National Antimicrobial Resistance Monitoring System (NARMS)
Quarterly Conference Call

Date: **Thursday, March 17, 2005**
Time: 2:00 – 3:00 p.m. (EST)
Toll-free number: 877-675-5901
Passcode: 37369
Leader: Felicita Medalla

A. Administrative
1. Roll call
2. Introductions

B. ELC applications
-GetSmart (Stacy Holzbauer: cyi3@cdc.gov)
-NARMS isolates

C. Status of Manuscripts

D. NARMS-Related Activities and Special Projects
1. Linking update (Julie Chouduri – czj6@cdc.gov)
-NARMS-PulseNet (Use of standard lab ID number for linking)
2. *S.* Paratyphi project (Sundeep Gupta – scg7@cdc.gov)
-Enhanced surveillance for *S.* Paratyphi

E. Surveillance
1. Status of 2003 and 2004 isolate submission
2. Preliminary 2003 results
3. Listeria isolates
-DASH form
4. Outbreak isolates
-S. Typhimurium, S. Newport, S. Enteritidis
-DASH form

F. FWA and IRB

G. Upcoming conference calls, meetings, and deadlines

NARMS Quarterly Conference Calls:
June 16, 2005 (Thursday), 2:00 – 3:00 pm ET
September 15, 2005 (Thursday), 2:00 – 3:00 pm ET
December 15, 2005 (Thursday), 2:00 – 3:00 pm ET

Meetings	Location	Date	Abstract Submission Deadline
EIS	Atlanta, GA	April 11-15, 2005	
AR Conference	Atlanta, GA	April 26-29, 2005	
ASM	Atlanta, GA	June 5-9, 2005	Dec. 15, 2004 (Div. Grp. 1)
CSTE	Albuquerque, NM	June 5-9, 2005	
NFID	Bethesda, MD	June 27-29, 2005	March 11, 2005 (on-line)
AVMA	Minneapolis, MN	July 16-20, 2005	Feb. 2, 2005
ICAAC	New Orleans, LA	Sept. 21-24, 2005	May 6, 2005 (on-line)
IDSA	San Francisco, CA	Oct. 6-9, 2005	May 9, 2005

Updated: 3/14/05

Status of Active Manuscripts

PRELIMINARY INFORMATION: SUBJECT TO CHANGE: NOT FOR DISTRIBUTION

Ref #.	Lead investigator (1st author)	Co-authors	Proposal/Publication	Abstract	Status	Date of last correspondence	Comments
1	Anderson AD	Nelson J, Rossiter S, Angulo FJ	Public Health Consequences of Use of Antimicrobial Agents in Agriculture		**6**		Food Safety Assurance and Veterinary Public Health Vol 3: Risk Management Strategies: Monitoring and Surveillance. Wageningen Academic Publishers: The Netherlands; 2005. p. 173-184.
2	Angulo FJ	Chiller TM, Nargund VN	Evidence of an association between use of antimicrobial agents in food animals and antimicrobial resistance among bacteria isolated from humans, and the human health consequences of such resistance		6		Journal of Veterinary Medicine B Nov 2004; 51 (374-379)
3	Fisk T	Lundberg BE, Guest JL, Ray S, Barrett TJ, Holland B, Stamey K, Angulo FJ, and Farley MM	Invasive Infection with Multidrug-Resistant Salmonella enterica Serotype Typhimurium Definitive Type 104 among HIV-Infected Adults		6	10/8/2004	CID April 2005; 40:1016-21
4	Giles WP	Benson AK, Olson ME, Hutkins RW, Whichard JM, Winokur PL, Fey PD	DNA sequence analysis of regions surrounding blaCMY-2 from multiple *Salmonella* plasmid backbones		6		Antimicrob Agents Chemother Aug 2004;48(8):2845-52.
5	Holmes CN	Chiller TM	National Antimicrobial Resistance Monitoring System (NARMS) - Enteric Bacteria, 2004 Scientific Meeting, Decatur, Georgia, March 4-5-, 2004		6		EID Nov 2004; 10 (11): 2061
6	Nargund V		Human Health Safety of Animal Feeds Workshop		6		EID Dec 2004; 10 (12): 2268
7	Nelson J	Smith KE, Vugia DJ, Rabatsky-Ehr T, Segler SD, Kassenborg HD, Zansky SM, Joyce K, Marano N, Hoekstra R, Angulo FJ	Prolonged diarrhea due to ciprofloxacin-resistant Campylobacter infection		6		JID September 2004; 190: 1150-1157 (response to Cox letter to editor in clearance)
8	Varma J	Mølbak K, Barrett TJ, Beebe JL, Jones TF, Rabatsky-Her T, Smith KE, Vugia DJ, Chang HH	Antimicrobial-resistant non-typhoidal *Salmonella* is associated with excess bloodstream infections and hospitalizations	ICEID 2002	6	1/30/2005	JID February 2005; 191: 554-61
9	Hannah EL	Angulo FJ, Johnson J, Haddadin B, Williamson J, Samore M	Rural community-based study of antimicrobial-resistant *E. coli:* Epidemiology, reservoirs, and potential consequences		5	1/28/2005	Submitted to EID
10	Sivapalasingam S	Angulo FJ	A high prevalence of antimicrobial resistance among *Shigella* isolates in the United States, NARMS, 1999-2002	IDSA 2001	5	1/30/2005	Submitted to EID
11	Varma J	Angulo FJ	Hospitalization and death rates among outbreaks caused by antimicrobial-resistant and pan-susceptible *Salmonella* -United States, 1984-2002	NARMS 2004	5	10/28/2004	Accepted - EID
12	Wright J	Angulo FJ	Outbreaks of multidrug-resistant Salmonella serotype Typhimurium infections associated with three companion animal veterinary facilities and one humane society		5	1/27/2005	Submitted to EID
13	Zirnstein G	Gay K, Stevenson JE, Wheeler D, Omondi M, Barrett TJ	Detection of *Salmonella gyr* A quinolone resistance mutations by MAMA PCR and DNA sequence analysis		4	10/8/2004	To resubmit for clearance
14	Campagnolo E	Johnson K, Rubin C, Karpati A, Angulo F	Microbiological characteristics and antimicrobial resistance patterns of bacteria from the local environment of large-scale animal feeding operations		3	1/13/2005	Revising draft
15	Stevenson J	Chiller TM, Angulo FJ	Quinolone resistance among non-typhi *Salmonella:* NARMS 1996-2002	NFID 2003	3	7/9/2004	Incorporating comments
16	Bird, M	Stevenson J, Whichard J, Barrett TJ	Assessing the emergence of a multi-drug resistant *Salmonella* serotype Newport using PFGE and plasmid profiling (1996-2000)	ICAAC2002	1	9/10/2004	Writing
17	Chiller T	Angulo FJ	Sensititre review of human enterococci data	IDSA 2002	1	9/10/2004	Reanalysis/Writing
18	Kretsinger K	Moore M, Angulo FJ	Prevalence of HLGR among human and retail food enterococci isolates	EIS 2003	1		Writing
19	Whichard JM	Gay K, Stevenson JE, Wheeler D, Omondi M, Barrett TJ	Concurrent Quinolone and Extended-spectrum Cephalosporin Resistance among Human Salmonella Isolates: Results of 2002 NARMS Monitoring		1	10/8/2004	Writing
20	Whichard JM	Carattoli A, Gottleib S, Morabito S, Hyytia-Trees E, Connor R, Bird MM, Wheeler D, Ribot EM, Baker NL, Griffin PM, Barrett TJ	Emergence of plasmid-mediated blaCMY genes and multidrug resistance among Escherichia coli O157:H7: results of NARMS monitoring 2000-2001		1	10/8/2004	Writing
21	Whichard JM	Theriot CM, Baker NL, Varma JK, VanDuyne S, Barrett TJ	blaCMY-mediated Third Generation Cephalosporin Resistance among Salmonella enterica serotype Newport strains: Results of FoodNet Case-Control Study		1	10/8/2004	Wriitng

0=Analysis, 1=Writing, 2=Draft being reviewed by co-authors, 3=Incorporating comments,4=NCID/CDC clearance, 5=At journal, 6=Published 7=On website

state	state lab ID format	Current state lab ID designation				
AK	A#######	A+ 7 digits	PulseNet NARMS	Mary Anctil Shelley Smith	907-334-2119 907-334-2111	mary_anctil@health.state.ak.us shelly_smith@health.state.ak.us
AL	AL####E-## AL####R-##	AL + 4 digit sequential + E + - + 2 # year AL + 4 digit sequential + R + - + 2 # year	PulseNet NARMS	Sharon Massingale LaDonna Cranidiotis	334-260-3400 334-260-3400	smassingale@adph.state.al.us ladonnacranidiotis@adph.state.al.us
AR	AR########	AR + 2digit calendar year + 6 digit sequential	PulseNet NARMS	(both) Rossina Stefanova (b/u) Joanie Jones-Harp	(501) 661 2212 (501) 661 2212	rstefanova@healthyarkansas.com jharp@healthyarkansas.com
AZ	ID##-##########	ID + 2digit year + - + 3 digit day of year + 7 digit sequential	PulseNet NARMS	Stephanie Kreis (b/u sup) Mary Finnerty	(602) 542-6132 (602) 542-6135	kreiss@hs.state.az.us finnerm@hs.state.az.us
CA	##X##### CA##X#####	2 # year + X + 5 # sequential CA + 2 # year + X + 5 # sequential (effective 7-1-04)	PulseNet NARMS FoodNet	Jan O'Connell Wendy Cheung/Claudia C Sam Shin	510-412-3796 510-412-3796 510-873-0773	joconnel@dhs.ca.gov wcheung@dhs.ca.gov sshin_ceip@mindspring.com
CO	PHM-##########	PHM + - + 4 # year + 6 # sequential	PulseNet NARMS FoodNet	Jim Beebe Jim Beebe Alicia Cronquist	303-692-3488 303-692-3488 303-692-2629	james.beebe@state.co.us james.beebe@state.co.us alicia.cronquist@state.co.us
CT	########	02 + 6 # sequential	PulseNet NARMS FoodNet	Stacey Kinney Bob Howard Sharon Hurd	860-509-8562 860-509-8560 203-764-4362	ctpfge@po.state.ct.us robert.howard@po.state.ct.us sharon.hurd@yale.edu
DC						
DE	####	4 digit sequential	PulseNet NARMS	Emily Outten Nancy Valeski Sue Shore	302-653-2870 302-653-2870 302-653-2870	emily.outten@state.de.us nancy.valeski@state.de.us susan.shore@state.de.us
FL	FL#####-##	FL + 5digit number + hyphen + 2 digit calendar yr	PulseNet NARMS	Paul Fiorella Ron Baker	904-791-1714 904-791-1600	paul_fiorella@doh.state.fl.us ron_baker@doh.state.fl.us
GA	MM####### FE######	MM + 2 # year + 5 # sequential FE + 2 # year + 4 # sequential	PulseNet NARMS FoodNet	Bob Manning Bob Manning Karen Lee Stepy Thomas Suzanne Segler	404-327-7996 404-327-7996 404-327-7996 404-657-6440 404-321-6111 x6492	rmanning@gdph.state.ga.us rmanning@gdph.state.ga.us klee@gdph.state.ga.us SmThomas1@dhr.state.ga.us alumssegler@learnlink.emory.edu
HI	##A###	2 # year + Letter code for month + 3 # sequential	PulseNet NARMS	Dana Tamashiro Becky Kanenaka	808-453-5983 808-587-6571	datamash@mail.health.state.hi.us rykanena@mail.health.state.hi.us
HU	#######HU##	7# sequential + HU+ 2digit year	PulseNet NARMS SlabsIDs	Joan Rogers Keri Goede Onesia Bishop	713-558-3445 713-558-3445 713-558-3042	joan.rogers@cityofhouston.net keri.goede@cityofhouston.net
IA	R######## E########	R + 4digit calendar year + 4 digit number E + 4digit calendar year + 4 digit number	PulseNet NARMS	(both) Mary Demartino	(319)335-4269	mary-demartino@uiowa.edu
ID	SC-#####		PulseNet NARMS	Annette Malan Walt DeLong Vivian Lockary	208.334.2235 x 259 208.334.2235 x 252 208.334.2235 x 257	MalanA@idhw.state.id.us delongw@idhw.state.id.us lockaryV@idhw.state.id.us
IL	50####	2digit seq (which turns over July 1 to '60') + 4digit sequential (which resets July 1 to 0001)	PulseNet NARMS	Joel Price Kuo Kuo-Jen	312-793-0750 312-793-4754	jprice1@idph.state.il.us kkuo@idph.state.il.us

IN		no PFGE in IN-- send out to MI	PulseNet NARMS	Shelley Stahl Brent Barrett	317-233-8045 317-233-8045	srstahl@isdh.state.in.us bbarrett@isdh.state.in.us
KS						
KY	##-###	2 # year + - + 3 digit sequential	PulseNet NARMS	Karim George Karim George	502-564-4446 502-564-4446	Karim.George@ky.gov Karim.George@ky.gov
LA County LAC (PulseNet) LAX (NARMS)	##-A### ##-A#### ##-A#####	2 # year + - + letter + 3 digit sequential 2 # year + - + letter + 4 digit sequential 2 # year + - + letter + 5 digit sequential	PulseNet NARMS	Eleanor Lehnkering Joan Sturgeon	213-250-8603 213-989-7074	elehnkering@dhs.co.la.ca.us jsturgeon@dhs.co.la.ca.us
Louisianna	LA-#########	LA + (hyphen) + 4 digit year + 5 digit sequential	PulseNet NARMS	Chupol Shariifskul Lori Kravet	(504) 568-5903 (504) 568-7683	cshariff@dhh.la.gov lkravet@dhh.la.gov
MA	MA##P#### MA##E####	MA + 2 digit claendar year + P + 4digit sequential	PulseNet NARMS	John Fontana Tracy Stiles Bob Goldbaum	(617) 983-6619 (617) 983-6612 (617) 983-6612	john.fontana@state.ma.us tracy.stiles@state.ma.us robert.goldbaum@state.ma.us
MD	MD#######	(starts 9/1/04 for all 3) MD +2 digit fiscal year + 5 digit sequential access #	PulseNet NARMS FoodNet	Naomi Barker Karen T. Cuenco Melanie Megginson	410-767-5772 410-706-5156 410-767-6261	barkern@dhmh.state.md.us kcuenco@epi.umaryland.edu MMegginson@dhmh.state.md.us
ME	##M-MIS-0514	2 # year + - + M + - + MIS + 4 digit sequential	PulseNet NARMS	Donna Wrigley Donna Wrigley	207-287-2727 207-287-2727	pfge.hetl@Maine.gov pfge.hetl@Maine.gov
MI	##ST###### ##EN###### ##UN###### ##ES###### ##AE######	2 # year + ST + 6 digit sequential 2 # year + EN + 6 digit sequential 2 # year + UN + 6 digit sequential 2 # year + ES + 6 digit sequential 2 # year + AE + 6 digit sequential (Listeria only)	PulseNet NARMS	Steve Dietrich William Schneider	517-335-8505 517-335-9343	DietrichS@michigan.gov SchneiderW@michigan.gov
MN	E########## I########## PO########## C#########	E + 4 # year + 6 # sequential (Enteric Bacteria) I + 4 # year + 6 # sequential (Enteric Bacteria) PO + 4 # year + 6 # sequential (Crypto & Cylco only) C + 4 # year + 6 # sequential (Listeria only)	PulseNet NARMS FoodNet	David Boxrud Fe Leano Ellen Swanson	612-676-5395 612-676-5252 612-676-5639	dave.boxrud@health.state.mn.us fe.leano@health.state.mn.us ellen.swanson@state.mn.us
MO	MOENT####-## MOREF####-## MOPAR####-##	MO + ENT + 4 digit sequential + - + 2 # year (Bacteria except Listeria) MO + REF + 4 digit sequential + - + 2 # year (Bacteria) MO + PAR + 4 digit sequential + - + 2 # year (Crypto and Cylo)	PulseNet NARMS	Stephen Gladbach Stephen Gladbach	573-751-0633 573-751-0633	Gladbs@dhss.mo.gov Gladbs@dhss.mo.gov
MS	##MS####	2 # year + MS + 4-digit sequential	PulseNet NARMS	Kimbley Lloyd Jane Campbell	601-576-7582 601-576-7582	klloyd@msdh.state.ms.us jane.campbell@msdh.state.ms.us
MT	MT#########	MT + 4digit year + 5 digit sequential	For Both PulseNet and NARMS	1- Susanne Zanto 2- Anne Weber	406-444-2839 406-444-5559	szanto@state.mt.us aweber@state.mt.us
NC	NC####-######	(starts Jan 2005) NC + 4digit year + hyphen + 6 digits	PulseNet NARMS	Denise Griffin Brad Jenkins	(919) 807-8763 (919) 807-8768	Denise.Griffin@ncmail.net Brad.Jenkins@ncmail.net
ND	ND######	ND + 2digit year + 4digit sequential	PulseNet NARMS .	Kali Hardy Tim Brosz Nicole Meier Eric Hieb	701-328-6283 701-328-5279 701-328-6288 701-328-6289	Khardy@state.nd.us Tbrosz@state.nd.us Nmeier@state.nd.us Ehieb@state.nd.us
NE	NPHL####	NPHL + continous 4 digit sequential (PN submission= REF + 4digit sequential	PulseNet NARMS	Robert Wickert Jodi Garrett	(402) 559-2123 (402) 552-3235	rwickert@unmc.edu jlgarrett@nebraskamed.com

NJ	2#E####	2 + 1digit year +E + 4digit number	PulseNet NARMS	Maria Orsini Lidicker xxxxx	609-984-2514 xxxx	maria.orsini@doh.state.nj.us xxxx
NH	##########	4 # year + 6 digit sequential	PulseNet NARMS	Krista Marschner Nancy Taylor	603-271-5038 603-271-4663	
NY (PulseNet, FoodNet) NX (NARMS)	BAC########## PAR##########	BAC + 2 # year + 8 # sequential (Bacteria) PAR + 2 # year + 8 # sequential (Crypto and Cyclo only)	PulseNet NARMS FoodNet	Dianna Bopp Tim Root Shelley Zansky	518-474-4177 518-474-2191 518-474-0926	djs03@health.state.ny.us tpr02@health.state.ny.us smz04@health.state.ny.us
NYC (PulseNet) NY (NARMS)	######	2 # year + 4 # sequential	PulseNet NARMS	Laura Kornstein Alice Agasan	212-447-6820 212-447-6558	lkornste@health.nyc.gov aagasan@health.nyc.gov
NM	########	4 # year + 5 digit sequential	PulseNet NARMS FoodNet	Debbie Sena Lisa Onischuk Karen Edge	505-841-2596 505-841-2596 505-272-3793	debbie.sena@state.nm.us lisa.onischuk@state.nm.us KEdge@salud.unm.edu
NV						
OH	##########	4 digit year + 6 digit number	PulseNet NARMS	Tammy Bannerman	(614) 644-4670	tbannerm@gw.odh.state.oh.us
OK	##OKE#### ##OKB####	(starts Jan 05) 2digit year + OK + E + 4digit sequential 2digit year + OK + B + 4digit sequential	PulseNet NARMS	Mike McDermott Rebekah Berry Sonny Crocker	405.271.5070 405.271.5070 405.271.5070	mikedm@health.state.ok.us rebekahb@health.state.ok.us sonnyc@health.state.ok.us
OR	G##-#### I##-####	G+2# year + - + 4 # sequential I+2# year + - + 4 # sequential (Listeria)	PulseNet NARMS FoodNet	Julie Hatch Julie Hatch Julie Hatch	503-731-4024 503-731-4024 503-731-4024	Julie.Hatch@state.or.us Julie.Hatch@state.or.us Julie.Hatch@state.or.us
Philadelphia			PulseNet (no separate NARMS)	Diane Green xxx	(215) 685-6815 xxx	
PA	##E##### ##F##### ##B#####	2 # year + E + 5 digit sequential (Enterics) 2 # year + F + 5 digit sequential (Field investigation for food) 2 # year + B + 5 digit sequential (Bacteriology samples)	PulseNet NARMS	Wayne Chmielecki Wayne Chmielecki	610-280-3464, Ext. 3247 610-280-3464, Ext. 3247	wchmieleck@state.pa.us wchmieleck@state.pa.us
RI	RI########	RI + 2digit calendar year + 6 digit number	PulseNet NARMS NARMS	Debbie Sizemore Cheryl Campbell Toby Bennett	401-222-5586 401-222-5654 401-222-5586	dsizemore@doh.state.ri.us cherylc@doh.state.ri.us tobyb@doh.state.ri.us
SC	SC-#####	SC + - + 5 digit sequential	PulseNet NARMS	Arthur Wozniak	803-896-0965	wozniaka@dhec.sc.gov
SDC	SDCE###### SDCF###### SDCM######	SDC + E + 2 digit calendar year + 4 digit accession number (Enterics) SDC + F + 2 digit calendar year + 4 digit accession number (Food Micro) SDC + M + 2 digit calendar year + 4 digit accession number (Enteric Bact)	PulseNet	Chris Peter	(619) 692-8500	Chris.Peter@sdcounty.ca.gov
SD	SD######	(as of 9/9/04) SD + 4 digit sequntial +2digit year (old) BA + 4 digit sequential number + space + 2 digit year	both PulseNet NARMS	Chris Carlson	605-773-4238	Chris.Carlson@state.sd.us

TN	######	2 # fiscal year (fy runs July 1-June 30) + 4 # sequential	PulseNet NARMS FoodNet	Henrietta Harding Henrietta Harding Tim Jones	615-262-6362 615-262-6362 615-741-3857	hhardin@state.tn.us hhardin@state.tn.us Tim.F.Jones@state.tn.us
TX	btx##BT###### btx##BR###### ##BT###### ##BR######	(+ or - 'btx') + 2digit calendar year + BT + 6digit sequential (+ or - 'btx') + 2digit calendar year + BR + 6digit sequential	PulseNet NARMS NARMS	Ana Maria Valle-Rivera Eileen Prentice Tamara Baldwin	512-458-7735 512-458-7784 512-458-6189	ana.valle@dshs.state.tx.us eileen.huston@dshs.state.tx.us tamara.baldwin@dshs.state.tx.us
UT	UT########	UT + 7 + 2 # year + 5 digit sequential	PulseNet NARMS	Jenni Wagner Cindy Fisher	801-584-8449 801-584-8449	jwagner@utah.gov ckfisher@utah.gov
VA	VA_##-####	VA + underscore + 2 digit year + hyphen + 4digit sequential	PulseNet NARMS	(both) Denise Toney (b/u) Ann Munson	804-648-4480 ext 282 804-648-4480 ext 280	denise.toney@dgs.virginia.gov ann.munson@dgs.virginia.gov
VT	##BAC####VT ##FD####VT	2digit fiscal yr (July1) + BAC +4digit sequential (Enterics) 2digit fiscal yr (July1) + FD +4digit sequential (Food)	both PulseNet NARMS	Natasha Pugsley	802-863-7617	Npugsle@vdh.state.vt.us
WA	EN###### RL####-####	EN + 6 digit sequential RL + 4 # year + - + 4 digit sequential (Listeria only)	PulseNet NARMS	Ravi Pallipamu Ravi Pallipamu	206-361-2933 206-361-2933	ravi.pallipamu@doh.wa.gov ravi.pallipamu@doh.wa.gov
WI	##BC####	2 # year + BC + 4 digit sequetial	PulseNet NARMS	Dave Warshauer Dave Warshauer	608-265-9115 608-265-9115	warshadm@mail.slh.wisc.edu warshadm@mail.slh.wisc.edu
WV	######	2digit calendar year + 4digit sequential (restarts July1)	PulseNet NARMS	(both) Christi Clark (b/u) Andrea Labik	(304) 558-3530 x2602 (304) 558-3530 x2001	christiclark@wvdhhr.org andrealabik@wvdhhr.org
WY	WY######	WY + zero (0) + 5 digit number	PulseNet NARMS	Wanda Manley John Harrison	307.777.8680 307.777.7431	wmanle@state.wy.us jharri1@state.wy.us

Non-Typhi *Salmonella* Isolates by Site and Month, 2003

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	1	0	0	1	0	0	0	0	0	1	**3**
AL	2	1	1	2	2	3	6	5	4	5	4	2	**37**
AR	0	0	0	0	0	0	0	0	2	2	4	5	**13**
AZ	2	1	0	1	2	4	1	5	5	4	3	4	**32**
CA	13	14	10	9	9	14	18	13	17	16	13	10	**156**
CO	4	0	2	2	2	1	2	2	3	2	1	1	**22**
CT	1	2	1	2	2	3	2	4	2	3	1	2	**25**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	1	0	0	1	1	1	1	1	2	0	0	**8**
FL	3	2	2	4	3	4	10	5	5	5	5	6	**54**
GA	9	5	6	3	6	10	19	13	15	15	7	6	**114**
HI	0	1	1	1	1	1	0	2	1	2	1	1	**12**
HT	1	1	1	5	3	3	4	4	7	3	3	2	**37**
IA	1	1	1	0	1	2	2	2	0	1	1	2	**14**
ID	1	0	3	0	0	1	0	2	1	0	1	1	**10**
IL	6	8	3	5	6	10	23	11	9	9	5	7	**102**
IN	2	1	2	4	2	4	3	3	2	3	1	2	**29**
KS	0	1	1	0	2	1	1	2	2	1	0	1	**12**
KY	1	1	1	1	1	2	3	3	2	2	1	1	**19**
LA	1	1	1	2	4	5	7	4	10	5	4	1	**45**
LX	4	4	1	4	4	5	8	5	8	4	5	3	**55**
MA	3	2	3	3	5	7	7	10	5	7	4	3	**59**
MD	7	4	5	3	5	4	5	9	5	6	4	2	**59**
ME	0	0	1	0	1	1	1	1	1	0	1	0	**7**
MI	3	2	5	2	5	3	6	4	5	3	3	3	**44**
MN	2	2	2	2	2	3	3	2	4	3	3	1	**29**
MO	2	2	2	2	5	8	9	9	7	5	4	2	**57**
MS	1	0	1	0	3	2	7	6	6	7	1	1	**35**
MT	0	0	0	0	1	0	0	1	0	0	0	0	**2**
NC	4	2	3	5	5	7	9	7	15	5	5	4	**71**
ND	1	0	0	0	0	0	0	0	0	0	0	1	**2**
NE	2	3	4	1	2	2	2	0	1	2	0	0	**19**
NH	1	0	1	0	1	1	1	1	2	1	0	1	**10**
NJ	1	1	1	1	2	5	6	8	3	3	2	2	**35**
NM	1	1	0	1	2	3	2	1	3	3	2	2	**21**
NV	0	0	0	0	0	0	0	2	1	1	1	0	**5**
NX	3	4	5	3	7	6	12	6	0	9	3	6	**64**
NY	4	3	3	4	4	5	11	10	15	7	6	2	**74**
OH	6	4	4	5	5	9	12	6	6	5	3	3	**68**
OK	0	2	0	2	1	3	7	2	2	3	1	2	**25**
OR	3	1	3	1	1	1	2	2	2	1	2	0	**19**
PA	6	4	5	4	1	7	10	7	6	5	5	4	**64**
RI	0	1	0	1	0	1	1	2	0	0	0	2	**8**
SC	2	1	1	2	2	2	3	4	3	1	2	3	**26**
SD	0	2	0	2	0	2	2	1	1	0	2	0	**12**
TN	5	5	2	6	5	3	5	7	4	4	3	1	**50**
TX	4	3	4	3	6	5	8	8	8	8	4	1	**62**
UT	0	1	1	1	1	2	1	3	1	2	1	1	**15**
VA	2	2	2	4	3	4	8	7	7	5	7	4	**55**
VT	0	0	0	0	1	0	1	0	0	0	0	0	**2**
WA	4	2	4	2	4	3	4	2	6	3	4	2	**40**
WI	1	1	2	2	1	2	6	8	4	4	2	3	**36**
WV	1	0	3	0	2	3	3	3	2	2	1	2	**22**
WY	0	1	0	0	2	0	0	0	0	1	0	1	**5**
Total	**120**	**101**	**105**	**107**	**136**	**179**	**264**	**225**	**221**	**190**	**136**	**117**	**1901**

Non-Typhi *Salmonella* Isolates by Site and Month, 2004

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	1	0	0	0	0	0	1	0	0	**2**
AL	3	1	1	2	2	0	6	5	5	4	1	0	**30**
AR	4	1	0	0	0	0	0	0	4	15	1	0	**25**
AZ	2	3	2	2	2	2	3	2	3	3	2	0	**26**
CA	9	7	13	7	6	14	11	6	10	11	10	3	**107**
CO	2	1	1	1	1	3	4	4	3	2	1	2	**25**
CT	0	2	2	1	2	2	5	3	3	1	2	2	**25**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	1	0	0	1	3	1	0	1	1	0	**8**
FL	3	2	3	5	2	6	5	9	6	3	0	0	**44**
GA	6	3	4	5	7	11	19	16	15	10	10	6	**112**
HI	1	2	2	1	2	2	1	2	2	2	1	0	**18**
HT	2	1	1	4	3	4	5	2	3	0	0	0	**25**
IA	0	0	1	1	2	2	3	1	1	0	1	0	**12**
ID	1	0	0	1	1	1	1	1	0	1	0	1	**8**
IL	8	2	7	8	6	11	10	11	6	4	0	0	**73**
IN	1	2	3	2	3	5	4	2	3	2	1	0	**28**
KS	0	1	0	1	2	1	3	1	2	0	0	0	**11**
KY	0	1	3	1	3	2	1	3	0	0	0	0	**14**
LA	2	2	1	3	2	6	6	9	5	5	6	2	**49**
LX	4	4	4	2	6	5	6	2	0	0	0	0	**33**
MA	3	1	3	3	4	6	12	8	6	0	0	0	**46**
MD	2	2	2	2	3	3	13	6	7	2	0	0	**42**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	3	6	3	4	2	5	5	2	0	0	0	0	**30**
MN	2	2	2	3	2	4	4	3	4	2	3	3	**34**
MO	2	3	3	2	4	5	5	6	5	4	3	2	**44**
MS	2	0	1	1	3	5	7	7	4	6	4	0	**40**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	2	2	3	3	3	12	19	15	9	4	0	0	**72**
ND	0	0	1	0	1	0	0	1	0	0	0	0	**3**
NE	3	2	0	2	1	3	0	0	0	0	0	0	**11**
NH	0	0	1	0	1	0	2	2	0	1	0	0	**7**
NJ	3	3	2	2	1	4	11	9	5	0	2	0	**42**
NM	4	2	2	2	1	2	1	3	1	1	0	0	**19**
NV	0	1	2	1	0	1	1	1	0	0	0	0	**7**
NX	2	5	5	7	5	5	10	10	9	2	6	1	**67**
NY	5	2	0	5	2	0	0	8	5	0	0	0	**27**
OH	5	3	3	4	5	7	10	7	5	4	0	0	**53**
OK	2	2	1	1	1	2	2	3	3	0	0	0	**17**
OR	2	1	1	1	2	2	3	2	1	2	1	1	**19**
PA	4	4	4	6	6	8	17	11	6	0	0	0	**66**
RI	0	0	1	1	1	1	1	1	1	1	1	0	**9**
SC	1	1	0	1	0	0	0	0	0	0	0	0	**3**
SD	1	2	1	0	1	1	1	0	2	0	1	1	**11**
TN	2	1	2	3	3	6	3	4	0	0	0	0	**24**
TX	2	3	3	5	4	5	5	4	4	0	0	0	**35**
UT	1	0	2	0	1	1	2	1	1	0	0	0	**9**
VA	2	3	1	0	0	0	0	0	0	0	0	0	**6**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	2	2	3	2	0	0	0	0	0	0	0	0	**9**
WI	1	3	5	2	3	4	8	5	4	0	0	0	**35**
WV	1	2	4	2	5	4	8	0	0	0	0	0	**26**
WY	0	1	0	1	1	0	0	1	0	0	0	1	**5**
Total	**107**	**94**	**110**	**114**	**118**	**174**	**246**	**200**	**153**	**94**	**58**	**25**	**1493**

Typhi Isolates by Site and Month, 2003

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	0	0	1	0	0	0	**1**
AL	0	1	1	0	0	0	1	0	0	0	1	0	**4**
AR	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AZ	0	0	0	1	0	0	0	1	0	0	0	0	**2**
CA	13	7	8	5	9	6	6	8	5	6	0	2	**75**
CO	2	0	1	0	0	0	0	0	0	0	1	0	**4**
CT	3	0	1	0	0	4	2	1	6	0	0	0	**17**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	1	0	0	0	0	0	0	0	0	0	**1**
FL	1	1	0	1	1	1	1	2	1	0	4	0	**13**
GA	0	0	1	1	0	0	2	1	0	0	0	2	**7**
HI	0	0	0	0	0	0	0	1	1	0	0	0	**2**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	1	0	0	0	1	0	0	0	0	**2**
ID	0	0	0	0	0	0	0	0	1	0	0	0	**1**
IL	2	1	1	1	0	1	4	3	4	1	0	1	**19**
IN	2	0	0	2	0	0	0	0	0	0	0	0	**4**
KS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
KY	0	0	0	0	0	0	0	0	0	1	0	0	**1**
LA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
LX	3	0	1	9	7	5	1	1	6	2	1	1	**37**
MA	0	1	2	1	1	1	5	1	3	2	0	0	**17**
MD	3	0	1	2	1	0	0	0	0	1	1	3	**12**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	1	0	6	0	1	1	0	2	2	0	0	0	**13**
MN	0	0	1	0	0	1	0	0	0	0	0	0	**2**
MO	0	0	0	0	1	0	0	0	0	0	0	0	**1**
MS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	1	1	1	1	1	0	1	1	1	0	0	1	**9**
ND	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NE	0	0	0	0	0	0	0	1	0	0	0	0	**1**
NH	0	0	0	0	1	0	1	0	0	0	0	0	**2**
NJ	0	2	0	1	6	0	1	3	6	0	0	0	**19**
NM	0	0	0	0	0	0	0	0	0	0	0	1	**1**
NV	0	0	0	0	0	0	0	0	0	2	0	0	**2**
NX	1	0	2	1	3	3	0	3	3	0	0	0	**16**
NY	2	4	4	3	1	1	4	5	15	4	4	1	**48**
OH	1	0	0	0	0	0	0	2	0	1	0	0	**4**
OK	0	0	0	0	0	0	0	0	1	0	0	0	**1**
OR	2	0	0	0	0	0	0	1	0	0	1	0	**4**
PA	1	0	0	0	1	0	0	0	2	0	2	1	**7**
RI	0	3	0	0	0	0	0	0	0	0	0	0	**3**
SC	0	0	0	1	0	0	0	0	0	0	0	0	**1**
SD	0	0	0	0	0	0	0	0	0	0	0	0	**0**
TN	0	1	0	1	0	0	0	0	0	0	2	0	**4**
TX	0	0	0	0	0	3	1	10	4	1	0	0	**19**
UT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
VA	2	5	1	1	0	1	1	1	2	0	0	0	**14**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	0	0	0	1	0	0	0	0	0	0	0	0	**1**
WI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WV	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**40**	**27**	**33**	**34**	**34**	**28**	**31**	**49**	**64**	**21**	**17**	**13**	**391**

Typhi Isolates by Site and Month, 2004

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AL	0	0	0	0	0	0	1	0	0	0	0	0	**1**
AR	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AZ	1	0	0	0	1	0	0	0	0	0	0	0	**2**
CA	5	3	6	3	2	7	8	9	14	4	3	3	**67**
CO	0	0	0	1	0	0	0	0	1	0	0	1	**3**
CT	0	0	0	1	1	0	1	0	4	0	1	1	**9**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
FL	1	2	0	0	0	3	2	1	0	0	0	0	**9**
GA	0	0	0	0	1	0	1	0	1	0	0	0	**3**
HI	2	1	3	0	1	0	0	0	0	0	0	0	**7**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IL	2	1	1	0	0	2	1	0	7	0	0	0	**14**
IN	0	0	0	0	0	0	0	1	0	0	0	0	**1**
KS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
KY	0	0	0	1	1	0	0	0	0	0	0	0	**2**
LA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
LX	2	2	1	1	2	7	4	6	0	0	0	0	**25**
MA	0	3	5	2	2	2	2	1	0	0	0	0	**17**
MD	4	2	2	0	0	3	8	1	1	0	0	0	**21**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	1	1	1	1	0	1	1	1	0	0	0	0	**7**
MN	0	0	1	0	0	0	1	0	0	2	1	1	**6**
MO	0	0	0	0	0	0	1	0	0	0	0	0	**1**
MS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	1	0	0	0	0	1	1	1	0	0	0	0	**4**
ND	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NE	0	0	0	0	0	0	2	0	0	0	0	0	**2**
NH	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NJ	1	2	4	0	2	0	0	3	2	1	1	0	**16**
NM	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NV	1	2	0	0	1	0	0	0	0	0	0	0	**4**
NX	0	0	0	1	0	2	3	2	4	1	1	1	**15**
NY	3	3	0	0	3	0	0	5	6	0	0	0	**20**
OH	2	0	0	0	0	2	0	3	0	0	0	0	**7**
OK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
OR	0	0	0	0	0	0	0	1	0	0	0	0	**1**
PA	0	0	1	0	3	2	1	0	0	0	0	0	**7**
RI	0	0	3	1	0	0	0	0	0	0	0	0	**4**
SC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SD	0	0	0	0	0	0	0	0	0	0	0	0	**0**
TN	0	0	1	0	2	2	0	0	1	0	0	0	**6**
TX	1	0	2	1	1	0	1	4	1	0	0	0	**11**
UT	1	0	0	0	0	0	0	0	0	0	0	0	**1**
VA	1	1	0	1	0	0	0	0	0	0	0	0	**3**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	1	0	0	0	0	0	0	0	0	0	0	0	**1**
WI	0	0	0	0	1	0	0	0	0	0	0	0	**1**
WV	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**30**	**23**	**31**	**14**	**24**	**34**	**39**	**39**	**42**	**8**	**7**	**7**	**298**

Shigella Isolates by Site and Month, 2003

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AL	1	1	1	0	1	3	0	1	1	1	0	1	**11**
AR	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AZ	1	0	0	0	1	2	1	2	2	2	2	0	**13**
CA	0	0	0	0	0	0	1	0	0	1	0	0	**2**
CO	1	0	0	0	0	0	1	1	3	2	1	1	**10**
CT	1	1	0	0	1	0	0	0	1	0	0	1	**5**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	3	1	2	0	1	1	1	0	0	0	0	0	**9**
FL	0	0	1	0	1	0	0	0	0	0	0	0	**2**
GA	9	5	5	3	4	5	2	2	3	2	2	1	**43**
HI	0	0	0	0	0	0	1	0	0	0	1	0	**2**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	0	1	0	0	0	0	0	**1**
IL	5	3	2	2	8	5	2	4	4	3	2	3	**43**
IN	0	0	0	0	0	1	0	0	0	1	0	0	**2**
KS	0	0	1	0	0	0	1	0	1	1	0	1	**5**
KY	0	0	0	0	0	0	0	1	1	0	1	0	**3**
LA	3	1	1	1	1	2	1	1	1	1	0	0	**13**
LX	0	1	0	1	0	0	1	0	2	0	1	0	**6**
MA	0	1	0	2	0	0	2	1	2	1	1	1	**11**
MD	4	1	3	2	2	2	4	3	2	0	1	1	**25**
ME	1	0	0	0	0	0	0	0	0	0	0	0	**1**
MI	1	0	2	2	1	1	2	1	0	2	0	0	**12**
MN	0	1	0	1	0	0	1	0	1	1	0	0	**5**
MO	1	1	0	1	2	1	1	0	1	2	0	1	**11**
MS	0	0	0	0	0	0	1	0	0	0	0	0	**1**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	1	0	1	0	2	3	5	3	1	1	0	0	**17**
ND	0	1	0	0	0	0	0	0	0	0	0	0	**1**
NE	1	1	1	2	0	0	2	0	0	2	0	0	**9**
NH	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NJ	1	1	0	2	1	1	3	1	1	1	1	1	**14**
NM	0	2	1	1	1	2	1	0	2	5	1	1	**17**
NV	0	0	0	0	1	0	0	0	1	0	0	0	**2**
NX	1	1	1	1	1	1	2	0	1	3	3	3	**18**
NY	1	1	1	1	1	0	1	2	1	0	1	1	**11**
OH	1	1	1	1	0	3	3	0	1	0	1	1	**13**
OK	2	3	1	3	5	5	3	3	4	3	3	2	**37**
OR	2	0	0	0	1	0	1	1	0	1	0	0	**6**
PA	2	2	2	4	16	8	5	4	1	3	1	1	**49**
RI	0	0	0	0	0	0	0	0	0	1	0	0	**1**
SC	0	1	0	2	3	2	0	2	2	2	2	2	**18**
SD	2	0	0	0	0	1	0	2	1	0	1	0	**7**
TN	3	2	4	5	1	0	2	1	2	4	2	2	**28**
TX	1	1	1	4	4	2	2	2	3	4	3	2	**29**
UT	0	0	0	1	0	0	0	1	0	0	0	1	**3**
VA	1	1	1	2	1	3	2	0	1	2	0	1	**15**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	1	2	1	1	0	1	1	1	1	0	1	0	**10**
WI	0	0	1	0	1	0	0	1	1	0	0	0	**4**
WV	0	0	2	0	1	0	0	0	0	0	1	0	**4**
WY	0	0	0	0	0	0	0	0	0	1	0	0	**1**
Total	**51**	**37**	**37**	**45**	**63**	**55**	**57**	**41**	**49**	**53**	**33**	**29**	**550**

***Shigella* Isolates by Site and Month, 2004**													
Preliminary data subject to change. Last revised 3-16-2005													
Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	1	0	0	0	0	0	0	0	**1**
AL	0	0	1	0	0	1	1	1	0	3	1	0	**8**
AR	0	0	0	0	0	0	0	0	2	2	0	0	**4**
AZ	1	1	0	1	1	1	1	1	1	1	1	0	**10**
CA	0	0	0	0	0	1	0	0	1	0	0	0	**2**
CO	0	1	0	0	0	1	1	1	0	1	1	0	**6**
CT	0	0	0	0	1	0	1	0	1	0	0	1	**4**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
FL	0	0	0	0	0	0	0	0	0	0	0	0	**0**
GA	1	1	2	2	2	3	3	1	2	3	2	2	**24**
HI	0	0	0	0	0	1	0	0	1	0	0	0	**2**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	0	1	0	0	0	0	0	**1**
IL	5	0	1	0	1	1	2	3	2	3	2	0	**20**
IN	0	0	0	0	0	0	1	0	0	0	0	0	**1**
KS	0	0	0	0	0	0	1	0	1	0	0	0	**2**
KY	0	0	0	0	0	0	1	0	0	0	0	0	**1**
LA	0	0	1	1	1	2	0	0	0	0	1	1	**7**
LX	0	1	0	0	1	0	1	1	0	0	0	0	**4**
MA	1	1	0	0	1	1	1	1	1	0	0	0	**7**
MD	0	1	0	1	1	1	1	0	1	1	0	0	**7**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	1	0	0	1	0	0	1	0	0	0	0	0	**3**
MN	0	0	0	0	0	0	1	0	1	0	0	0	**2**
MO	0	0	1	0	1	1	2	0	1	0	2	1	**9**
MS	0	0	0	0	0	0	0	0	1	0	0	0	**1**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	0	0	1	0	0	1	0	1	1	1	0	0	**5**
ND	0	0	0	0	0	0	0	0	0	0	1	0	**1**
NE	0	0	0	2	0	0	2	0	0	0	0	0	**4**
NH	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NJ	1	1	1	1	1	1	2	1	1	1	1	0	**12**
NM	0	0	0	0	2	1	0	1	0	1	0	0	**5**
NV	0	0	0	0	0	0	1	0	0	0	0	0	**1**
NX	1	0	3	2	2	1	1	1	2	0	1	0	**14**
NY	0	0	0	1	0	0	0	1	1	0	0	0	**3**
OH	1	0	0	0	1	0	1	0	1	1	0	0	**5**
OK	4	2	1	2	4	2	2	2	1	1	0	0	**21**
OR	1	0	0	0	1	0	0	0	1	0	1	0	**4**
PA	1	0	0	1	0	1	1	0	0	0	0	0	**4**
RI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SC	2	3	2	1	0	0	0	0	0	0	0	0	**8**
SD	0	0	1	0	0	0	1	1	0	1	1	0	**5**
TN	2	1	1	2	1	5	2	3	0	0	0	0	**17**
TX	2	2	1	3	3	2	2	2	1	0	0	0	**18**
UT	0	0	0	0	0	1	0	0	0	0	0	0	**1**
VA	0	0	1	0	1	0	0	0	0	0	0	0	**2**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	1	0	0	1	0	0	0	0	0	0	0	0	**2**
WI	1	0	1	0	2	2	1	2	2	0	0	0	**11**
WV	0	0	0	0	0	0	1	0	0	0	0	0	**1**
WY	0	0	0	0	0	0	0	1	0	0	0	0	**1**
Total	**26**	**15**	**19**	**22**	**29**	**31**	**37**	**25**	**27**	**20**	**15**	**5**	**271**

E. coli Isolates by Site and Month, 2003

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AL	1	0	0	0	0	0	0	0	0	0	0	1	**2**
AR	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AZ	1	0	0	0	0	0	0	0	0	1	0	0	**2**
CA	0	0	2	0	0	0	1	3	1	5	0	1	**13**
CO	0	0	0	0	0	0	1	0	0	0	0	0	**1**
CT	1	0	0	0	0	1	0	1	0	0	0	0	**3**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	0	1	0	0	1	0	0	0	0	0	**2**
FL	0	0	0	0	0	0	1	0	0	0	0	0	**1**
GA	1	2	0	1	1	2	2	2	2	2	0	2	**17**
HI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	0	0	1	1	1	0	0	**3**
IL	0	0	0	0	0	1	1	1	1	1	0	0	**5**
IN	0	0	0	0	0	0	1	0	1	0	0	1	**3**
KS	0	0	0	0	0	0	0	0	0	1	0	0	**1**
KY	0	0	0	0	0	0	0	0	1	0	0	0	**1**
LA	0	0	0	0	0	0	2	0	0	0	0	0	**2**
LX	0	0	0	0	0	0	0	0	0	1	0	0	**1**
MA	0	0	0	0	0	1	0	1	0	0	1	0	**3**
MD	0	0	0	0	1	0	0	1	0	0	1	1	**4**
ME	0	0	0	0	0	1	0	0	0	0	0	0	**1**
MI	0	0	0	0	0	1	0	1	0	0	0	1	**3**
MN	0	0	0	1	0	1	0	2	1	0	1	0	**6**
MO	1	0	0	0	0	1	1	0	1	1	1	0	**6**
MS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	0	0	0	0	0	0	0	0	0	1	0	0	**1**
ND	0	1	0	0	0	0	0	0	0	1	0	0	**2**
NE	0	1	1	1	0	0	1	0	1	0	0	0	**5**
NH	1	0	0	0	0	0	0	0	0	0	0	0	**1**
NJ	1	0	1	0	1	1	1	1	1	1	0	1	**9**
NM	0	0	0	1	0	0	1	1	1	0	1	0	**5**
NV	0	0	0	0	0	0	0	0	1	0	0	0	**1**
NX	1	2	1	0	1	1	1	1	0	1	0	1	**10**
NY	0	0	1	0	0	0	0	0	3	0	0	1	**5**
OH	0	0	0	0	1	0	1	1	0	2	0	0	**5**
OK	0	0	0	0	0	0	0	0	0	0	1	0	**1**
OR	0	1	0	0	0	0	0	2	1	0	1	0	**5**
PA	0	0	0	1	0	1	1	1	1	0	0	0	**5**
RI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SD	0	1	0	0	1	0	1	2	1	1	0	0	**7**
TN	0	0	0	1	0	0	0	0	1	1	0	0	**3**
TX	0	0	0	1	0	0	0	0	0	0	0	0	**1**
UT	0	0	0	0	0	0	1	0	1	1	0	0	**3**
VA	0	0	0	0	0	1	0	0	0	0	1	0	**2**
VT	0	0	0	0	0	0	0	1	0	0	0	0	**1**
WA	0	0	1	0	0	1	1	1	0	1	1	0	**6**
WI	0	0	0	0	1	0	2	0	1	1	0	0	**5**
WV	0	0	0	1	0	0	1	0	1	1	0	1	**5**
WY	0	0	0	0	0	0	0	0	0	2	0	0	**2**
Total	**8**	**8**	**7**	**9**	**7**	**14**	**23**	**24**	**23**	**27**	**9**	**11**	**170**

E. coli Isolates by Site and Month, 2004

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	1	0	0	0	0	0	**1**
AL	0	0	0	0	0	0	0	0	0	0	1	0	**1**
AR	0	0	0	0	0	0	0	0	0	1	0	0	**1**
AZ	0	0	0	0	0	0	0	0	0	0	0	0	**0**
CA	0	0	0	1	1	0	2	2	1	2	1	0	**10**
CO	0	0	0	0	0	1	0	1	0	0	0	0	**2**
CT	0	1	0	0	0	1	0	1	0	0	1	0	**4**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
FL	0	0	0	0	0	0	0	0	0	0	0	0	**0**
GA	1	1	0	8	2	1	0	0	0	2	4	2	**21**
HI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	1	0	0	0	1	0	0	**2**
IL	0	0	0	1	0	0	0	0	0	4	2	0	**7**
IN	0	0	0	0	0	0	0	1	0	0	0	0	**1**
KS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
KY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
LA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
LX	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MA	0	0	0	0	1	0	1	0	1	0	0	0	**3**
MD	1	0	0	0	1	0	0	1	0	0	0	0	**3**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	0	0	0	0	1	0	1	0	1	0	0	0	**3**
MN	0	0	1	0	0	1	1	1	1	0	0	0	**5**
MO	0	0	0	1	0	0	2	0	2	0	1	0	**6**
MS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	0	0	0	0	0	0	0	0	0	1	0	0	**1**
ND	0	0	0	0	0	0	0	0	0	1	0	0	**1**
NE	0	0	1	0	2	1	0	0	0	0	0	0	**4**
NH	0	0	0	0	0	0	0	0	0	1	0	0	**1**
NJ	1	0	0	1	1	1	1	1	1	1	1	0	**9**
NM	0	0	1	0	0	0	0	0	0	0	0	0	**1**
NV	0	0	0	0	0	0	0	0	1	0	0	0	**1**
NX	1	1	1	0	0	1	0	1	1	1	0	1	**8**
NY	1	1	0	0	0	0	0	0	0	0	0	0	**2**
OH	0	0	0	1	0	1	1	1	0	0	0	0	**4**
OK	1	1	0	0	0	0	0	0	1	0	0	0	**3**
OR	1	0	0	0	0	0	0	1	1	0	0	0	**3**
PA	1	0	0	1	0	0	0	0	6	0	0	0	**8**
RI	0	0	0	0	0	0	0	0	0	0	1	0	**1**
SC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SD	0	0	1	1	1	2	0	1	1	1	1	0	**9**
TN	0	0	0	0	0	0	1	0	0	0	0	0	**1**
TX	0	0	0	0	0	0	0	0	0	1	0	0	**1**
UT	0	0	0	0	0	1	0	1	0	0	0	0	**2**
VA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	0	0	0	0	1	0	0	0	0	0	0	0	**1**
WI	1	0	0	0	0	1	1	0	1	0	0	0	**4**
WV	0	0	0	0	0	0	1	0	0	0	0	0	**1**
WY	0	0	0	0	0	1	1	0	0	1	0	0	**3**
Total	**9**	**5**	**5**	**15**	**11**	**14**	**14**	**13**	**19**	**18**	**13**	**3**	**139**

Non-*Cholerae Vibrio* Isolates by Site and Month, 2003

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AL	0	0	1	0	0	0	0	0	0	0	0	0	**1**
AR	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AZ	0	0	0	0	0	0	1	0	0	1	1	0	**3**
CA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
CO	0	0	0	0	0	0	0	1	0	0	0	0	**1**
CT	0	0	0	0	0	1	2	4	2	0	1	0	**10**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
FL	1	0	0	0	0	0	0	0	0	0	0	0	**1**
GA	0	0	0	1	1	2	2	2	0	1	0	0	**9**
HI	0	1	3	0	7	2	0	4	1	0	0	1	**19**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IL	0	0	1	0	0	0	1	2	0	0	0	1	**5**
IN	0	0	0	0	0	0	0	0	0	0	0	0	**0**
KS	0	1	0	0	0	0	1	0	0	0	0	0	**2**
KY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
LA	0	0	4	6	4	2	8	1	2	3	2	0	**32**
LX	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MA	0	1	0	1	0	1	2	0	0	1	0	0	**6**
MD	0	0	0	1	1	2	3	4	2	0	0	0	**13**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MN	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MO	0	0	0	0	1	0	0	0	0	0	0	0	**1**
MS	0	0	0	0	0	1	0	0	0	0	0	0	**1**
MT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NC	0	0	0	0	2	3	1	4	1	1	0	1	**13**
ND	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NH	0	0	0	0	0	0	0	1	1	0	0	0	**2**
NJ	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NM	0	0	0	0	0	0	0	1	0	0	0	0	**1**
NV	0	0	0	0	1	0	2	0	0	0	0	0	**3**
NX	1	0	0	0	2	0	8	5	0	1	0	0	**17**
NY	0	0	0	0	0	0	2	0	0	0	0	0	**2**
OH	0	0	0	0	0	0	0	0	0	0	0	0	**0**
OK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
OR	0	0	0	0	0	0	0	4	0	0	1	0	**5**
PA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
RI	0	0	0	0	0	0	1	3	0	0	0	0	**4**
SC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SD	0	0	0	0	0	0	0	0	0	0	0	0	**0**
TN	0	0	0	0	1	2	1	0	1	1	2	0	**8**
TX	0	0	0	2	2	1	3	2	1	0	0	0	**11**
UT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
VA	0	0	0	0	2	3	2	0	2	1	1	0	**11**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WV	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**2**	**3**	**9**	**11**	**24**	**20**	**40**	**38**	**13**	**10**	**8**	**3**	**181**

Non-*Cholerae Vibrio* Isolates by Site and Month, 2004

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
AK	0	0	0	0	0	0	0	7	0	0	0	0	**7**
AL	0	1	0	1	0	0	0	0	0	0	0	0	**2**
AR	0	0	0	0	0	0	0	0	0	0	0	0	**0**
AZ	0	0	0	0	0	0	0	0	0	1	0	0	**1**
CA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
CO	0	0	0	0	0	0	3	1	1	2	1	2	**10**
CT	0	0	0	0	1	0	0	3	0	0	0	0	**4**
DC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
DE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
FL	0	0	0	0	0	0	0	0	0	0	0	0	**0**
GA	0	0	0	0	3	0	2	1	1	1	0	0	**8**
HI	0	1	0	5	1	1	0	2	3	1	1	3	**18**
HT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
ID	0	0	0	0	0	0	0	0	0	0	0	0	**0**
IL	0	0	0	0	0	0	1	0	2	1	0	0	**4**
IN	0	0	0	0	0	0	0	1	0	0	0	0	**1**
KS	0	0	0	0	0	0	0	0	0	0	0	0	**0**
KY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
LA	0	0	0	4	6	11	5	4	1	5	3	2	**41**
LX	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MA	0	0	0	0	0	0	0	2	2	0	0	0	**4**
MD	0	0	0	0	0	0	3	5	3	0	0	0	**11**
ME	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MI	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MN	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MO	0	0	0	0	0	0	0	0	0	0	0	0	**0**
MS	0	0	0	0	0	0	6	1	1	0	0	0	**8**
MT	0	0	0	0	0	1	0	0	0	0	0	0	**1**
NC	0	0	0	0	3	1	5	2	2	0	0	0	**13**
ND	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NE	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NH	0	0	0	0	0	1	0	0	0	0	0	0	**1**
NJ	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NM	0	0	0	0	0	0	0	1	0	0	0	0	**1**
NV	0	0	0	0	0	0	0	0	0	0	0	0	**0**
NX	0	0	0	0	0	0	0	0	1	0	1	0	**2**
NY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
OH	0	0	0	0	0	2	1	0	0	0	0	0	**3**
OK	0	0	0	0	0	0	0	0	0	0	0	0	**0**
OR	0	0	0	0	1	2	3	2	3	0	0	0	**11**
PA	0	1	0	0	0	0	0	0	0	0	0	0	**1**
RI	0	0	0	0	0	0	0	0	1	0	0	0	**1**
SC	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SD	0	0	0	0	0	0	1	0	0	0	0	0	**1**
TN	1	0	0	0	1	0	0	0	0	0	0	0	**2**
TX	0	0	0	0	0	0	0	0	3	2	2	0	**7**
UT	0	0	0	0	0	0	0	1	0	0	0	0	**1**
VA	0	0	0	0	0	3	0	0	0	0	0	0	**3**
VT	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WA	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WI	0	0	0	1	0	0	0	0	0	0	0	0	**1**
WV	0	0	0	0	0	0	0	0	0	0	0	0	**0**
WY	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**1**	**3**	**0**	**11**	**16**	**22**	**30**	**33**	**24**	**13**	**8**	**7**	**168**

Campylobacter Isolates by Site and Month, 2003

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
CA	4	4	4	4	1	9	4	2	3	8	6	0	**49**
CO	2	2	1	2	2	3	6	2	2	2	3	5	**32**
CT	3	4	4	5	5	5	4	4	5	3	5	4	**51**
GA	8	3	8	2	4	4	4	4	4	5	2	3	**51**
MD	2	3	4	2	4	4	3	5	3	3	1	1	**35**
MN	5	4	6	5	5	5	5	6	5	5	4	5	**60**
NM	0	1	3	0	2	2	3	5	3	5	0	0	**24**
NX	7	3	3	5	4	7	3	5	3	4	4	6	**54**
OR	3	3	2	0	3	4	0	6	6	0	1	3	**31**
TN	4	3	4	2	2	4	2	5	2	2	5	5	**40**
Total	**38**	**30**	**39**	**27**	**32**	**47**	**34**	**44**	**36**	**38**	**31**	**32**	**428**

Camplobacter Isolates by Site and Month, 2004

Preliminary data subject to change. Last revised 3-16-2005

Site	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Total**
CA	6	6	4	5	5	6	3	8	5	6	2	0	**56**
CO	2	4	4	5	2	3	5	4	4	1	5	1	**40**
CT	5	4	5	4	4	4	4	4	5	5	5	3	**52**
GA	2	3	3	2	5	4	5	4	4	3	5	0	**40**
MD	1	2	2	1	3	3	3	4	1	3	3	0	**26**
MN	5	4	5	5	6	5	5	5	5	6	5	5	**61**
NM	1	0	2	2	1	3	2	2	3	1	2	2	**21**
NX	4	4	4	4	5	4	4	5	4	4	5	3	**50**
OR	0	2	2	0	2	5	4	4	6	7	9	6	**47**
TN	1	3	3	5	1	5	9	3	1	2	1	4	**38**
Total	**28**	**33**	**36**	**33**	**34**	**42**	**44**	**43**	**38**	**38**	**42**	**24**	**435**

National Antimicrobial Resistance Monitoring System for Enteric Bacteria
Summary: Multidrug* resistance of non-Typhi *Salmonella* isolates, 1996-2003

Non-Typhi *Salmonella*

Year	# isolates tested	Number resistant to ≥ 1 antimicrobial agents		Number resistant to ≥ 2 antimicrobial agents		Number resistant to ≥ 5 antimicrobial agents		Resistant to at least ACSSuT**		Resistant to at least AKSSuT***		Resistant to ceftiofur (MIC≥8 µg/ml)		Decreased susceptibility to ceftriaxone (MIC ≥ 2µg/ml)		Resistant to nalidixic acid (MIC≥ 32 µg/ml)		Decreased susceptibility to ciprofloxacin (MIC ≥ 0.25µg/ml)	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1996	1326	493	37	404	31	163	12	117	9	31	2	53	4	37	3	5	0.4	5	0.4
1997	1301	443	34	328	25	180	14	125	10	46	3	44	3	13	1	11	1	7	0.5
1998	1460	397	27	333	23	187	13	130	9	50	3	14	1	14	1	20	1	10	1
1999	1498	390	26	317	21	174	12	127	8	44	3	31	2	33	2	16	1	15	1
2000	1378	353	26	284	21	161	12	122	9	44	3	44	3	45	3	34	2	20	1
2001	1419	394	28	315	22	170	12	142	10	28	2	58	4	56	4	37	3	15	1
2002	2009	424	21	321	16	188	9	156	8	49	2	87	4	87	4	37	2	16	1
2003	1873	426	23	343	18	206	11	173	9	34	2	86	5	85	5	47	3	28	1

Salmonella Enteritidis

Year	# isolates tested	Number resistant to ≥ 1 antimicrobial agents		Number resistant to ≥ 2 antimicrobial agents		Number resistant to ≥ 5 antimicrobial agents		Resistant to at least ACSSuT**		Resistant to at least AKSSuT***		Resistant to ceftiofur (MIC≥8 µg/ml)		Decreased susceptibility to ceftriaxone (MIC ≥ 2µg/ml)		Resistant to nalidixic acid (MIC≥ 32 µg/ml)		Decreased susceptibility to ciprofloxacin (MIC ≥ 0.25µg/ml)	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1996	357	110	31	84	23	13	4	1	0.3	0	0	14	4	8	2	3	1	3	1
1997	303	78	26	37	12	6	2	1	0.3	1	0.3	15	5	1	0.3	4	1	2	1
1998	244	30	12	16	6	0	0	0	0	0	0	0	0	0	0	5	2	2	1
1999	270	45	17	28	10	2	1	2	1	0	0	1	0.4	1	0.4	7	3	6	2
2000	319	35	11	9	3	0	0	0	0	0	0	0	0	0	0	7	2	1	0.3
2001	282	40	14	16	6	3	1	0	0	1	0.3	7	2	7	2	12	4	0	0
2002	338	44	13	14	4	2	1	1	0.3	0	0	0	0	0	0	14	4	2	1
2003	257	24	9	9	4	2	1	1	0.4	0	0	1	0.4	1	0	15	6	3	1

* Using only antimicrobial agents (n=15) tested in all seven years
**ACSSuT = Ampicillin, Chloramphenicol, Streptomycin, Sulfamethoxazole, and Tetracycline
***AKSSuT= Ampicillin, Kanamycin, Streptomycin, Sulfamethoxazole, and Tetracycline
+ Preliminary 2003 and 2004 data

National Antimicrobial Resistance Monitoring System for Enteric Bacteria
Summary: Multidrug* resistance of non-Typhi *Salmonella* isolates, 1996-2003

Salmonella Typhimurium

Year	# isolates tested	Number resistant to ≥ 1 antimicrobial agents		Number resistant to ≥ 2 antimicrobial agents		Number resistant to ≥ 5 antimicrobial agents		Resistant to at least ACSSuT**		Resistant to at least AKSSuT***		Resistant to ceftiofur (MIC≥8 μg/ml)		Decreased susceptibility to ceftriaxone (MIC ≥ 2μg/ml)		Resistant to nalidixic acid (MIC≥ 32 μg/ml)		Decreased susceptibility to ciprofloxacin (MIC ≥ 0.25μg/ml)	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1996	306	196	64	177	58	125	41	103	34	27	9	13	4	7	2	1	0.3	1	0.3
1997	326	202	63	188	58	154	47	115	35	41	13	17	5	7	2	3	1	1	0.3
1998	377	200	53	193	51	158	42	120	32	47	12	8	2	7	2	2	0.5	1	0.3
1999	362	179	49	167	46	132	36	102	28	39	11	9	2	9	2	0	0	1	0.3
2000	303	153	50	143	47	110	36	84	28	28	9	11	4	11	4	4	1	2	1
2001	325	165	51	155	48	111	34	96	29	14	4	10	3	10	3	2	1	2	1
2002	393	157	40	143	36	107	27	84	21	24	6	17	4	17	4	5	1	3	1
2003+	330	136	40	124	37	92	28	74	22	10	3	17	5	18	5	4	1	3	1

Salmonella Newport

Year	# isolates tested	Number resistant to ≥ 1 antimicrobial agents		Number resistant to ≥ 2 antimicrobial agents		Number resistant to ≥ 5 antimicrobial agents		Number resistant to ≥ 8 antimicrobial agents		At least MDRAmpC-resistant****		Resistant to nalidixic acid (MIC≥32 μg/ml)		Decreased susceptibility to ciprofloxacin (MIC ≥ 0.25μg/ml)	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
1996	51	9	18	4	8	3	6	2	4	0	0	0	0	0	0
1997	48	6	12	3	6	2	4	2	4	0	0	0	0	0	0
1998	77	4	5	2	3	2	3	2	3	1	1	0	0	0	0
1999	98	23	23	17	17	17	17	17	17	17	17	0	0	0	0
2000	124	30	24	28	23	28	23	27	22	27	22	1	1	0	0
2001	124	43	35	39	31	33	27	31	25	31	25	0	0	0	0
2002	239	65	27	60	25	56	23	53	22	53	22	2	1	0	0
2003+	225	59	26	56	25	50	22	49	21	47	21	1	0.4	1	0.4

* Using only antimicrobial agents (n=15) tested in all seven years
**ACSSuT = Ampicillin, Chloramphenicol, Streptomycin, Sulfamethoxazole, and Tetracycline
***AKSSuT= Ampicillin, Kanamycin, Streptomycin, Sulfamethoxazole, and Tetracycline
****MDR-AmpC=ACSSuT, amoxicillin-clavulanic acid, cephalothin, cefoxitin, ceftiofur, decreased susceptibility to ceftriaxone (MIC ≥ 2 μg/ml)
+ Preliminary 2003 data

National Antimicrobial Resistance Monitoring System for Enteric Bacteria

Summary: Antimicrobial resistance of *Campylobacter* isolates, 1997-2003

Campylobacter	1997	1998	1999	2000	2001	2002	2003*
Campylobacter isolates	217	310	318	324	384	354	397
Isolates resistant to ≥ 1 antimicrobial agents**	52% (113)	55% (170)	53% (169)	48% (155)	50% (193)	51% (180)	50% (200)
Isolates resistant to ≥ 2 antimicrobial agents**	16% (34)	18% (57)	21% (67)	16% (51)	21% (81)	21% (74)	19% (74)
Ciprofloxacin (MIC ≥ 4)	13% (28)	13% (42)	18% (58)	14% (46)	19% (75)	20% (71)	18% (70)
Nalidixic Acid (MIC ≥ 32)	14% (31)	17% (54)	21% (67)	17% (54)	20% (77)	21% (73)	19% (75)
Erythromycin (MIC ≥ 8)	2% (4)	3% (8)	2% (8)	1% (5)	2% (8)	2% (6)	0.7% (3)
Azithromycin (MIC ≥ 2)	Not Tested	2% (5)	3% (10)	2% (7)	2% (8)	2% (8)	2% (6)
Chloramphenicol (MIC ≥ 32)	1% (3)	2% (6)	0.3% (1)	0% (0)	0% (0)	0% (0)	0% (0)
Clindamycin (MIC ≥ 4)	2% (4)	1% (4)	2% (5)	1% (4)	2% (8)	2% (7)	0.5% (2)
Gentamicin (MIC ≥ 16)	Not Tested	0% (0)	0% (0)	0.3% (1)	0% (0)	0% (0)	0.2% (1)
Tetracycline (MIC ≥ 16)	47% (102)	45% (141)	44% (140)	38% (122)	41% (156)	40% (141)	38% (152)

*2003 Data are preliminary
**Using only *Campylobacter* antimicrobial agents (n=6) tested in all six years

LABORATORY EXAMINATION(S) REQUESTED:

- ☐ **AN**timicrobial Susceptibility
- ☐ **HI**stology
- ☐ **ID**entification
- ☐ **IS**olation
- ☐ **SE**rology (Specific Test) _____
- ☐ **OT**her (Specify) _____

CATEGORY OF AGENT SUSPECTED:

- ☐ **BA**cterial
- ☐ **VI**ral
- ☐ **FU**ngal
- ☐ **RI**ckettsial
- ☐ **PA**rasitic
- ☐ **OT**her (Specify) _____

SPECIFIC AGENT SUSPECTED:	OTHER ORGANISM(S) FOUND:	ISOLATION ATTEMPTED?	NO. OF TIMES ISOLATED:	NO. OF TIMES PASSED:	SPECIMEN SUBMITTED IS:
_____	_____	☐ YES ☐ NO	_____	_____	☐ Original Material ☐ Mixed Isolate ☐ Pure Isolate

DATE SPECIMEN TAKEN: ____/____/____ (MO DA YR)

ORIGIN: ☐ **HU**man ☐ **FO**od ☐ **SO**il ☐ **AN**imal (Specify) _____ ☐ **OT**her (Specify) _____

SOURCE OF SPECIMEN:

- ☐ **BL**ood
- ☐ **GA**stric
- ☐ **SE**rum
- ☐ **SP**utum
- ☐ **UR**ine
- ☐ **CS**F
- ☐ **HA**ir
- ☐ **SK**in
- ☐ **ST**ool
- ☐ **TH**roat
- ☐ **WO**und (Site) _____
- ☐ **EX**udate (Site) _____
- ☐ **TI**ssue (Specify) _____
- ☐ **OT**her (Specify) _____

SUBMITTED ON:

- ☐ **ME**dium _____
- ☐ **AN**imal _____
- ☐ **TI**ssue Culture (Type) _____
- ☐ **EG**g
- ☐ **OT**her (Specify) _____

SERUM INFORMATION:

	MO DA YR		MO DA YR
☐ **AC**ute	__ __/__ __/__ __ __ __	☐ **S3**	__ __/__ __/__ __ __ __
☐ **CO**nvalescent	__ __/__ __/__ __ __ __	☐ **S4**	__ __/__ __/__ __ __ __
		☐ **S5**	__ __/__ __/__ __ __ __

IMMUNIZATIONS:

	MO YR
(1.) _____	__ __/__ __ __ __
(2.) _____	__ __/__ __ __ __
(3.) _____	__ __/__ __ __ __
(4.) _____	__ __/__ __ __ __

TREATMENT: **DRUGS USED** ☐ None

	DATE BEGUN MO DA YR	DATE COMPLETED MO DA YR
(1.) _____	__ __/__ __/__ __ __ __	__ __/__ __/__ __ __ __
(2.) _____	__ __/__ __/__ __ __ __	__ __/__ __/__ __ __ __
(3.) _____	__ __/__ __/__ __ __ __	__ __/__ __/__ __ __ __

EPIDEMIOLOGICAL DATA:

☐ **SI**ngle Case ☐ **SP**oradic ☐ **CO**ntact ☐ **EP**idemic ☐ **CA**rrier

Family Illness _____

Community Illness _____

Travel and Residence (Location)

☐ **Foreign** _____

☐ **USA** _____

Animal Contacts (Species) _____

Anthropod Contacts: ☐ None ☐ Exposuer Only ☐ Bite

Type of Anthropod: _____

Suspected Source of Infection: _____

SIGNS AND SYMPTOMS:

- ☐ **FE**ver
  - Maximum Temperature: _____
  - Duration: _____ Days
- ☐ **CH**ills

SKIN:

- ☐ **MA**culopapular
- ☐ **HE**morrhagic
- ☐ **VE**sicular
- ☐ **E**rythema **N**odosum
- ☐ **E**rythema **M**arginatum
- ☐ **OT**her _____

RESPIRATORY:

- ☐ **RH**initis
- ☐ **PU**lmonary
- ☐ **PH**aryngitis
- ☐ **CA**lcifications
- ☐ **O**titis **M**edia
- ☐ **PN**eumonia (type)
- ☐ **OT**her _____

CARDIOVASCULAR:

- ☐ **MY**ocarditis
- ☐ **PE**ricarditis
- ☐ **EN**docarditis
- ☐ **OT**her _____

GASTROINTESTINAL:

- ☐ **DI**arrhea
  - ☐ **BL**ood
  - ☐ **MU**cous
- ☐ **CO**nstipation
- ☐ **AB**normal Pain
- ☐ **VO**miting
- ☐ **OT**her _____

CENTRAL NERVOUS SYSTEM:

- ☐ **HE**adache
- ☐ **ME**ningismus
- ☐ **MI**crocephalus
- ☐ **HY**drocephalus
- ☐ **SE**izures
- ☐ **CE**rebral Calcification
- ☐ **CH**orea
- ☐ **PA**ralysis
- ☐ **OT**her _____

MISCELLANEOUS:

- ☐ **JA**undice
- ☐ **MY**algia
- ☐ **PL**eurodynia
- ☐ **CO**njunctivitis
- ☐ **CH**orioretinitis
- ☐ **SP**lenomegaly
- ☐ **HE**patomegaly
- ☐ **LI**ver Abscess/cyst
- ☐ **LY**mphadenopathy
- ☐ **MU**cous Membrane Lesions
- ☐ **OT**her _____

STATE OF ILLNESS:

- ☐ **SY**mptomatic
- ☐ **AS**ymptomatic
- ☐ **SU**bacute
- ☐ **CH**ronic
- ☐ **DI**sseminated
- ☐ **LO**calized
- ☐ **EX**traintestinal
- ☐ **OT**her _____

PREVIOUS LABORATORY RESULTS/OTHER CLINICAL INFORMATION: (Information supplied should be related to this case and/or specimen(s) and relative to the test(s) requested.

CDC NUMBER

UNIT	FY	NUMBER	SUF.

Justification must be completed by State health department laboratory before specimen can be accepted by CDC. Please check the first applicable statement and when appropriate complete the statement with the ∗.

1. Disease suspected to be of public health importance. Specimen is:
   (a) ❑ from an outbreak. (b) ❑ from uncommon or exotic disease.
   (c) ❑ an isolate that cannot be identified, is atypical, shows multiple antibiotic resistance, or from a normally sterile site(s) (d) ❑ from a disease for which reliable diagnostic reagents or expertise are unavailable in State.
2. ❑ Ongoing collaborative CDC/State project.
3. ❑ Confirmation of results requested for quality assurance.

∗Prior arrangement for testing has been made.
Please bring to the attention of:

(Name): _____

Completed by:

_____

Date: __ __/__ __/__ __ __ __

Name, Address and Phone Number of Physician or Organization:

(FOR CDC USE ONLY)		CDC NUMBER		
UNIT	FY	NUMBER	SUF	DATE RECEIVED MO DA YR
				__ __/__ __/__ __ __ __

STATE HEALTH DEPARTMENT LABORATORY ADDRESS:

STATE HEALTH DEPT. NO.: _____

DATE SENT TO CDC: (MM/DD/YYYY) __ __/__ __/__ __ __ __

PATIENT IDENTIFICATION: (Hospital No.) _____

NAME: (LAST, FIRST, MI) _____

BIRTHDATE: (MM/DD/YYYY) __ __/__ __/__ __ __ __

SEX: ❑ MALE ❑ FEMALE

CLINICAL DIAGNOSIS: _____

ASSOCIATED ILLNESS: _____

DATE OF ONSET: (MM/DD/YYYY) __ __/__ __/__ __ __ __

FATAL? ❑ YES ❑ NO

REVERSE SIDE OF THIS FORM MUST BE COMPLETED

THIS FORM MUST BE EITHER PRINTED OR TYPED

PLEASE PREPARE A SEPARATE FORM FOR EACH SPECIMEN

D.A.S.H.

DATE REPORTED

MO DA YR

___ ___/___ ___/___ ___ ___ ___

0	3

Comments:

D	6	5

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
Center for Infectious Diseases
Atlanta, Georgia 30333

The Centers for Disease Control (CDC), an agency of the Department of Health and Human Services, is authorized to collect this information, including the Social Security number (if applicable), under provisions of the Public Health Service Act, Section 301 (42 U.S.C. 241). Supplying the information is voluntary and there is no penalty for not providing it. The data will be used to increase understanding of disease patterns, develop prevention and control programs, and communicate new knowledge to the health community. Data will become part of CDC Privacy Act system 09-20-0106, "Specimen Handling for Testing and Related Data" and may be disclosed: to appropriate State or local public health departments and cooperating medical authorities to deal with conditions of public health significance; to private contractors assisting CDC in analyzing and refining records; to researchers under certain limited circumstances to conduct further investigations; to organizations to carry out audits and reviews on behalf of HHS; to the Department of Justice in the event of litigation, and to a congressional office assisting individuals in obtaining their records. An accounting of the disclosures that have been made by CDC will be made available to the subject individual upon request. Except for permissible disclosures expressly authorized by the Privacy Act, no other disclosure may be made without the subject individual's written consent.

Status of FWA and IRB for Protocol 3138
As of March 14, 2005

State	FWA	IRB Approval	Defer to CDC IRB
AK	Yes		
AL	Yes		
AR	Yes		
AZ	Yes		
CA	Yes	Yes	
CO	Yes		Yes
CT	Yes	Yes	
DC	Yes		
DE	Yes		Yes
FL	Yes		Yes
GA	Yes	Yes	
HI	Yes	Yes	
HT	Yes		
IA	Yes		Yes
ID			
IL	Yes		
IN	Yes		Yes
KS	Yes		Yes
KY	Yes		Yes
LA	Yes		Yes
LX	Yes		
MA	Yes	Yes	
MD	Yes		
ME	Yes		Yes
MI	Yes	Yes	
MN	Yes		Yes
MO	Yes		Yes
MS	Yes	Yes*	
MT	Yes		Yes
NC	Yes		
ND	Yes		Yes
NE	Yes		Yes
NH	Yes		
NJ	Yes		
NM	Yes	Yes	
NV			
NY	Yes		
NYC	Yes	Yes	
OH	Yes		
OK	Yes		
OR	Yes	Yes	
PA	Yes		Yes
RI	Yes		
SC	Yes		
SD	Yes		Yes
TN	Yes		Yes
TX	Yes	Yes	
UT	Yes		
VA	Yes	Yes	
VT	Yes		Yes
WA	Yes		Yes
WI	Yes		
WV	Yes		
WY	Yes	Yes	
Total (Yes)	52	13	19