FoodNet Active Manuscripts

Status	#	Lead	Coauthors	Title	Journal	Updated	Comment
9							
	106	Marcus, Ruthanne	Varma, Jay K., Medus, Carlota, Boothe, Effie, Anderson, Bridget J., Crume, Tessa L., Fullerton, Kathleen E., Moore, Matthew R., White, Patricia L., Lyszkowicz, Ewelina, Voetsch, Andrew C., Angulo, Fredrick J., EIP FoodNet Working Group	Re-assessment of Risk Factors for Sporadic Salmonella Enteritidis Infections: A Case-Control Study in Five FoodNet Sites, 2002-2003	Epidemiology and Infection	6/20/2006	
8							
	114	Hoefer, Dina	Malone, Shauna, Zansky, Shelley M., Marcus, Ruthanne, Frenzen, Paul D., Scallan, Elaine	Knowledge, Attitude, and Practice of the Use of Irradiation Among Respondents to the FoodNet Population Survey in Connecticut and New York	Journal of Food Protection	2/10/2006	Accepted to JFP
	65	Jones, Timothy F.	McMillian, Marcella B., Scallan, Elaine, Thomas, Stephanie M., Cronquist, Alicia B., Frenzen, Paul D., Angulo, Fredrick J.	A Population-Based Estimate of the Substantial Burden of Diarrheal Disease in the United States; FoodNet, 1996-2003	Epidemiology and Infection	1/6/2006	Accepted to Epi and Infection
	460	Jones, Timothy F.	Angulo, Fredrick J.	Eating in Restaurants: A Risk Factor for Foodborne Disease?		7/11/2006	Accepted to CID
	433	Roy, Sharon L.	Scallan, Elaine, Beach, Michael J.	The Burden of Acute Gastrointestinal Illness		3/10/2006	Accepted
	112	Varma, Jay K.	Marcus, Ruthanne, Stenzel, Sara A., Hanna, Samir S., Gettner, Sharmeen, Anderson, Bridget J., Hayes, Tameka, Shiferaw, Beletshachew, Crume, Tessa L., Joyce, Kevin W., Fullerton, Kathleen E., Voetsch, Andrew C., Angulo, Fredrick J.	Highly-resistant Salmonella Newport-MDRAmpC Transmitted Through the Domestic United States Food Supply: FoodNet Case Control Study, 2002-2003	Journal of Infectious Diseases	1/11/2006	Accepted at JID
7							
	105	Fullerton, Kathleen E.	Ingram, Amanda, Jones, Timothy F., Anderson, Bridget J., McCarthy, Patrick V., Hurd, Sharon, Shiferaw, Beletshachew, Vugia, Duc J., Haubert, Nicole, Hayes, Tameka, Wedel, Stephanie, Scallan, Elaine, Henao, Olga L., Angulo, Fredrick J., EIP FoodNet Working Group	Risk Factors for Infant Campylobacter Infections: A FoodNet Case-Control Study		3/5/2006	Submitting to Pediatrics

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
	24	Jones, Timothy F.	Ingram, Amanda, Fullerton, Kathleen E., Marcus, Ruthanne, Anderson, Bridget J., McCarthy, Patrick V., Vugia, Duc J., Shiferaw, Beletshachew, Haubert, Nicole, Wedel, Stephanie, Angulo, Fredrick J.	A Case Control Study of Salmonella Infection in Infants, FoodNet, 2002-2004		3/5/2006	Submitting to Pediatrics
	325	Shiferaw, Beletshachew		Comparison of Three Surveillance Systems for Hemolytic Uremic Syndrome in Oregon		6/6/2006	Submitted to AJPH.
	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		3/5/2006	Submitting to CID
	118	Voetsch, Andrew C.	Rabatsky-Ehr, Therese R., Lance-Parker, Susan, Thomas, Stephanie M., Smith, Kirk E., Mohle-Boetani, Janet C., Keene, William E., Mead, Paul S.	Changes in Bovine Risk Factors for E. coli O157: a Case-Control Study in FoodNet Sites: 1999-2000		5/23/2006	Submitted to Epidemiology and Infection.
6							
	124	Dunne, Eileen F.	Griffin, Patricia M., Snider, Cynthia J., 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	Pediatric Hemolytic Uremic Syndrome in the United States, 1997-2002: A Study of 379 Cases	Journal of Food Protection		
	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		5/23/2006	
	121	Samuel, Michael C.	Vugia, Duc J., Koehler, Kathleen M., Marcus, Ruthanne, McNees, Alexander A., Deneen, Valerie C., Damaske, Barbara, Shiferaw, Beletshachew, Hadler, James L., Angulo, Fredrick J.	Consumption of Risky Foods Among Adults at High Risk for Severe Foodborne Diseases: Room for Improved Targeted Prevention Messages		6/6/2006	Submitted to Journal of Food Safety
5							

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
	455	Aragon, Tomas J.	Vugia, Duc J., Shallow, Sue, Samuel, Michael C., Reingold, Art, Angulo, Fredrick J., Bradford, William Z.	A Case-Control Study of Shigellosis in San Francisco: The Role of Sexual Transmission and HIV Infection			
	394	Nelson, Jennifer M.	Nadle, Joelle, Daniels, Allison, Clogher, Paula, Gillespie, Jennifer, Furuno, Jon P., Plantenga, Melissa, Bernarczyk, Robert, Ingram, Amanda	Foods Associated with Listeria monocytogenes Infections Are Common at Long-Term Care Facilities in Eight States, FoodNet 2005		7/11/2006	
	104	Scallan, Elaine	Jones, Timothy F., McMillian, Marcy, Frenzen, Paul D., Cronquist, Alicia B., Thomas, Stephanie M., Angulo, Fredrick J.	Health Care Utilization Among Persons Who Have Recently Experienced Gastrointestinal Illness		6/21/2006	
	107	Voetsch, Andrew C.		Analysis of Trends in Listeriosis in the FoodNet Sites, 1996-2003		5/23/2006	
	459	Voetsch, Andrew C.		Case-Only Manuscript (dissertation)		5/23/2006	
4							
	119	Watt, James P.	Bales, Michael, Dannenberg, Andrew L., Imhoff, Beth, Mullins, Scott R., Dowell, Scott F.	Impact of a Health-Related Internet Hoax on a Public Health Agency and the Public: Implications for Health Communication			
3							
	323	DeBess, Emilio E.		Food Handler Survey: Knowledge and Attitudes of Foodborne Illnesses in Two Oregon Counties			
	26	Majowicz, Shannon E.	Scallan, Elaine, Hall, Gillian, Banerjee, Anyana, Kirk, Martyn D., Angulo, Fredrick J.	Respiratory Symptoms Among Persons with Gastrointestinal Illness		6/21/2006	
	360	Voetsch, Andrew C.	Henao, Olga L., Cronquist, Alicia B., Hurd, Sharon, Thomas, Stephanie M., Scheftel, Joni M., McMillian, Marcy, Megginson, Melanie, Hatch, Julie, Angulo, Fredrick J., EIP FoodNet Working Group	Surveillance Trends for Vibrio Infections in FoodNet sites, 1996-2004		11/9/2005	
2							
	103	Ailes, Elizabeth	Nelson, Jennifer M.	Foodborne Diseases Active Surveillance Network Surveillance Summary, 1996-2003			

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
	115	Bair, Heather	FoodNet Education Working Group	Foodborne Diseases in the United States: Lessons Learned from FoodNet, 1996-2002			
	116	Cheung, Michelle	Ray, Susan M., Shiferaw, Beletshachew,	Foodborne Pathogens Causing Illness in the First 7 Days of Life: FoodNet, 1996-2001			
	22	Crump, John A.	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		11/9/2005	
	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			
	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			
	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			
	432	Maldonado, George		Blending Project		1/3/2006	
	341	Snider, Cynthia J.	Phan, Quyen, Gettner, Sharmeen, Edwards, Leslie, Morse, Dale L., Vugia, Duc J., Cronquist, Alicia B., Burnett, Cindy, Swanson, Ellen, Keene, William E., Lynch, Michael, Jones, Timothy F., EIP FoodNet Working Group	Epidemiology of Foodborne Outbreaks of Undetermined Etiology, FoodNet Sites, 2001-2004			
	25	Snider, Cynthia J.	Vugia, Duc J., Burnite, Steve, Hurd, Sharon, Hayes, Tameka, Scheftel, Joni M., Smith, Glenda, Shiferaw, Beletshachew, Boothe, Effie, Griffin, Patricia M., EIP FoodNet Working Group	Post-Diarrheal Hemolytic (D+HUS) in Adults, FoodNet, 1997-2002			

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
	458	Voetsch, Andrew C.		S. Heidelberg Using Repeated Sampling from the 1996-1997 Population Survey			
1							
	326	Boxrud, David		Salmonella Enteritidis Case-Control Study PFGE Comparison			
	364	Daly, Leslie	Scallan, Elaine, Majowicz, Shannon E., Hall, Gillian, Angulo, Fredrick J.	Estimating the Duration of Illnes from Population Surveys of Acute Gastroenteritis			
	102	Dunn, John R.		Substantial Decline in the Incidence of Escherichia coli O157:H7 Infections in FoodNet, 2003		6/8/2006	
	110	Frenzen, Paul D.		Consumer Interest in Irradiated Foods			
	321	Hedberg, Craig W.		Look at EFORS Data from FoodNet Sites to Determine the Value of the Contributing Factors			
	88	Nelson, Jennifer M.	Hurd, Sharon	Multiple Pathogens Isolated Over a Short Period, FoodNet 1996-2002			
	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			
0							
	322	Hoekstra, Robert M.		Protective Exposures in Matched Case-Control Studies of Foodborne Illness			
	100	Scallan, Elaine	Frenzen, Paul	The Economic Cost of Diarrheal Illness in the United States			

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

Non Typhi Salmonella MDR Clinical Outcomes Cohort Study Status

State	Study Start Date	Eligible	Interviewed	Pending	Refused	Other Not Enrolled
CA	1/1/2006	13	6	4	2	1
CO	1/1/2006	46	32	7	5	2
CT	1/1/2006	38	29	0	5	4
GA	3/7/06 (GOA) & 3/15/06 (MSA)	14	5	4	0	5
MD	6/21/2006	12	0	12	0	0
MN	1/1/2006	52	31	11	5	5
NM	1/1/2006	15	7	5	1	2
NY	1/1/2006	19	6	5	1	7
OR	1/1/2006	9	7	1	1	0
TN	1/1/2006	25	17	4	1	3
	Total	243	140	53	21	29

Updated 6/22/06.

Proposal to conduct surveillance for *Brucella* in FoodNet

Background:

Brucellosis is an infection caused by the bacteria of the genus *Brucella*. Various *Brucella* species affect sheep, goats, cattle, deer, elk, pigs, dogs, and several other animals. Worldwide, human infection usually occurs through contact with contaminated animals or animal products; in the United States many infections are acquired via the foodborne route, from eating contaminated, unpasteurized dairy products of international origin. In humans, infection causes flu-like symptoms; severe infections and long-lasting or chronic symptoms may occur. Brucellosis is diagnosed in a laboratory by finding *Brucella* organisms in samples of blood or bone marrow, through paired serology, or through immunofluoresence (http://www.cdc.gov/epo/dphsi/casedef/brucellosis_current.htm). Brucellosis is a nationally notifiable disease in the United States.

Proposal: To expand FoodNet surveillance to include laboratory-confirmed infections of *Brucella*.

Proposed time line:

- July – August 2006
  - Identify site representative to participate in FoodNet *Brucella* working group
  - Complete FoodNet site assessment regarding *Brucella* diagnostic laboratories in FoodNet catchment area.
- August – September 2006
  - Bacterial Zoonoses Branch to review existing case report forms
  - Work with FoodNet *Brucella* working group to modify case report form if necessary
  - CDC FoodNet to identify IT infrastructure to facilitate case reporting from states
- October-December 2006: Participating FoodNet sites to begin reporting of laboratory-confirmed cases of *Brucella* (Pilot phase)
- January 2007: FoodNet sites to begin active laboratory-based surveillance for *Brucella*

FoodNet Steering Committee Proposal

Project Brief: Validity of Race and Ethnicity in Public Health Surveillance Data

Date: July 11, 2006

Proposed by: Benjamin Silk, MPH [Contact: (404) 727-8717 or email bsilk@sph.emory.edu]

Statement of problem: Reporting of race- and ethnicity-specific surveillance data has been limited to case reports where these data are available in the National Notifiable Diseases Surveillance System (NNDSS). This raises the question as to whether cases' known racial and ethnic frequency distributions are equivalent to those of unknown race or ethnicity. Pursuit of missing data through follow-up is a potential solution, but evidence for the utility of this strategy is absent. A study in Massachusetts had limited success contacting patients' healthcare providers. Thus, multiple imputation of missing data is an attractive alternative, but needs to be validated with actual race and ethnicity data. In addition, agreement between self-reported race/ethnicity and race/ethnicity recorded for public health surveillance has not been assessed across healthcare systems in a catchment area.

Proposal: The FoodNet project provides an ideal infrastructure for an assessment of the validity of race and ethnicity in public health surveillance data. The project's near complete surveillance case ascertainment (e.g., *Campylobacter*, *Salmonella*) includes recruitment into case-control studies, where gold standard race/ethnicity data from self reports are collected again. Since data can be linked, the validity of the surveillance data (often obtained from administrative health records) can be compared to self reports of race and ethnicity. Surveillance reports also include residency information. When contextualized to race/ethnicity Census data (e.g., proportion Hispanic in resident's census tract), residency can inform sequential regression multivariate imputation (SRMI). The SRMI approach predicts race/ethnicity via polytomous logistic regression, conditioning on the remaining case report and Census data. To assess this application of SRMI, the project will evaluate the covariates' predictive value for race/ethnicity multiple imputation. In addition, the missing data mechanism (e.g., missing at random) will be assessed by creating a data status indicator (i.e., race/ethnicity missing or not) to test for associations with the remaining observed data (multiple imputation predictors) using logistic regression. To summarize, the project will report comparisons of incidence rates for African Americans, Hispanics, and non-Hispanic Whites where records with missing race/ethnicity are excluded, missing race/ethnicity data are imputed, and where race/ethnicity surveillance data are corrected with self-reported data.

In Georgia, four assumptions were affirmed for the project:

1. Self-reported race/ethnicity data were not used to update surveillance records following study interviews. In other words, race and ethnicity data in the surveillance registry were not affected by the case-control study.
2. Linkability of datasets was demonstrated using a variety of fields that are common to both the surveillance registry and the study datasets.
3. The frequency distribution of race and ethnicity differed somewhat according to enrollment status in the studies, which is an acknowledged limitation. In the 1998 *Campylobacter* study, non-Hispanic Blacks and Hispanics were more common in the non-enrolled group, but their frequency differed from the enrolled group by less than 5%. Non-Hispanic Whites were more common in the enrolled group than the non-participant group (86.4% vs. 54.3%).
4. Using data from the 1998 *Campylobacter* study, the study of infant salmonellosis and campylobacteriosis, and *S. newport* study, there were a total of 67 records with race/ethnicity data available from the studies and missing in surveillance records. Addition of data from other FoodNet sites would increase statistical power, provided the first three assumptions could be met.

FoodNet Analysis Proposal

Variations in Rates of Hospitalization Among *Salmonella* Serotypes

Date:	July 7, 2006
Participants:	Amanda Ingram (TN), Jones, Blythe, Hoefer, Vugia
Proposal:	Examine FoodNet active surveillance data from 1996-2005 to determine potential differences in rates of hospitalization, mean duration of hospitalization, or other indicators of differences in disease severity among different *Salmonella* serotypes.
Data:	FoodNet *Salmonella* surveillance data, 1996-2005
Plan:	This updates a proposal submitted in November, 2004. Analysis of 1996-2003 data was presented as a poster at the 2006 ICEID Conference. Additional data will be added to the analysis, with plans to pursue publication of results as appropriate.
Timeline:	Analysis of updated data to begin July, 2006

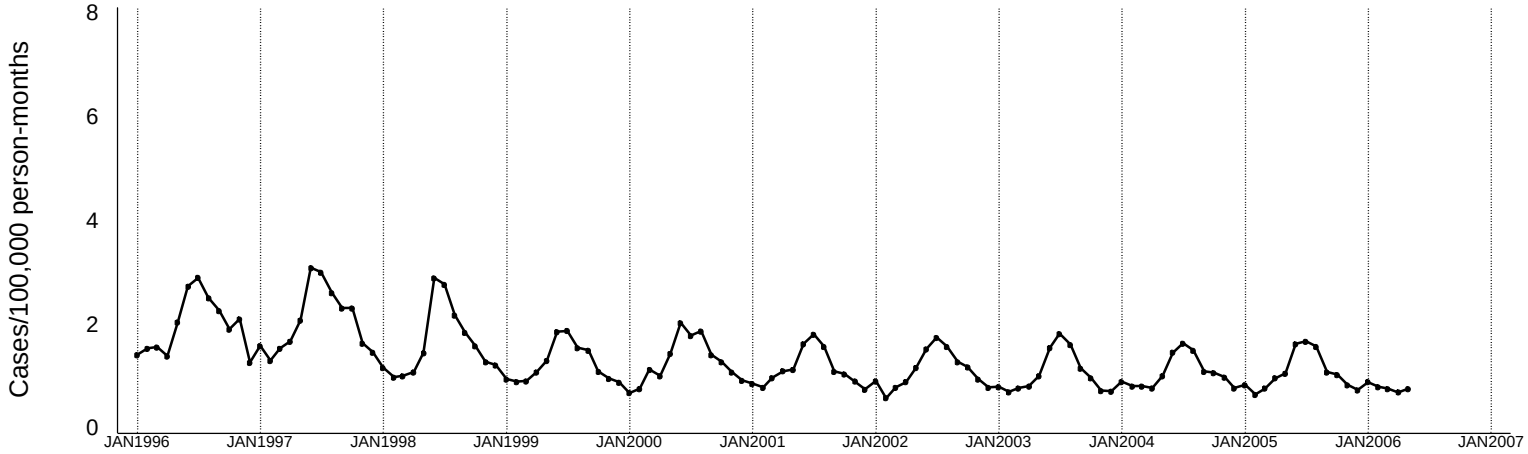
Clostridium difficile Surveillance Update

State	Start date	Total # *C. diff* toxin+ Identified*	# of Cases mtg Surv Case definition	# of Case Report Forms Received	Culture positive
CA	May	17	4		
CO	Surveillance protocol with state IRB				
CT	Jun	6	1		
GA	May	N/A	12	12	
MD	May	10	1		
MN	Jun	N/A	11	11	
NM	Proposed surveillance start date in August				
NY	Jun	9	0		
OR	Jul				
TN	Jun	22	6	5	
total		**87**	**35**	**28**	**0**

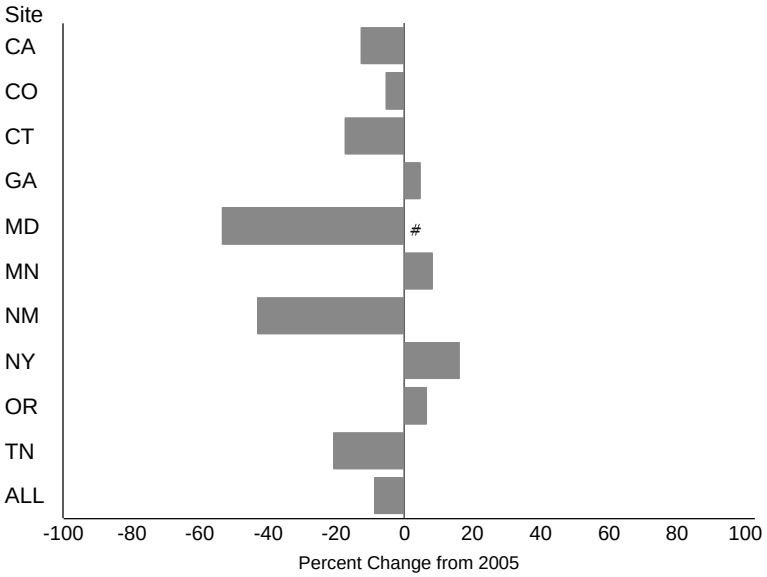
*Total number of *C. difficile* toxin-positive cases may be an under-estimate (to be updated).
N/A= Total number of *C. difficile* toxin-positive cases not available at this time.

Campylobacter

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

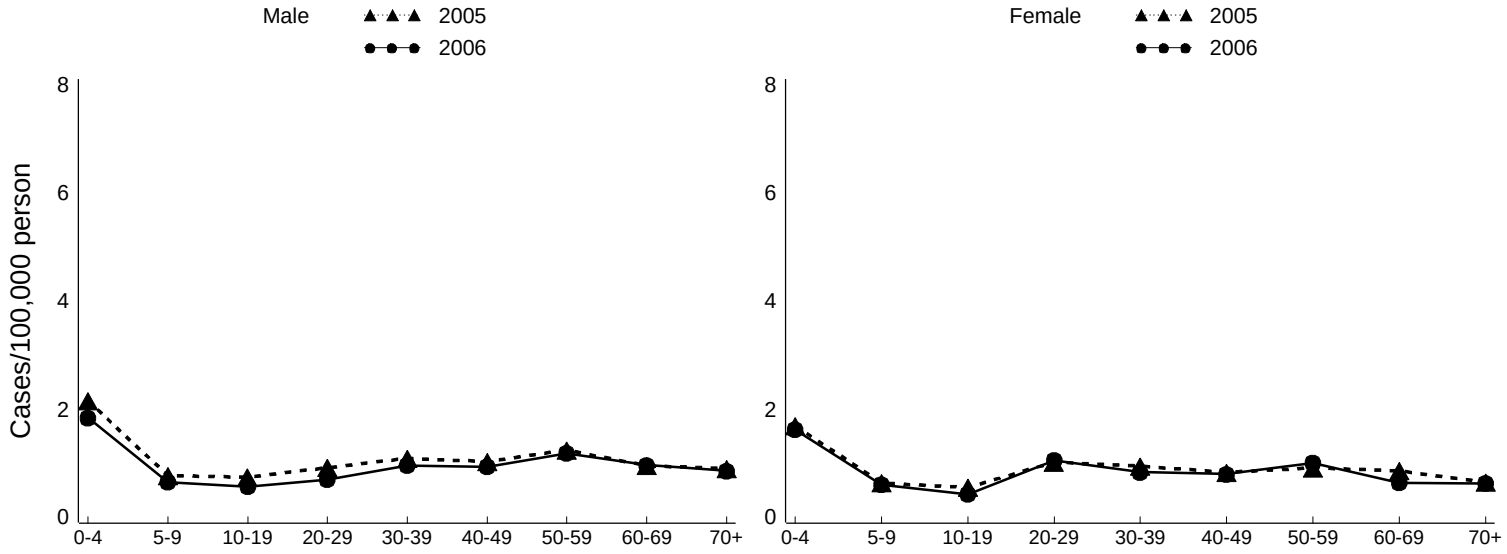


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	313	9.755	358	11.16	370	11.50
CO	143	5.595	151	5.909	126	5.119
CT	148	4.224	179	5.109	170	4.882
GA	204	2.310	195	2.209	212	2.453
MD	62	1.115	133	2.393	108	2.042
MN	280	5.489	259	5.077	276	5.459
NM	62	3.258	109	5.727	111	5.832
NY	166	3.847	143	3.314	132	3.644
OR	231	6.426	217	6.037	219	6.162
TN	119	2.017	150	2.542	111	2.318
ALL	1728	3.886	1894	4.259	1834	4.356

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

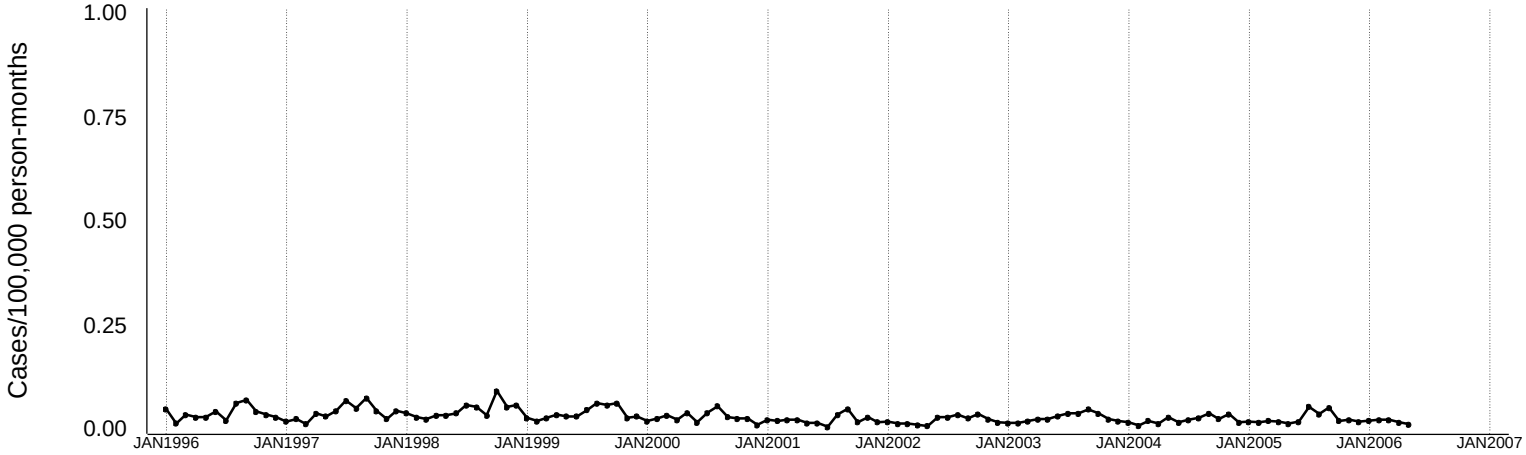
Calendar year through May: Rates for 2005 and 2006 by age group and sex



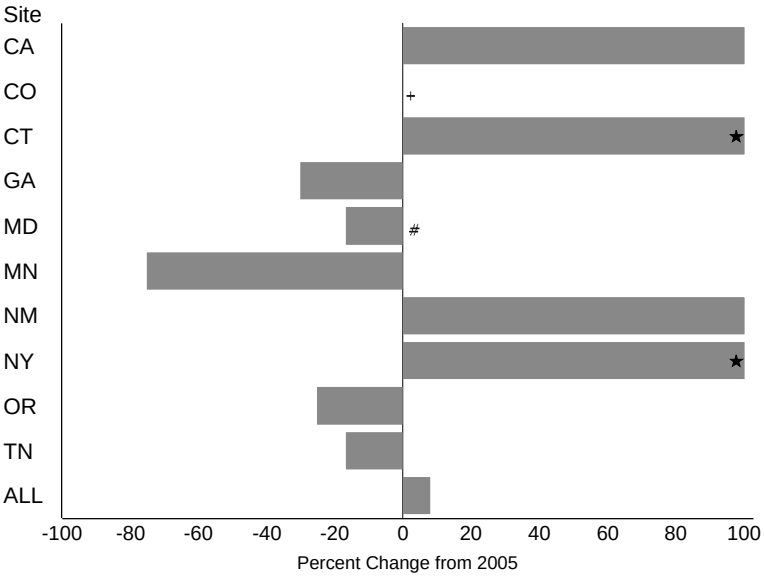
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Listeria

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

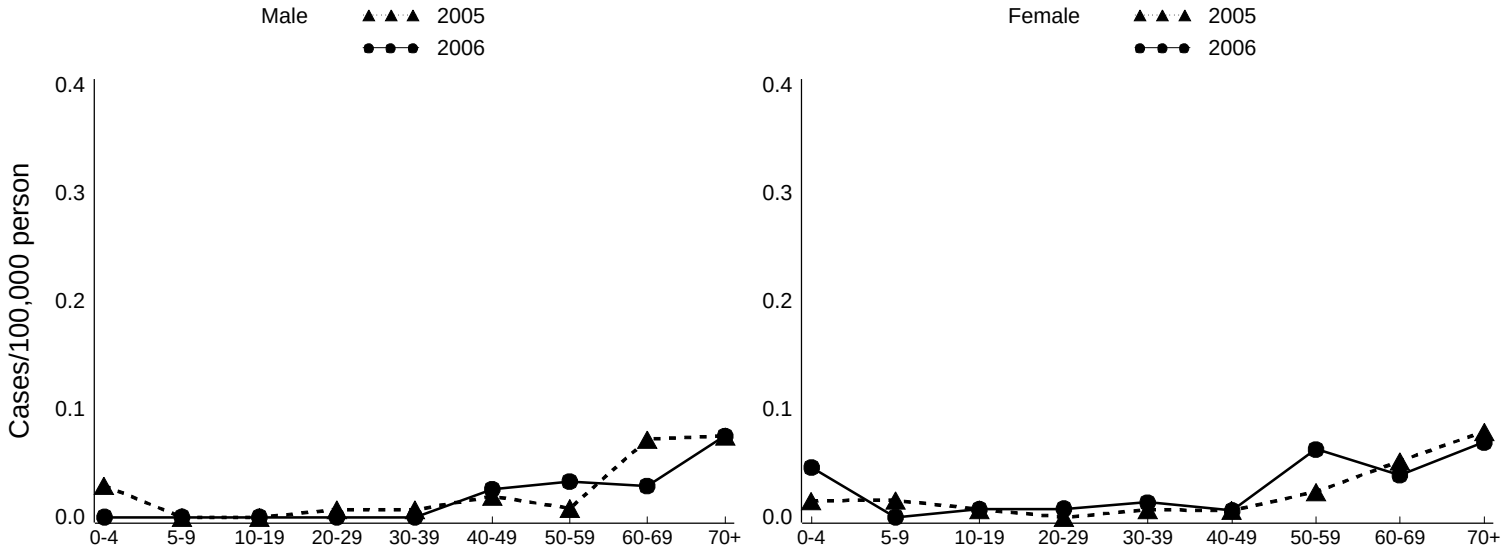


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	6	0.187	3	0.093	6	0.193
CO	1	0.039	0	0.000	1	0.058
CT	6	0.171	2	0.057	4	0.104
GA	7	0.079	10	0.113	8	0.097
MD	5	0.090	6	0.108	4	0.082
MN	1	0.020	4	0.078	1	0.028
NM	2	0.105	1	0.053	1	0.026
NY	5	0.116	2	0.046	4	0.109
OR	3	0.083	4	0.111	3	0.079
TN	5	0.085	6	0.102	3	0.068
ALL	41	0.092	38	0.085	36	0.087

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

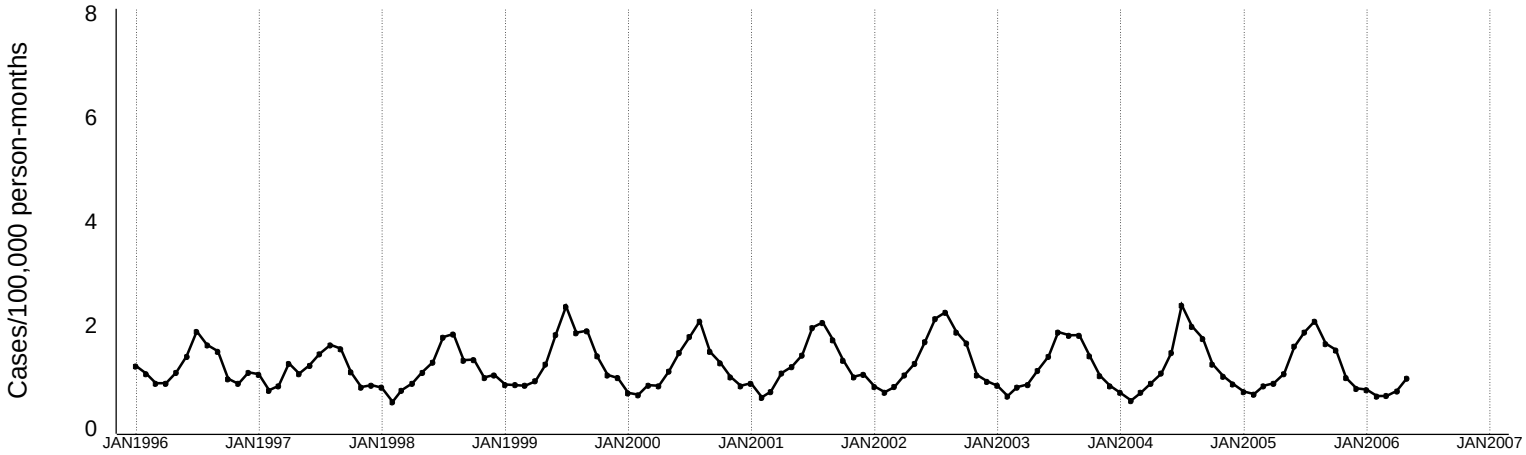
Calendar year through May: Rates for 2005 and 2006 by age group and sex



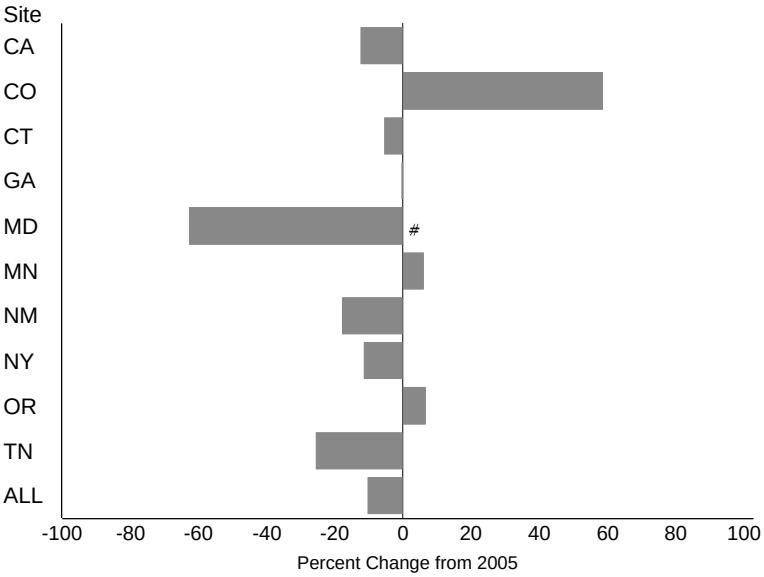
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella, all serotypes

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

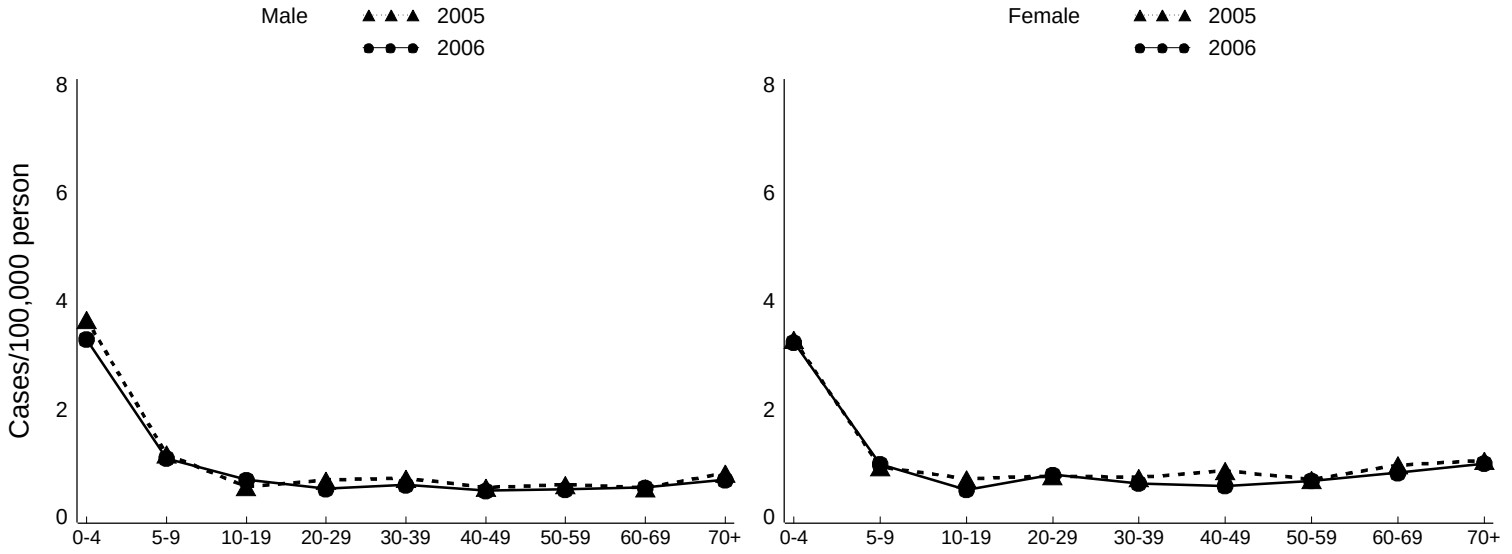


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	136	4.24	155	4.83	162	5.04
CO	160	6.26	101	3.95	101	4.13
CT	140	4.00	148	4.22	144	4.16
GA	388	4.39	389	4.41	393	4.54
MD	85	1.53	227	4.08	233	4.45
MN	212	4.16	200	3.92	208	4.13
NM	65	3.42	79	4.15	81	4.26
NY	134	3.11	151	3.50	132	3.74
OR	147	4.09	138	3.84	135	3.80
TN	200	3.39	268	4.54	199	4.26
ALL	1667	3.75	1856	4.17	1791	4.30

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

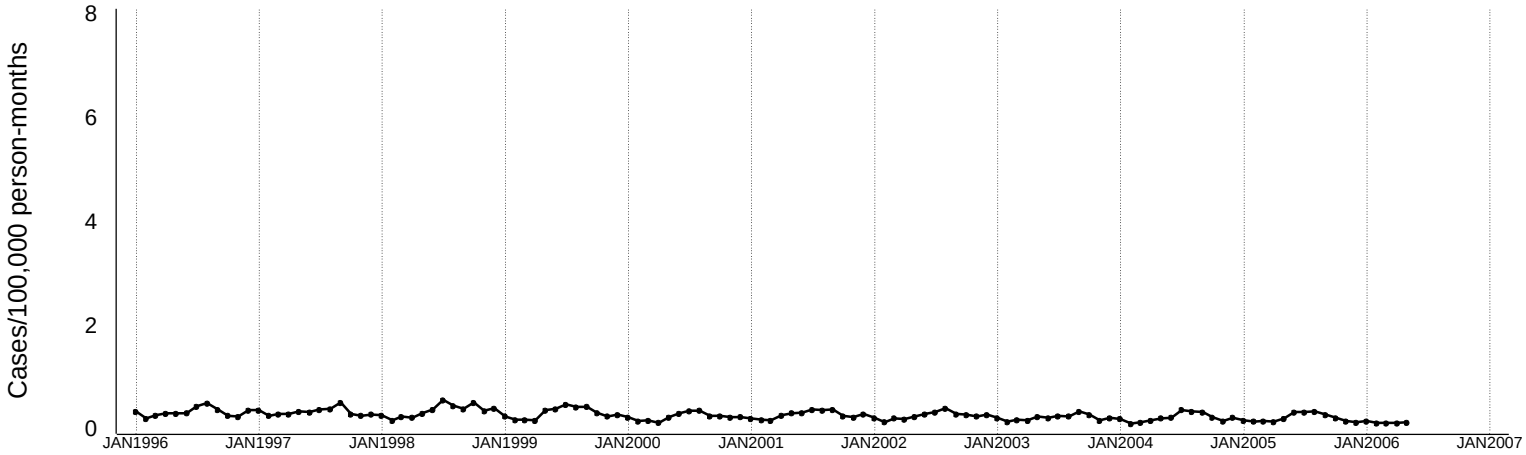
Calendar year through May: Rates for 2005 and 2006 by age group and sex



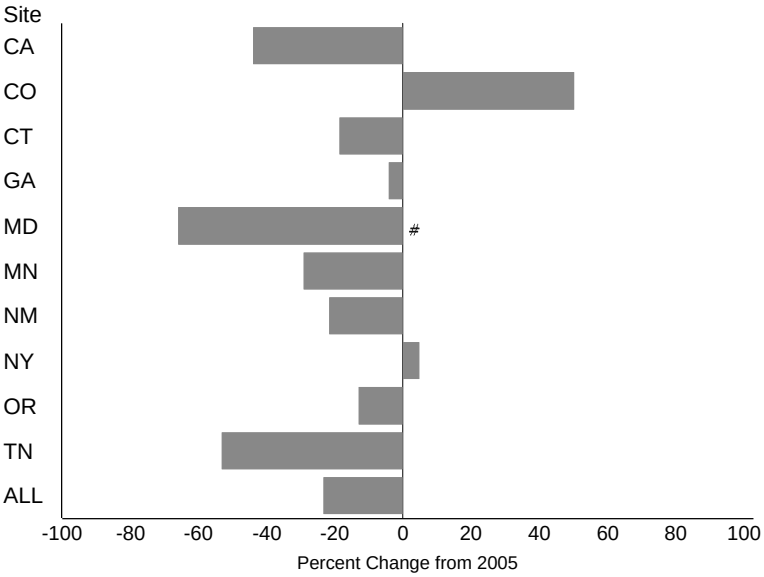
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella Typhimurium

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

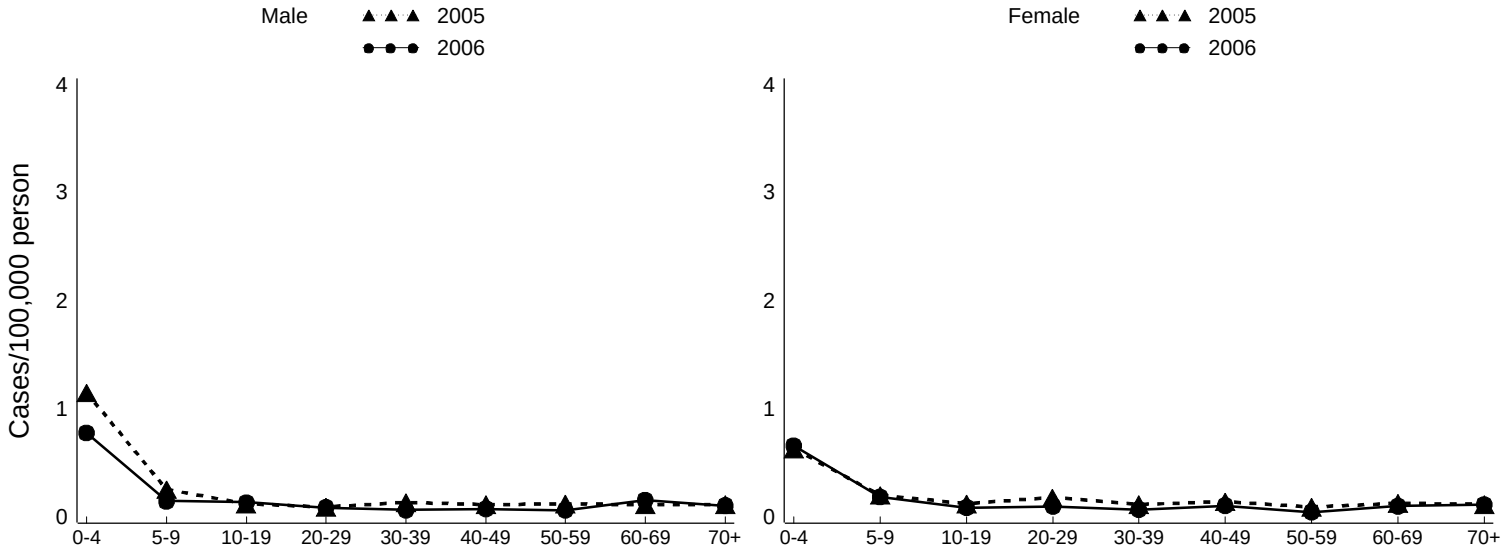


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	18	0.56	32	1.00	26	0.82
CO	39	1.53	26	1.02	26	1.08
CT	22	0.63	27	0.77	28	0.79
GA	70	0.79	73	0.83	87	1.01
MD	12	0.22	35	0.63	43	0.82
MN	27	0.53	38	0.74	54	1.07
NM	11	0.58	14	0.74	15	0.76
NY	23	0.53	22	0.51	25	0.73
OR	27	0.75	31	0.86	28	0.78
TN	32	0.54	68	1.15	55	1.24
ALL	281	0.63	366	0.82	387	0.94

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

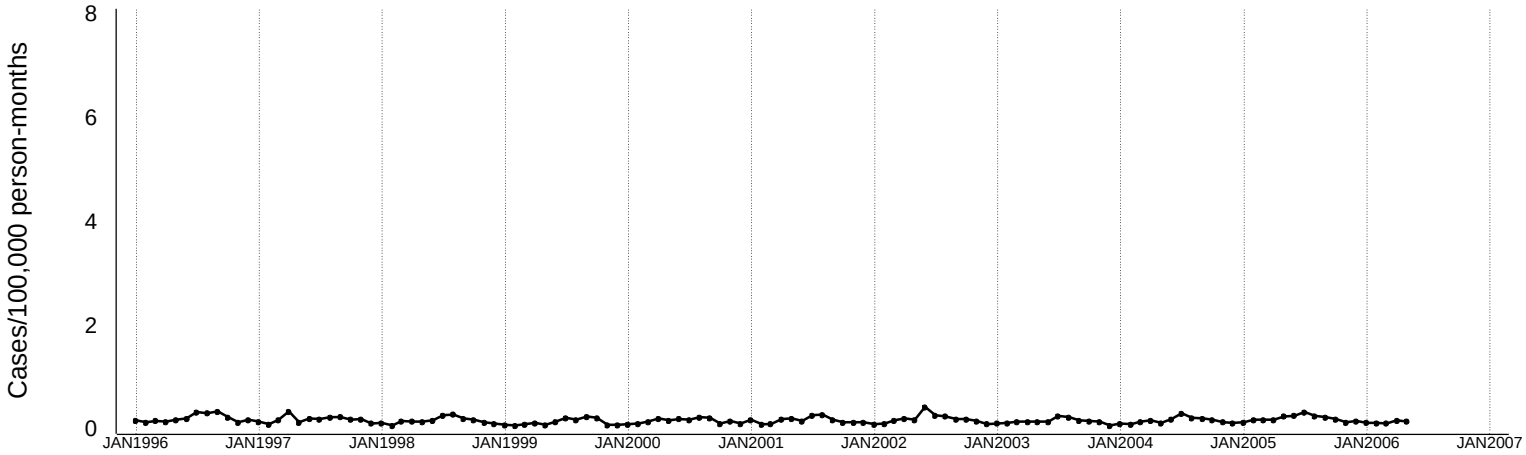
Calendar year through May: Rates for 2005 and 2006 by age group and sex



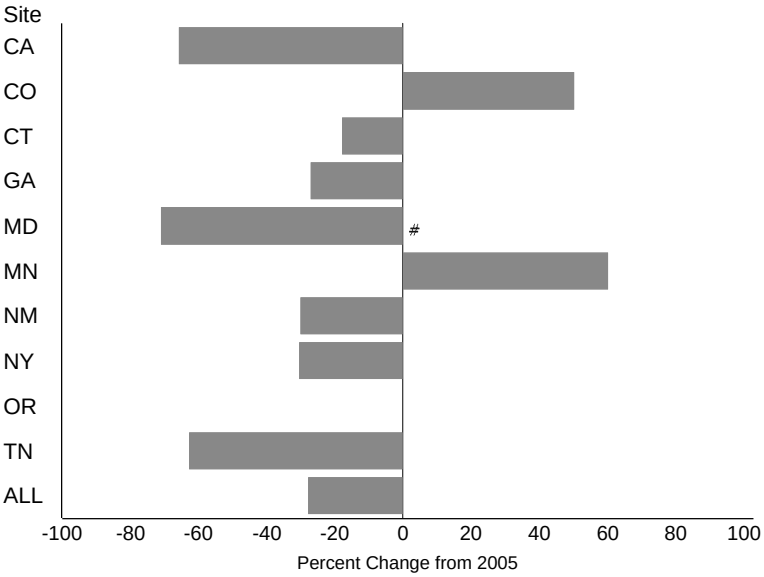
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella Enteritidis

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

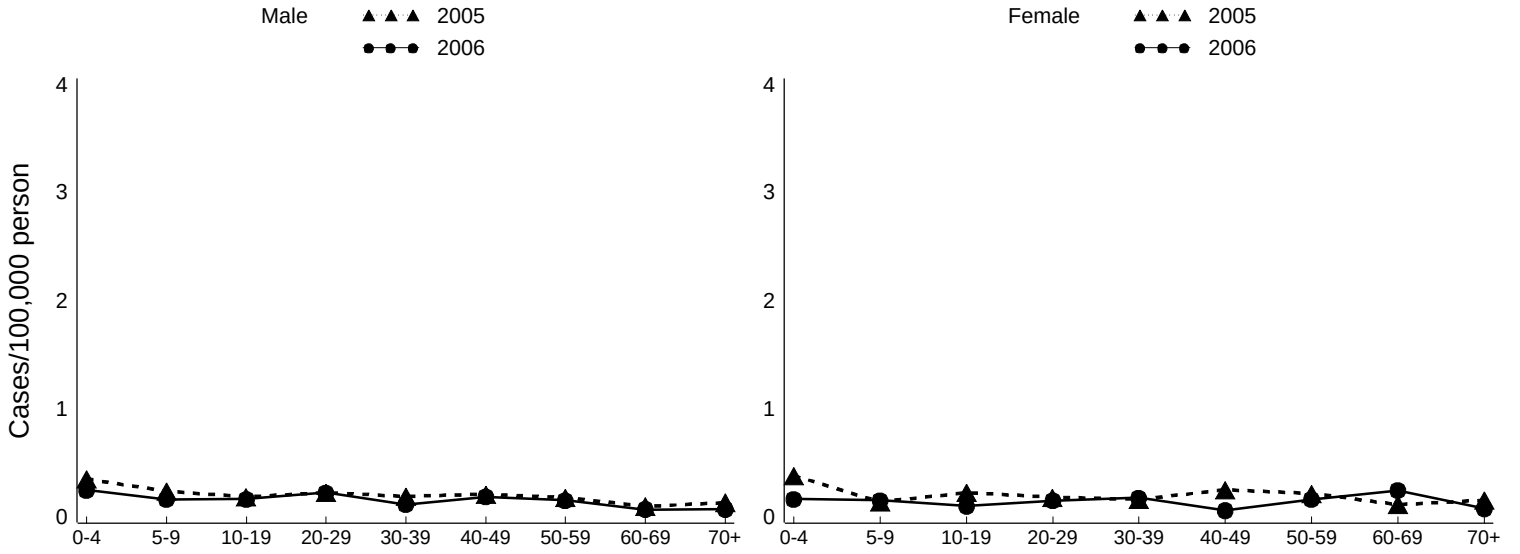


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	10	0.312	29	0.904	26	0.820
CO	27	1.056	18	0.704	19	0.773
CT	42	1.199	51	1.456	37	1.076
GA	30	0.340	41	0.464	25	0.293
MD	26	0.468	89	1.601	75	1.423
MN	80	1.568	50	0.980	45	0.884
NM	7	0.368	10	0.525	9	0.447
NY	30	0.695	43	0.996	27	0.765
OR	24	0.668	24	0.668	24	0.687
TN	21	0.356	56	0.949	21	0.421
ALL	297	0.668	411	0.924	309	0.747

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

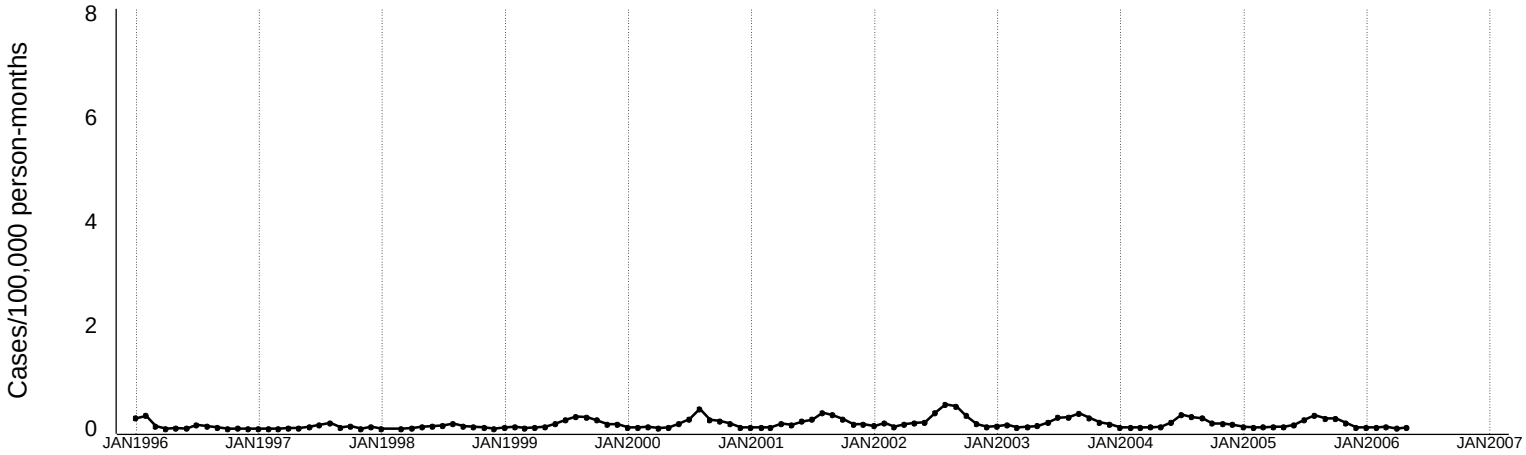
Calendar year through May: Rates for 2005 and 2006 by age group and sex



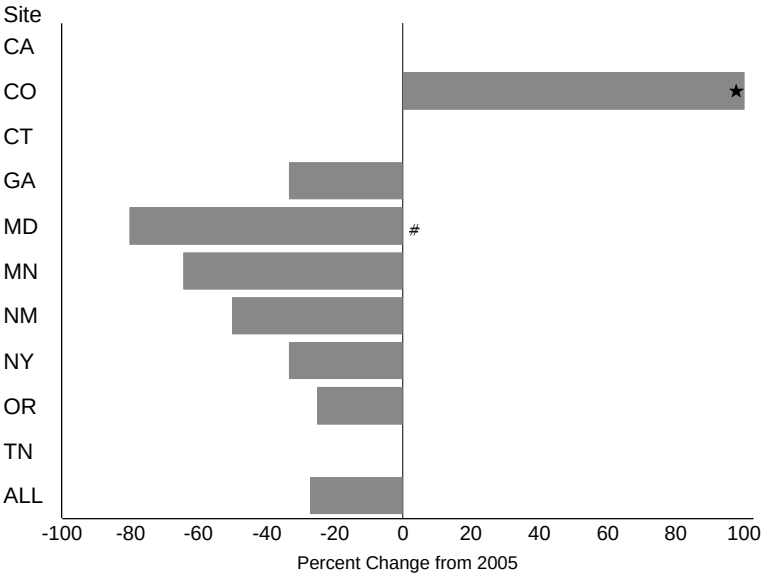
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella Newport

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

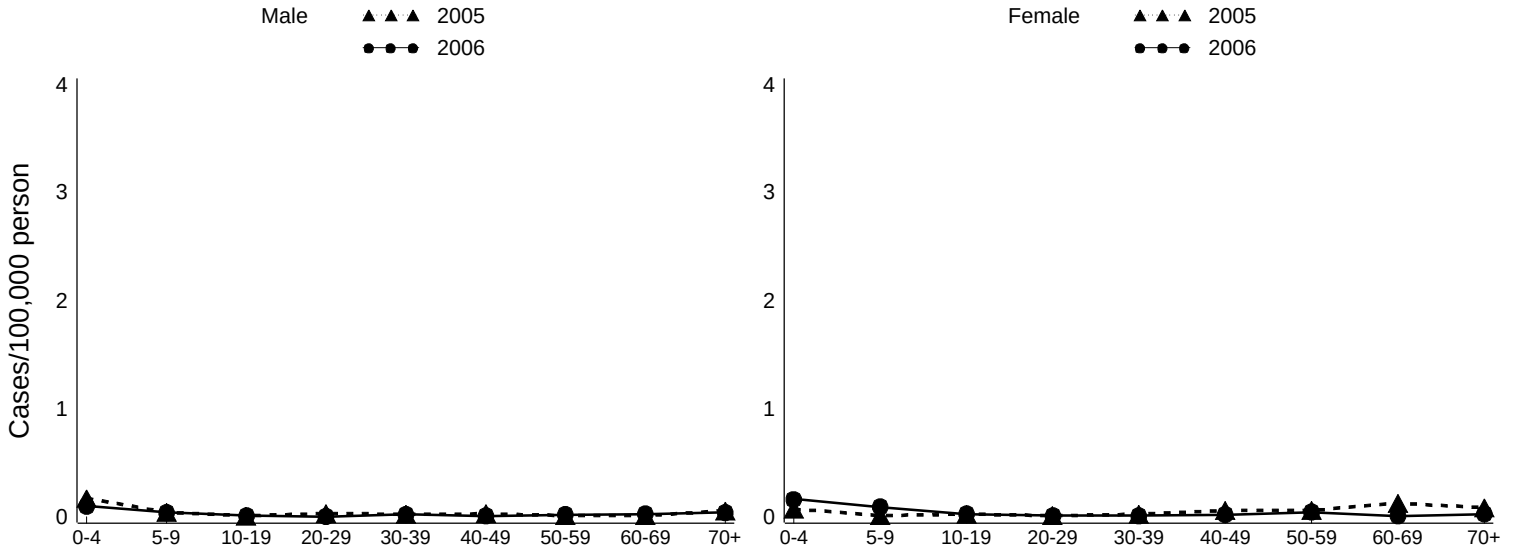


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	5	0.156	5	0.156	10	0.304
CO	11	0.430	5	0.196	6	0.236
CT	5	0.143	5	0.143	14	0.416
GA	20	0.227	30	0.340	31	0.358
MD	1	0.018	5	0.090	8	0.156
MN	5	0.098	14	0.274	11	0.218
NM	4	0.210	8	0.420	6	0.315
NY	4	0.093	6	0.139	12	0.344
OR	6	0.167	8	0.223	10	0.282
TN	6	0.102	6	0.102	6	0.138
ALL	67	0.151	92	0.207	113	0.275

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

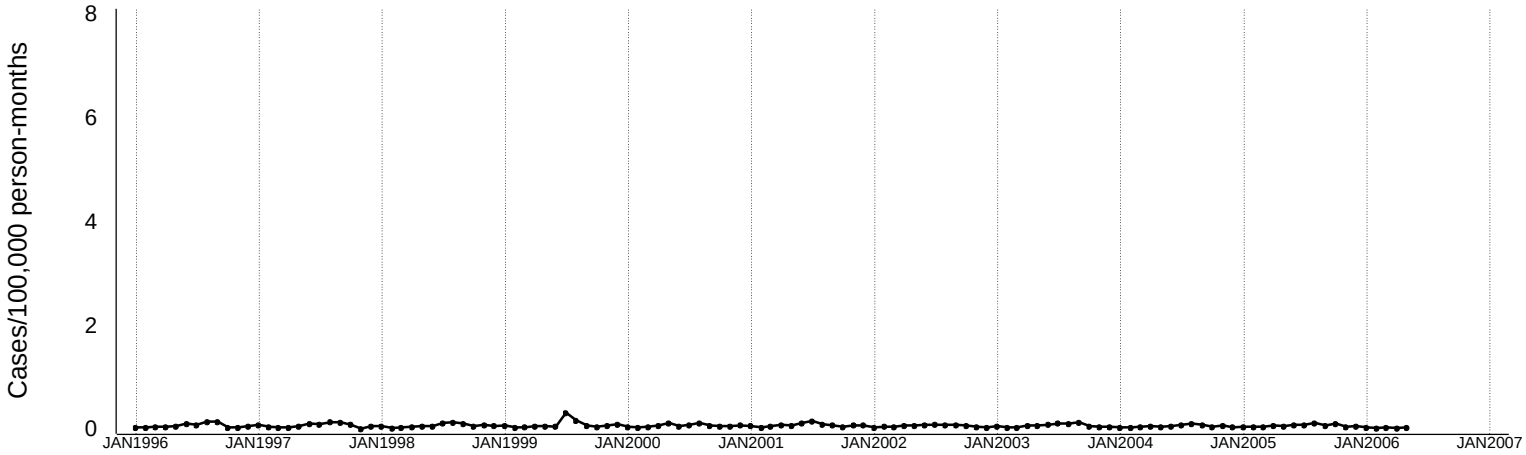
Calendar year through May: Rates for 2005 and 2006 by age group and sex



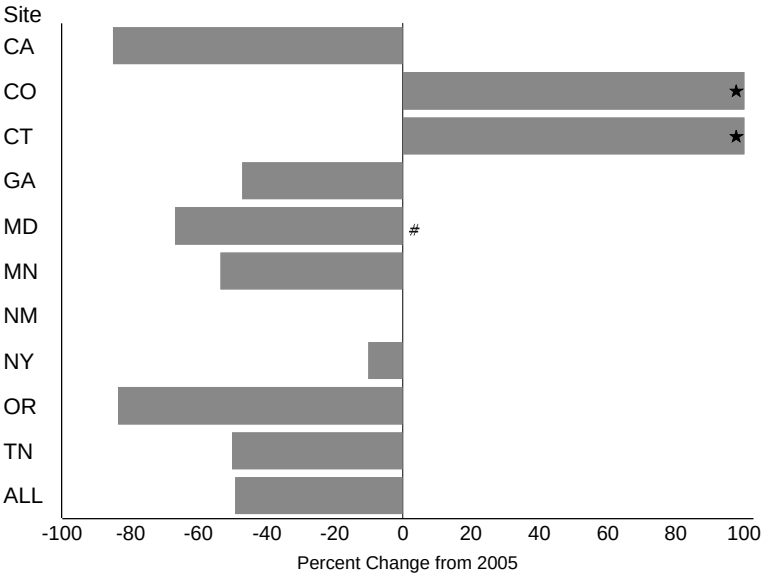
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella Heidelberg

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

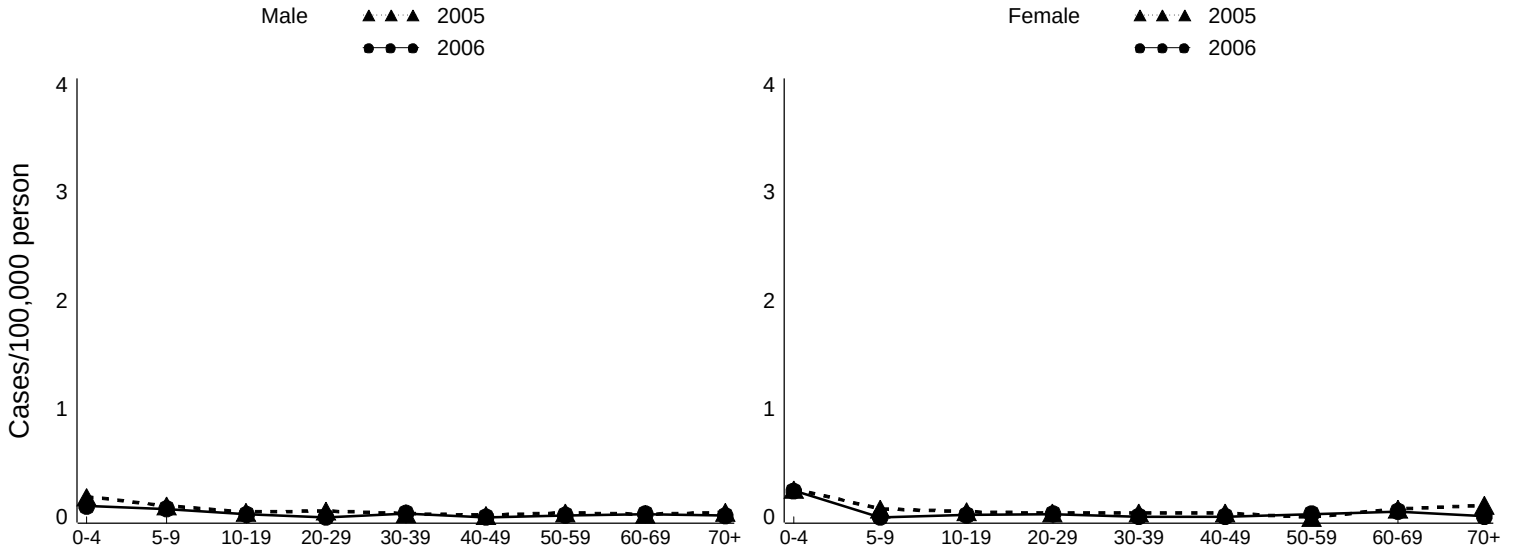


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	3	0.093	20	0.623	17	0.528
CO	4	0.157	1	0.039	6	0.271
CT	8	0.228	4	0.114	6	0.173
GA	18	0.204	34	0.385	26	0.305
MD	1	0.018	3	0.054	9	0.161
MN	7	0.137	15	0.294	10	0.194
NM	1	0.053	1	0.053	1	0.053
NY	9	0.209	10	0.232	11	0.341
OR	3	0.083	18	0.501	8	0.236
TN	6	0.102	12	0.203	11	0.248
ALL	60	0.135	118	0.265	106	0.262

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

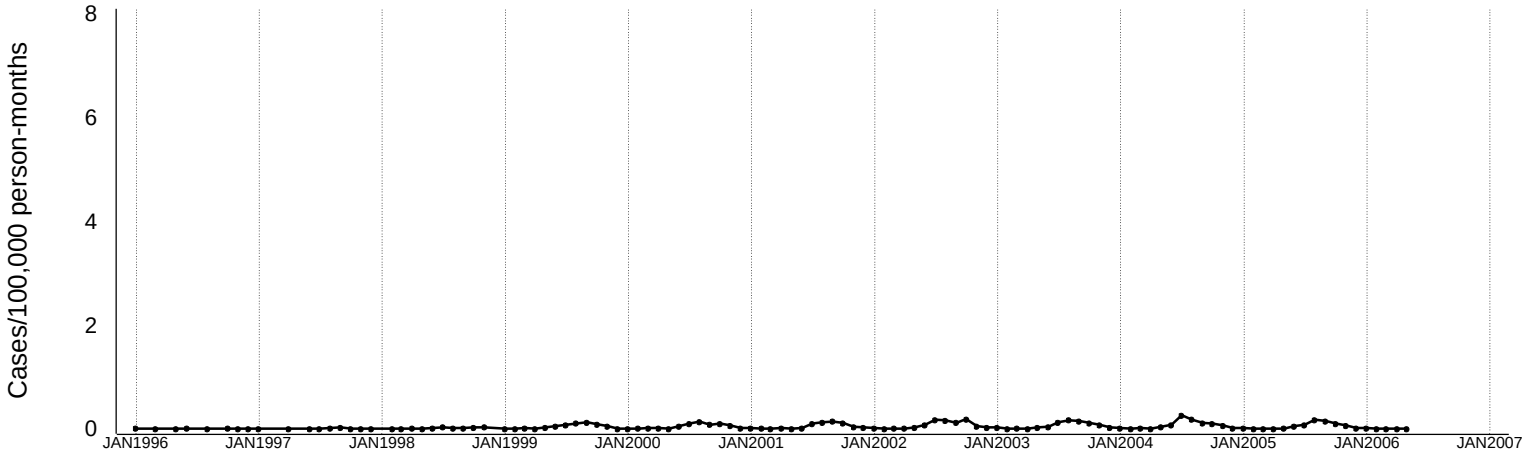
Calendar year through May: Rates for 2005 and 2006 by age group and sex



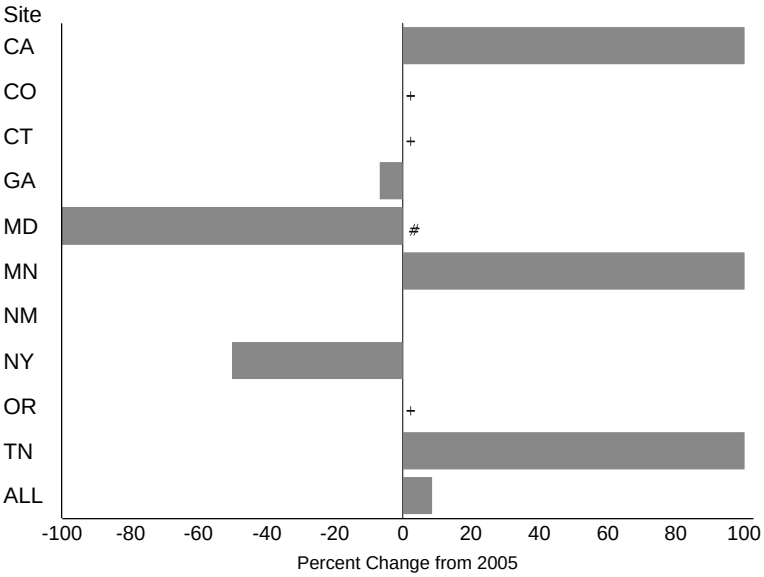
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella Javiana

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

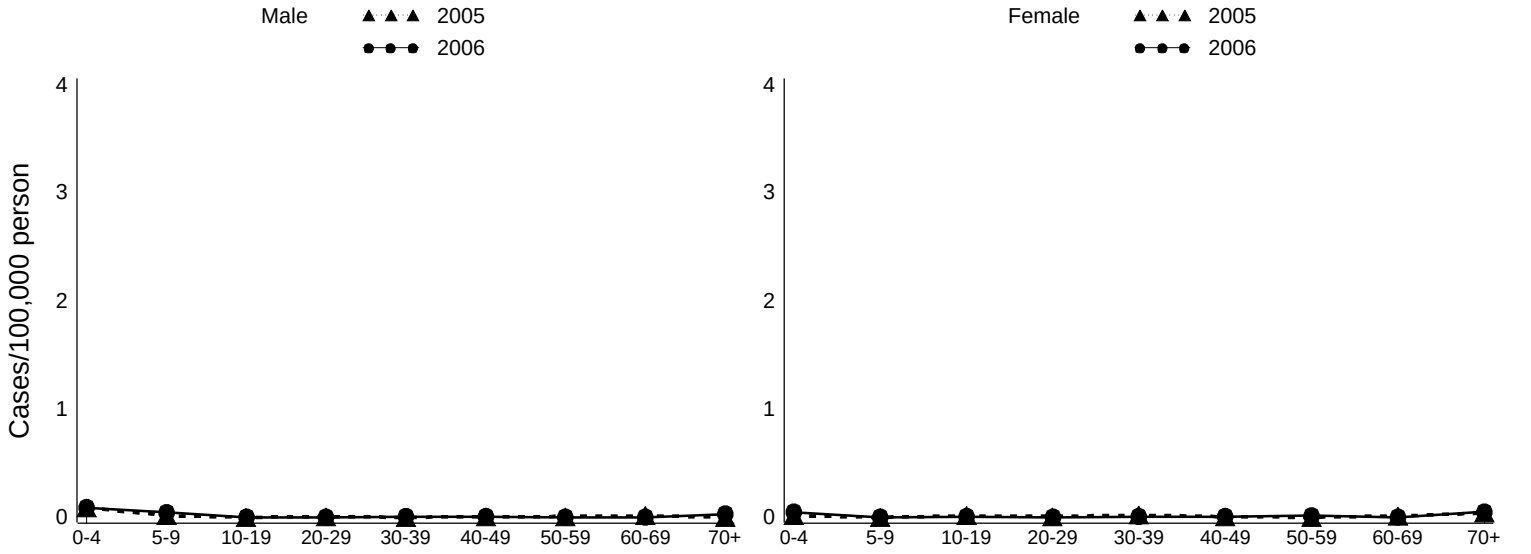


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	2	0.062	1	0.031	1	0.044
CO	2	0.078	0	0.000	0	0.000
CT	0	0.000	0	0.000	1	0.029
GA	14	0.159	15	0.170	19	0.224
MD	0	0.000	2	0.036	2	0.040
MN	2	0.039	1	0.020	2	0.036
NM	2	0.105	2	0.105	5	0.236
NY	1	0.023	2	0.046	1	0.019
OR	1	0.028	0	0.000	1	0.017
TN	2	0.034	1	0.017	4	0.083
ALL	26	0.058	24	0.054	35	0.080

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

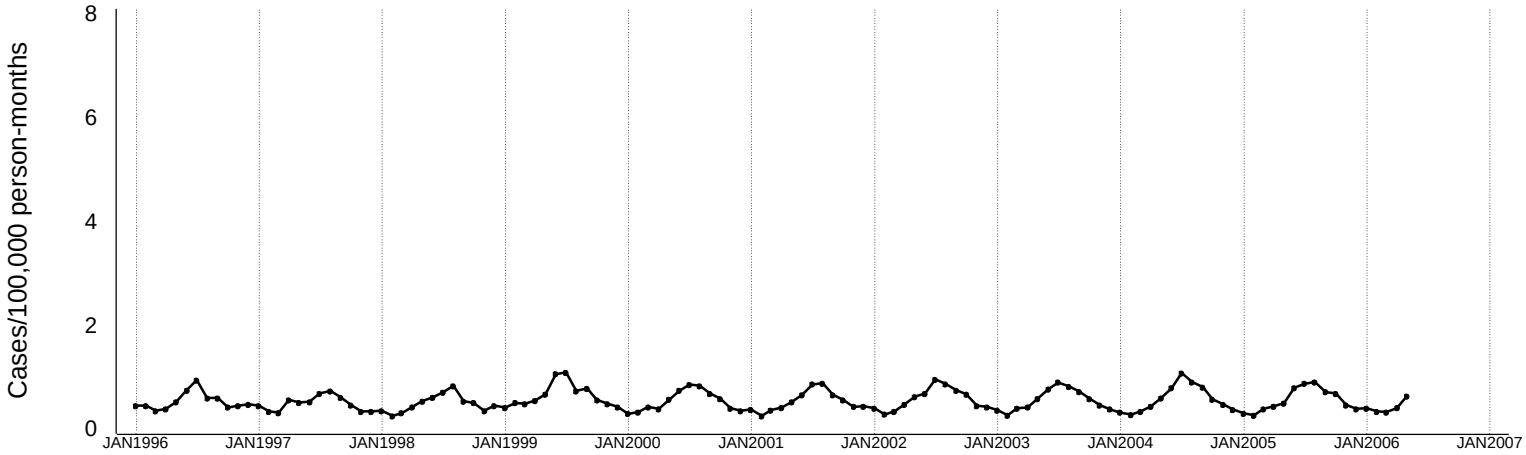
Calendar year through May: Rates for 2005 and 2006 by age group and sex



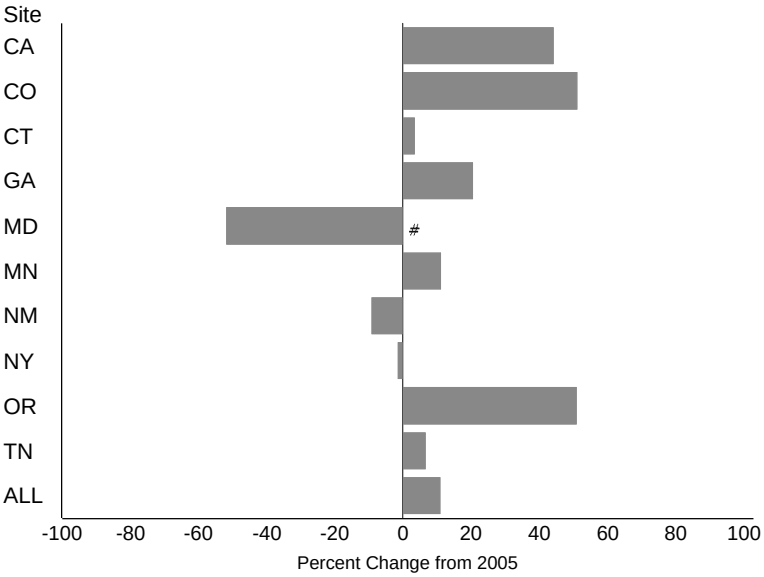
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Salmonella, all others

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

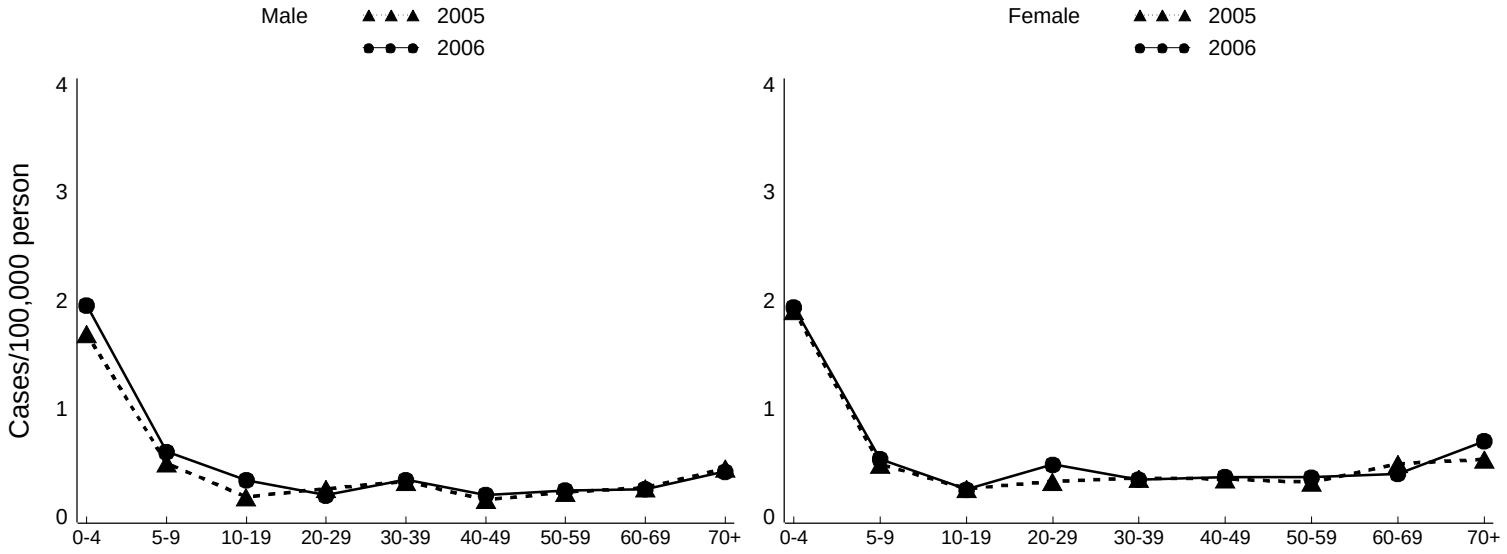


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	98	3.05	68	2.12	81	2.52
CO	77	3.01	51	2.00	44	1.77
CT	63	1.80	61	1.74	58	1.67
GA	236	2.67	196	2.22	204	2.35
MD	45	0.81	93	1.67	97	1.85
MN	91	1.78	82	1.61	87	1.73
NM	40	2.10	44	2.31	47	2.44
NY	67	1.55	68	1.58	57	1.54
OR	86	2.39	57	1.59	64	1.79
TN	133	2.25	125	2.12	102	2.13
ALL	936	2.10	845	1.90	840	1.99

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

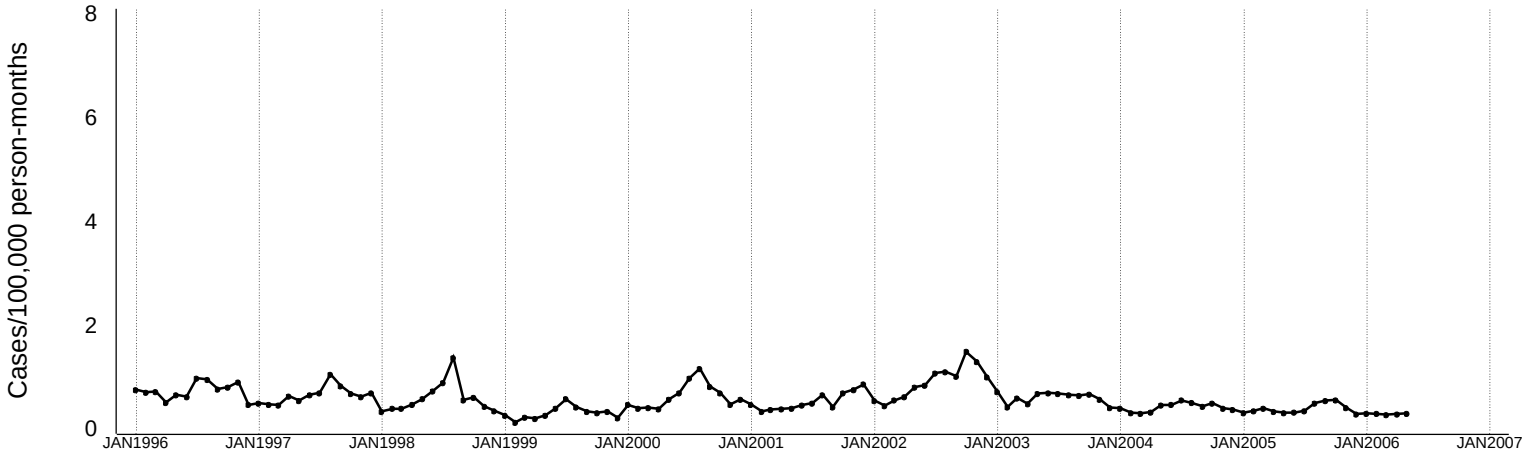
Calendar year through May: Rates for 2005 and 2006 by age group and sex



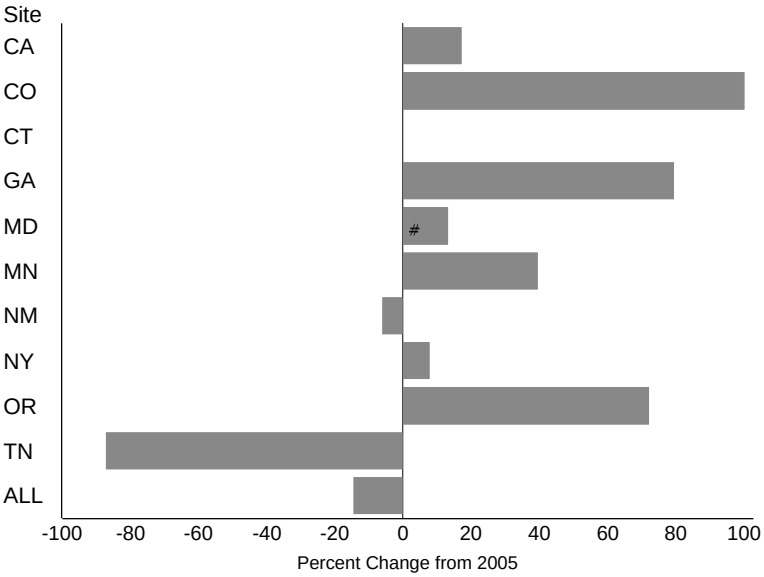
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Shigella, all species

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

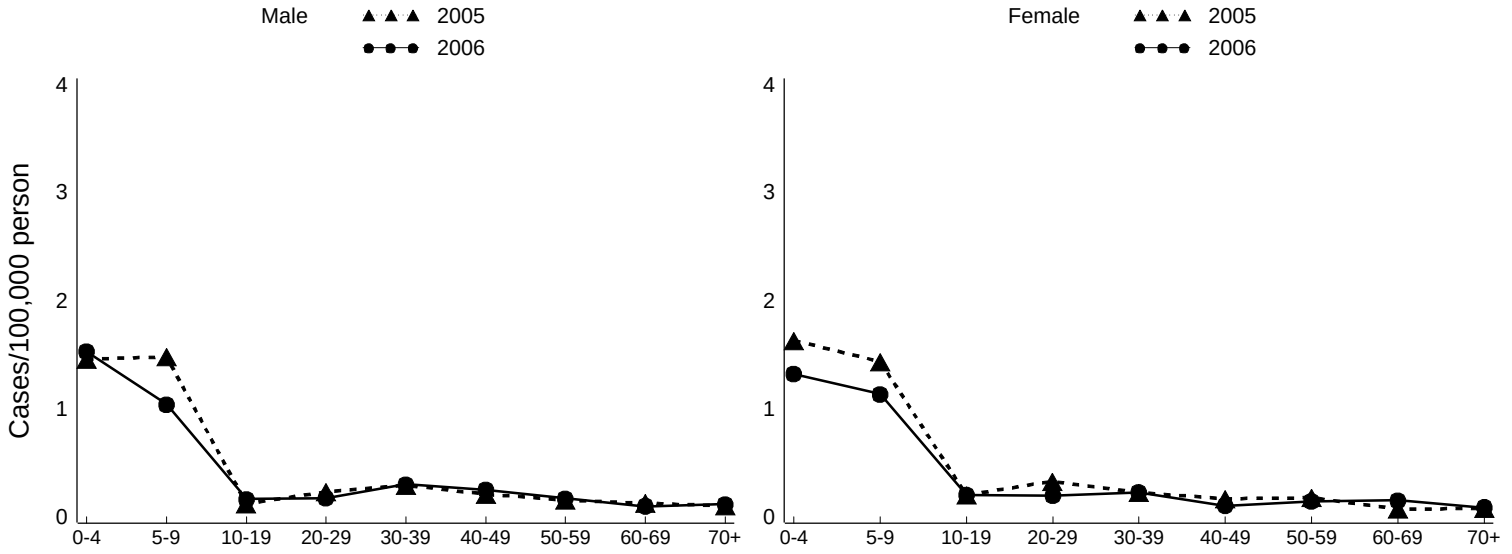


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	76	2.37	65	2.03	114	3.53
CO	38	1.49	19	0.74	30	1.26
CT	21	0.60	21	0.60	23	0.67
GA	321	3.64	179	2.03	327	3.77
MD	26	0.47	23	0.41	119	2.21
MN	39	0.76	28	0.55	82	1.63
NM	32	1.68	34	1.79	43	2.26
NY	14	0.32	13	0.30	46	1.16
OR	43	1.20	25	0.70	30	0.85
TN	47	0.80	360	6.10	135	2.50
ALL	657	1.48	767	1.72	949	2.28

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

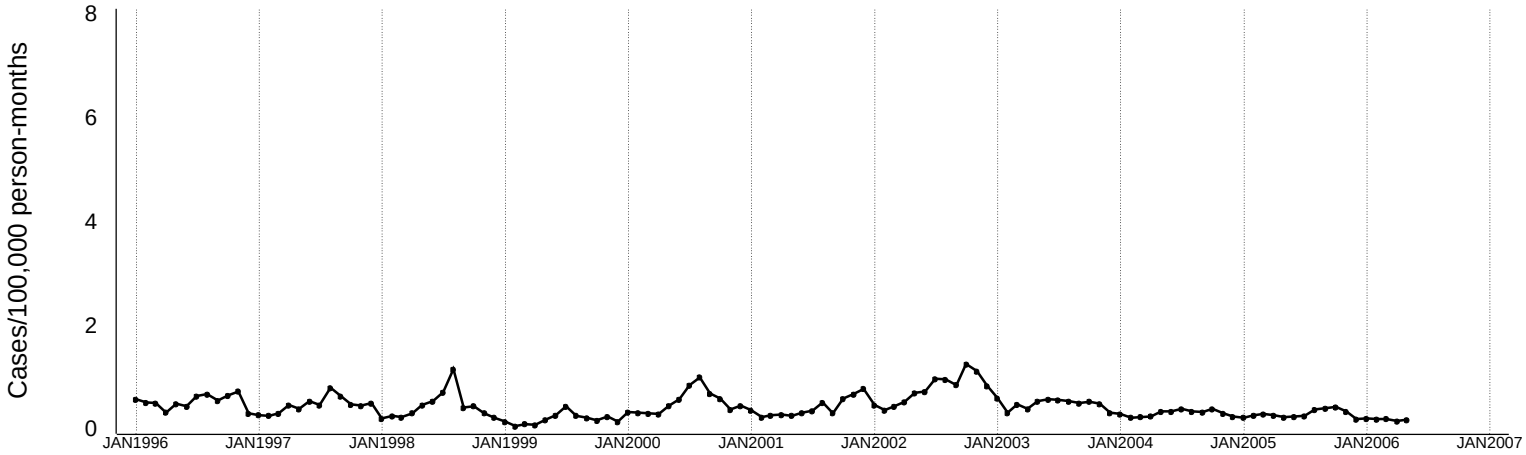
Calendar year through May: Rates for 2005 and 2006 by age group and sex



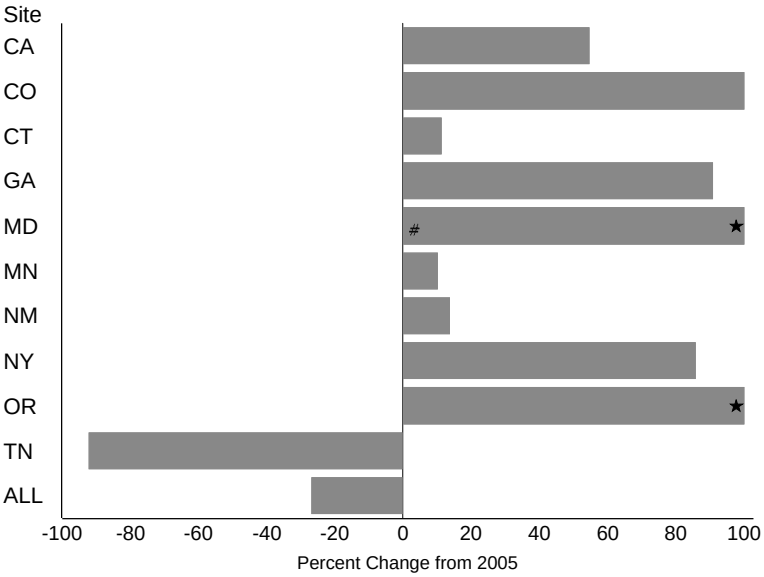
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Shigella sonnei

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

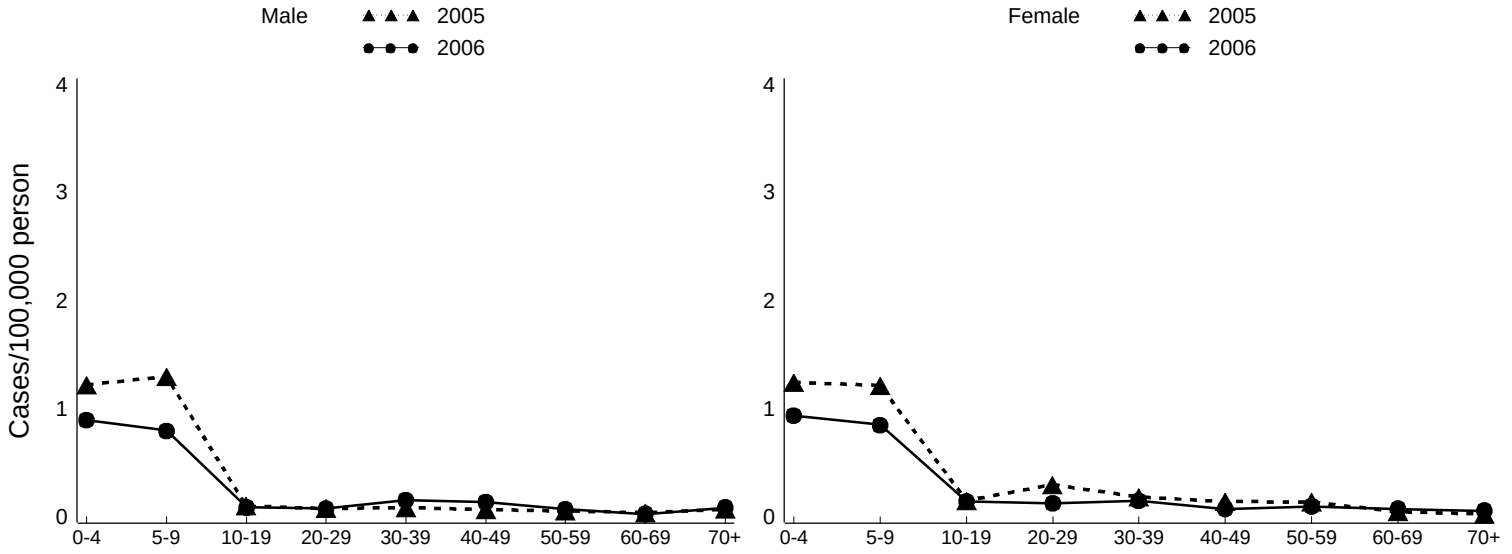


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	34	1.060	22	0.686	65	2.029
CO	16	0.626	8	0.313	19	0.794
CT	10	0.285	9	0.257	14	0.414
GA	229	2.594	120	1.359	261	3.006
MD	13	0.234	6	0.108	102	1.876
MN	22	0.431	20	0.392	68	1.361
NM	25	1.314	22	1.156	30	1.576
NY	13	0.301	7	0.162	40	0.982
OR	29	0.807	14	0.389	13	0.360
TN	27	0.458	342	5.796	119	2.136
ALL	418	0.940	570	1.282	732	1.766

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

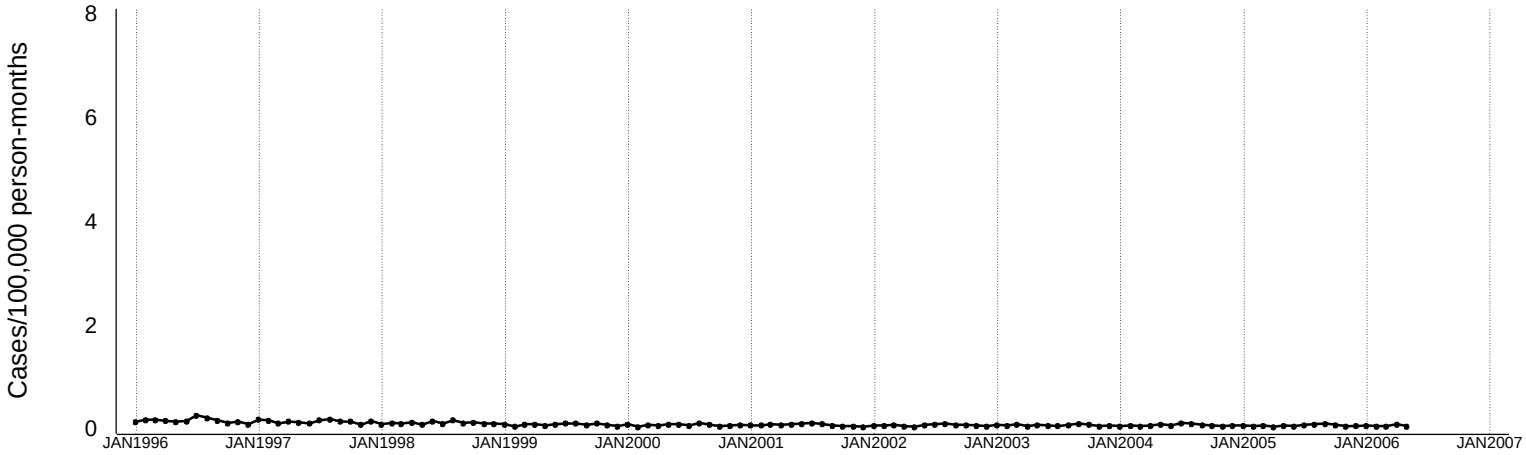
Calendar year through May: Rates for 2005 and 2006 by age group and sex



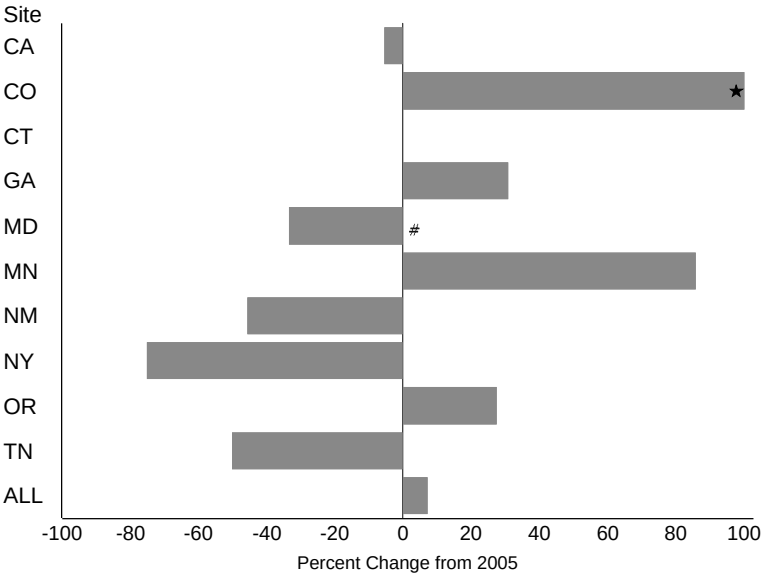
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Shigella flexneri

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

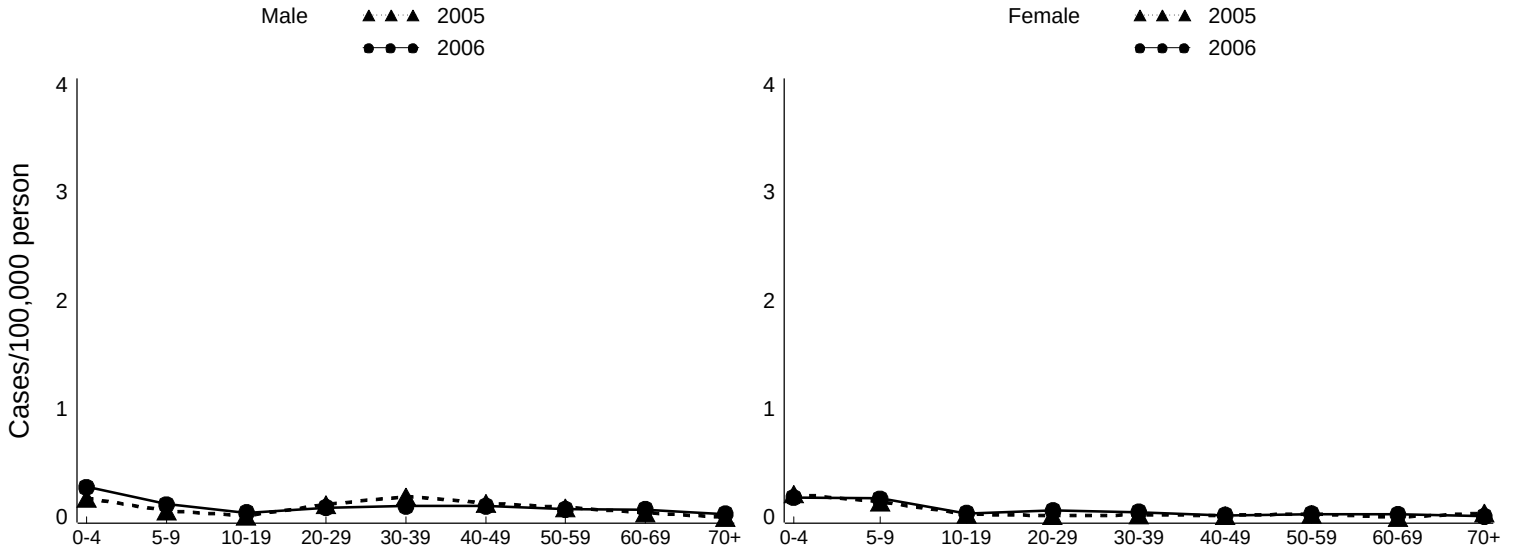


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	36	1.122	38	1.184	40	1.237
CO	22	0.861	10	0.391	10	0.392
CT	10	0.285	10	0.285	7	0.207
GA	34	0.385	26	0.294	31	0.360
MD	10	0.180	15	0.270	14	0.267
MN	13	0.255	7	0.137	12	0.238
NM	6	0.315	11	0.578	12	0.604
NY	1	0.023	4	0.093	5	0.148
OR	14	0.389	11	0.306	15	0.430
TN	4	0.068	8	0.136	6	0.135
ALL	150	0.337	140	0.315	151	0.355

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

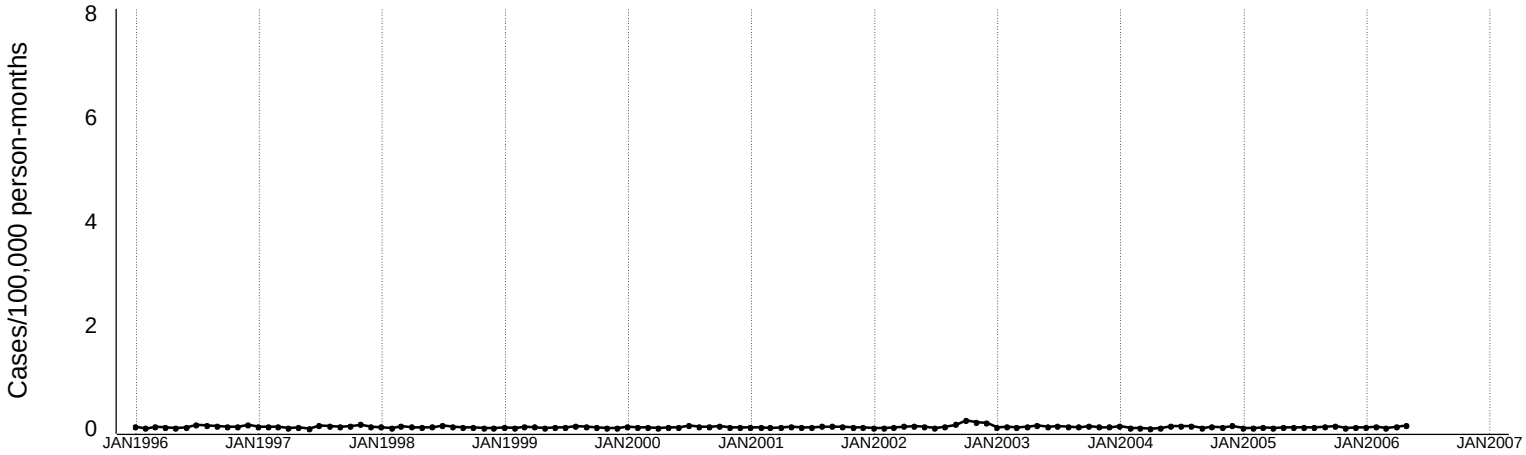
Calendar year through May: Rates for 2005 and 2006 by age group and sex



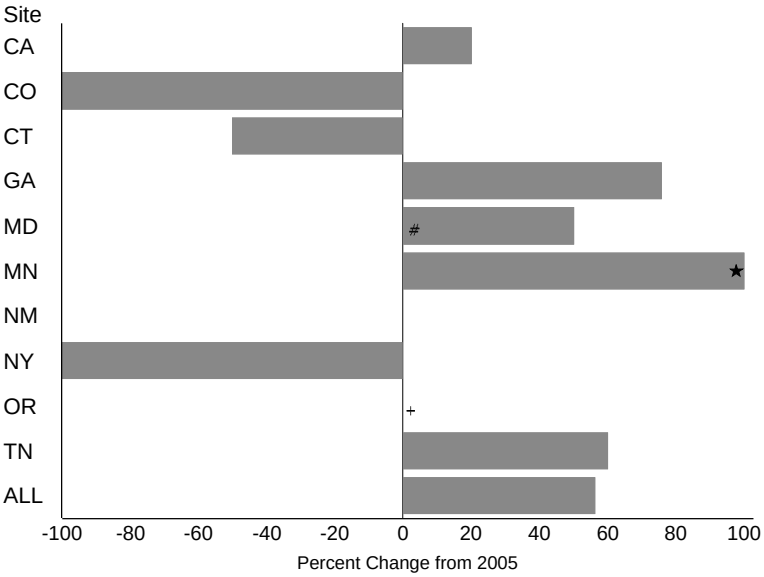
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Shigella, all others

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

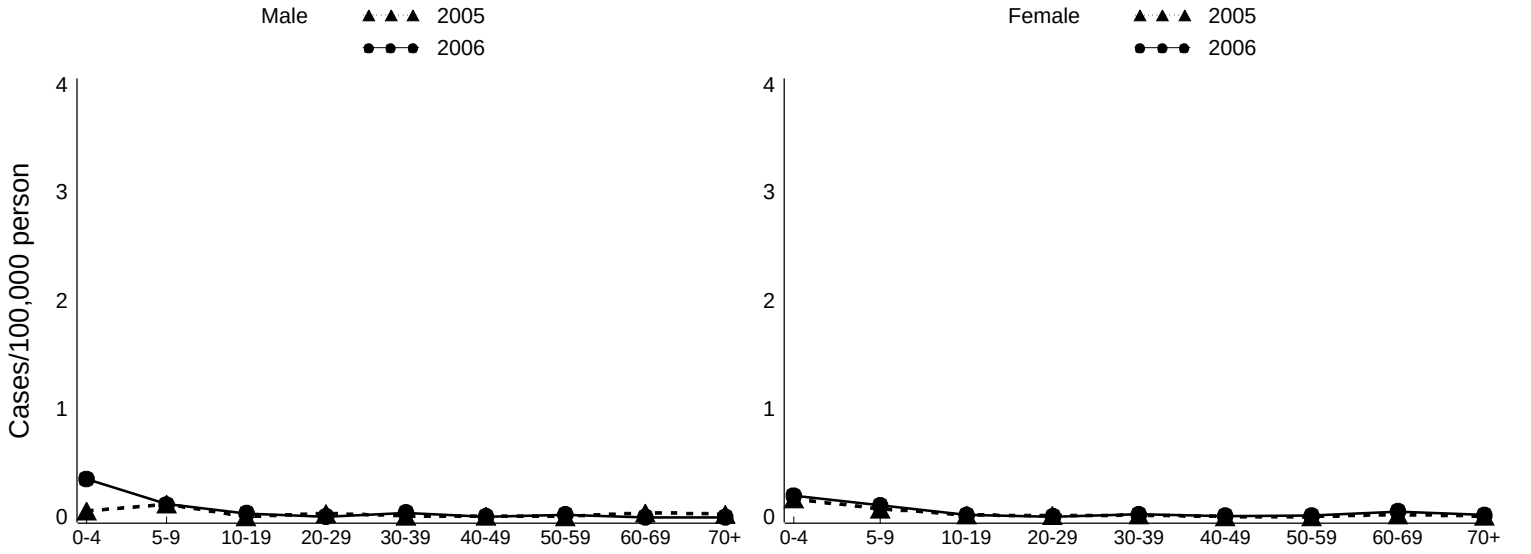


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	6	0.187	5	0.156	8	0.261
CO	0	0.000	1	0.039	2	0.070
CT	1	0.029	2	0.057	2	0.046
GA	58	0.657	33	0.374	35	0.403
MD	3	0.054	2	0.036	4	0.070
MN	4	0.078	1	0.020	2	0.032
NM	1	0.053	1	0.053	2	0.079
NY	0	0.000	2	0.046	1	0.028
OR	0	0.000	0	0.000	2	0.058
TN	16	0.271	10	0.169	10	0.231
ALL	89	0.200	57	0.128	67	0.163

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

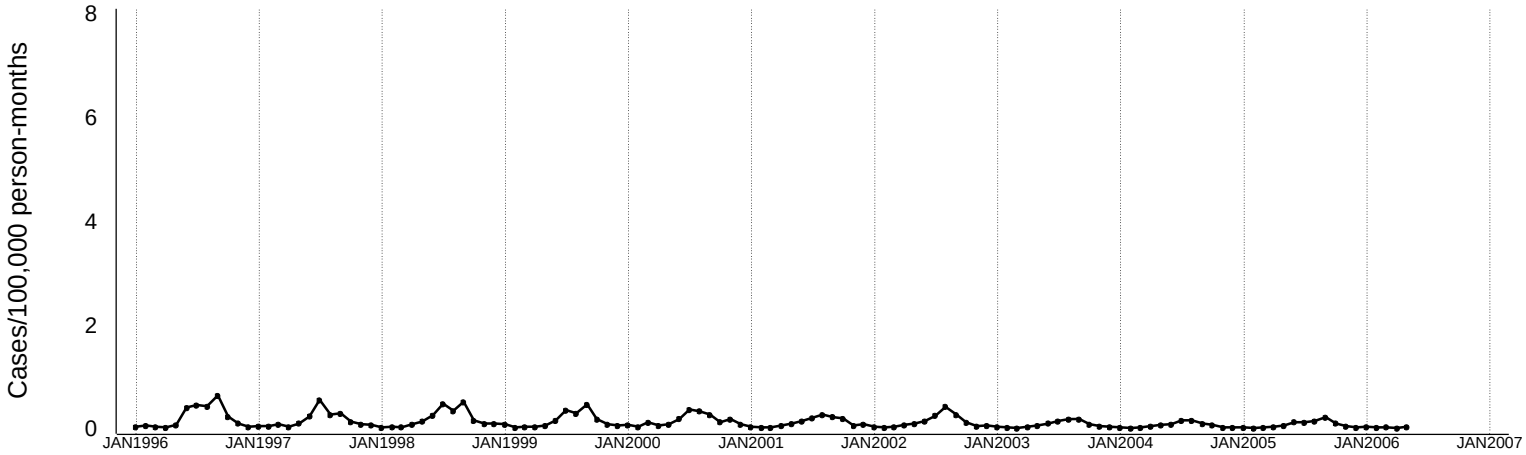
Calendar year through May: Rates for 2005 and 2006 by age group and sex



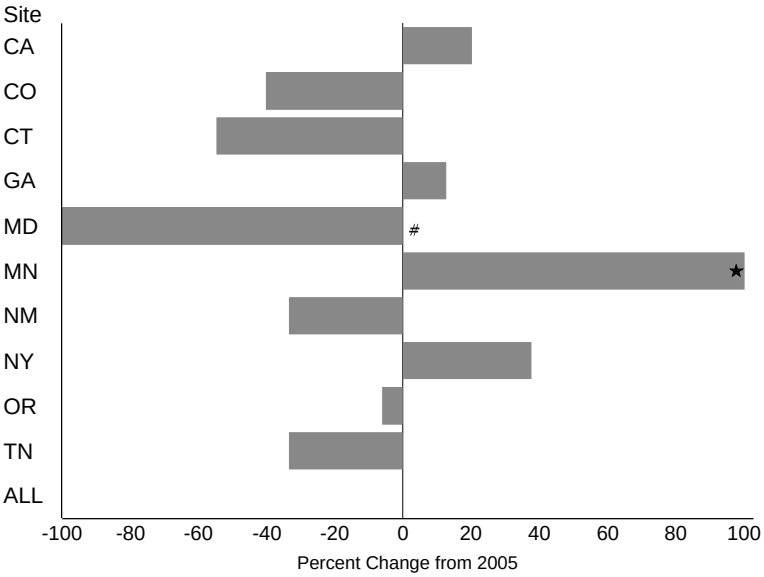
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

STEC O157

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

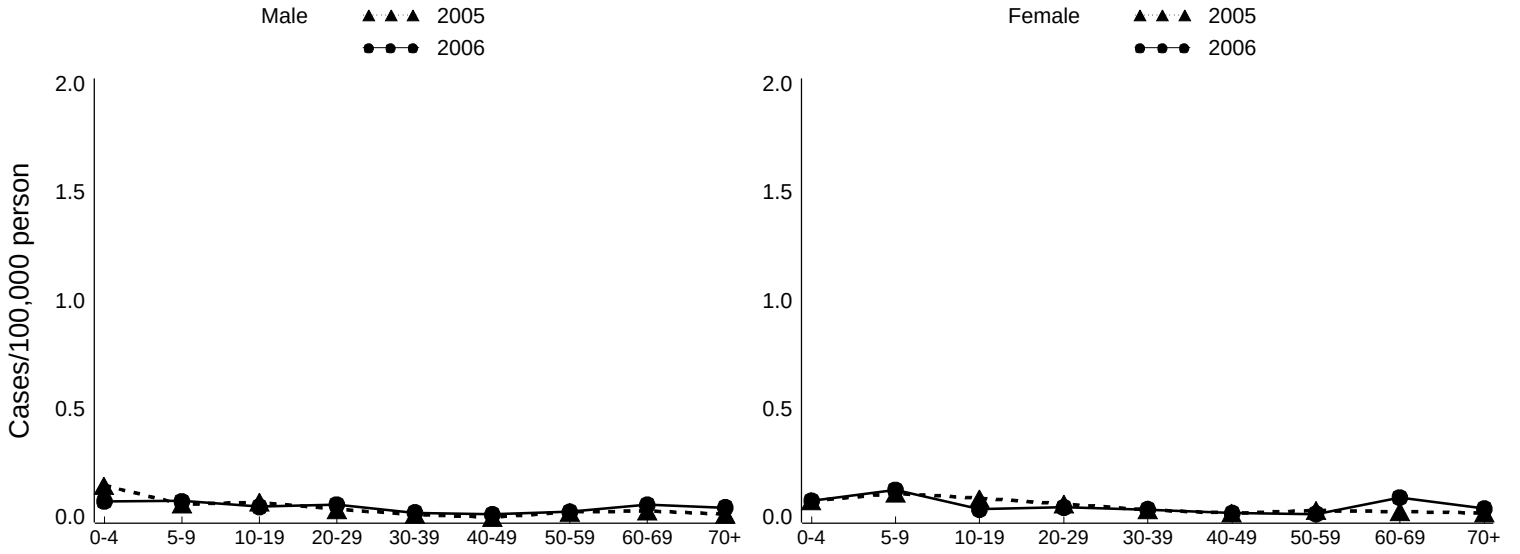


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	6	0.187	5	0.156	5	0.162
CO	6	0.235	10	0.391	8	0.336
CT	5	0.143	11	0.314	10	0.294
GA	9	0.102	8	0.091	10	0.111
MD	0	0.000	4	0.072	4	0.079
MN	24	0.470	10	0.196	25	0.488
NM	2	0.105	3	0.158	3	0.158
NY	11	0.255	8	0.185	11	0.340
OR	16	0.445	17	0.473	15	0.412
TN	6	0.102	9	0.153	9	0.200
ALL	85	0.191	85	0.191	99	0.243

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

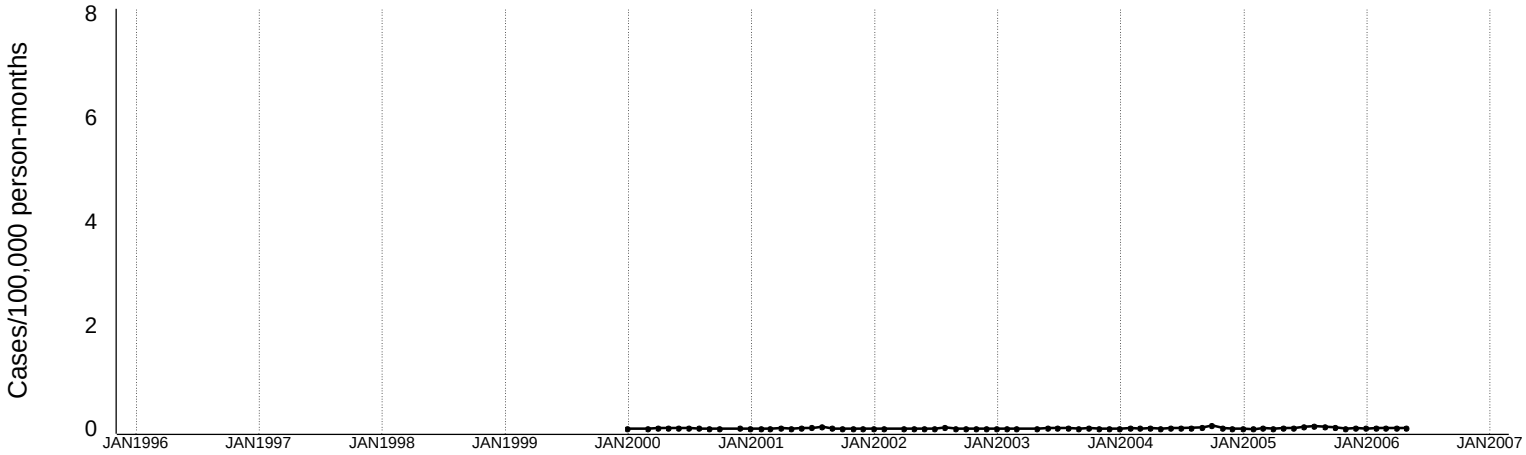
Calendar year through May: Rates for 2005 and 2006 by age group and sex



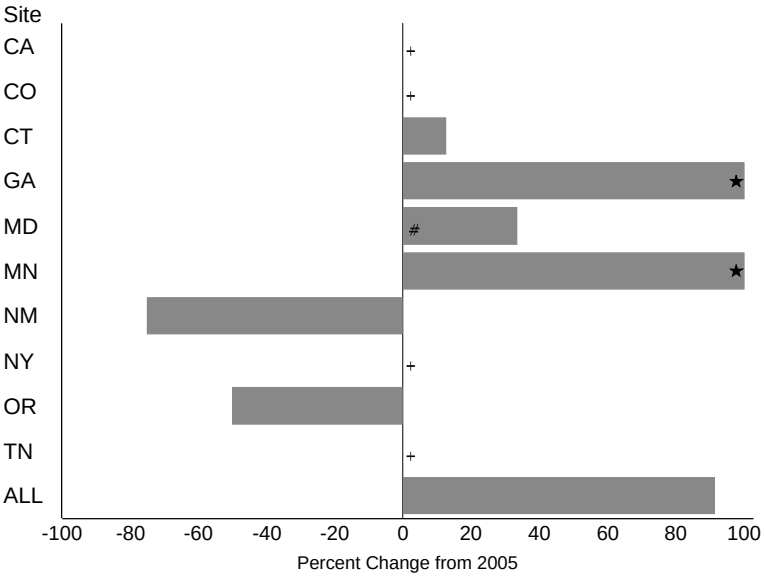
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

STEC Non-O157

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

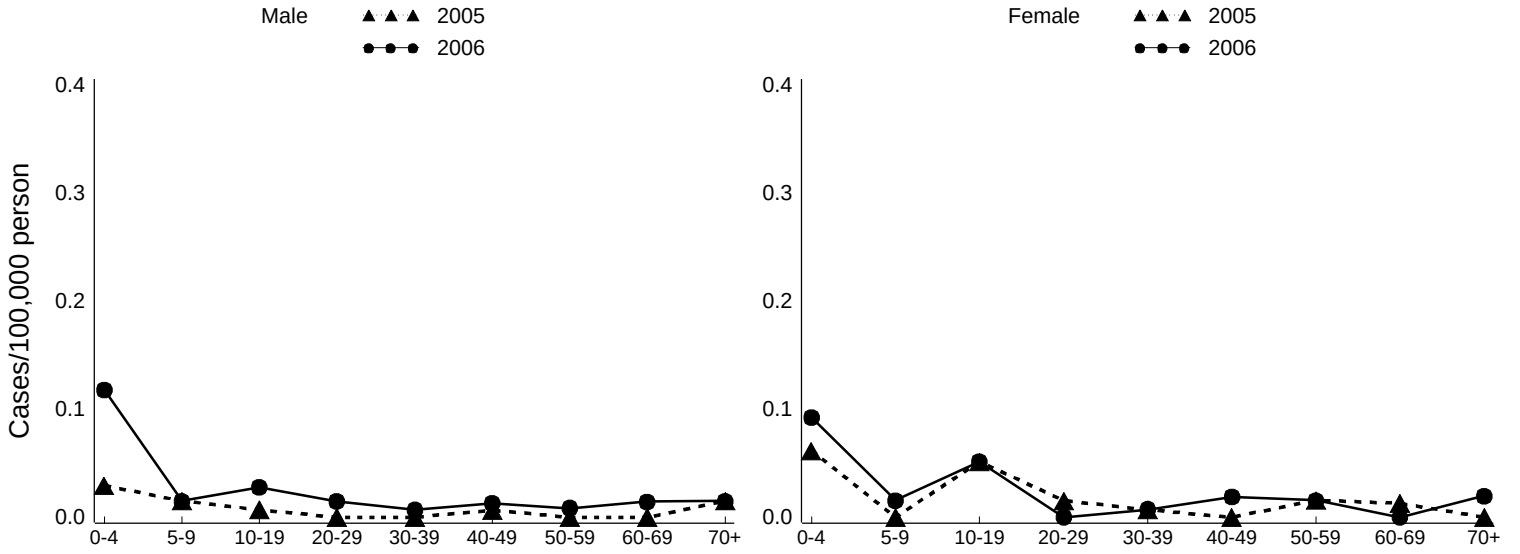


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	0	0.000	0	0.000	0	0.000
CO	3	0.117	0	0.000	0	0.017
CT	9	0.257	8	0.228	7	0.207
GA	5	0.057	1	0.011	1	0.014
MD	4	0.072	3	0.054	1	0.025
MN	14	0.274	5	0.098	3	0.067
NM	1	0.053	4	0.210	4	0.184
NY	7	0.162	0	0.000	0	0.010
OR	1	0.028	2	0.056	1	0.040
TN	0	0.000	0	0.000	0	0.003
ALL	44	0.099	23	0.052	19	0.041

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

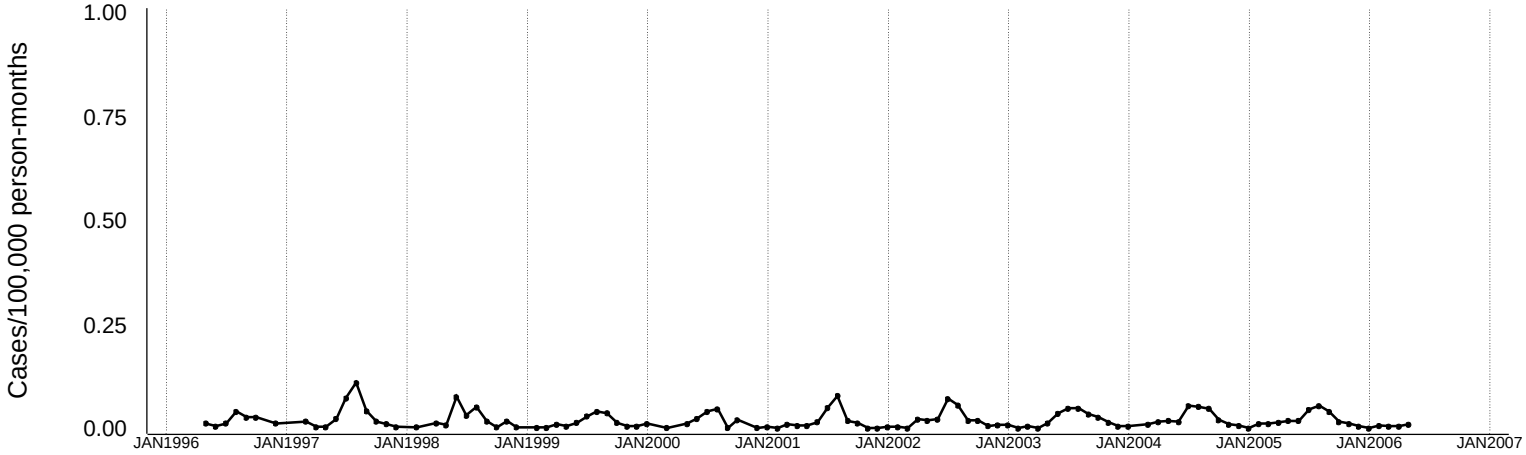
Calendar year through May: Rates for 2005 and 2006 by age group and sex



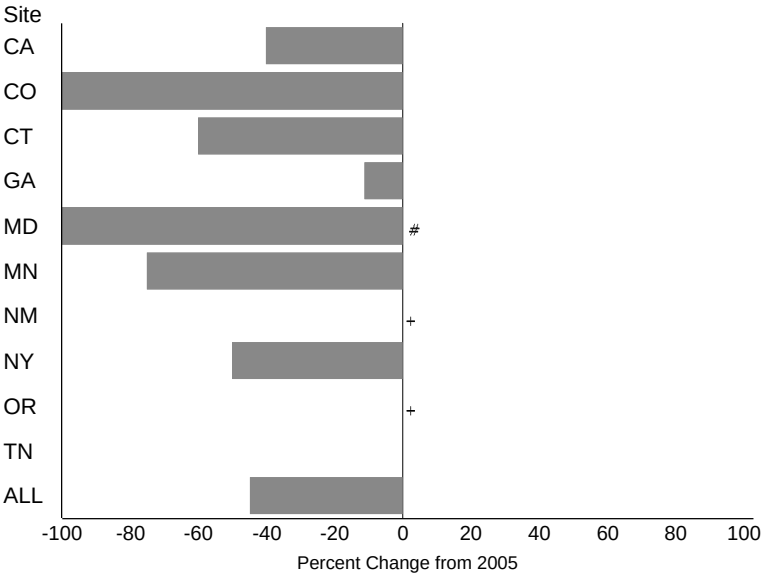
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Vibrio, all species

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

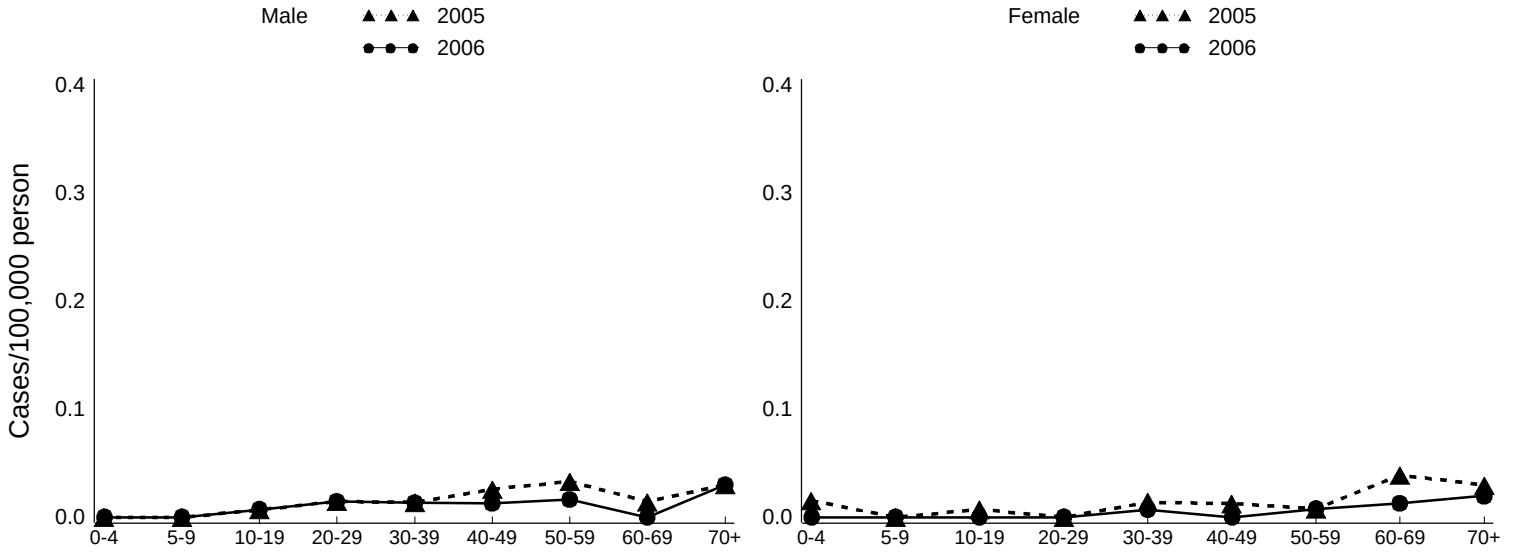


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	3	0.093	5	0.156	3	0.106
CO	0	0.000	2	0.078	1	0.033
CT	2	0.057	5	0.143	3	0.081
GA	8	0.091	9	0.102	5	0.057
MD	0	0.000	1	0.018	3	0.051
MN	1	0.020	4	0.078	2	0.040
NM	0	0.000	0	0.000	0	0.000
NY	1	0.023	2	0.046	1	0.031
OR	0	0.000	0	0.000	1	0.028
TN	1	0.017	1	0.017	2	0.045
ALL	16	0.036	29	0.065	21	0.050

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

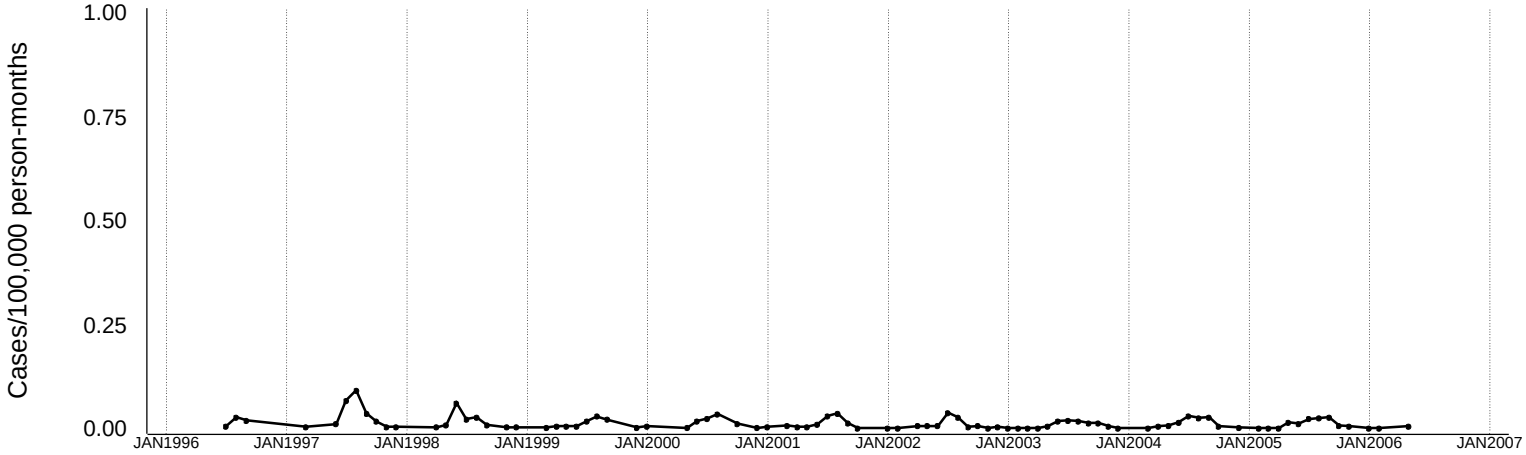
Calendar year through May: Rates for 2005 and 2006 by age group and sex



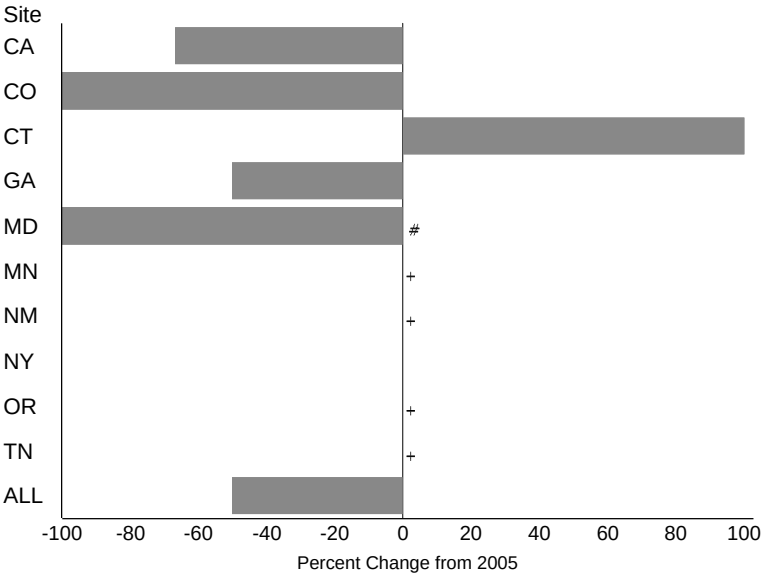
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Vibrio parahaemolyticus

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

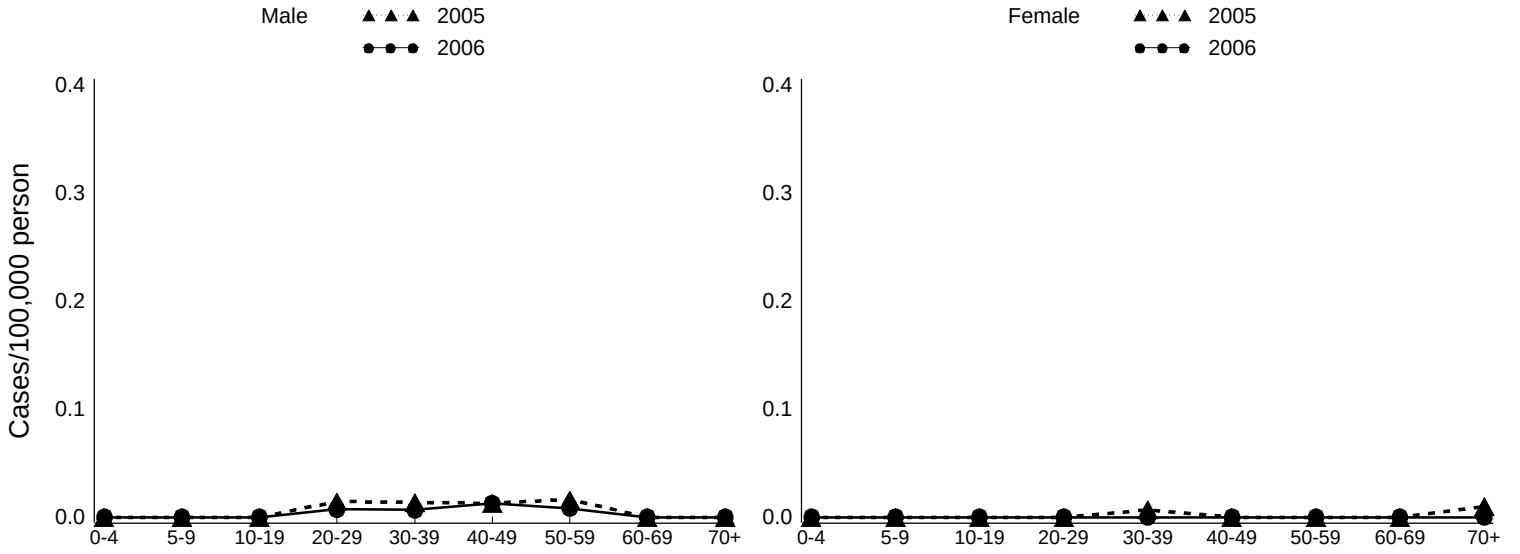


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	1	0.031	3	0.093	2	0.062
CO	0	0.000	2	0.078	1	0.025
CT	2	0.057	1	0.029	1	0.029
GA	1	0.011	2	0.023	1	0.012
MD	0	0.000	1	0.018	2	0.033
MN	0	0.000	0	0.000	1	0.012
NM	0	0.000	0	0.000	0	0.000
NY	1	0.023	1	0.023	0	0.010
OR	0	0.000	0	0.000	0	0.011
TN	0	0.000	0	0.000	1	0.014
ALL	5	0.011	10	0.022	8	0.021

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

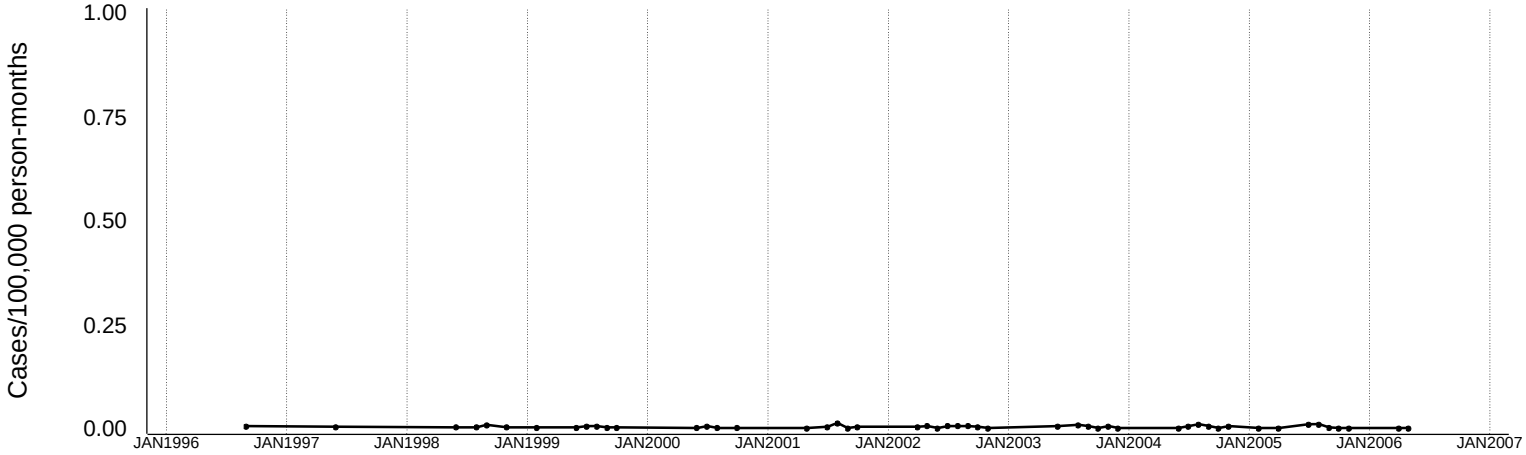
Calendar year through May: Rates for 2005 and 2006 by age group and sex



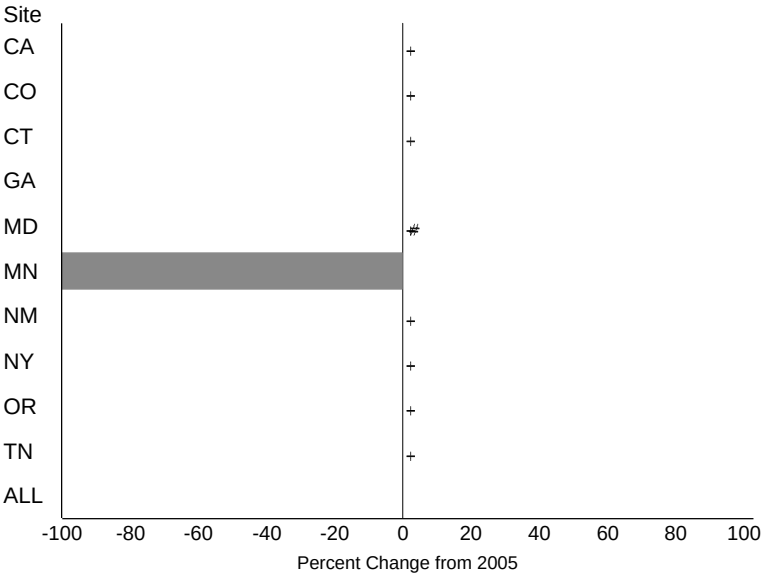
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Vibrio vulnificus

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

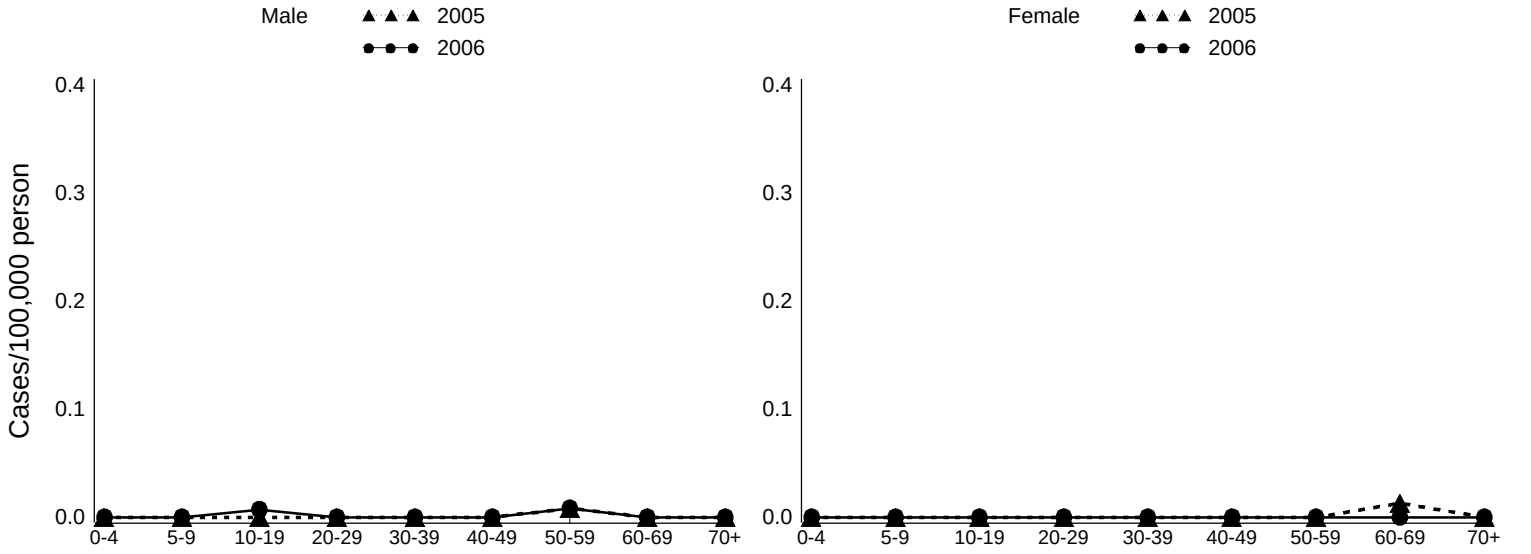


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		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	1	0.011	1	0.007
MD	0	0.000	0	0.000	0	0.004
MN	0	0.000	1	0.020	0	0.004
NM	0	0.000	0	0.000	0	0.000
NY	0	0.000	0	0.000	0	0.000
OR	0	0.000	0	0.000	0	0.006
TN	1	0.017	0	0.000	0	0.014
ALL	2	0.004	2	0.004	2	0.004

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

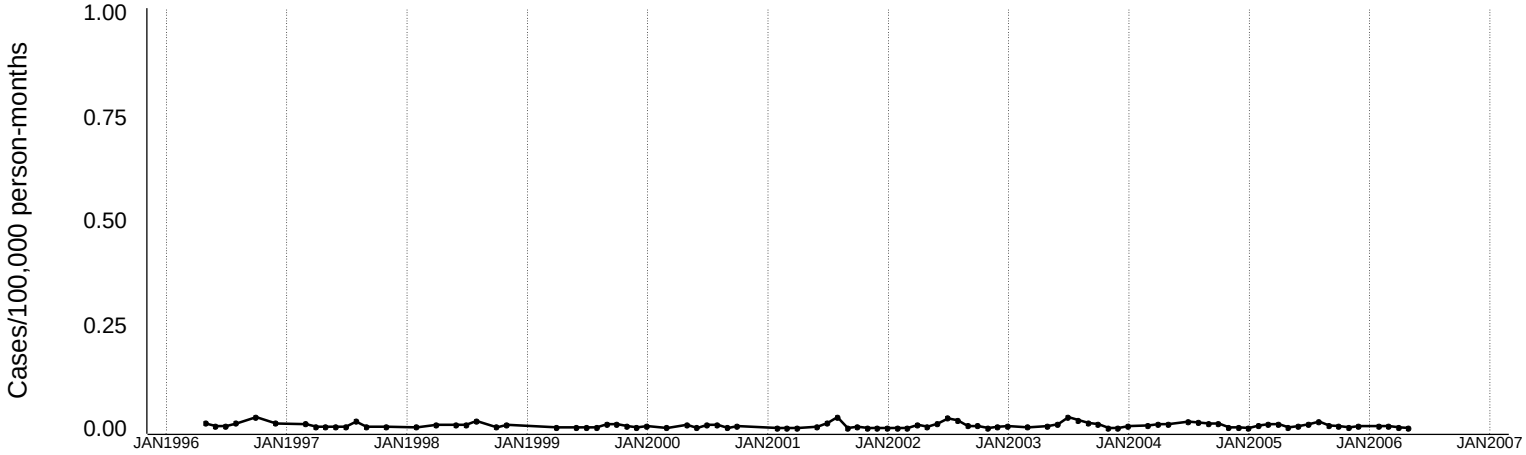
Calendar year through May: Rates for 2005 and 2006 by age group and sex



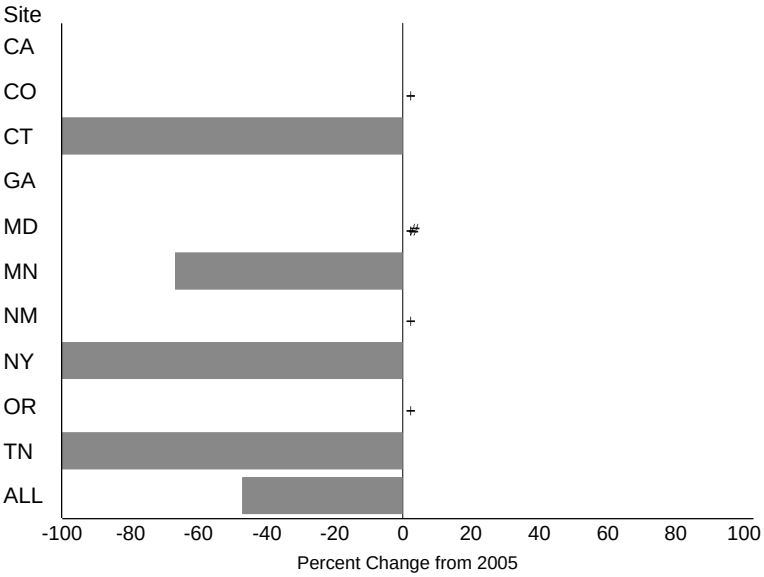
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Vibrio, all others

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

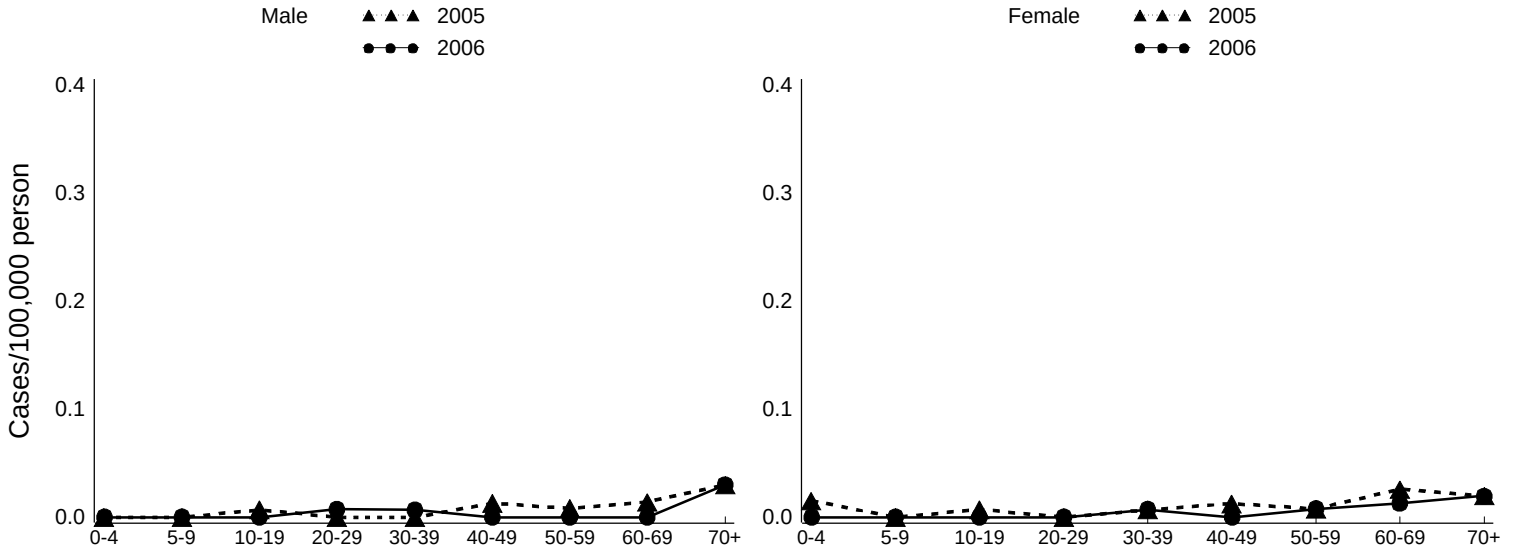


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	2	0.062	2	0.062	1	0.044
CO	0	0.000	0	0.000	0	0.008
CT	0	0.000	4	0.114	2	0.052
GA	6	0.068	6	0.068	3	0.039
MD	0	0.000	0	0.000	1	0.014
MN	1	0.020	3	0.059	1	0.024
NM	0	0.000	0	0.000	0	0.000
NY	0	0.000	1	0.023	1	0.022
OR	0	0.000	0	0.000	0	0.011
TN	0	0.000	1	0.017	1	0.017
ALL	9	0.020	17	0.038	11	0.026

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

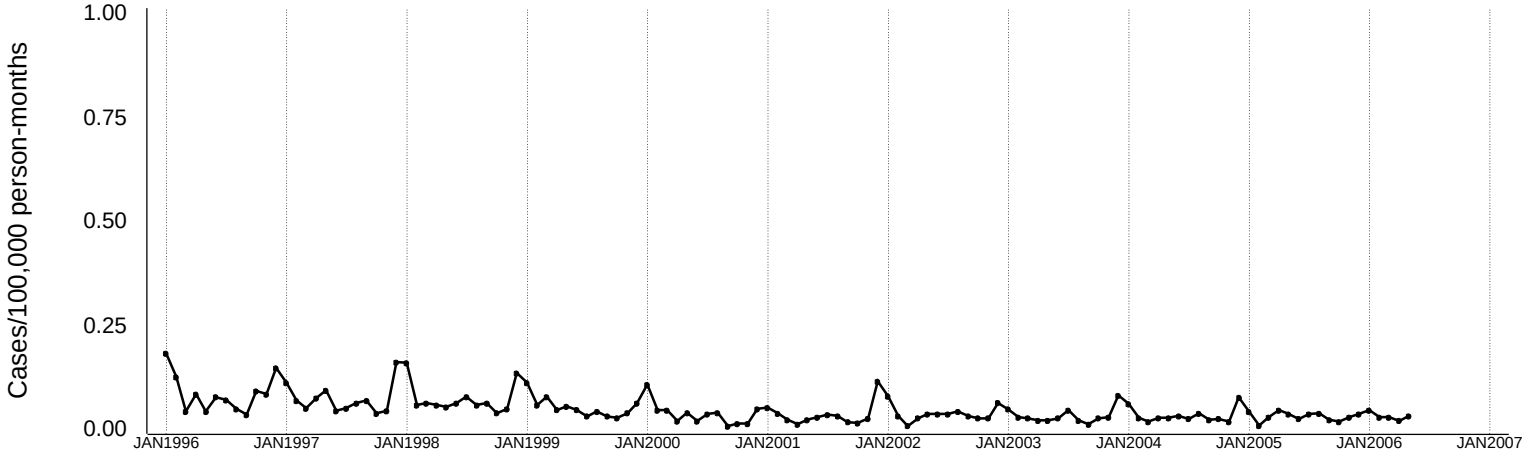
Calendar year through May: Rates for 2005 and 2006 by age group and sex



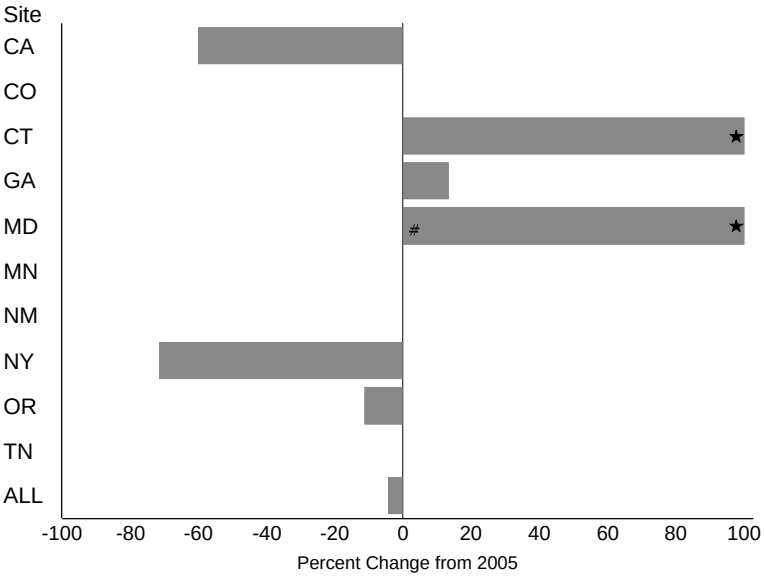
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Yersinia

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

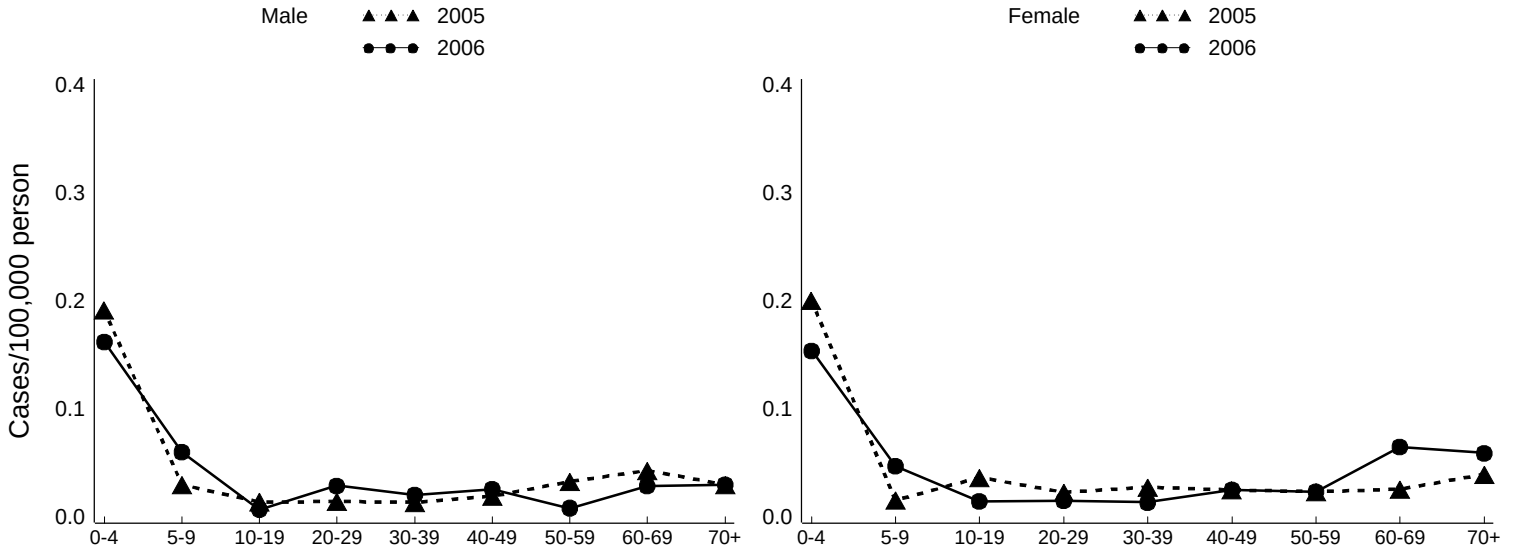


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	6	0.187	15	0.467	9	0.274
CO	2	0.078	2	0.078	2	0.099
CT	11	0.314	4	0.114	5	0.155
GA	17	0.193	15	0.170	18	0.203
MD	5	0.090	2	0.036	4	0.074
MN	7	0.137	7	0.137	6	0.123
NM	1	0.053	1	0.053	1	0.053
NY	2	0.046	7	0.162	5	0.134
OR	8	0.223	9	0.250	6	0.163
TN	10	0.169	10	0.169	9	0.206
ALL	69	0.155	72	0.162	65	0.159

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

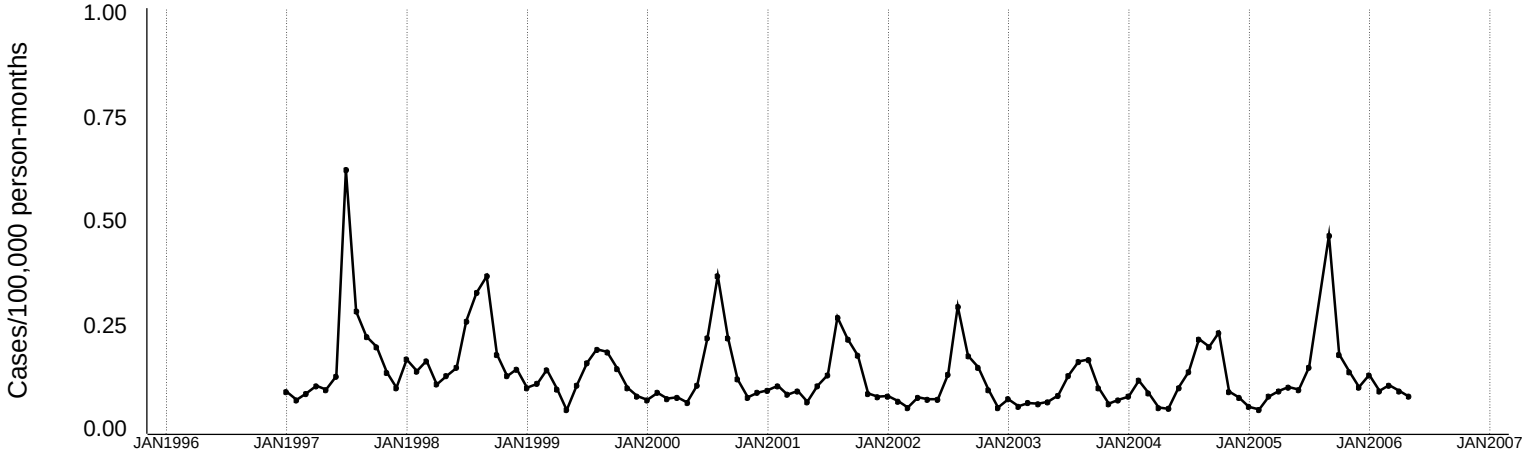
Calendar year through May: Rates for 2005 and 2006 by age group and sex



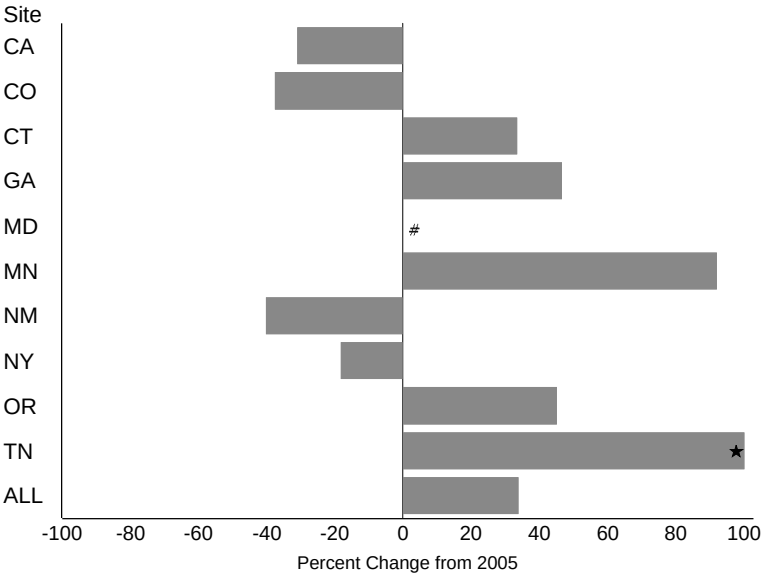
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Cryptosporidium

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

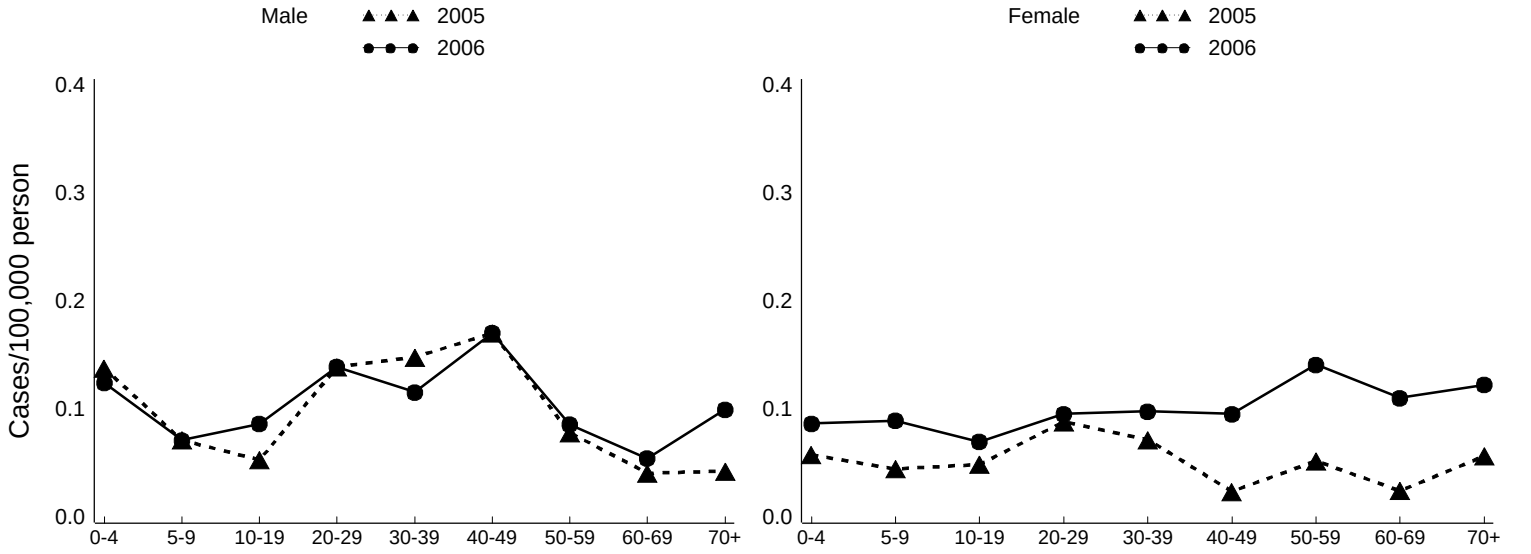


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
\# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	18	0.561	26	0.810	21	0.459
CO	5	0.196	8	0.313	6	0.254
CT	8	0.228	6	0.171	5	0.143
GA	63	0.714	43	0.487	43	0.497
MD	6	0.108	6	0.108	8	0.166
MN	71	1.392	37	0.725	39	0.780
NM	3	0.158	5	0.263	4	0.184
NY	9	0.209	11	0.255	8	0.213
OR	29	0.807	20	0.556	15	0.434
TN	10	0.169	4	0.068	9	0.207
ALL	222	0.499	166	0.373	159	0.372

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

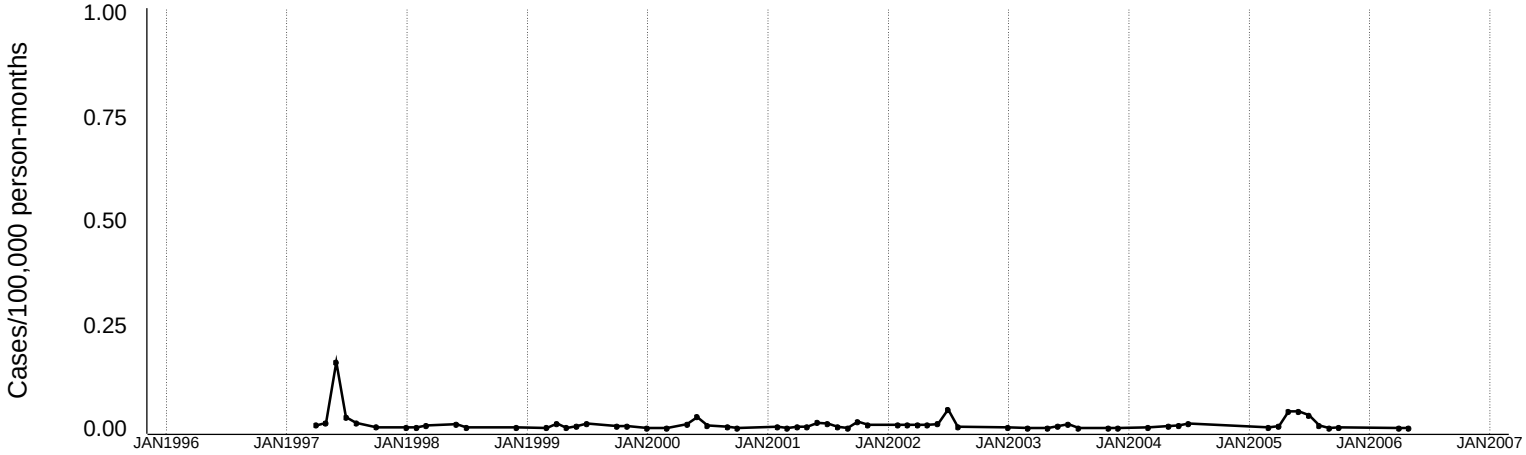
Calendar year through May: Rates for 2005 and 2006 by age group and sex



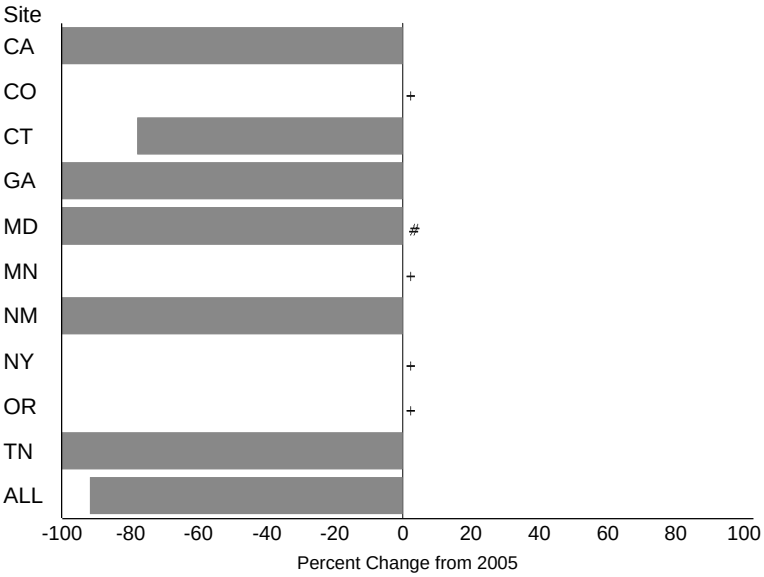
Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Cyclospora

Incidence rate of culture-confirmed infections, FoodNet sites, January 1996-May 2006



Calendar year through May: Percent change in rates between 2005 and 2006 by site

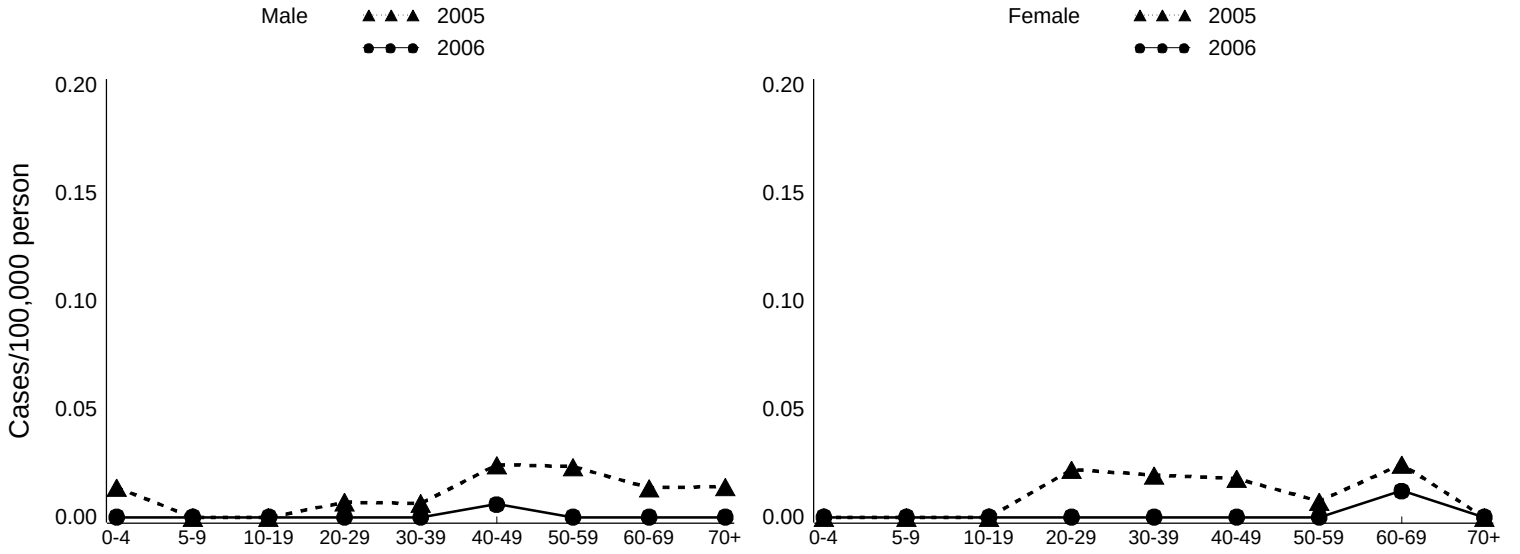


* Change exceeds 100%, +Percent increase cannot be calculated because 2005 rate is 0
# MD 2006 data Jan-Mar; All 2006 MD data is entered but not available at CDC due to NEDSS PAM malfunction

	2006		2005		5 year mean*	
Site	Cases	Rate^	Cases	Rate^	Cases	Rate^
CA	0	0.000	1	0.031	1	0.013
CO	0	0.000	0	0.000	0	0.008
CT	2	0.057	9	0.257	3	0.092
GA	0	0.000	7	0.079	5	0.058
MD	0	0.000	2	0.036	1	0.014
MN	0	0.000	0	0.000	0	0.000
NM	0	0.000	3	0.158	2	0.079
NY	0	0.000	0	0.000	0	0.005
OR	0	0.000	0	0.000	0	0.000
TN	0	0.000	2	0.034	1	0.014
ALL	2	0.004	24	0.054	12	0.026

*year 2001-2005 except for NM (2004-2005)
^cases/100,000 person

Calendar year through May: Rates for 2005 and 2006 by age group and sex



Data source: Preliminary FoodNet data, subject to change, not for public distribution. Report date: 06-July-2006

Comparison of FoodNet 2005 and 2006 Incidence Rates without Maryland cases, data through May 2006

Pathogen	**2005 cases w/o MD**	**2006 cases w/o MD**	**2005 Rate* w/o MD**	**2006 Rate* w/o MD**	**p-value**
Campylobacter	1761	1666	4.53	4.28	0.1047
Listeria	32	36	0.08	0.09	0.6305
Salmonella, all serotypes	1629	1582	4.19	4.07	0.4069
S. Typhimurium	331	269	0.85	0.69	0.0114
S. Enteritidis	322	271	0.83	0.70	0.0363
S. Newport	87	66	0.22	0.17	0.0903
S. Heidelberg	115	59	0.30	0.15	0.0000
S. Javiana	22	26	0.06	0.07	0.5682
Salmonella, all others	752	891	1.93	2.29	0.0006
Shigella, all species	744	631	1.91	1.62	0.0023
Shigella sonnei	564	396	1.45	1.02	0.0000
Shigella felxneri	125	140	0.32	0.36	0.3577
Shigella, all others	55	86	0.14	0.22	0.0090
E. coli O157	81	85	0.21	0.22	0.7570
STEC non-O157	20	40	0.05	0.10	0.0099
Vibrio, all	28	16	0.07	0.04	0.0725
V. parahaemolyticus	9	5	0.02	0.01	0.3018
V. vulnificus	2	2	0.01	0.01	1.0000
Vibrio, all others	17	9	0.04	0.02	0.1221
Yersinia	70	64	0.18	0.16	0.6057
Cryptosporidium	160	216	0.41	0.56	0.0039
Cyclospora	22	2	0.06	0.01	0.0000

*cases/100,000 persons

Those highlighted show significant difference between 2005 and 2006 rates.

2005 FoodNet and NARMS Linking Data

Total NARMS Isolates in FoodNet Catchement / Total Cases Reported to FoodNet, 2005 (NARMS Sampling Percentages

Isolate	CA*		CO*		CT		GA		MD		MN		NM		NY*		OR		TN		ALL FN	
CAMPYLOBACTER	74 / 919	8%	72 / 495	15%	46 / 542	8%	97 / 582	17%	29 / 403	7%	128 / 843	15%	38 / 352	11%	87 / 507	17%	100 / 641	16%	20 / 404	5%	691 / 5688	12%
E. COLI O157	0 / 28	0%	3 / 26	12%	1 / 42	2%	28 / 33	85%	25 / 27	93%	5 / 120	4%	1 / 10	10%	5 / 74	7%	4 / 66	6%	0 / 38	0%	72 / 464	16%
SALMONELLA	11 / 452	2%	11 / 336	3%	26 / 460	6%	95 / 1918	5%	34 / 779	4%	23 / 574	4%	12 / 251	5%	27 / 488	6%	19 / 372	5%	12 / 807	1%	270 / 6437	4%
SHIGELLA	0 / 283	0%	7 / 101	7%	3 / 58	5%	21 / 671	3%	10 / 99	10%	4 / 96	4%	6 / 133	5%	3 / 67	4%	6 / 85	7%	19 / 505	4%	79 / 2098	4%
TYPHI	12 / 15	80%	3 / 5	60%	8 / 8	100%	4 / 8	50%	12 / 12	100%	4 / 6	67%	1 / 1	100%	0 / 0	n/a	3 / 4	75%	1 / 4	25%	48 / 63	76%
VIBRIO	0 / 24	0%	7 / 8	88%	1 / 12	8%	7 / 22	32%	16 / 25	64%	0 / 6	0%	1 / 1	100%	1 / 8	13%	6 / 9	67%	0 / 5	0%	39 / 120	33%

NARMS Cases Linked to FoodNet Cases / Total NARMS Isolates in FoodNet Catchement, 2005 (FoodNet Linking Percentages)

Isolate	CA*		CO*		CT		GA		MD		MN		NM		NY*		OR		TN		ALL FN	
CAMPYLOBACTER	56 / 74	76%	66 / 72	92%	40 / 46	87%	73 / 97	75%	29 / 29	100%	123 / 128	96%	29 / 38	76%	84 / 87	97%	89 / 100	89%	0 / 20	0%	589 / 691	85%
E. COLI O157	0 / 0	n/a	1 / 3	33%	1 / 1	100%	20 / 28	71%	20 / 25	80%	5 / 5	100%	1 / 1	100%	4 / 5	80%	4 / 4	100%	0 / 0	n/a	56 / 72	78%
SALMONELLA	11 / 11	100%	9 / 11	82%	23 / 26	88%	80 / 95	84%	31 / 34	91%	21 / 23	91%	11 / 12	92%	14 / 27	52%	19 / 19	100%	6 / 12	50%	225 / 270	83%
SHIGELLA	0 / 0	n/a	5 / 7	71%	3 / 3	100%	19 / 21	90%	10 / 10	100%	4 / 4	100%	6 / 6	100%	2 / 3	67%	5 / 6	83%	16 / 19	84%	70 / 79	89%
TYPHI	9 / 12	75%	3 / 3	100%	7 / 8	88%	3 / 4	75%	12 / 12	100%	4 / 4	100%	1 / 1	100%	0 / 0	n/a	3 / 3	100%	1 / 1	100%	43 / 48	90%
VIBRIO	0 / 0	n/a	6 / 7	86%	1 / 1	100%	5 / 7	71%	13 / 16	81%	0 / 0	n/a	1 / 1	100%	1 / 1	100%	5 / 6	83%	0 / 0	n/a	32 / 39	82%

*FoodNet catchment areas are not statewide.
Updated 6/1/06.

Table 1. Summary of Foodborne Outbreaks with ≥ 2 ill, by FoodNet Site, 2006

***Data accessed July 6, 2006 (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	9	3,228,717	2.78	5	4 (44)	Norovirus (3) *Salmonella* (1)	0 (-)	6 (67)
CO	10	2,507,484	3.98	7	10 (100)	*Campylobacter* unknown (1), *Campylobacter* jejuni (1) Norovirus (6), *Salmonella* (1), Scrombroid (1)	3 (30)	5 (50)
CT	5	3,460,503	1.44	19	4 (80)	Norovirus (4)	3 (60)	3 (60)
GA	17	8,560,310	1.99	4	12 (71)	Norovirus (7), *Staphylococcus aureus* (2), *Bacillus* (1), *C. perfringens* (1), *Salmonella* (1)	6 (35)	10 (59)
MD	8	5,458,137	1.47	9.5	4 (50)	Other viral (1) *Salmonella* (2) Norovirus (1)	2 (25)	3 (38)

MN	30	5,019,720	5.98	7	21 (70)	*Clostridium perfringens* (2) Norovirus (17) Scrombroid (1) Salmonella (1)	7 (23)	18 (60)
NM	1	1,855,059	0.54	164	1 (100)	Norovirus (1)	0 (-)	0 (-)
NY	7	4,312,301	1.62	11	2 (29)	*Salmonella* (2)	1 (14)	2 (28)
OR	11	3,521,515	3.12	8	8 (73)	Norovirus (4), *Shigella sonnei* (1), *Salmonella* (2) Listeria (1)	6 (55)	4 (36)
TN	13	5,797,289	2.24	15	5 (38)	Norovirus (4), *Salmonella* (1)	3 (23)	8 (62)
Total	**111**	**43,721,035**	**2.54**	**8**	**71 (64)**		**31 (28)**	**59 (53)**

Table 2. Summary of Foodborne Outbreaks with ≥10 ill, by FoodNet Site, 2006

*** Data accessed July 6, 2006 (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	3	3,228,717	0.92	15	2 (67)	0 (-)	1 (33)
CO	4	2,507,484	1.59	22.5	4 (100)	1 (25)	3 (75)
CT	3	3,460,503	0.87	34	2 (67)	2 (67)	1 (33)
GA	6	8,560,310	0.70	17.5	5 (83)	1 (17)	1 (17)
MD	4	5,458,137	0.73	23.5	3 (75)	0 (-)	1 (25)
MN	11	5,019,720	2.19	16	10 (91)	5 (45)	3 (27)
NM	1	1,855,059	0.54	164	1 (100)	0 (-)	0 (-)
NY	4	4,312,301	0.93	15	0 (-)	1 (25)	1 (25)
OR	5	3,521,515	1.42	15	4 (80)	3 (60)	3 (60)
TN	8	5,797,289	1.38	21	4 (50)	2 (25)	4 (50)
Total	**49**	**43,721,035**	**1.12**	**18**	**35 (71)**	**15 (31)**	**18 (37)**

HUS Surveillance, 2006

Data as of July 7, 2006

Site	All cases (N=36)												In catchment (N=24)											
	<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	0	--	3	1 (33)	1	0 (0)	1	0 (0)	0	--	1	0(0)	0	0.0	1	0.59	1	0.5	0	0.0	0	0.0	0	0.0
CO	2	1(100)	5	0 (0)	1	0 (0)	0	0 (0)	0	--	0	--	0	0.0	3	1.91	0	0.0	0	0.0	0	0.0	0	0.0
CT	0	--	0	--	0	--	1	--	0	--	0	--	0	0.0	0	0.00	0	0.0	1	0.4	0	0.0	0	0.0
GA	1	--	1	0 (0)	1	0(0)	0	--	0	--	0	--	1	0.7	1	0.18	1	0.2	0	0.0	0	0.0	0	0.0
MD	0	--	0	--	0	--	0	--	0	--	0	--	0	0.0	0	0.00	0	0.0	0	0.0	0	0.0	0	0.0
MN	0	--	1	0(0)	0	--	0	--	1	0 (0)	0	--	0	0.0	1	0.38	0	0.0	0	0.0	1	0.0	0	0.0
NM	0	--	1	--	0	--	0	--	0	--	0	--	0	0.0	1	0.94	0	0.0	0	0.0	0	0.0	0	0.0
NY	0	--	0	--	0	--	0	--	0	--	0	--	0	0.0	0	0.00	0	0.0	0	0.0	0	0.0	0	0.0
OR	0	--	1	--	0	--	0	--	1	--	0	--	0	0.0	1	0.55	0	0.0	0	0.0	1	0.0	0	0.0
TN	2	0(0)	7	0(0)	2	0(0)	2	0 (0)	0	--	0	--	1	1.3	6	1.96	1	0.3	2	0.5	0	0.0	0	0.0
Total	**5**	1(20)	**19**	1 (5)	**5**	**0 (0)**	**4**	**0 (0)**	**2**	0 (0)	**1**	0(0)	**2**	0.3	**14**	0.59	**3**	0.10	**3**	0.10	**2**	0.06	**0**	0.0

*per 100,000 persons

Site	Laboratory Testing (all cases included N=36)																							
	Shiga toxin			O157									Non-O157											
	No. pos/ tested (%)			No. culture pos/tested (%)			No. seropos/ tested (%)			Total pos/total cases (by culture or serology) (%)			Stx pos & SMAC-O157 neg No. pos/tested (%)			Non-O157 isolated	No. seropos/ tested for O111 or O26 (%)			Total pos/total cases (by culture or serology) (%)		
CA	1	2	50%	3	5	60%	0	5	0%	3	6	50%	0	5	0%	-	0	1	0%	0	6	0%
CO	0	0	--	0	1	0%	0	1	0%	0	8	0%	0	1	0%	-	0	0	--	0	8	0%
CT	0	0	--	1	1	100%	0	1	0%	1	1	100%	0	1	0%	-	0	1	0%	0	1	0%
GA	1	3	33%	1	2	50%	0	2	0%	1	3	33%	0	2	0%	-	0	0	--	0	3	0%
MD	0	0	--	0	0	--	0	0	--	0	0	--	0	0	--	-	0	0	--	0	0	--
MN	2	2	100%	2	2	100%	0	2	0%	2	2	100%	0	2	0%	-	0	0	--	0	2	0%
NM	0	1	0%	0	0	--	0	0	--	0	1	0%	0	0	--	-	0	0	--	0	1	0%
NY	0	0	--	0	0	--	0	0	--	0	0	--	0	0	--	-	0	0	--	0	0	--
OR	0	0	--	0	1	0%	0	1	0%	0	2	0%	0	1	0%	-	0	0	--	0	2	0%
TN	2	2	100%	2	9	22%	0	9	0%	2	13	15%	0	9	0%	-	0	3	0%	0	13	0%
Total	**6**	**10**	**60%**	**9**	**21**	**43%**	**0**	**21**	**0%**	**9**	**36**	**25%**	**0**	**21**	**0%**		**0**	**5**	**0%**	**0**	**36**	**0%**

[1] No. seropos is from 1. a "yes" response to "Was serum obtained?" and 2. a "yes" response to "Were significant levels of antibodies against an STEC detected?" and 3. LPS type=O157

[2] The denominator is a "yes" response to the question: "Was serum obtained from this patient?" and a "yes" response to "Was serum tested?"

[3] No. seropos is from 1. a "yes" response to "Was serum obtained?" 2. a "yes" response to "Were significant levels of antibodies against an STEC detected?" and 3. LPS type≠O157

Data as of July 7, 2006

2006 Additional Tables

Site	Additional Tables (all cases included N=36)															
	O157				Non-O157				Serum							
	No. cultured/total cases		No. isolated/no. cultured		No. cultured for Non-O157/total cases		No. isolated/no. cultured		No. serum collected/ total cases		No. of significant Ab detected/ no. tested		No. with stool tested for Shiga toxin/total cases		Outbreak related/total cases	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CA	5/6	83	3/5	60	0/6	0	0/0	0	0/6	0	0/0	0	2/6	33	0/6	0
CO	1/8	13	0/1	0	0/8	0	0/0	0	0/8	0	0/0	0	0/8	0	0/8	0
CT	1/1	100	1/1	100	0/1	0	0/0	0	1/1	100	0/1	0	0/1	0	0/1	0
GA	2/3	67	½	50	0/3	0	0/0	0	0/3	0	0/0	0	3/3	100	0/3	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	2/2	100	2/2	100	0/2	0	0/0	0	0/2	0	0/0	0	2/2	100	0/2	0
NM	0/1	0	0/0	0	0/1	0	0/0	0	1/1	100	0/1	0	1/1	100	0/1	0
NY	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0
OR	½	50	0/1	0	0/2	0	0/0	0	0/2	0	0/0	0	0/2	0	½	50
TN	9/13	69	2/9	22	0/13	0	0/0	0	3/13	23	2/3	67	2/13	15	4/13	31
Total	21/36	58	9/21	43	0/36	0	0/0	0	5/36	14	2/5	40	10/36	28	5/36	14

HUS Surveillance, 2005

Data as of July 7, 2006

Site	All cases (N=88)												In catchment (N=67)											
	<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	1	0 (0)	10	0 (0)	2	0 (0)	0	--	0	--	0	--	1	2.3	5	3.0	0	0.0	0	0.0	0	0.0	0	0.00
CO	0	--	9	0 (0)	2	0 (0)	0	--	0	--	0	--	0	0.0	4	2.5	0	0.0	0	0.0	0	0.0	0	0.00
CT	0	--	2	0 (0)	1	0 (0)	1	0 (0)	1	0 (0)	0	--	0	0.0	2	1.2	1	0.4	1	0.4	1	0.0	0	0.00
GA	0	--	5	1 (20)	0	--	1	0 (0)	0	--	1	1 (100)	0	0.0	4	0.7	0	0.0	1	0.2	0	0.0	0	0.00
MD	0	--	3	0 (0)	1	0 (0)	0	--	0	--	0	--	0	0.0	2	0.7	1	0.3	0	0.0	0	0.0	0	0.00
MN	0	--	7	0 (0)	5	0 (0)	2	0 (0)	2	0 (0)	0	--	0	0.0	7	2.7	5	1.5	2	0.6	2	0.1	0	0.00
NM	1	1 (100)	0	--	0	--	0	--	0	--	0	--	1	3.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.00
NY	0	--	3	0 (0)	2	0 (0)	1	0 (0)	2	0 (0)	0	--	0	0.0	3	1.6	2	0.8	1	0.3	2	0.1	0	0.00
OR	0	--	6	0 (0)	1	0 (0)	0	--	0	--	0	--	0	0.0	6	3.3	1	0.4	0	0.0	0	0.0	0	0.00
TN	0	--	8	1 (13)	6	0 (0)	0	--	1	0 (0)	1	0 (0)	0	0.0	7	2.3	3	0.8	0	0.0	1	0.0	1	0.10
Total	**2**	**1 (50)**	**53**	**2 (4)**	**20**	**0 (0)**	**5**	**0 (0)**	**6**	**0 (0)**	**2**	**1 (50)**	**2**	0.3	**40**	1.6	**13**	0.4	**5**	0.2	**6**	0.2	**1**	**0.03**

*per 100,000 persons

Site	Laboratory Testing (all cases included N=88)																							
	Shiga toxin			O157									Non-O157											
	No. pos/ tested (%)			No. culture pos/tested (%)			No. seropos/ tested (%)			Total pos/total cases (by culture or serology) (%)			Stx pos & SMAC-O157 neg No. pos/tested (%)			Non-O157 isolated	No. seropos/ tested for O111 or O26 (%)			Total pos/total cases (by culture or serology) (%)		
CA	7	8	88%	7	13	54%	0	4	0%	7	13	54%	0	8	0%	-	0	4	0%	0	13	0%
CO	0	0	--	0	0	--	0	0	--	0	11	0%	0	0	--	-	0	0	--	0	11	0%
CT	2	2	100%	2	3	67%	0	0	--	2	5	40%	0	1	0%	-	0	0	--	0	5	0%
GA	1	1	100%	3	4	75%	0	0	--	3	7	43%	0	1	0%	-	0	0	--	0	7	0%
MD	2	2	100%	1	4	25%	0	0	--	1	4	25%	1	2	50%	sent to CDC	0	0	--	1	4	25%
MN	8	16	50%	8	16	50%	5	9	56%	13	16	81%	0	16	0%	-	0	9	0%	0	16	0%
NM	0	1	0%	0	0	--	0	1	0%	0	1	0%	0	0	--	-	0	1	0%	0	1	0%
NY	2	2	100%	5	7	71%	0	2	0%	5	8	63%	0	2	0%	-	0	2	0%	0	8	0%
OR	0	0	--	2	4	50%	0	3	0%	2	7	29%	0	0	--	-	0	3	0%	0	7	0%
TN	1	1	100%	9	14	64%	0	4	0%	9	16	56%	0	1	0%	-	0	4	0%	0	16	0%
Total	**23**	**33**	**70%**	**37**	**65**	**57%**	**5**	**23**	**22%**	**42**	**88**	**48%**	**1**	**31**	**3%**		**0**	**23**	**0%**	**1**	**88**	**1%**

*Lab Result Pending: MD-1

[1] No. seropos is from 1. a "yes" response to "Were significant levels of antibodies against an STEC detected?" 2. LPS type=O157 and 3. Titer IgG≥320 and a "positive" interpretation or Titer IgM ≥320 and a "positive" interpretation

[2] The denominator is a "yes" response to the question: "Was serum obtained from this patient?" It was assumed that each "yes" response resulted in a test.

[3] No. seropos is from 1. "yes" response to "Were significant levels of antibodies against an STEC detected?" 2. LPS type≠O157 and 3. Titer IgG≥320 and a "positive" interpretation or Titer IgM ≥ 320 and a "positive" interpretation

Data as of July 7, 2006

2005 Additional Tables

Site	Additional Tables (all cases included N=88)															
	O157				Non-O157				Serum							
	No. cultured/total cases		No. isolated/no. cultured		No. cultured for Non-O157/total cases		No. isolated/no. cultured		No. serum collected/ total cases		No. of significant Ab detected/ no. tested		No. with stool tested for Shiga toxin/total cases		Outbreak related/total cases	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CA	13/13	100	7/13	54	0/13	0	0/0	0	4/13	31	2/4	50	8/13	62	0/13	0
CO	0/11	0	0/0	0	0/11	0	0/0	0	0/11	0	0/0	0	0/11	0	2/11	18
CT	3/5	60	3/3	100	1/5	20	0/1	0	0/5	0	0/0	0	2/5	40	1/5	20
GA	4/7	57	¾	75	0/7	0	0/0	0	0/7	0	0/0	0	1/7	14	0/7	0
MD	4/4	100	¼	25	¼	25	1/1	100	0/4	0	0/0	0	2/4	50	0/4	0
MN	16/16	100	8/16	50	7/16	44	0/7	0	9/16	56	5/9	56	16/16	100	4/16	25
NM	0/1	0	0/0	0	0/1	0	0/0	0	1/1	100	0/1	0	1/1	100	0/1	0
NY	7/8	88	5/7	71	0/8	0	0/0	0	2/8	25	0/2	0	2/8	25	0/8	0
OR	4/7	57	2/4	50	0/7	0	0/0	0	3/7	43	1/3	33	0/7	0	1/7	14
TN	14/16	88	9/14	64	0/16	0	0/0	0	4/16	25	0/4	0	1/16	6	3/16	19
Total	65/88	76	38/65	43	9/88	10	1/9	11	23/88	26	8/23	35	33/88	38	11/88	13