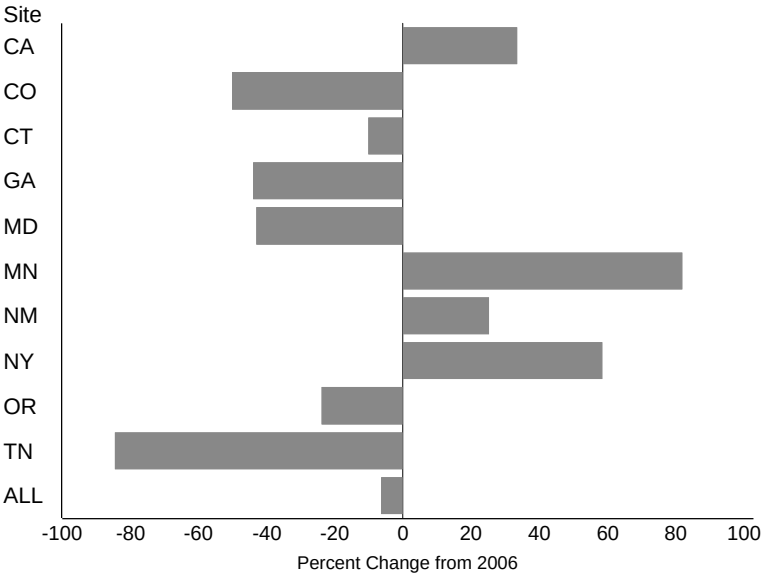
Report date: 06-September-2007

STEC O157

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

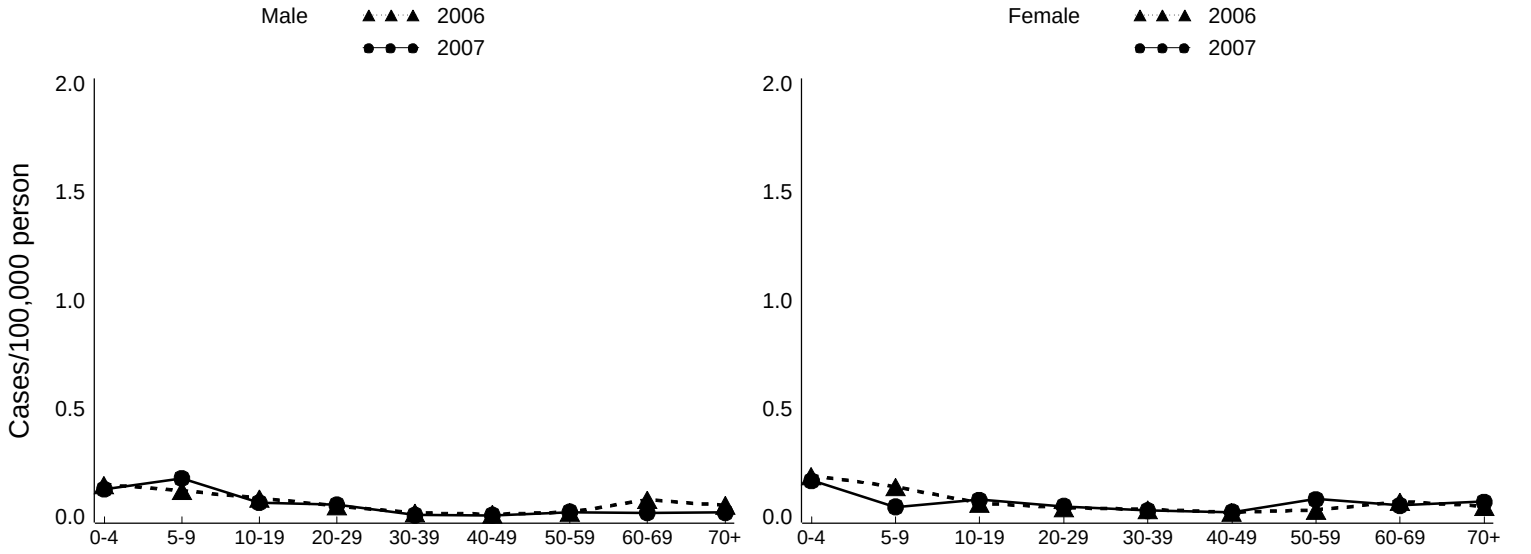


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	16	0.499	12	0.374	9	0.274
CO	6	0.232	12	0.464	13	0.511
CT	9	0.256	10	0.285	13	0.361
GA	9	0.099	16	0.176	15	0.172
MD	4	0.071	7	0.125	8	0.144
MN	60	1.169	33	0.643	34	0.661
NM	5	0.259	4	0.207	4	0.191
NY	19	0.441	12	0.279	19	0.467
OR	16	0.439	21	0.577	21	0.574
TN	5	0.084	32	0.537	18	0.329
ALL	149	0.331	159	0.354	152	0.355

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

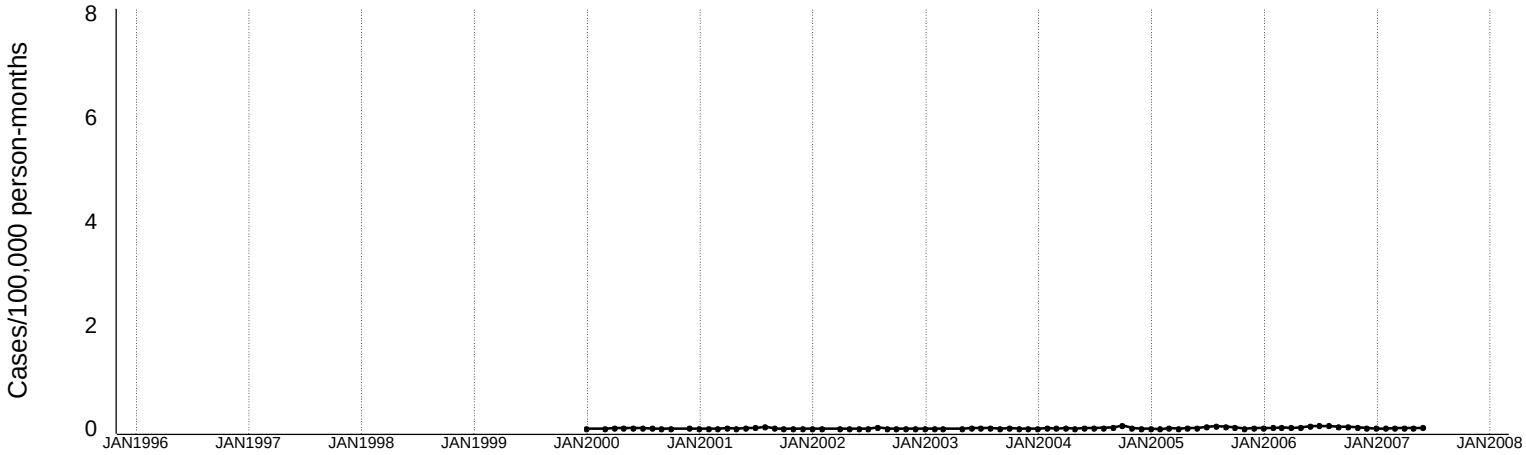


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

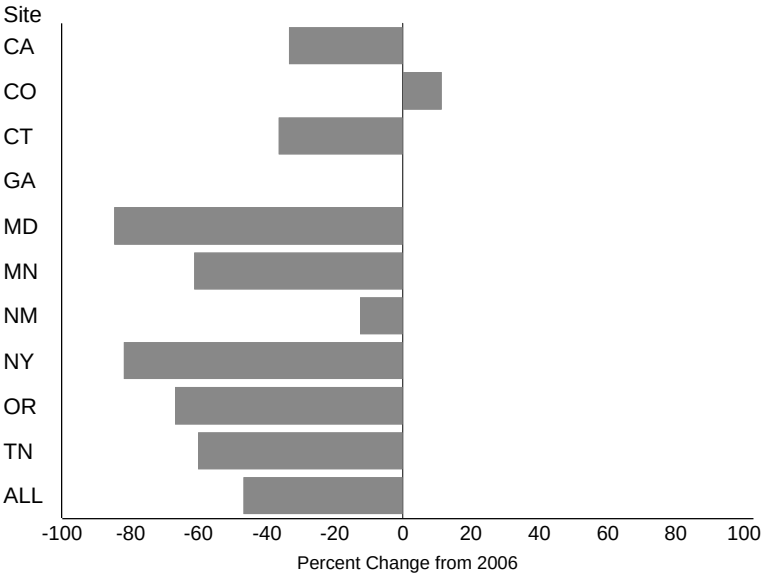
Report date: 06-September-2007

STEC Non-O157

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

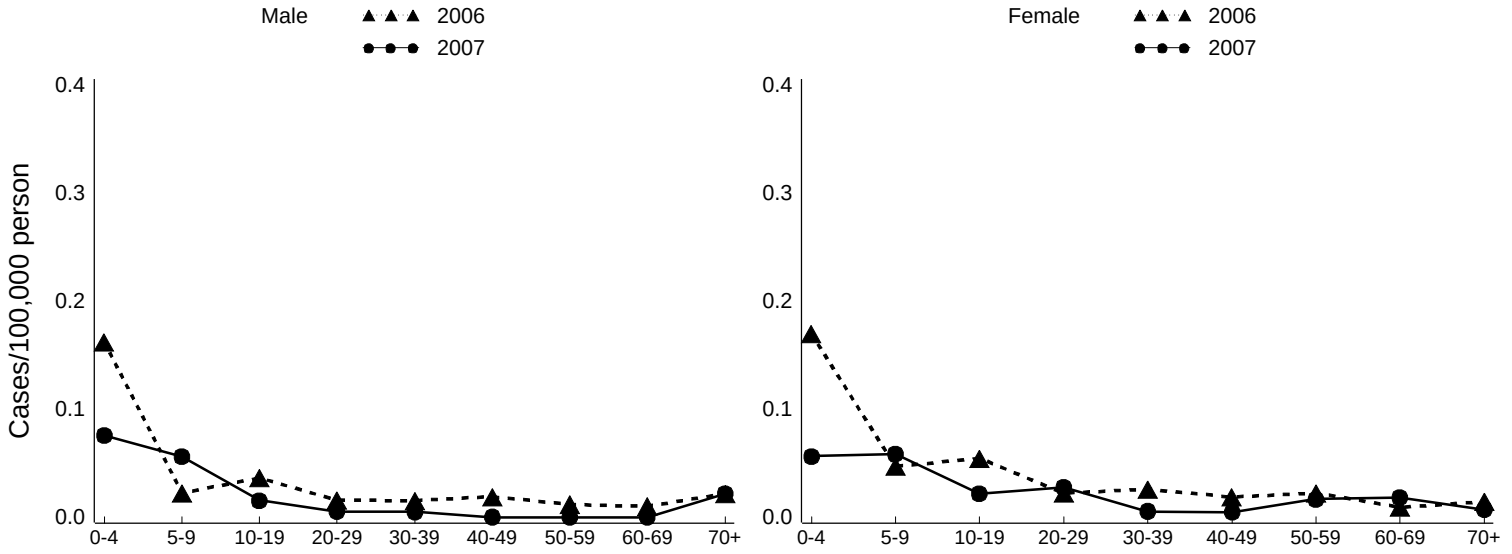


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	2	0.062	3	0.094	1	0.019
CO	10	0.387	9	0.348	3	0.101
CT	7	0.199	11	0.313	10	0.292
GA	7	0.077	7	0.077	2	0.027
MD	2	0.036	13	0.232	4	0.075
MN	7	0.136	18	0.351	7	0.133
NM	7	0.363	8	0.415	6	0.295
NY	2	0.046	11	0.255	3	0.070
OR	1	0.027	3	0.082	2	0.056
TN	2	0.034	5	0.084	2	0.027
ALL	47	0.105	88	0.196	39	0.083

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

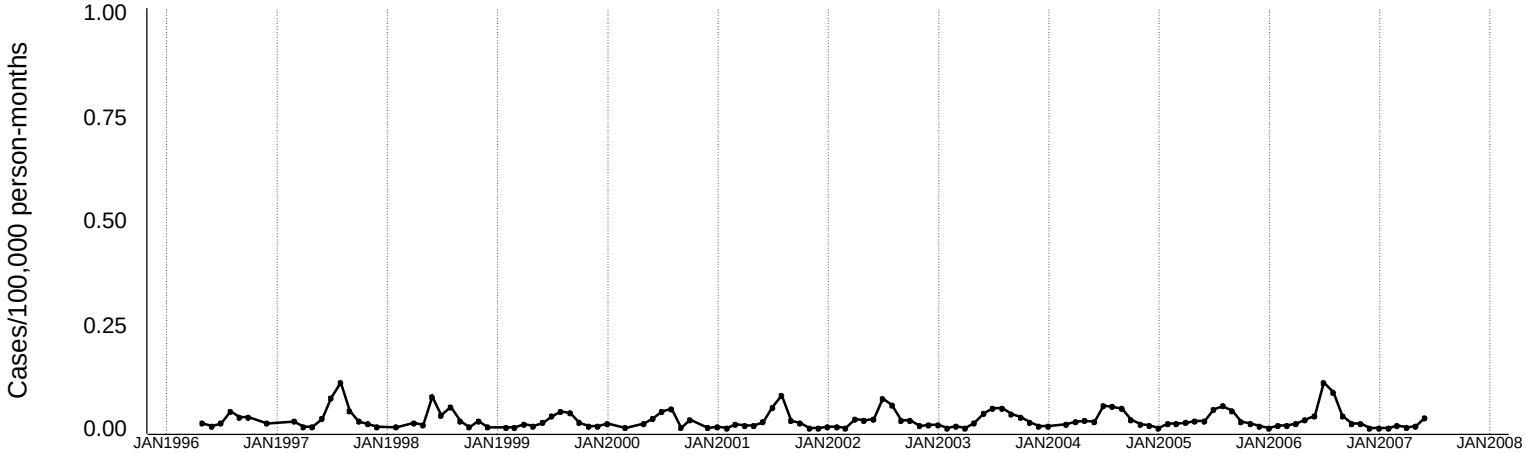


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

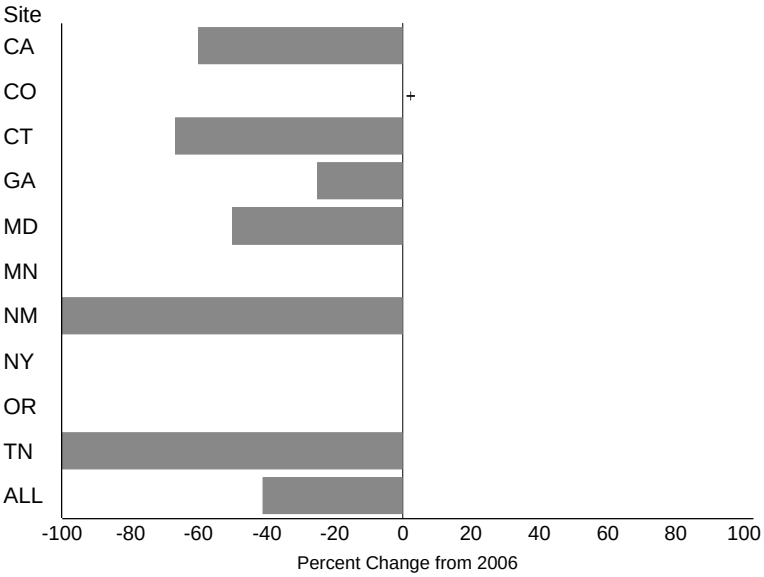
Report date: 06-September-2007

Vibrio, all species

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

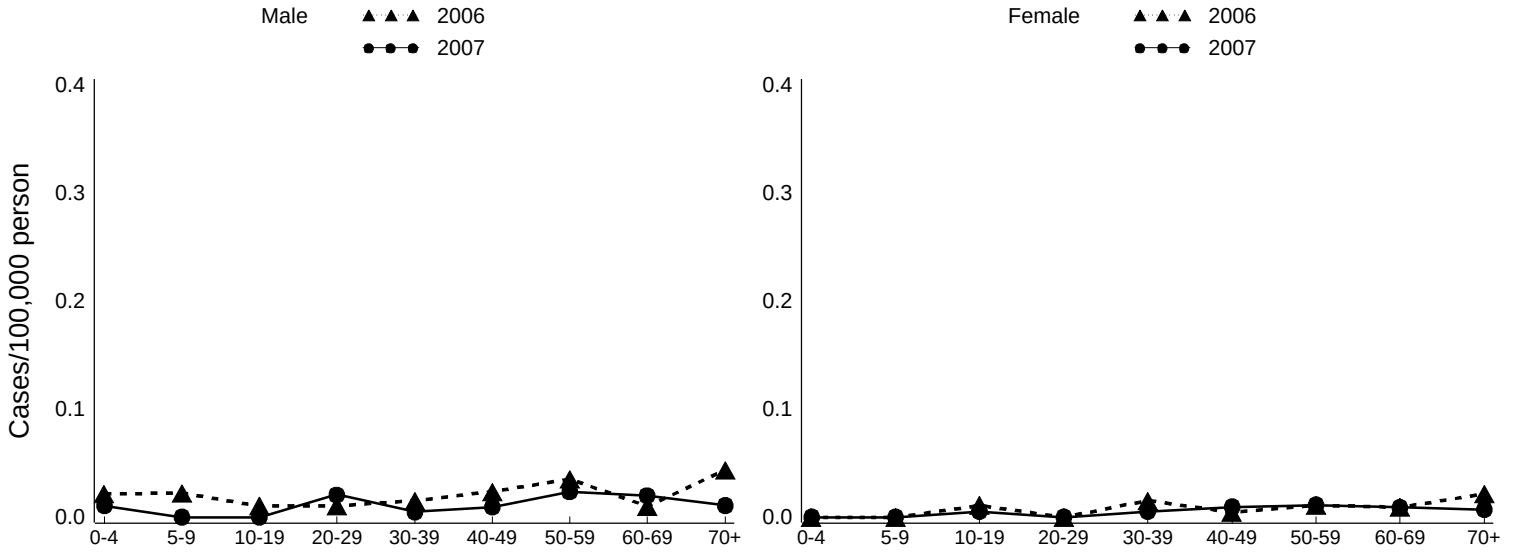


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	**Cases**	**Rate^**	**Cases**	**Rate^**	**Cases**	**Rate^**
CA	2	0.062	5	0.156	5	0.168
CO	1	0.039	0	0.000	1	0.023
CT	1	0.028	3	0.085	3	0.080
GA	9	0.099	12	0.132	8	0.094
MD	5	0.089	10	0.179	7	0.130
MN	1	0.019	1	0.019	2	0.043
NM	0	0.000	1	0.052	0	0.017
NY	3	0.070	3	0.070	2	0.061
OR	1	0.027	1	0.027	2	0.056
TN	0	0.000	3	0.050	3	0.065
ALL	23	0.051	39	0.087	35	0.080

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

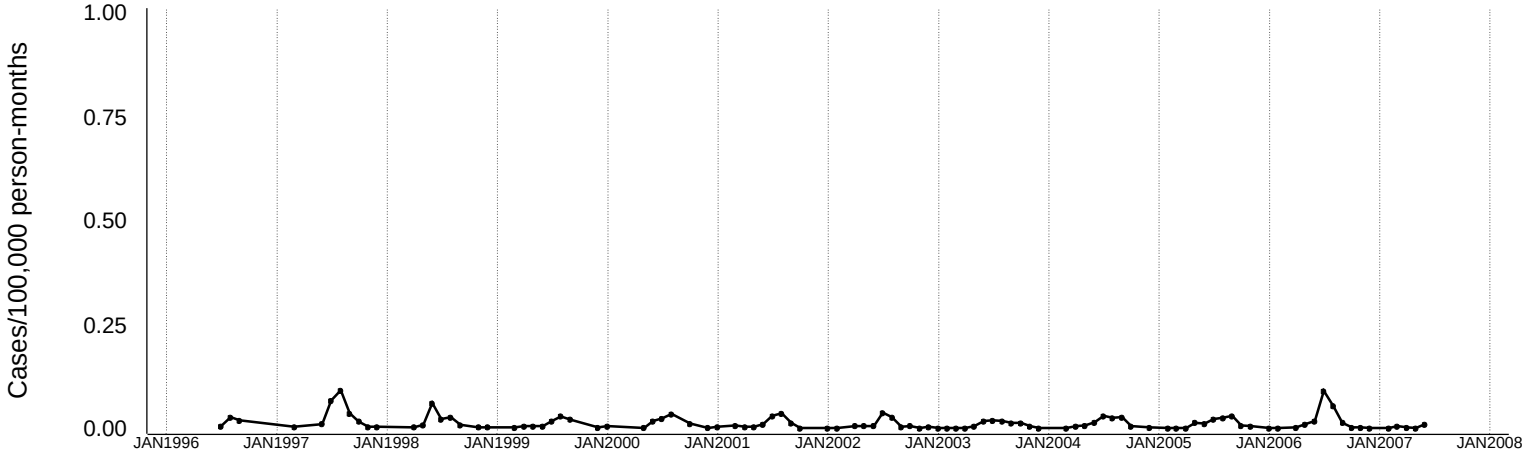


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

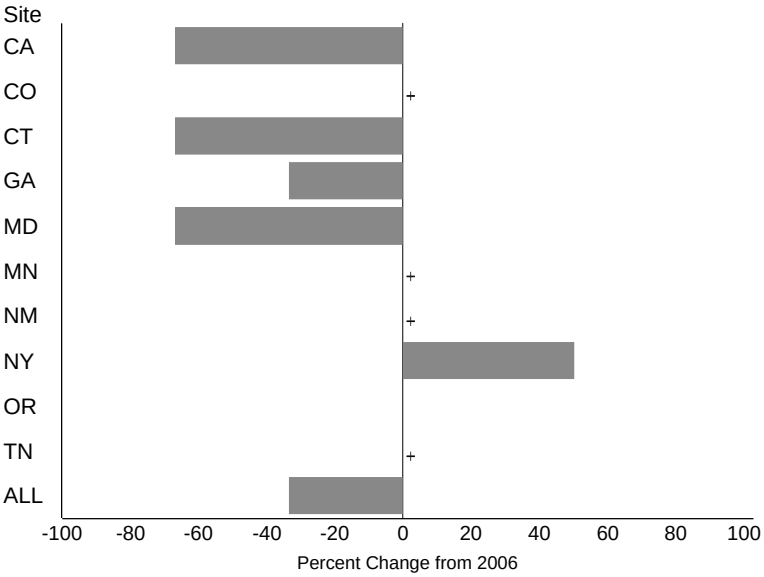
Report date: 06-September-2007

Vibrio parahaemolyticus

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

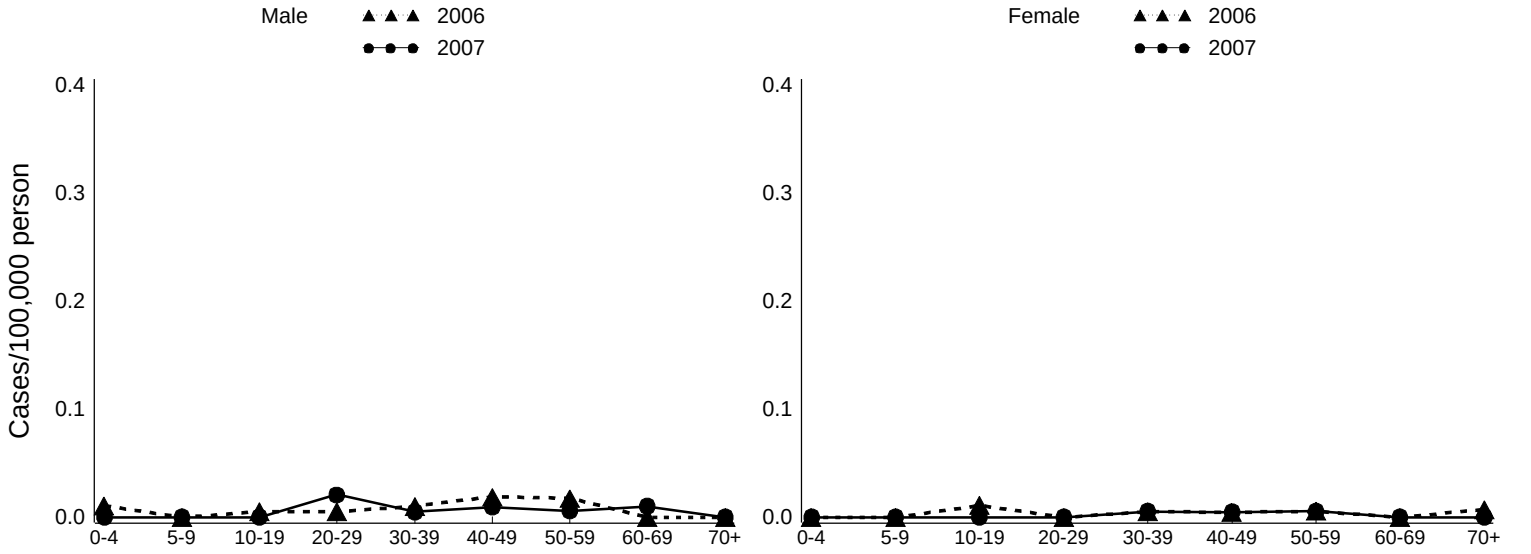


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	1	0.031	3	0.094	3	0.100
CO	1	0.039	0	0.000	0	0.015
CT	1	0.028	3	0.085	1	0.034
GA	2	0.022	3	0.033	2	0.022
MD	2	0.036	6	0.107	4	0.076
MN	1	0.019	0	0.000	1	0.012
NM	0	0.000	0	0.000	0	0.000
NY	3	0.070	2	0.046	1	0.034
OR	1	0.027	1	0.027	1	0.028
TN	0	0.000	0	0.000	1	0.017
ALL	12	0.027	18	0.040	15	0.035

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

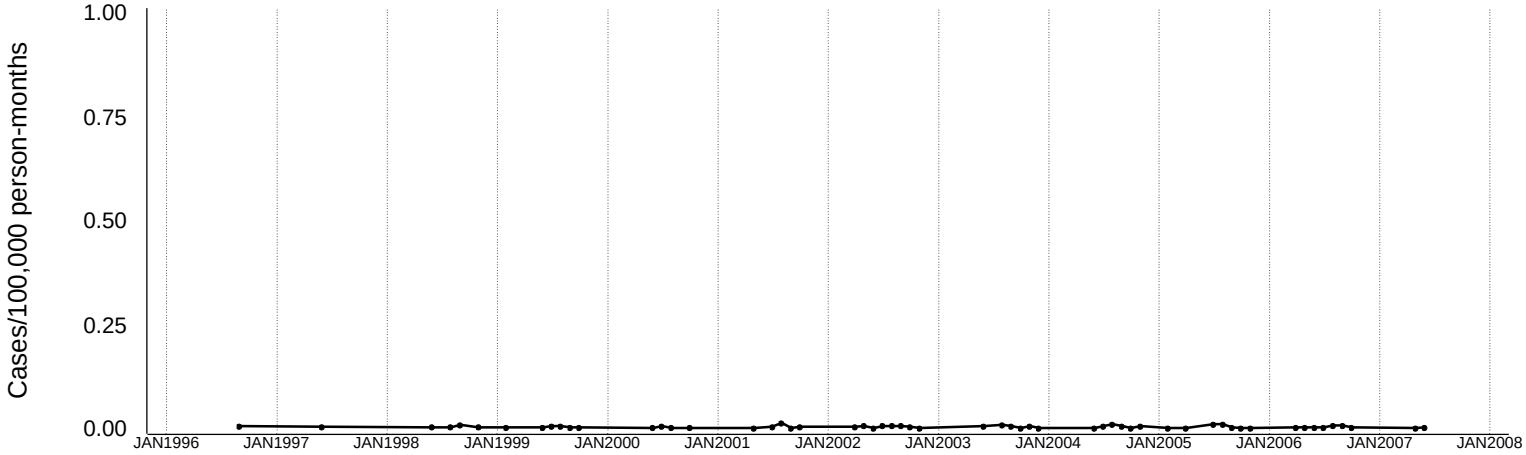


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

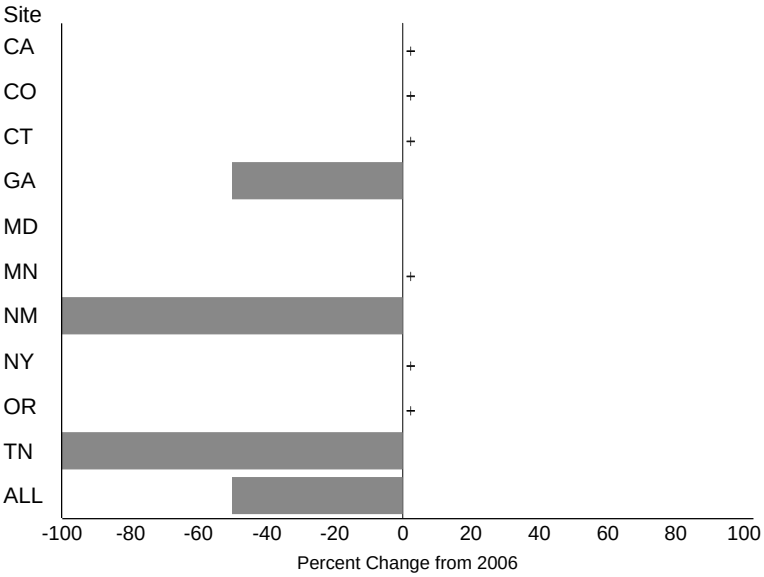
Report date: 06-September-2007

Vibrio vulnificus

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

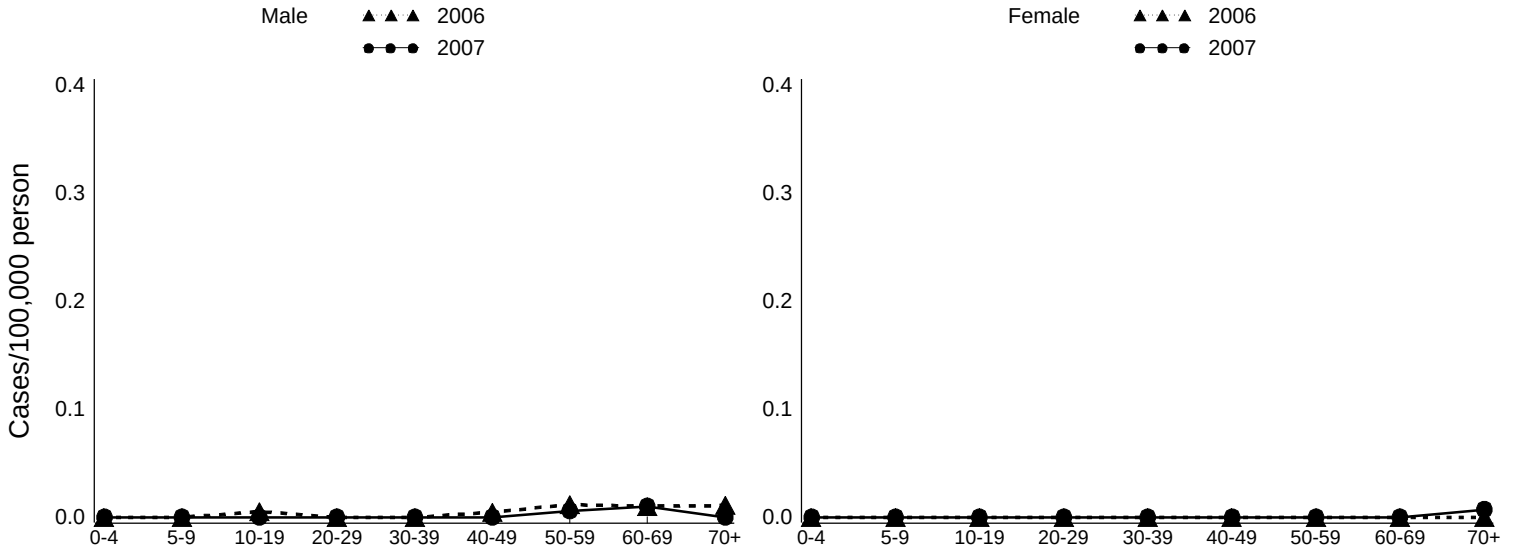


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	0	0.000	0	0.000	0	0.000
CO	0	0.000	0	0.000	0	0.000
CT	0	0.000	0	0.000	0	0.000
GA	1	0.011	2	0.022	1	0.014
MD	2	0.036	2	0.036	1	0.022
MN	0	0.000	0	0.000	0	0.004
NM	0	0.000	1	0.052	0	0.017
NY	0	0.000	0	0.000	0	0.000
OR	0	0.000	0	0.000	0	0.006
TN	0	0.000	1	0.017	1	0.014
ALL	3	0.007	6	0.013	4	0.009

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

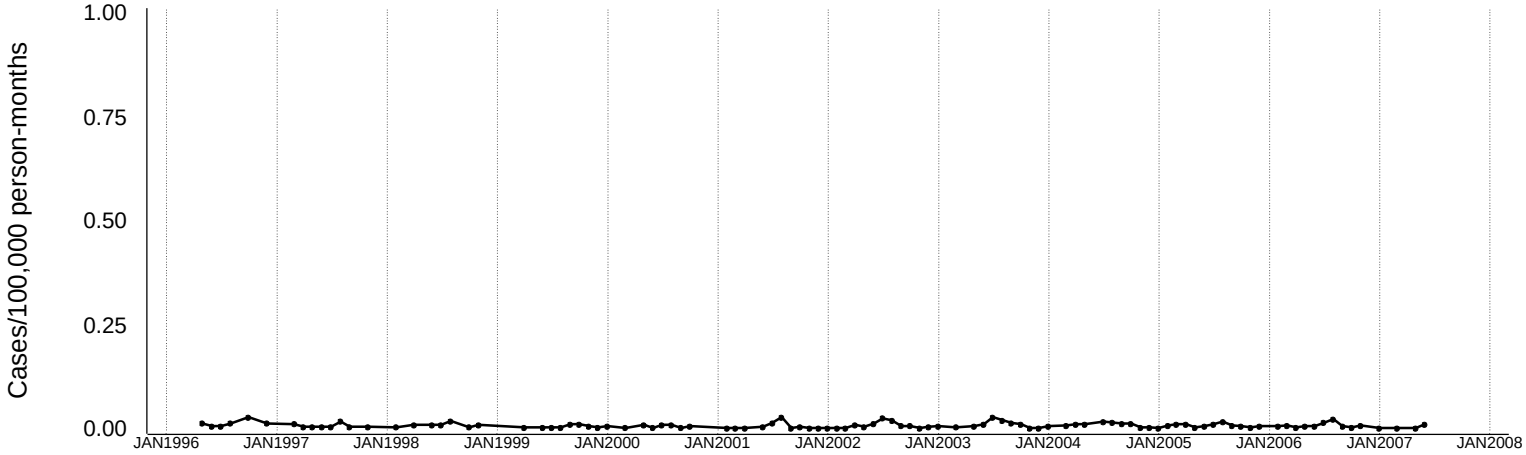
Calendar year through June: Rates for 2006 and 2007 by age group and sex



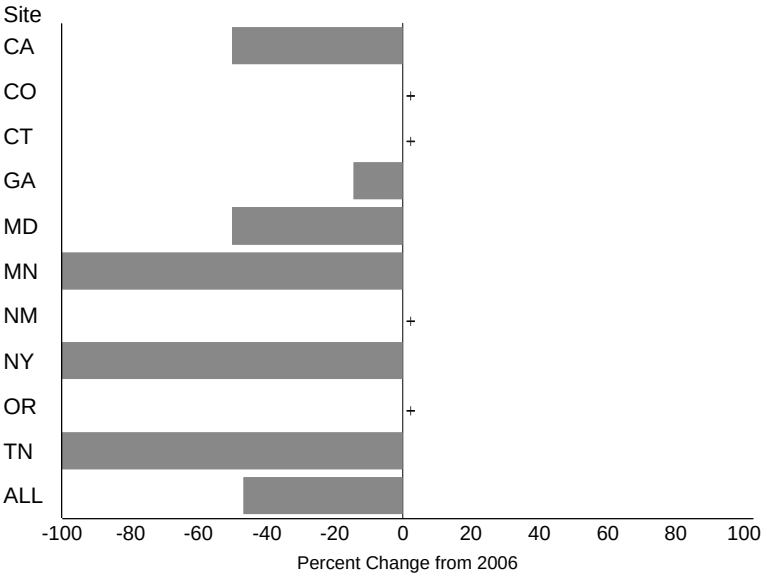
Vibrio, all others

40

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

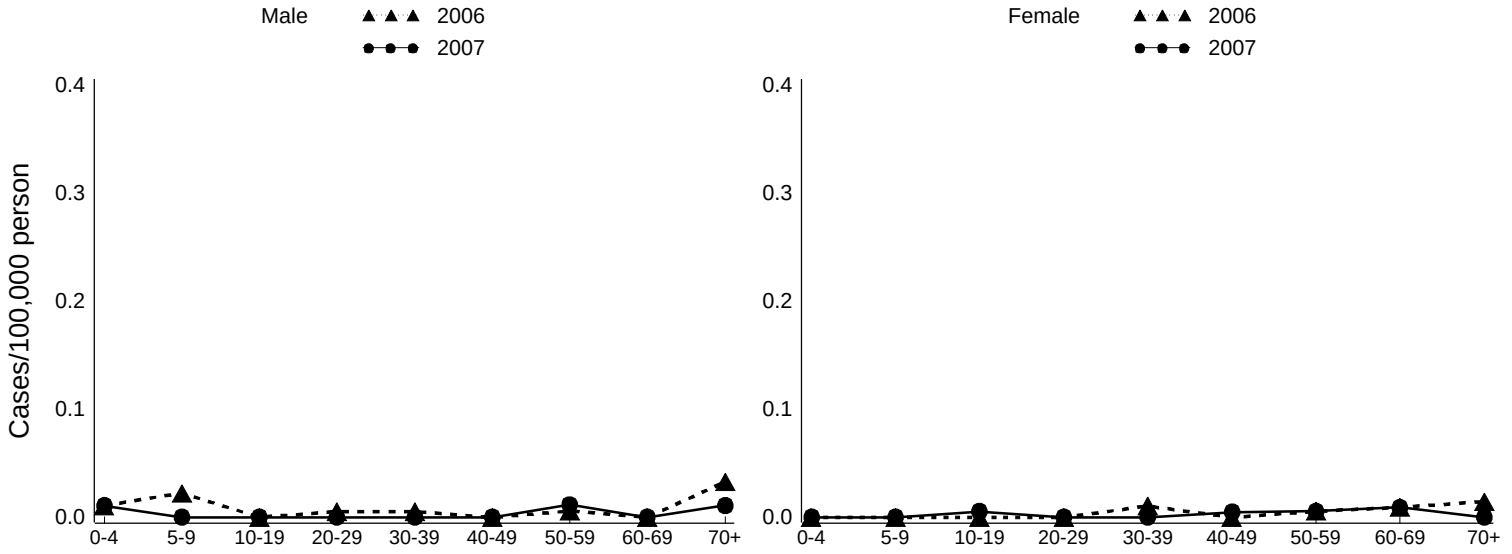


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	1	0.031	2	0.062	2	0.069
CO	0	0.000	0	0.000	0	0.008
CT	0	0.000	0	0.000	2	0.046
GA	6	0.066	7	0.077	5	0.058
MD	1	0.018	2	0.036	2	0.032
MN	0	0.000	1	0.019	1	0.027
NM	0	0.000	0	0.000	0	0.000
NY	0	0.000	1	0.023	1	0.026
OR	0	0.000	0	0.000	1	0.023
TN	0	0.000	2	0.034	2	0.034
ALL	8	0.018	15	0.033	16	0.037

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

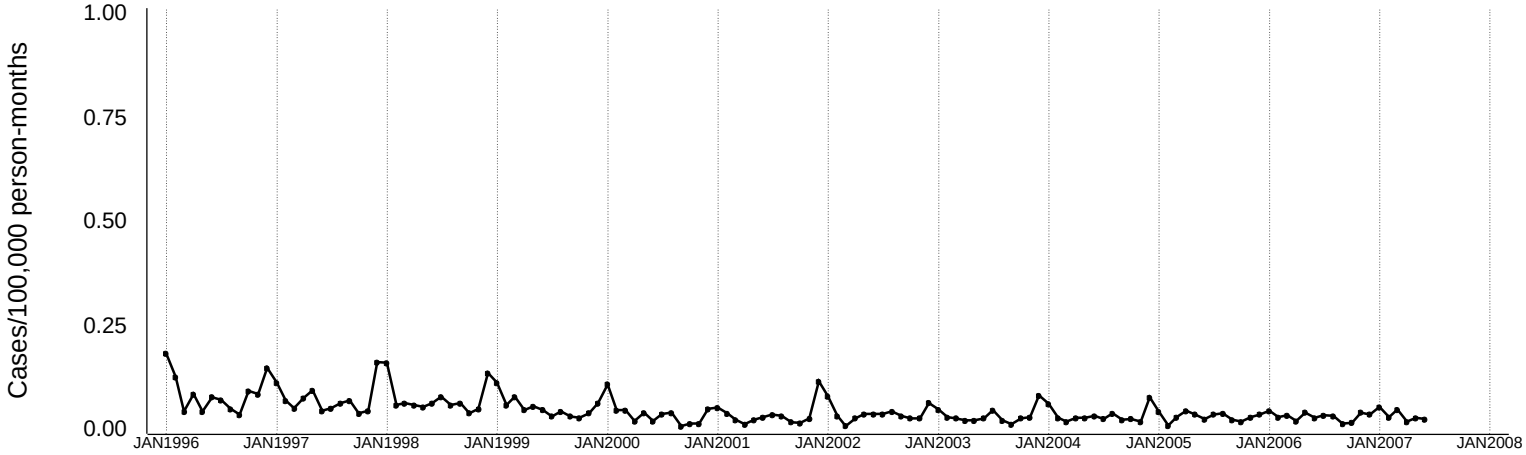


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

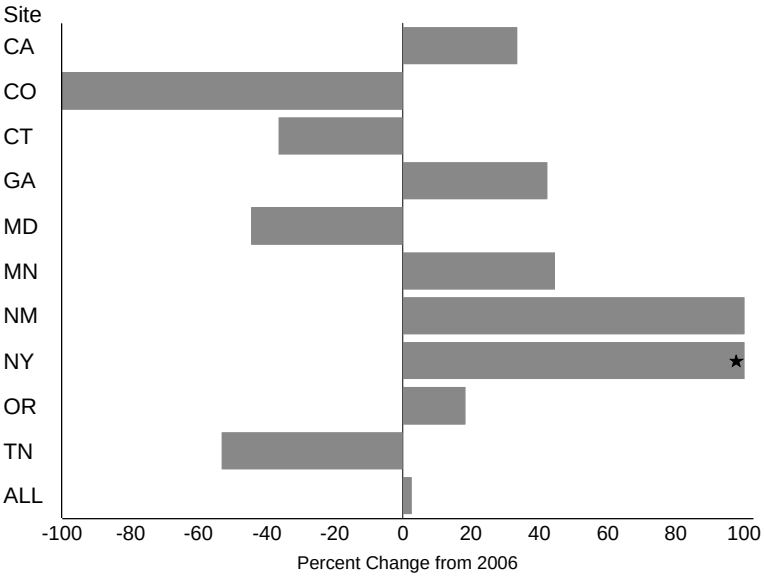
Report date: 06-September-2007

Yersinia

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

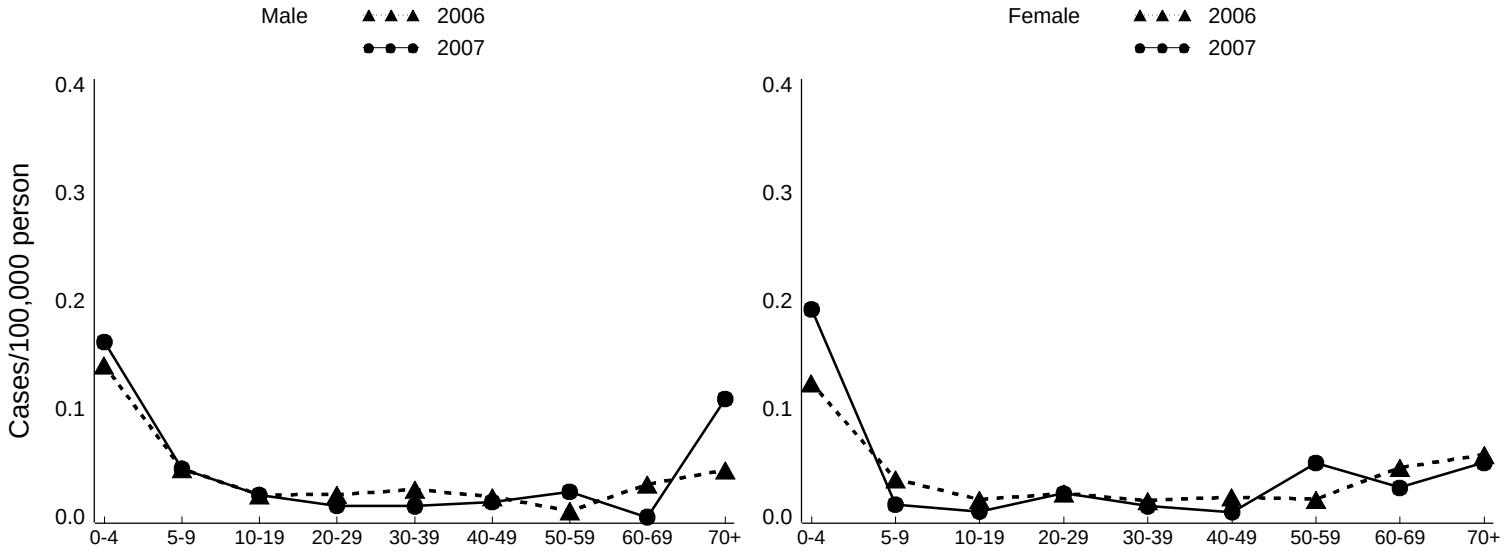


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	8	0.250	6	0.187	10	0.312
CO	0	0.000	2	0.077	3	0.102
CT	7	0.199	11	0.313	8	0.229
GA	27	0.298	19	0.209	20	0.228
MD	5	0.089	9	0.161	5	0.094
MN	13	0.253	9	0.175	8	0.161
NM	2	0.104	1	0.052	1	0.052
NY	6	0.139	2	0.046	7	0.166
OR	13	0.357	11	0.302	8	0.216
TN	8	0.134	17	0.285	13	0.252
ALL	89	0.198	87	0.194	82	0.192

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

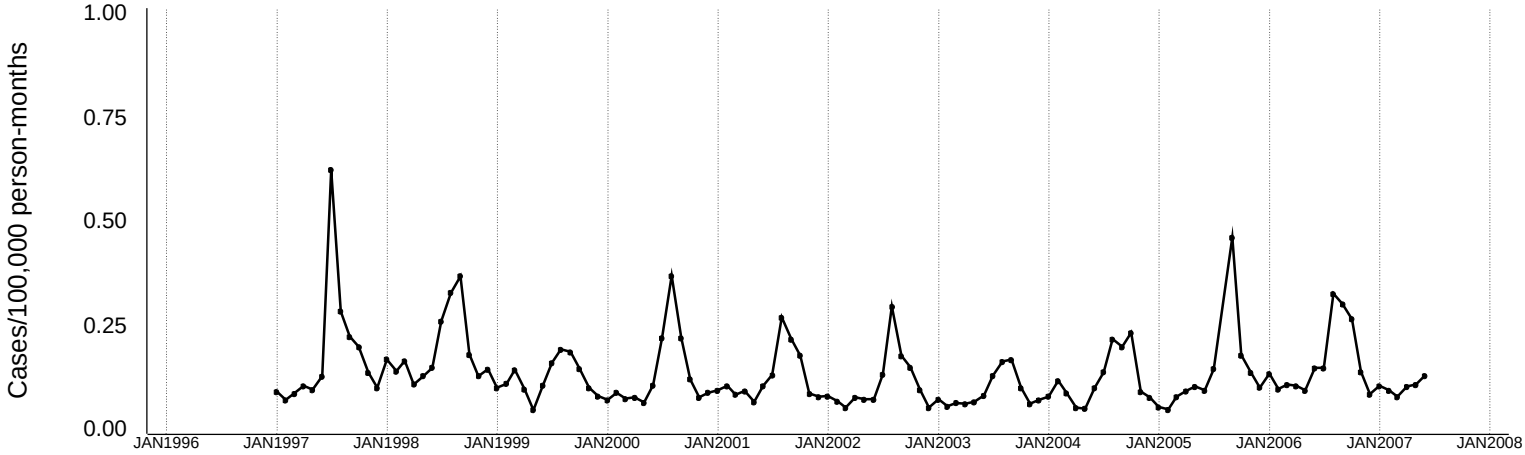


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

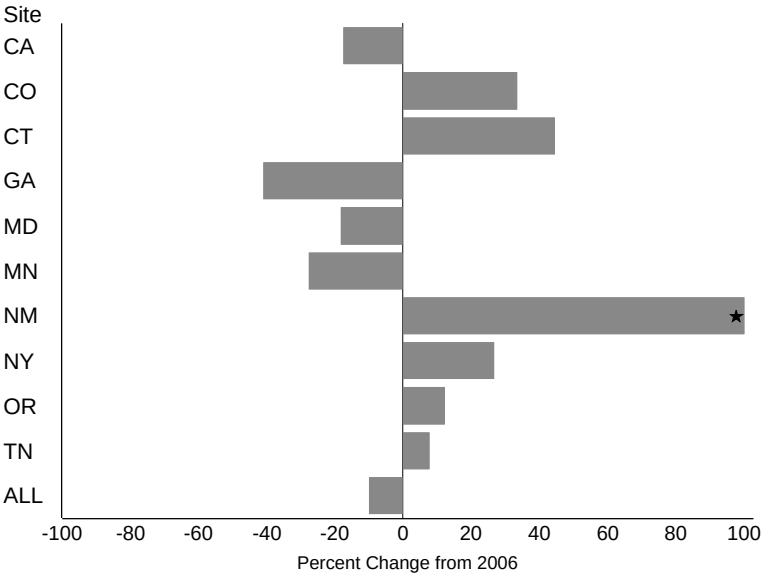
Report date: 06-September-2007

Cryptosporidium

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

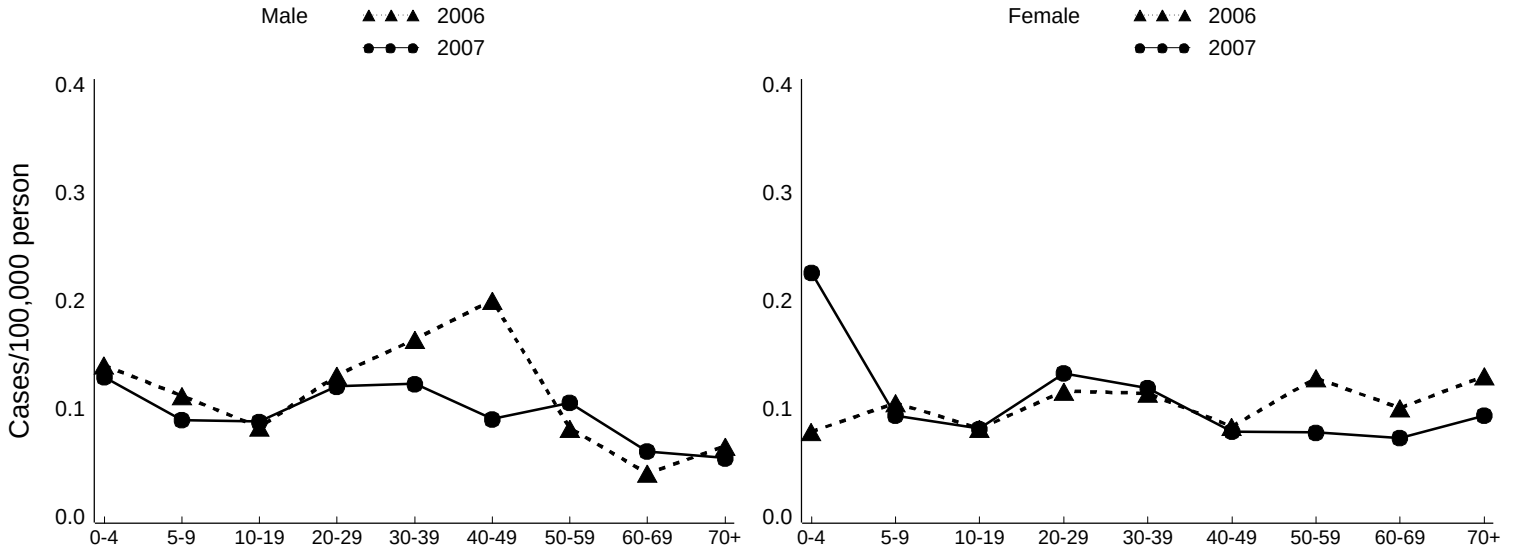


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	19	0.593	23	0.717	22	0.582
CO	12	0.464	9	0.348	8	0.313
CT	13	0.370	9	0.256	7	0.194
GA	55	0.606	93	1.025	60	0.676
MD	9	0.161	11	0.196	9	0.155
MN	66	1.286	91	1.773	57	1.118
NM	32	1.659	9	0.467	6	0.329
NY	19	0.441	15	0.348	12	0.299
OR	37	1.016	33	0.906	23	0.628
TN	14	0.235	13	0.218	13	0.249
ALL	276	0.614	306	0.681	218	0.489

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex

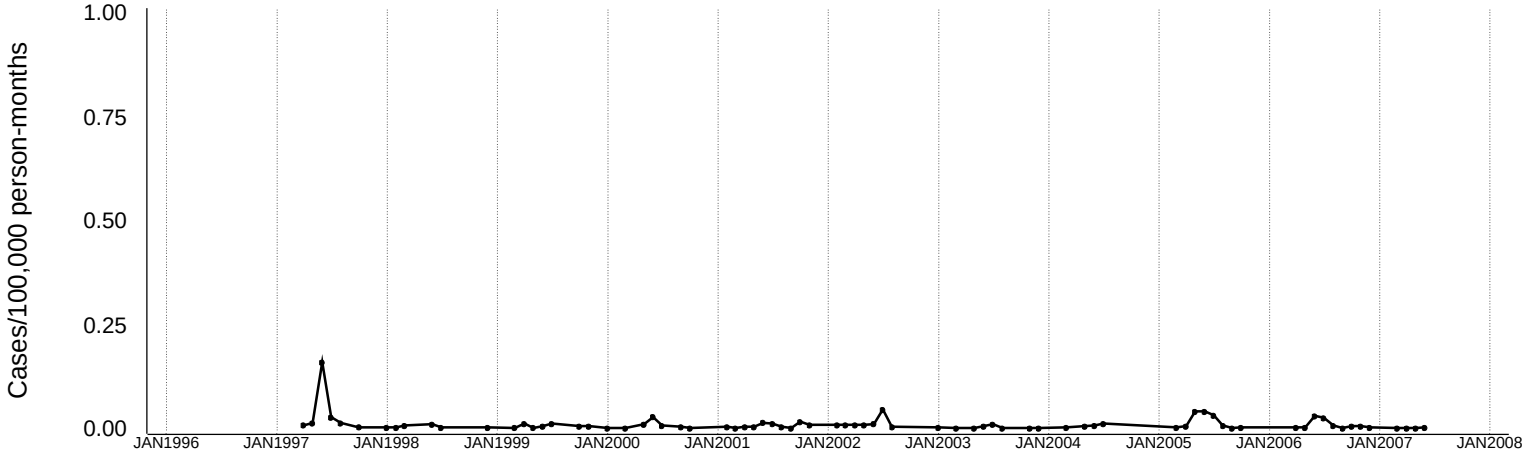


Data source: Preliminary FoodNet data, subject to change, not for public distribution.

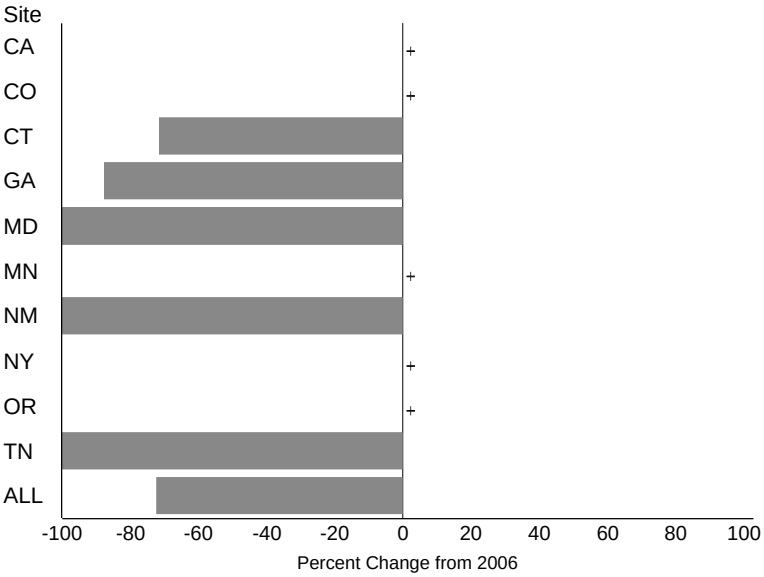
Report date: 06-September-2007

Cyclospora

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-June 2007



Calendar year through June: Percent change in rates between 2006 and 2007 by site

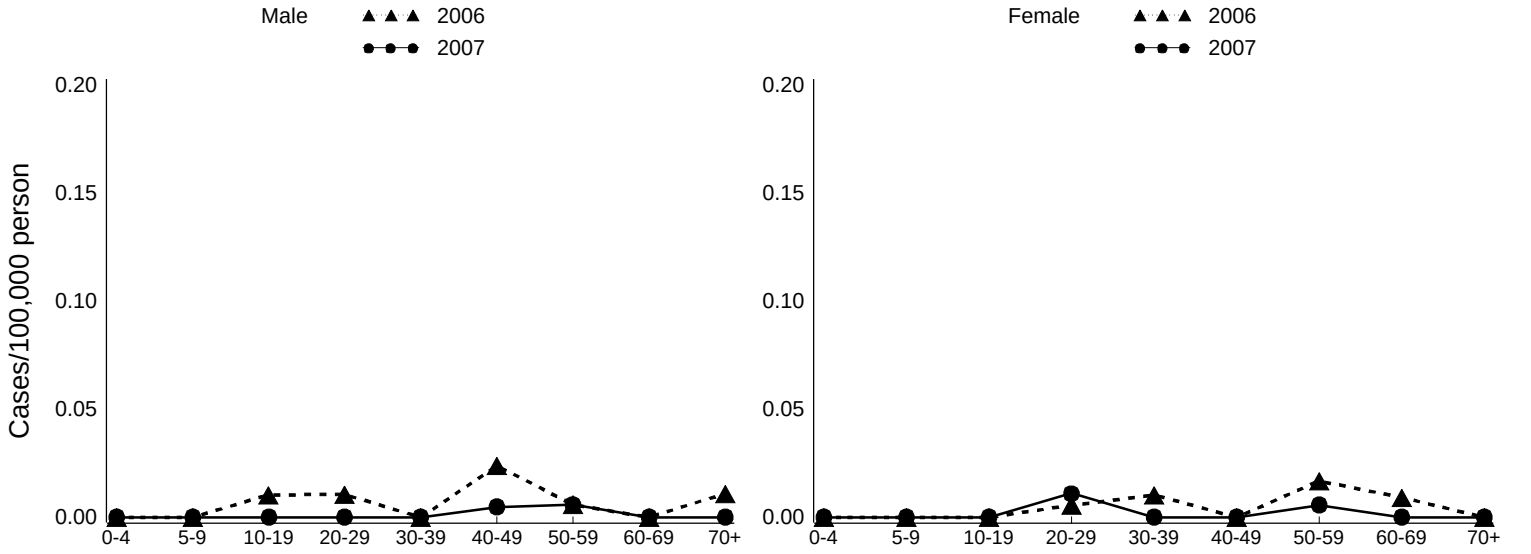


* Change exceeds 100%, +Percent increase cannot be calculated because 2006 rate is 0

	2007		2006		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	0	0.000	0	0.000	1	0.017
CO	0	0.000	0	0.000	0	0.016
CT	2	0.057	7	0.199	8	0.229
GA	1	0.011	8	0.088	6	0.072
MD	0	0.000	1	0.018	1	0.025
MN	0	0.000	0	0.000	0	0.000
NM	0	0.000	1	0.052	1	0.069
NY	2	0.046	0	0.000	0	0.005
OR	0	0.000	0	0.000	1	0.022
TN	0	0.000	1	0.017	1	0.017
ALL	5	0.011	18	0.040	20	0.045

*year 2002-2006 except for NM (2004-2006)
^cases/100,000 person

Calendar year through June: Rates for 2006 and 2007 by age group and sex



Data source: Preliminary FoodNet data, subject to change, not for public distribution.

Report date: 06-September-2007

Table 1. A Comparison of Etiologies for Foodborne Outbreaks with ≥ 2 ill, by year, 1998-2006,
(Data accessed August30th, 2007 (eFORS 2) PRELIMINARY DATA)

year	outbreaks in eFORS	Known etiology (%)	bacterial	viral	Other confirmed
1998	231	85(37)	36 (42%)	45(53%)	4(5%)
1999	258	117 (45)	55 (47%)	57(49%)	5(4%)
2000	290	150 (51)	65(43%)	83(55%)	2(1%)
2001	259	193 (75)	89(46%)	98(51%)	6(3%)
2002	236	176 (75)	77(44%)	91(52%)	7(4%)
2003	217	183 (84)	81(44%)	88(48%)	13(7%)
2004	242	223 (92)	86(39%)	114(51%)	20(9%)
2005	192	167 (87)	68(41%)	85(51%)	13(7%)
2006	280	233 (84)	80(34%)	140(60%)	13(5%)

Table 1. Summary of Foodborne Outbreaks with ≥ 2 ill, by FoodNet Site, 2007
(Data accessed August 30th , 2007 (eFORS 2) PRELIMINARY DATA)

State	Outbreaks reported	2005 population	Rate/1,000,000 population	Median Number Ill	Known Etiology* No. (%)	Etiology (confirmed and suspected)	Known Vehicle** No. (%)	Restaurant-associated*** No. (%)
CA	5	3,206,118	1.56	17	3 (60)	Bacillus Cerus/ Clostridium perfringens(1) *Campylobacter*(1), Norovirus(1)	2 (40)	4(67)
CO	11	2,586,568	4.25	9	10 (91)	Norovirus(8), *Salmonella*(1), STEC O157 (1)	6 (55)	8 (73)
CT	10	3,510,297	2.85	14	7 (70)	Norovirus (6) STEC O157 (1)	9 (90)	7 (70)
GA	15	9,072,576	1.65	19	13 (87)	Norovirus(5), *Campylobacter*(1) Clostridium perfringens(3) *Salmonella*(4)	7(45)	6 (40)
MD	16	5,600,388	2.86	20	8 (50)	Norovirus(5), *Campylobacter*(1) Clostridium perfringens(1) *Salmonella*(1)	11(69)	7 (44)
MN	28	5,132,799	5.46	10	21 (75)	Hep A(2), Norovirus(7), Clostridium perfringens(3), *Salmonella*(5), STEC O157 (2) Scromboid toxin(1) *Vibrio*(1)	10 (36)	18 (64)
NM	1	1,928,384	0.52	48	1 (100)	*Campylobacter*(1)	1 (100)	-(-)
NY	6	4,307,911	1.39	18	2(33)	Norovirus(1), STEC O157 (1)	6(100)	0 (-)
OR	16	3,641,056	4.39	17	11 (69)	Clostridium perfringens (1), Norovirus (9) STEC O157 (1)	5 (31)	6 (38)
TN	14	5,962,959	2.35	11	13 (93)	Norovirus (8) *Salmonella*(2), Bacillus Cerus(1) Staph aureus(2)	5 (36)	13 (93)
Total	**122**	**44,949,056**	**2.71**	**18**	**89 (73)**		**62 (51)**	**53 (57)**

*Known etiology- Confirmed and suspected etiologies
**Known vehicle- Any vehicle reported
***Restaurant-associated- Any outbreak where food item was prepared in a restaurant or deli

*Known etiology- Confirmed and suspected etiologies
**Known vehicle- Any vehicle reported
***Restaurant-associated- Any outbreak where food item was prepared in a restaurant or deli

Table 2. Summary of Foodborne Outbreaks with ≥10 ill, by FoodNet Site, 2007

*** Data accessed August 30th 2007 (eFORS 2)**
*** Preliminary data**

State	Outbreaks reported	2005 population	Rate/1,000,000 population	Median Number Ill	Known Etiology* No. (%)	Known Vehicle** No. (%)	Restaurant-associated*** No. (%)
CA	2	3,206,118	0.62	34	1 (50)	1 (50)	1 (50)
CO	4	2,586,568	1.55	17	4 (100)	3 (75)	3 (75)
CT	5	3,510,297	1.42	23	3 (60)	5 (100)	3 (60)
GA	6	9,072,576	0.66	39	5 (83)	3 (50)	1 (-)
MD	7	5,600,388	1.25	41	5 (71)	5 (71)	3 (43)
MN	9	5,132,799	1.75	22	6 (67)	4 (44)	4 (44)
NM	1	1,928,384	0.52	48	1 (100)	1 (100)	-(-)
NY	4	4,307,911	0.93	25	1 (33)	4 (100)	- (-)
OR	7	3,641,056	1.92	32	6 (86)	2 (29)	3 (43)
TN	6	5,962,959	1.01	20	6 (100)	1 (17)	5 (83)
2007 Total	**51**	**44,949,056**	**1.13**	**30**	**38 (75)**	**29 (57)**	**23 (45)**

*Known etiology- Confirmed and suspected etiologies
**Known vehicle- Any vehicle reported
***Restaurant-associated- Any outbreak where food item was prepared in a restaurant or deli

Site	In catchment (N=47)												In catchment (N=47)											
	<1 yo		1-4 yo		5-9 yo		10-14 yo		15-59 yo		60+ yo		<1 yo		1-4 yo		5-9 yo		10-14 yo		15-59 yo		60+ yo	
	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*	No.	Rate*
CA	2	0 (0)	1	0 (0)	0	--	0	--	0	--	0	--	2	4.7	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
CO	0	--	1	0 (0)	0	--	0	--	0	--	0	--	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0
CT	0	--	0	--	1	0 (0)	2	0 (0)	0	--	0	--	0	0.0	0	0.0	1	0.4	2	0.8	0	0.0	0	0.0
GA	0	--	6	0 (0)	0	--	1	0 (0)	0	--	0	--	0	0.0	6	1.1	0	0.0	1	0.2	0	0.0	0	0.0
MD	0	--	0	--	0	--	0	--	0	--	0	--	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MN	0	--	4	--	2	0 (0)	1	--	0	--	1	0 (0)	0	0.0	4	1.5	2	0.6	1	0.3	0	0.0	1	0.1
NM	0	--	0	--	0	--	0	--	0	--	0	--	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NY	2	0 (0)	2	0 (0)	0	--	0	--	1	0 (0)	3	0 (0)	2	4.3	2	1.1	0	0.0	0	0.0	1	0.0	3	0.4
OR	0	--	5	0 (0)	1	--	0	--	1	0 (0)	0	--	0	0.0	5	2.8	1	0.4	0	0.0	1	0.0	0	0.0
TN	0	--	8	0 (0)	1	0 (0)	1	0 (0)	0	--	0	--	0	0.0	8	2.6	1	0.3	1	0.3	0	0.0	0	0.0
Total	**4**	**0 (0)**	**27**	**0 (0)**	**5**	**0 (0)**	**5**	**0 (0)**	**2**	**0 (0)**	**4**	**0 (0)**	**4**	0.66	**27**	1.12	**5**	0.17	**5**	0.16	**2**	0.01	**4**	0.05

*per 100,000 persons

For cases with Diarrhea in 3 wks before HUS dx (N=44)											
	CA	CO	CT	GA	MD	MN	NM	NY	OR	TN	**TOTAL**
Cases with O157 + Only/ Cases O157 positive	0/1 (0)	0/0 --	1/1 (100)	0/4 (0)	0/0 --	0/4 (0)	0/0 --	3/4 (75)	2/2 (100)	2/4 (50)	**8/20 (40)**
Cases with non-O157 + Only/ Cases non-O157 +	0/0 --	0/0 --	0/0 --	0/0 --	0/0 --	0/0 --	0/0 --	0/0 --	0/0 --	0/0 --	**0/0 --**
Cases positive for shiga-toxin only/ Cases shiga-toxin positive	0/1 (0)	0/0 --	0/0 --	0/4 (0)	0/0 --	0/4 (0)	0/0 --	1/2 --	0/0 --	0/2 (0)	**1/13 (8)**
Cases not positive for O157, Stx or non-O157*/ Total Stool Specimens	2/3 (67)	0/0 --	0/1 (0)	3/7 (43)	0/0 --	4/8 (50)	0/0 --	2/7 (29)	0/2 (0)	3/7 (43)	**14/35 (40)**
Cases positive for Stx and O157 or Stx and non-O157/ Total Stool Specimens	1/3 (33)	0/0 --	0/1 (0)	4/7 (57)	0/0 --	4/8 (50)	0/0 --	1/7 (14)	0/2 (0)	2/7 (29)	**12/35 (34)**

*not positive or not tested

Results of microbiologic testing for STEC infection among HUS cases, 2007

as of 8/31/07

	Site										
	CA	CO	CT	GA	MD	MN	NM	NY	OR	TN	**TOTAL**
	# %	# %	# %	# %	# %	# %	# %	# %	# %	# %	**# %**
Diarrhea in 3 weeks before HUS diag./ Total patients	3/3 (100)	1/1 (100)	2/3 (67)	7/7 (100)	0/0 --	8/8 (100)	0/0 --	7/8 (88)	7/7 (100)	9/10 (90)	**44/47** (94)
Stool specimen obtained/ Patients with diarrhea	3/3 (100)	0/1 (0)	1/2 (50)	7/7 (100)	0/0 --	8/8 (100)	0/0 --	7/7 (100)	2/7 (29)	7/9 (78)	**35/44** (80)
E. coli O157 Isolation											
Stool cultured for E. coli O157/ Patients with stool specimens obtained	3/3 (100)	0/0 --	1/1 (100)	6/7 (86)	0/0 --	6/8 (75)	0/0 --	7/7 (100)	2/2 (100)	6/7 (86)	**31/35** (89)
E. coli O157 isolated from stool/ Patients with stool cultured for O157	1/3 (33)	0/0 --	1/1 (100)	4/6 (67)	0/0 --	4/6 (67)	0/0 --	4/7 (57)	2/2 (100)	4/6 (67)	**20/31** (65)
Shiga toxin + Questions											
Stool tested for Shiga toxin/ Patients with stool specimen obtained	2/3 (67)	0/0 --	0/1 (0)	4/7 (57)	0/0 --	6/8 (75)	0/0 --	4/7 (57)	0/2 (0)	4/7 (57)	**20/35** (57)
Stool Shiga toxin-positive/ Patients with stool tested for Shiga toxin	1/2 (50)	0/0 --	0/0 --	4/4 (100)	0/0 --	4/6 (67)	0/0 --	2/4 (50)	0/0 --	2/4 (50)	**13/20** (65)
Non-O157 Isolation											
Stool tested for non-O157 STEC/ Patients with stool tested for Shiga toxin	0/2 (0)	0/0 --	0/0 --	4/4 (100)	0/0 --	1/6 (17)	0/0 --	2/4 (50)	0/0 --	0/4 (0)	**7/20** (35)
Non-O157* STEC isolated from stool/ Stool tested for non-O157 STEC	0/0 --	0/0 --	0/0 --	0/4 (0)	0/0 --	0/1 --	0/0 --	0/2 (0)	0/0 --	0/0 --	**0/7** (0)
Serum											
Serum Tested/ Serum Collected	2/2 (100)	0/0 --	0/0 --	0/2 (0)	0/0 --	2/3 (67)	0/0 --	0/0 --	0/1 --	0/2 --	**4/10** (40)
O157/Tested	0/2 (0)	0/0 --	0/0 --	0/0 --	0/0 --	2/2 (100)	0/0 --	0/0 --	0/0 --	0/0 --	**2/4** (50)
Total Stool											
O157, non-O157 STEC, Shiga toxin +/ Total stool specimens obtained	1/3 (33)	0/0 --	1/1 (100)	4/7 (57)	0/0 --	4/8 (50)	0/0 --	5/7 (71)	2/2 (100)	4/7 (57)	**21/35** (60)

Non-O157 identified:

*Culture:

HUS Surveillance, 2006 Table A

as of 8/31/07

Site	In catchment (N=103)												In catchment (N=103)						
	<1 yo		1-4 yo		5-9 yo		10-14 yo		15-59 yo		60+ yo		<1 yo		1-4 yo		5-9 yo		10-14
	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Deaths (%)	No.	Rate*	No.	Rate*	No.	Rate*	No.
CA	0	--	5	0 (0)	2	0 (0)	0	--	2	1 (50)	0	--	0	0.0	5	2.9	2	1.0	0
CO	0	0 (0)	7	0 (0)	1	0 (0)	0	--	0	--	0	--	0	0.0	7	4.4	1	0.6	0
CT	0	--	3	0 (0)	1	0 (0)	1	0 (0)	0	--	0	--	0	0.0	3	1.8	1	0.4	1
GA	1	0 (0)	6	0 (0)	1	0(0)	0	--	2	0 (0)	0	--	1	0.7	6	1.1	1	0.2	0
MD	0	--	3	0 (0)	0	--	0	--	0	--	1	1 (100)	0	0.0	3	1.0	0	0.0	0
MN	0	--	9	0(0)	3	0 (0)	1	0 (0)	3	0 (0)	3	1 (33)	0	0.0	9	3.4	3	0.9	1
NM	0	--	4	0 (0)	0	--	1	0 (0)	0	--	0	--	0	0.0	4	3.7	0	0.0	1
NY	0	--	0	--	1	0 (0)	1	0 (0)	2	1 (50)	1	0 (0)	0	0.0	0	0.0	1	0.4	1
OR	0	--	6	0 (0)	0	--	2	0 (0)	3	0 (0)	0	--	0	0.0	6	3.3	0	0.0	2
TN	1	0(0)	19	0(0)	3	0(0)	3	0 (0)	1	0 (0)	0	--	1	1.3	19	6.2	3	0.8	3
Total	**2**	0 (0)	**62**	0 (0)	**12**	**0 (0)**	**9**	**0 (0)**	**13**	**2 (15)**	**5**	**2 (40)**	**2**	0.30	**62**	2.57	**12**	0.41	**9**

*per 100,000 persons

For cases with Diarrhea in 3 wks before HUS dx (n=96)											
	CA	CO	CT	GA	MD	MN	NM	NY	OR	TN	**TOTAL**
Cases with O157 + Only/ Cases O157 positive	0/5 (0)	2/2 (100)	2/3 (67)	1/6 (17)	1/2 (50)	2/15 (13)	0/3 (0)	3/3 (100)	7/8 (88)	8/16 (50)	**26/63 (41)**
Cases with non-O157 + Only/ Cases non-O157 +	0/0 --	0/1 (0)	0/0 --	0/0 --	0/0 --	0/1 (0)	0/0 --	0/0 --	0/0 --	0/1 (0)	**0/3 (0)**
Cases positive for shiga-toxin only/ Cases shiga-toxin positive	0/5 (0)	0/1 (0)	0/1 (0)	0/5 (0)	0/1 (0)	0/14 (0)	0/3 (0)	0/0 --	0/1 (0)	2/10 (20)	**2/41 (5)**
Cases not positive for O157, Stx or non-O157*/ Total Stool Specimens	2/7 (29)	3/6 (50)	2/5 (40)	4/10 (40)	1/3 (33)	2/18 (11)	1/4 (25)	1/4 (25)	3/11 (27)	7/25 (28)	**26/93 (28)**
Cases positive for Stx and O157 or Stx and non-O157/ Total Stool Specimens	5/7 (71)	1/6 (17)	1/5 (20)	5/10 (50)	1/3 (33)	14/18 (78)	3/4 (75)	0/4 (0)	1/11 (9)	8/25 (32)	**39/93 (42)**

*not positive or not tested

Results of microbiologic testing for STEC infection among HUS cases, 2006

as of 8/31/07

	Site																							
	CA		CO		CT		GA		MD		MN		NM		NY		OR		TN		**TOTAL**	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	**#**	**%**
Diarrhea in 3 weeks before HUS diag./ Total patients	7/9	(78)	6/8	(75)	5/5	(100)	10/10	(100)	4/4	(100)	18/19	(95)	4/5	(80)	4/5	(80)	11/11	(100)	27/27	(100)	**96/103**	(93)
Stool specimen obtained/ Patients with diarrhea	7/7	(100)	6/6	(100)	5/5	(100)	10/10	(100)	3/4	(75)	18/18	(100)	4/4	(100)	4/4	(100)	11/11	(100)	25/27	(93)	**93/96**	(97)
E. coli O157 Isolation																						
Stool cultured for E. coli O157/ Patients with stool specimens obtained	7/7	(100)	5/6	(83)	3/5	(60)	10/10	(100)	3/3	(100)	18/18	(100)	4/4	(100)	4/4	(100)	11/11	(100)	24/25	(96)	**89/93**	(96)
E. coli O157 isolated from stool/ Patients with stool cultured for O157	5/7	(71)	2/5	(40)	3/3	(100)	6/10	(60)	2/3	(67)	15/18	(83)	3/4	(75)	3/4	(75)	8/11	(73)	16/24	(67)	**63/89**	(71)
Shiga toxin + Questions																						
Stool tested for Shiga toxin/ Patients with stool specimen obtained	5/7	(71)	2/6	(33)	3/5	(60)	10/10	(100)	1/3	(33)	18/18	(100)	4/4	(100)	0/4	(0)	3/11	(27)	10/25	(40)	**56/93**	(60)
Stool Shiga toxin-positive/ Patients with stool tested for Shiga toxin	5/5	(100)	1/2	(50)	1/3	(33)	5/10	(50)	1/1	(100)	14/18	(78)	3/4	(75)	0/0	--	1/3	(33)	10/10	(100)	**41/56**	(73)
Non-O157 Isolation																						
Stool tested for non-O157 STEC/ Patients with stool tested for Shiga toxin	0/5	(0)	1/2	(50)	1/3	(33)	7/10	(70)	1/1	(100)	3/18	(17)	1/4	(25)	0/0	--	0/3	(0)	1/10	(10)	**15/56**	(27)
Non-O157* STEC isolated from stool/ Stool tested for non-O157 STEC	0/0	--	1/1	(100)	0/1	(0)	0/7	(0)	0/1	(0)	1/3	(33)	0/1	(0)	0/0	--	0/0	--	1/1	(100)	**3/15**	(20)
Serum																						
Serum Tested/ Serum Collected	2/2	(100)	1/1	(100)	3/3	(100)	3/4	(75)	0/0	--	5/5	(100)	0/1	(0)	0/1	(0)	6/7	(86)	11/11	(100)	**31/35**	(89)
O157/Tested	2/2	(100)	1/1	(100)	2/3	--	1/3	(33)	0/0	--	2/5	(40)	0/0	--	0/0	--	6/6	(100)	9/11	(82)	**23/31**	(74)
Total Stool																						
O157, non-O157 STEC, Shiga toxin +/ Total stool specimens obtained	5/7	(71)	3/6	(50)	3/5	(60)	6/10	(60)	2/3	(67)	16/18	(89)	3/4	(75)	3/4	(75)	8/11	(73)	19/25	(76)	**68/93**	(73)

Non-O157 identified:

*Culture:O121 (1), O145 (1)