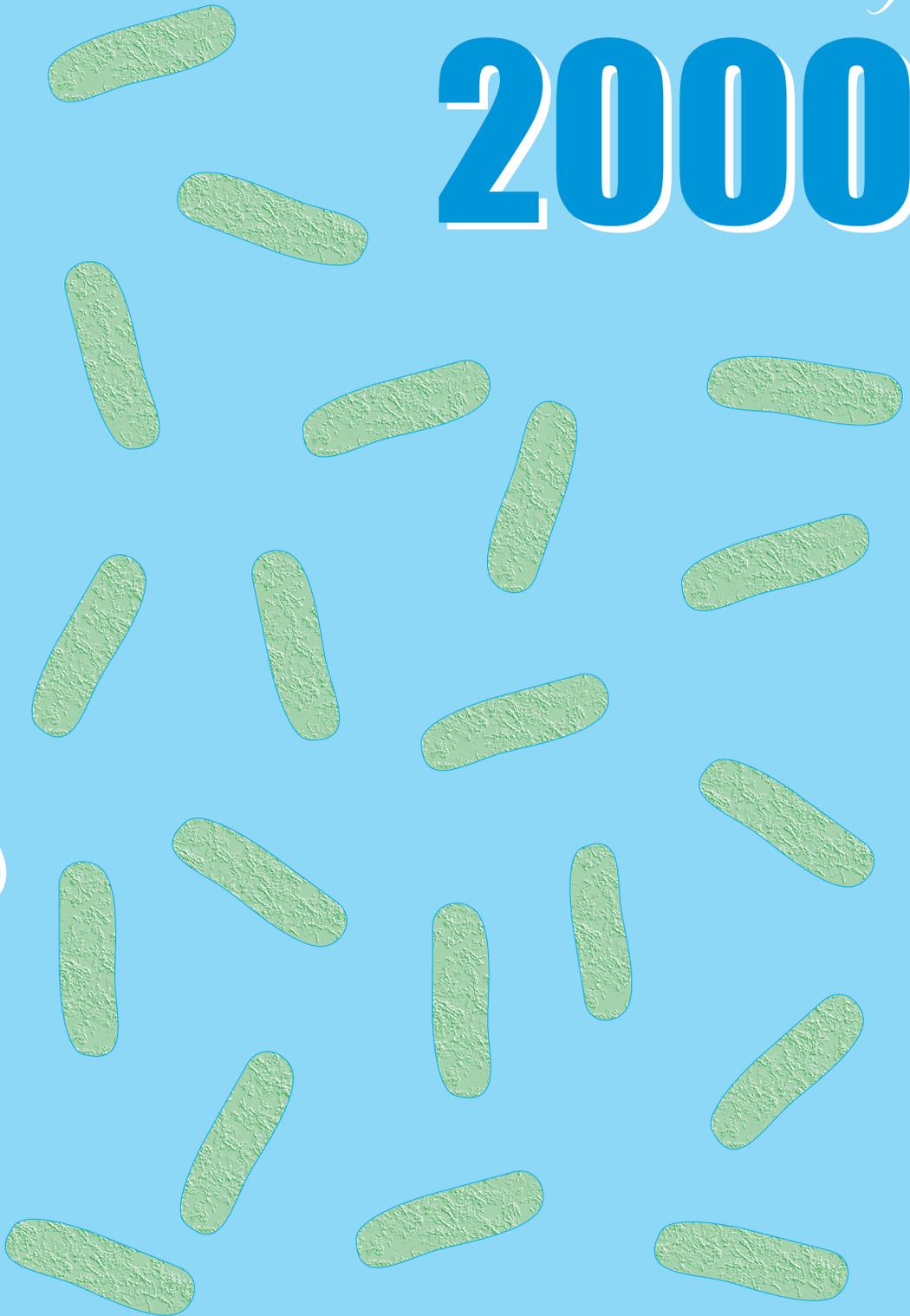


# Shigella

*Annual Summary*

# 2000



Department of Health and Human Services  
Centers for Disease Control and Prevention  
National Center for Infectious Diseases  
Division of Bacterial and Mycotic Diseases  
Foodborne and Diarrheal Diseases Branch  
Atlanta, GA 30333



## Laboratory-Confirmed *Shigella* Surveillance Annual Summary, 2000

The Annual Summary contains surveillance data on reported laboratory-confirmed *Shigella* isolates in the United States. The National *Shigella* Surveillance System collects reports of isolates of *Shigella* from every state in the United States. This information is reported electronically through the Public Health Laboratory Information System (PHLIS) by the State Public Health Laboratory Directors and State and Territorial Epidemiologists to the Foodborne and Diarrheal Diseases Branch (FDDDB) and the Biostatistics and Information Management Branch (BIMB) of the Division of Bacterial and Mycotic Diseases in the National Center for Infectious Diseases.

The National *Shigella* Surveillance System is based on data collected by state and territorial public health laboratories. *Shigella* isolates are submitted to the state public health laboratory by clinical diagnostic laboratories. The state and territorial laboratories confirm the isolates as *Shigella*, perform subtyping, and submit the data for reporting through PHLIS. Unusual or untypable isolates are forwarded to the National *Shigella* Reference Laboratory at the Centers for Disease Control and Prevention for further characterization or confirmation. These results are reported back to the state laboratory, where they are reported to CDC through PHLIS.

The capture of isolates in the National *Shigella* Surveillance System is considered to be consistent. However, some *Shigella* isolates may not be forwarded or reported to state public health laboratories and therefore are not captured. In addition, irrespective of the surveillance system, many cases of *Shigella* illness are not reported because the ill person does not seek medical care, the health-care provider does not obtain a specimen for diagnosis or the laboratory does not perform culture for *Shigella*. The results of surveillance reported herein are therefore substantial underestimates of the true number of infections.

The number of isolates reported by state represents the state where laboratory confirmation and subtyping were performed. In some instances, the reporting state is not the same as the state of residence of the person from whom the isolate was obtained. For the Annual Summaries, duplicate records are deleted.

There are 4 major subgroups and 43 recognized serotypes of *Shigella*, shown in Table A below.

Table A. Subgroups, Serotypes and Subtypes of *Shigella*

Subgroups	Serotypes and Subtypes
Group A: <i>Shigella dysenteriae</i>	15 serotypes (type 1 produces Shiga toxin)
Group B: <i>Shigella flexneri</i>	8 serotypes and 9 subtypes
Group C: <i>Shigella boydii</i>	19 serotypes
Group D: <i>Shigella sonnei</i>	1 serotype

These subgroups and serotypes are differentiated from one another by their biochemical traits (such as ability to ferment mannitol) and antigenic properties (Table B).

Table B. Classification of *Shigella* subgroups.

Species	Group	Serotypes	Carbohydrate fermentation		
			Glucose	Mannitol	Lactose
<i>S. dysenteriae</i>	A	15	+	-	-
<i>S. flexneri</i>	B	8	+	+	-
<i>S. boydii</i>	C	19	+	+	-
<i>S. sonnei</i>	D	1	+	+	Late

Since there are no recognized environmental or animal reservoirs for *Shigella*, except higher primates, the isolates reported herein are all from infected humans.

This report can be viewed online at [www.cdc.gov/ncidod/dbmd/phlisdata/](http://www.cdc.gov/ncidod/dbmd/phlisdata/). Further information concerning data described in this report can be obtained by contacting the Foodborne and Diarrheal Diseases Branch (404) 639-2206. For further information concerning PHLIS, please contact the Biostatistics and Information Management Branch (404) 639-1364.

The Surveillance Outbreak Detection Algorithm (SODA), developed by BMB and FDDB, is a statistical algorithm based on the National Surveillance Data. It is designed to detect unusual clusters of *Salmonella* and *Shigella* infection. SODA compares current *Salmonella* and *Shigella* isolates reported through PHLIS by subgroup or serotype with a 5 year historical baseline for that subgroup or serotype for the specified time period to detect unusual increases from the baseline. Analyses can be conducted at state, regional, or national levels. Since 1996, SODA has been implemented at CDC and selected state health departments. If you would like more information on SODA, please call the PHLIS Helpdesk (404) 639-3365.

### Annual Highlights for 2000

A total of 12,732 *Shigella* isolates were reported from public health laboratories in 50 states in 2000 (Table 1). This represents a 26% decrease compared with 1990 and a 26% increase from 1999. The national rate of reported *Shigella* isolates in 2000 was 4.5 per 100,000 population based on 2000 census population figures for the United States.

Similar to previous years, *Shigella* was isolated frequently from children under 5 years of age, who accounted for 28.7% of all isolates. About 27.4% of all isolates came from persons aged 5-19 years, and 32.5% from persons aged 20-59, with declining numbers thereafter. The median age of patients by serogroup of the isolate is shown in Table 4. The distribution of *Shigella* isolates between the sexes was similar, with females accounting for 51.5% of persons from whom *Shigella* was isolated. Gender differences were most notable in two age groups, 20-29 and 70-79 years,

with higher percentages of isolates from females in both age groups, 64% and 64%, respectively. These estimates, however, are not complete since Illinois, Louisiana and Maine do not report age of persons from whom *Shigella* isolates are obtained. Age and sex data were obtained from California for the first time in 2000. The frequency of reported subgroups, and the frequency of reported serotypes within these groups for all *Shigella* isolates are shown in Table 2. Of the 12,732 isolates, 95% were subgrouped. Trends of subgroups remained constant, with *S. sonnei* accounting for the largest percentage of isolates (83.8%), followed by *S. flexneri* (14.3%), *S. boydii* (1.4%) and *S. dysenteriae* (0.5%). *Shigella* isolate serotype trends by year are shown in Table 5. Over the past decade, the number of isolates of *Shigella boydii*, *dysenteriae* and *flexneri* that were not identified as belonging to a specific serotype (and the rate of such unspecified isolates) has declined.

*Shigella* transmission occurs via the fecal-oral route. The majority of *Shigella sonnei* infections in the United States occur in young children and are associated with crowding and poor personal hygiene. Daycare centers have been implicated in many *S. sonnei* outbreaks (1). *S. sonnei* has also been transmitted through unchlorinated wading pools (2), interactive water fountains (3), food items such as parsley (4) and bean dip (5), and men who have sex with men (MSM) (6). Until recently, the dominant subgroup causing illness among MSM was *S. flexneri* (7). However, in a large outbreak among MSM in San Francisco, the dominant serotype was *S. sonnei* (6).

Geographic trends by region for *S. sonnei* isolates from 1986 to 2000 are illustrated in Figure 1. All regions except New England and Mountain and Pacific regions exhibited increases in *S. sonnei* isolates from 1986 to 2000.

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TABLE 1  
SHIGELLA SEROGROUPS REPORTED TO THE CDC  
FOR 2000

RANK	SPECIES	NUMBER	PERCENT
1	SONNEI	10134	79.6
2	FLEXNERI	1732	13.6
3	BOYDII	174	1.4
4	DYSENTERIAE	56	0.4
		-----	-----
	SUBTOTAL	12096	95.0
	UNKNOWN	636	5.0
	TOTAL	12732	100.0

TABLE 2  
NUMBER OF REPORTED ISOLATES OF SHIGELLA  
SEROTYPES FOR 2000

RANK	SEROTYPE	NUMBER	PERCENT
1	SONNEI	10134	79.6
2	FLEXNERI UNSPECIFIED	850	6.7
3	FLEXNERI 2 UNSPECIFIED	250	2.0
4	FLEXNERI 1 UNSPECIFIED	140	1.1
5	FLEXNERI 2A	100	0.8
6	BOYDII UNSPECIFIED	88	0.7
7	FLEXNERI 3 UNSPECIFIED	75	0.6
8	FLEXNERI 4 UNSPECIFIED	65	0.5
9	FLEXNERI 6	63	0.5
10	FLEXNERI 3A	55	0.4
11	BOYDII 2	36	0.3
12	DYSENTERIAE UNSPECIFIED	35	0.3
13	FLEXNERI 4A	35	0.3
14	FLEXNERI 2B	33	0.3
15	FLEXNERI 5 UNSPECIFIED	23	0.2
16	BOYDII 1	13	0.1
17	BOYDII 4	13	0.1
18	FLEXNERI 1B	13	0.1
19	FLEXNERI VARIANT Y	11	0.1
20	DYSENTERIAE 1	9	0.1
21	FLEXNERI 3B	9	0.1
22	BOYDII 5	6	0.0
23	BOYDII 14	5	0.0
24	DYSENTERIAE 2	5	0.0
25	FLEXNERI 1A	5	0.0
26	BOYDII 6	4	0.0
27	DYSENTERIAE 4	3	0.0
28	FLEXNERI 3C	3	0.0
29	BOYDII 12	2	0.0
30	BOYDII 15	2	0.0
31	BOYDII 3	2	0.0
32	BOYDII 8	2	0.0
33	DYSENTERIAE 3	2	0.0
34	FLEXNERI VARIANT X	2	0.0
35	BOYDII 11	1	0.0
36	DYSENTERIAE 10	1	0.0
37	DYSENTERIAE 9	1	0.0
	UNKNOWN	636	5.0
	TOTAL	12732	100.0

TABLE 3

AGE AND SEX OF PERSONS FROM WHOM ISOLATES  
OF SHIGELLA WERE REPORTED FOR 2000

AGEGROUP	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
< 1 YR	109	126	17	252
1 TO 4 YRS	1600	1641	159	3400
5 TO 9 YRS	1221	1183	118	2522
10 TO 19 YRS	517	415	35	967
20 TO 29 YRS	841	468	33	1342
30 TO 39 YRS	641	756	30	1427
40 TO 49 YRS	410	512	15	937
50 TO 59 YRS	230	195	7	432
60 TO 69 YRS	102	91	2	195
70 TO 79 YRS	64	36	1	101
80+ YEARS	20	22	.	42
UNKNOWN AGE	457	387	271	1115
TOTAL	6212	5832	688	12732

TABLE 3A

AGE AND SEX OF PERSONS FROM WHOM ISOLATES  
OF BOYDII WERE REPORTED FOR 2000

AGEGROUP	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
< 1 YR	4	2	.	6
1 TO 4 YRS	23	14	.	37
5 TO 9 YRS	10	6	1	17
10 TO 19 YRS	11	3	1	15
20 TO 29 YRS	8	9	.	17
30 TO 39 YRS	14	13	.	27
40 TO 49 YRS	12	10	.	22
50 TO 59 YRS	3	6	.	9
60 TO 69 YRS	2	4	.	6
70 TO 79 YRS	1	2	.	3
80+ YEARS	1	2	.	3
UNKNOWN AGE	3	5	4	12
TOTAL	92	76	6	174

TABLE 3B

AGE AND SEX OF PERSONS FROM WHOM ISOLATES  
OF DYSENTERIAE WERE REPORTED FOR 2000

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
1 TO 4 YRS	8	5	.	13
5 TO 9 YRS	4	5	3	12
10 TO 19 YRS	.	3	.	3
20 TO 29 YRS	5	4	.	9
30 TO 39 YRS	.	6	1	7
40 TO 49 YRS	2	2	.	4
50 TO 59 YRS	1	2	.	3
60 TO 69 YRS	.	1	.	1
UNKNOWN AGE	2	2	.	4
TOTAL	22	30	4	56

TABLE 3C

AGE AND SEX OF PERSONS FROM WHOM ISOLATES  
OF FLEXNERI WERE REPORTED FOR 2000

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	17	21	8	46
1 TO 4 YRS	217	242	13	472
5 TO 9 YRS	145	117	10	272
10 TO 19 YRS	45	54	3	102
20 TO 29 YRS	79	114	3	196
30 TO 39 YRS	63	159	5	227
40 TO 49 YRS	39	101	4	144
50 TO 59 YRS	37	42	1	80
60 TO 69 YRS	16	20	1	37
70 TO 79 YRS	14	8	.	22
80+ YEARS	7	4	.	11
UNKNOWN AGE	40	40	43	123
TOTAL	719	922	91	1732

TABLE 3D

AGE AND SEX OF PERSONS FROM WHOM ISOLATES  
OF SONNEI WERE REPORTED FOR 2000

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	86	94	8	188
1 TO 4 YRS	1279	1311	145	2735
5 TO 9 YRS	999	998	96	2093
10 TO 19 YRS	420	330	28	778
20 TO 29 YRS	705	322	29	1056
30 TO 39 YRS	522	537	22	1081
40 TO 49 YRS	335	368	10	713
50 TO 59 YRS	177	124	6	307
60 TO 69 YRS	71	60	1	132
70 TO 79 YRS	44	20	1	65
80+ YEARS	11	14	.	25
UNKNOWN AGE	404	337	220	961
TOTAL	5053	4515	566	10134

TABLE 3E

AGE AND SEX OF PERSONS FROM WHOM ISOLATES  
OF UNKNOWN WERE REPORTED FOR 2000

AGEGROUP	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
< 1 YR	2	9	1	12
1 TO 4 YRS	73	69	1	143
5 TO 9 YRS	63	57	8	128
10 TO 19 YRS	41	25	3	69
20 TO 29 YRS	44	19	1	64
30 TO 39 YRS	42	41	2	85
40 TO 49 YRS	22	31	1	54
50 TO 59 YRS	12	21	.	33
60 TO 69 YRS	13	6	.	19
70 TO 79 YRS	5	6	.	11
80+ YEARS	1	2	.	3
UNKNOWN AGE	8	3	4	15
TOTAL	326	289	21	636

TABLE 4

MEDIAN AGE OF PERSONS FROM WHOM ISOLATES OF SHIGELLA WERE REPORTED  
BY SUBGROUP FOR 1986-2000

SUBGROUP	YEAR														
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BOYDII	8	22	22	24	10	21	18	20	20	15	10	19	22	8	26
DYSENTERIAE	29	29	29	29	20	20	26	29	26	30	26	19	36	29	11
FLEXNERI	22	22	23	23	19	19	19	18	19	18	22	16	18	10	11
SONNEI	8	7	8	8	8	9	8	7	8	8	8	8	8	8	9
UNKNOWN	9	9	7	9	8	9	11	8	7	7	8	26	7	7	13

\*\* MEDIAN CALCULATION EXCLUDES CALIFORNIA ISOLATES  
AGE INFORMATION UNAVAILABLE FOR CALIFORNIA PRIOR TO 2000

TABLE 5  
NUMBER OF REPORTED SHIGELLA ISOLATES BY YEAR FOR 1986-2000

SUBGROUP	SEROTYPE	YEAR														TOTAL	
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		2000
BOYDII	BOYDII UNSPECIFIED	228	221	296	321	268	196	172	124	120	108	127	130	117	70	88	2586
	BOYDII 1	11	8	9	16	12	13	7	14	9	15	22	12	12	13	13	186
	BOYDII 2	70	81	108	55	57	55	19	54	49	60	82	54	43	28	36	851
	BOYDII 3	.	1	3	2	.	.	.	.	.	2	.	2	2	2	2	16
	BOYDII 4	18	14	21	29	11	21	10	12	16	21	14	20	12	16	13	248
	BOYDII 5	9	1	3	3	5	2	2	2	1	1	1	3	.	2	6	41
	BOYDII 6	.	2	1	1	.	.	.	.	.	.	1	.	2	5	4	16
	BOYDII 7	1	.	1	1	1	1	.	.	1	.	.	.	.	.	.	6
	BOYDII 8	.	.	1	1	1	.	1	.	.	1	.	.	4	1	.	12
	BOYDII 9	1	1	1	.	.	1	.	.	.	1	.	.	1	.	.	6
	BOYDII 10	8	13	13	14	25	11	5	2	3	7	10	9	5	5	.	130
	BOYDII 11	.	.	1	2	.	.	2	2	.	.	2	.	1	2	1	13
	BOYDII 12	2	.	2	2	.	1	.	1	.	.	2	2	2	3	2	19
	BOYDII 13	.	.	.	.	.	1	.	.	.	.	1	.	.	2	.	4
	BOYDII 14	23	13	11	15	13	9	6	10	7	12	13	11	5	8	5	161
	BOYDII 15	1	.	.	.	1	.	.	.	.	.	.	1	.	.	2	5
	BOYDII 17	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
	BOYDII 18	1	1	1	4	4	1	.	.	1	.	.	2	2	1	.	18
	BOYDII 19	.	.	.	.	.	.	.	.	.	.	.	2	4	1	.	7
SUBTOTAL		373	356	472	466	398	312	224	221	207	229	275	253	208	158	174	4326

(Continued)

TABLE 5

## NUMBER OF REPORTED SHIGELLA ISOLATES BY YEAR FOR 1986-2000

SUBGROUP	SERO TYPE	YEAR													TOTAL		
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
DYSENTERIAE	DYSENTERIAE UNSPECIFIED	78	188	136	143	130	102	89	77	66	54	55	38	37	24	35	1252
	DYSENTERIAE 1	8	6	28	23	7	3	2	9	7	7	4	6	3	6	9	128
	DYSENTERIAE 2	15	20	33	29	23	20	21	11	8	10	16	17	37	12	5	277
	DYSENTERIAE 3	11	9	6	9	15	10	8	6	10	17	17	10	9	4	2	143
	DYSENTERIAE 4	4	2	3	7	3	3	3	1	.	.	3	.	1	.	3	33
	DYSENTERIAE 5	.	1	1	.	.	.	.	.	.	.	1	.	.	.	.	3
	DYSENTERIAE 6	1	1	1	.	.	1	.	.	1	.	.	1	.	.	.	6
	DYSENTERIAE 7	.	1	.	1	1	.	.	.	.	.	.	.	.	1	.	4
	DYSENTERIAE 8	.	1	1	.	.	1	.	.	.	.	.	.	.	1	.	4
	DYSENTERIAE 9	1	3	2	2	1	3	3	.	2	1	5	5	.	1	1	30
	DYSENTERIAE 10	.	.	.	1	.	.	.	.	.	.	.	.	.	.	1	2
	DYSENTERIAE 11	.	.	.	.	1	.	.	.	.	.	2	2	.	.	.	5
	DYSENTERIAE 12	.	.	.	1	.	.	.	1	.	1	.	.	.	.	.	3
DYSENTERIAE 13	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	2	
SUBTOTAL		118	232	211	216	181	145	126	105	94	90	103	79	87	49	56	1892
FLEXNERI	SERO TYPE																
	FLEXNERI UNSPECIFIED	2010	2161	2716	2093	2449	2320	2027	1867	1815	1528	1350	1214	985	916	850	26301
	FLEXNERI 1 UNSPECIFIED	293	268	314	318	391	391	294	294	310	412	303	238	200	169	140	4335
FLEXNERI 1A	69	82	64	44	40	16	5	2	8	4	4	6	9	7	5	365	

(Continued)

TABLE 5  
NUMBER OF REPORTED SHIGELLA ISOLATES BY YEAR FOR 1986-2000

SUBGROUP	SEROTYPE	YEAR														TOTAL	
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		2000
FLEXNERI	FLEXNERI 1B	34	70	180	172	167	63	26	12	54	17	7	18	26	25	13	884
	FLEXNERI 2 UNSPECIFIED	356	344	347	310	314	362	393	394	367	382	401	423	395	361	250	5399
	FLEXNERI 2A	153	143	135	151	168	98	85	88	84	71	31	85	102	134	100	1628
	FLEXNERI 2B	20	29	31	29	25	26	10	17	10	17	7	11	20	13	33	298
	FLEXNERI 3 UNSPECIFIED	192	245	151	125	118	154	158	165	131	246	255	248	155	93	75	2511
	FLEXNERI 3A	94	90	68	57	36	31	22	11	13	11	26	26	28	65	55	633
	FLEXNERI 3B	8	4	9	13	26	5	.	2	1	6	16	7	5	4	9	115
	FLEXNERI 3C	3	.	2	6	9	9	5	2	.	1	2	4	7	5	3	58
	FLEXNERI 4 UNSPECIFIED	144	133	123	167	106	120	126	91	116	139	124	108	116	75	65	1753
	FLEXNERI 4A	54	45	39	37	57	8	11	19	7	12	17	13	13	34	35	401
	FLEXNERI 4B	17	6	1	3	10	1	2	2	1	.	1	.	4	.	.	48
	FLEXNERI 5 UNSPECIFIED	4	13	16	17	16	16	14	28	43	62	39	47	56	28	23	422
	FLEXNERI 6	115	127	141	138	99	92	72	67	141	107	119	118	78	79	63	1556
	FLEXNERI VARIANT X	.	.	1	1	.	.	.	.	.	.	.	3	6	2	2	15
FLEXNERI VARIANT Y	1	.	.	1	.	.	.	.	.	4	2	4	2	15	11	40	
SUBTOTAL	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	1732	46762	

(Continued)

TABLE 5

## NUMBER OF REPORTED SHIGELLA ISOLATES BY YEAR FOR 1986-2000

SUBGROUP	SEROTYPE	YEAR													TOTAL		
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
SONNEI	SONNEI	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	10134	163362
	SUBTOTAL	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	10134	163362
UNKNOWN	SEROTYPE																
	UNKNOWN	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	636	19046
	SUBTOTAL	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	636	19046
TOTAL		12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	12732	235388

TABLE 6

## NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 2000

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	5	6	5	2	4	6	11	12	9	10	12	6	88
BOYDII 1	1	.	.	1	1	2	3	3	2	.	.	.	13
BOYDII 2	2	1	3	5	3	5	3	4	2	6	2	.	36
BOYDII 3	.	.	.	.	1	1	.	.	.	.	.	.	2
BOYDII 4	1	.	.	.	.	1	2	.	3	1	2	3	13
BOYDII 5	.	.	.	.	1	1	1	.	.	.	3	.	6
BOYDII 6	.	.	.	.	.	2	.	.	1	1	.	.	4
BOYDII 8	.	.	.	1	.	.	.	1	.	.	.	.	2
BOYDII 11	.	.	.	.	.	.	.	.	1	.	.	.	1
BOYDII 12	.	.	.	.	.	.	.	1	.	1	.	.	2
BOYDII 14	.	.	.	.	3	.	.	1	.	.	1	.	5
BOYDII 15	.	.	.	1	1	.	.	.	.	.	.	.	2
DYSENTERIAE	.	3	4	4	3	1	4	7	4	2	3	.	35
DYSENTERIAE 1	.	1	1	.	1	.	2	2	2	.	.	.	9
DYSENTERIAE 2	1	.	.	1	.	.	.	1	1	.	.	1	5
DYSENTERIAE 3	1	.	.	.	.	.	.	1	.	.	.	.	2
DYSENTERIAE 4	.	.	.	.	1	.	1	.	1	.	.	.	3
DYSENTERIAE 9	.	.	1	.	.	.	.	.	.	.	.	.	1
DYSENTERIAE 10	.	.	.	.	.	.	1	.	.	.	.	.	1
FLEXNERI	56	57	67	67	73	61	94	85	102	68	56	64	850
FLEXNERI 1 UNSPECIFIED	9	3	17	9	9	14	19	17	15	10	9	9	140
FLEXNERI 1A	.	.	.	.	1	1	1	.	.	1	.	1	5
FLEXNERI 1B	1	1	1	1	1	.	.	5	1	1	.	1	13
FLEXNERI 2 UNSPECIFIED	25	8	15	21	31	16	24	30	12	22	30	16	250
FLEXNERI 2A	12	10	13	5	4	12	4	10	9	9	6	6	100
FLEXNERI 2B	2	1	2	1	4	2	10	5	2	1	3	.	33
FLEXNERI 3 UNSPECIFIED	8	5	5	4	3	4	8	7	5	7	14	5	75
FLEXNERI 3A	2	3	1	2	5	7	2	7	8	7	5	6	55
FLEXNERI 3B	.	.	1	1	2	.	.	.	.	.	3	2	9
FLEXNERI 3C	1	.	1	.	.	1	.	.	.	.	.	.	3

(Continued)

TABLE 6

## NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 2000

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
FLEXNERI 4 UNSPECIFIED	8	4	2	1	4	8	5	7	11	7	4	4	65
FLEXNERI 4A	2	1	3	2	4	7	2	2	2	2	6	2	35
FLEXNERI 5 UNSPECIFIED	.	.	.	.	5	1	1	3	8	1	1	3	23
FLEXNERI 6	2	2	1	5	9	6	9	13	5	.	7	4	63
FLEXNERI VARIANT X	.	.	1	.	.	.	.	.	.	.	1	.	2
FLEXNERI VARIANT Y	1	.	3	.	.	2	.	1	1	.	2	1	11
SONNEI	477	599	675	680	842	957	997	1132	1138	1083	832	722	10134
UNKNOWN	38	66	24	69	37	36	51	94	92	50	45	34	636
TOTAL	655	771	846	883	1053	1154	1255	1451	1437	1290	1047	890	12732

TABLE 7  
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1986-2000

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	133	137	110	100	161	197	251	323	352	356	241	225	2586
BOYDII 1	7	9	12	10	18	8	21	20	30	21	12	18	186
BOYDII 2	45	35	47	56	64	77	99	118	115	88	63	44	851
BOYDII 3	3	2	1	2	3	4	.	.	1	.	.	.	16
BOYDII 4	19	9	11	17	13	18	29	41	38	21	19	13	248
BOYDII 5	4	3	1	3	4	5	3	3	5	4	5	1	41
BOYDII 6	1	.	.	.	.	3	5	3	1	3	.	.	16
BOYDII 7	1	2	.	1	.	.	.	1	.	1	.	.	6
BOYDII 8	.	.	1	1	1	1	.	4	1	1	.	2	12
BOYDII 9	.	.	1	.	.	.	.	1	.	4	.	.	6
BOYDII 10	4	3	4	6	10	11	19	24	17	14	8	10	130
BOYDII 11	1	.	2	1	1	.	2	2	2	.	1	1	13
BOYDII 12	1	2	.	.	2	1	2	5	2	3	.	1	19
BOYDII 13	1	.	.	.	.	.	.	.	.	1	1	1	4
BOYDII 14	8	3	4	11	17	10	26	28	16	19	12	7	161
BOYDII 15	.	.	1	1	2	.	.	1	.	.	.	.	5
BOYDII 17	.	.	.	.	.	1	.	.	.	.	.	.	1
BOYDII 18	2	1	.	2	4	.	.	1	1	2	2	3	18
BOYDII 19	2	.	1	.	1	.	.	1	1	1	.	.	7
DYSENTERIAE	81	75	90	82	68	71	100	123	179	135	150	98	1252
DYSENTERIAE 1	10	4	4	10	7	5	19	21	14	15	2	17	128
DYSENTERIAE 2	16	37	25	18	16	19	40	33	27	21	17	8	277
DYSENTERIAE 3	5	4	8	8	17	12	15	27	20	9	10	8	143
DYSENTERIAE 4	1	5	3	1	3	1	2	6	4	2	2	3	33
DYSENTERIAE 5	.	.	.	.	1	.	.	.	2	.	.	.	3
DYSENTERIAE 6	.	.	.	.	1	.	2	1	1	.	1	.	6
DYSENTERIAE 7	.	1	.	.	2	.	.	1	.	.	.	.	4
DYSENTERIAE 8	.	1	.	.	1	.	1	1	.	.	.	.	4
DYSENTERIAE 9	.	1	2	3	5	2	4	2	2	2	5	2	30
DYSENTERIAE 10	.	.	.	.	.	.	1	.	.	.	1	.	2

(Continued)

TABLE 7

NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1986-2000

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
DYSENTERIAE 11	.	.	.	.	1	1	1	1	.	1	.	.	5
DYSENTERIAE 12	.	.	.	.	.	.	1	1	.	1	.	.	3
DYSENTERIAE 13	.	.	.	.	.	.	1	.	1	.	.	.	2
FLEXNERI	1714	1770	1883	1899	1846	1834	2306	2607	2950	2766	2331	2395	26301
FLEXNERI 1 UNSPECIFIED	326	266	309	287	347	356	430	468	448	485	297	316	4335
FLEXNERI 1A	28	25	35	29	28	14	34	47	47	35	23	20	365
FLEXNERI 1B	60	58	65	53	49	94	61	117	127	67	63	70	884
FLEXNERI 2 UNSPECIFIED	456	373	371	406	485	415	524	637	499	480	385	368	5399
FLEXNERI 2A	120	122	119	110	119	143	161	220	152	151	104	107	1628
FLEXNERI 2B	30	16	30	20	19	24	39	32	27	23	22	16	298
FLEXNERI 3 UNSPECIFIED	196	169	164	202	209	161	312	238	248	237	191	184	2511
FLEXNERI 3A	45	61	38	38	44	47	74	84	64	58	36	44	633
FLEXNERI 3B	5	8	16	8	8	13	7	18	6	8	11	7	115
FLEXNERI 3C	6	.	5	4	6	5	10	3	4	6	6	3	58
FLEXNERI 4 UNSPECIFIED	144	109	127	132	145	153	178	188	195	148	118	116	1753
FLEXNERI 4A	22	26	29	50	29	38	28	33	34	46	32	34	401
FLEXNERI 4B	5	2	2	4	6	6	9	2	6	.	4	2	48
FLEXNERI 5 UNSPECIFIED	30	22	27	18	38	49	50	43	48	36	35	26	422
FLEXNERI 6	78	78	88	124	98	114	192	197	202	160	130	95	1556
FLEXNERI VARIANT X	.	.	2	.	2	.	3	2	2	1	3	.	15
FLEXNERI VARIANT Y	5	2	7	3	3	5	1	5	2	1	5	1	40
SONNEI	9325	8276	9216	9014	10611	12400	15589	20086	19703	19282	15791	14069	163362
UNKNOWN	1027	1037	1031	1171	1406	1428	1748	2082	2357	2143	1752	1864	19046
TOTAL	13967	12754	13892	13905	15921	17746	22400	27902	27953	26858	21891	20199	235388

TABLE 8

NUMBER OF REPORTED SHIGELLA ISOLATES BY REGION  
FOR 1986-2000

REGION	YEAR														TOTAL	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		2000
NEW ENGLAND	729	645	651	546	646	1757	555	520	414	586	373	486	366	851	385	9510
MID-ATLANTIC	1263	2331	1179	1310	1595	1263	1071	1215	1562	1758	2240	1874	1739	750	1726	22876
EAST NORTH CENTRAL	1550	3816	3597	2673	2096	1643	2154	2816	1970	2105	1190	1457	1580	1853	1334	31834
WEST NORTH CENTRAL	330	671	1151	1359	630	403	589	828	1368	1391	699	494	623	806	2064	13406
SOUTH ATLANTIC	686	1425	2562	2568	1894	1565	1727	2860	4790	2181	1912	1136	1275	534	1171	28286
EAST SOUTH CENTRAL	60	219	683	482	799	915	305	768	1023	802	334	233	272	223	207	7325
WEST SOUTH CENTRAL	1611	1671	2535	1408	1832	1409	1453	2943	1771	1944	1225	1731	2427	1688	1549	27197
MOUNTAIN	1137	1174	1692	1161	1655	2248	1174	1348	1436	2713	1665	1238	764	773	868	21046
PACIFIC	4906	4812	8286	4465	6159	5302	5895	6213	4449	5850	4433	3665	3439	2606	3428	73908
TOTAL	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	12732	235388

TABLE 8A  
 NUMBER OF REPORTED S. SONNEI ISOLATES BY REGION  
 FOR 1986-2000

REGION	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
NEW ENGLAND	596	491	481	358	448	1573	435	428	302	456	264	341	248	739	299	7459
MID-ATLANTIC	772	2030	883	1015	1321	1020	880	985	1325	1527	2048	1664	1470	547	1536	19023
EAST NORTH CENTRAL	1123	3279	2685	2061	1443	1176	1671	2440	1707	1773	896	1242	1354	1592	1232	25674
WEST NORTH CENTRAL	147	503	870	1084	446	255	478	698	1166	1281	575	405	538	696	1971	11113
SOUTH ATLANTIC	462	1099	2155	2268	1535	1210	1451	2280	2695	1966	1772	999	1121	396	1003	22412
EAST SOUTH CENTRAL	52	136	523	319	513	587	152	341	649	511	232	211	262	218	196	4902
WEST SOUTH CENTRAL	1161	1293	2103	1022	1415	1072	1268	2765	1595	1721	1085	1514	2239	1449	1286	22988
MOUNTAIN	571	470	921	522	1124	1601	722	824	920	2180	1115	695	374	405	506	12950
PACIFIC	2421	1981	4407	1593	2871	2240	3049	3578	2087	3396	2275	1736	1781	1321	2105	36841
TOTAL	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	10134	163362

TABLE 8B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY REGION  
FOR 1986-2000

REGION	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
NEW ENGLAND	93	109	127	150	122	94	107	92	106	115	94	123	102	99	74	1607
MID-ATLANTIC	341	278	257	269	254	227	177	211	213	206	179	188	247	176	154	3377
EAST NORTH CENTRAL	314	361	422	439	465	339	330	287	238	289	267	185	191	223	91	4441
WEST NORTH CENTRAL	168	134	156	168	125	115	77	67	121	71	105	82	79	95	70	1633
SOUTH ATLANTIC	116	154	143	101	156	124	137	173	343	196	122	120	136	127	135	2283
EAST SOUTH CENTRAL	6	9	8	9	10	8	2	4	18	7	7	20	9	5	11	133
WEST SOUTH CENTRAL	380	328	376	333	367	280	170	136	141	188	113	184	146	185	131	3458
MOUNTAIN	496	556	503	472	381	491	371	382	353	464	441	484	352	338	312	6396
PACIFIC	1653	1831	2346	1741	2151	2034	1879	1709	1568	1483	1376	1187	945	777	754	23434
TOTAL	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	1732	46762

TABLE 8C  
NUMBER OF REPORTED S. BOYDII ISOLATES BY REGION  
FOR 1986-2000

REGION	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
NEW ENGLAND	6	14	7	16	17	12	4	.	5	11	6	14	6	8	7	133
MID-ATLANTIC	16	16	21	17	10	10	6	11	15	12	5	13	10	12	16	190
EAST NORTH CENTRAL	37	28	64	42	29	20	16	30	19	31	19	23	25	23	6	412
WEST NORTH CENTRAL	1	2	6	5	5	7	3	.	7	6	3	4	4	6	7	66
SOUTH ATLANTIC	6	7	5	10	8	8	5	10	27	7	10	7	9	9	14	142
EAST SOUTH CENTRAL	1	2	2	1	1	.	1	.	.	.	2	.	.	.	.	10
WEST SOUTH CENTRAL	54	36	39	37	35	44	11	33	24	27	19	27	17	18	13	434
MOUNTAIN	43	59	52	48	47	30	14	14	18	32	91	41	22	23	38	572
PACIFIC	209	192	276	290	246	181	164	123	92	103	120	124	115	59	73	2367
TOTAL	373	356	472	466	398	312	224	221	207	229	275	253	208	158	174	4326

TABLE 8D

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY REGION  
FOR 1986-2000

REGION	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
NEW ENGLAND	4	4	12	9	8	6	6	.	.	3	6	6	10	3	2	79
MID-ATLANTIC	11	7	18	9	9	6	8	2	6	6	6	8	7	2	11	116
EAST NORTH CENTRAL	7	27	21	23	15	11	21	4	6	11	8	2	9	9	3	177
WEST NORTH CENTRAL	3	8	8	7	3	1	6	1	2	1	2	2	1	2	.	47
SOUTH ATLANTIC	2	4	4	2	5	6	4	4	5	2	8	5	6	2	4	63
EAST SOUTH CENTRAL	1	1	2	.	2	.	1	1	1	.	.	2	1	.	.	12
WEST SOUTH CENTRAL	13	12	17	15	14	10	2	9	10	5	7	6	9	1	3	133
MOUNTAIN	9	10	8	25	7	12	5	12	9	6	18	12	16	7	5	161
PACIFIC	68	159	121	126	118	93	73	72	55	56	48	36	28	23	28	1104
TOTAL	118	232	211	216	181	145	126	105	94	90	103	79	87	49	56	1892

TABLE 8E  
 NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP  
 BY REGION FOR 1986-2000

REGION	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
NEW ENGLAND	30	27	24	13	51	72	3	.	1	1	3	2	.	2	3	232	
MID-ATLANTIC	123	.	.	.	1	.	.	6	3	7	2	1	5	13	9	170	
EAST NORTH CENTRAL	69	121	405	108	144	97	116	55	.	1	.	5	1	6	2	1130	
WEST NORTH CENTRAL	11	24	111	95	51	25	25	62	72	32	14	1	1	7	16	547	
SOUTH ATLANTIC	100	161	255	187	190	217	130	393	1720	10	.	5	3	.	15	3386	
EAST SOUTH CENTRAL	.	71	148	153	273	320	149	422	355	284	93	.	.	.	.	2268	
WEST SOUTH CENTRAL	3	2	.	1	1	3	2	.	1	3	1	.	16	35	116	184	
MOUNTAIN	18	79	208	94	96	114	62	116	136	31	.	6	.	.	7	967	
PACIFIC	555	649	1136	715	773	754	730	731	647	812	614	582	570	426	468	10162	
TOTAL	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	636	19046	

TABLE 9  
 NUMBER OF REPORTED SHIGELLA SUBGROUP ISOLATES BY YEAR FOR 1986-2000

SUBGROUP	YEAR															TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
BOYDII	373	356	472	466	398	312	224	221	207	229	275	253	208	158	174	4326
DYSENTERIAE	118	232	211	216	181	145	126	105	94	90	103	79	87	49	56	1892
FLEXNERI	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	1732	46762
SONNEI	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	10134	163362
UNKNOWN	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	636	19046
TOTAL	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	12732	235388

\*\* MEDIAN CALCULATION EXCLUDES CALIFORNIA ISOLATES  
 AGE INFORMATION UNAVAILABLE FOR CALIFORNIA PRIOR TO 2000

TABLE 10

## NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																	TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000			
ALABAMA	50	122	444	332	514	450	160	341	479	383	110	193	220	63	79	3940		
ALASKA	2	5	9	14	7	30	19	21	14	10	59	3	7	5	3	208		
ARIZONA	513	512	365	291	498	577	399	369	401	815	695	694	348	413	350	7240		
ARKANSAS	27	44	94	43	20	91	18	100	61	96	100	60	67	27	63	911		
CALIFORNIA	4489	4341	7883	4132	5703	4473	5217	5175	3757	5347	3879	3222	3033	2358	2865	65874		
COLORADO	158	290	371	411	385	216	364	614	529	485	484	199	164	164	221	5055		
CONNECTICUT	112	203	162	233	192	108	131	212	146	148	121	81	66	70	70	2055		
DELAWARE	1	.	20	60	109	4	7	60	11	125	66	21	38	11	23	556		
DISTRICT OF COLUMBIA	188	240	142	12	59	45	63	26	19	199	200	8	.	.	.	1201		
FLORIDA	64	35	487	500	199	378	263	248	721	319	275	245	539	154	107	4534		
GEORGIA	133	331	657	518	620	532	560	494	2062	176	173	244	252	83	194	7029		
HAWAII	81	82	59	69	60	80	119	89	193	102	86	55	51	36	33	1195		
IDAHO	.	.	.	1	2	.	13	16	30	74	54	39	15	12	25	281		
ILLINOIS	1020	2516	1593	883	932	759	910	1142	1030	1215	525	842	1308	1018	179	15872		
INDIANA	76	296	925	306	350	334	209	173	181	103	71	30	43	118	157	3372		
IOWA	22	108	320	82	47	30	42	45	323	240	115	72	46	62	350	1904		
KANSAS	65	21	52	82	62	56	83	110	57	106	32	80	62	57	147	1072		
KENTUCKY	10	2	34	16	11	204	28	45	83	86	45	40	45	149	121	919		
LOUISIANA	279	440	517	325	214	120	87	303	314	378	344	114	288	137	200	4060		
MAINE	6	7	7	9	5	4	9	2	4	.	6	.	.	.	11	70		
MARYLAND	101	428	540	151	147	50	276	262	201	226	447	176	69	58	115	3247		
MASSACHUSETTS	541	324	325	244	341	1387	240	256	209	288	169	299	260	731	262	5876		

(Continued)

TABLE 10

## NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
MICHIGAN	113	283	473	772	342	193	494	645	329	454	341	249	5	489	610	5792	
MINNESOTA	66	163	349	426	122	80	90	236	467	166	164	141	334	254	926	3984	
MISSISSIPPI	.	95	205	134	274	261	117	382	461	333	179	.	7	11	7	2466	
MISSOURI	45	291	316	213	170	139	273	336	292	609	272	161	136	353	466	4072	
MONTANA	26	42	258	97	46	136	120	12	2	203	28	5	3	.	.	978	
NEBRASKA	11	3	.	1	5	1	6	1	2	4	4	17	19	68	117	259	
NEVADA	8	6	4	27	8	2	6	3	2	19	13	13	20	6	66	203	
NEW HAMPSHIRE	39	28	54	27	63	40	6	10	10	79	26	21	22	17	8	450	
NEW JERSEY	158	268	216	216	202	226	220	274	388	675	342	480	652	236	440	4993	
NEW MEXICO	300	273	606	254	462	303	164	272	235	408	177	192	177	109	119	4051	
NEW YORK	723	1785	475	423	770	361	451	453	697	548	305	790	828	331	840	9780	
NORTH CAROLINA	110	88	306	932	555	228	307	1089	1130	593	186	173	183	93	271	6244	
NORTH DAKOTA	19	25	28	193	143	25	13	13	59	126	58	3	3	2	52	762	
OHIO	54	127	128	403	212	97	77	585	276	260	221	307	153	150	332	3382	
OKLAHOMA	127	97	75	93	187	130	97	214	85	132	157	134	213	171	45	1957	
OREGON	46	51	50	51	101	350	144	108	87	113	125	173	156	91	113	1759	
PENNSYLVANIA	382	278	488	671	623	676	400	488	477	535	1593	604	259	183	446	8103	
RHODE ISLAND	25	72	34	28	30	214	163	32	43	65	43	83	13	29	34	908	
SOUTH CAROLINA	14	99	83	112	110	38	68	113	180	115	78	30	99	64	94	1297	
SOUTH DAKOTA	102	60	86	362	81	72	82	87	168	140	54	20	23	10	6	1353	
TENNESSEE	101	321	1002	256	257	193	561	1049	709	440	242	343	958	476	380	7288	
TEXAS	1077	769	847	691	1154	875	690	1277	602	898	382	1080	901	877	861	12981	

(Continued)

TABLE 10  
 NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1986-2000

STATE	YEAR														TOTAL	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		2000
UTAH	132	51	88	80	254	1014	108	54	235	705	212	95	36	68	84	3216
VERMONT	6	11	69	5	15	4	6	8	2	6	8	2	5	4	.	151
VIRGINIA	57	169	305	260	74	257	165	530	466	401	456	226	87	66	350	3869
WASHINGTON	288	333	285	199	288	369	396	820	398	278	284	212	192	116	414	4872
WEST VIRGINIA	18	35	22	23	21	33	18	38	.	27	31	13	8	5	17	309
WISCONSIN	287	594	478	309	260	260	464	271	154	73	32	29	71	78	56	3416
WYOMING	.	.	.	.	.	.	.	8	2	4	2	1	1	1	3	22
TOTAL	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	12732	235388

TABLE 10A  
NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
ALABAMA	42	69	391	262	365	361	111	200	356	281	103	184	215	58	71	3069	
ALASKA	.	4	6	5	2	26	17	13	10	10	53	2	7	1	3	159	
ARIZONA	169	202	112	73	309	294	166	149	196	523	327	373	126	203	168	3390	
ARKANSAS	23	42	87	38	19	89	16	99	58	96	97	60	63	25	59	871	
CALIFORNIA	2176	1670	4209	1448	2632	1632	2580	2806	1657	3126	1993	1508	1568	1227	1700	31932	
COLORADO	92	124	228	236	255	112	245	444	329	365	394	129	99	95	151	3298	
CONNECTICUT	95	172	132	207	172	93	101	199	117	127	104	57	43	48	53	1720	
DELAWARE	.	.	20	60	108	3	6	58	8	122	66	16	37	6	12	522	
DISTRICT OF COLUMBIA	146	205	109	7	39	20	45	12	4	166	188	4	.	.	.	945	
FLORIDA	58	27	480	495	188	371	252	237	694	305	261	233	529	144	99	4373	
GEORGIA	43	155	392	313	399	293	404	68	149	131	141	213	205	31	123	3060	
HAWAII	44	34	18	24	22	23	46	26	125	44	17	23	24	11	16	497	
IDAHO	.	.	.	.	1	.	10	9	17	72	50	30	5	6	16	216	
ILLINOIS	767	2231	1238	559	567	524	674	910	860	995	339	702	1116	835	156	12473	
INDIANA	56	219	545	202	224	238	168	160	161	85	57	22	29	104	141	2411	
IOWA	15	90	200	51	29	18	27	34	263	231	101	57	40	53	336	1545	
KANSAS	54	12	43	73	48	41	73	104	47	100	22	75	49	46	139	926	
KENTUCKY	10	.	33	14	9	200	27	43	76	84	43	27	42	149	119	876	
LOUISIANA	249	407	492	304	195	103	78	288	304	365	329	102	273	130	194	3813	
MAINE	3	5	6	5	3	3	5	2	3	.	.	.	.	.	8	43	
MARYLAND	64	391	516	130	115	35	239	213	134	194	413	154	38	36	91	2763	
MASSACHUSETTS	474	243	223	125	227	1300	176	187	143	206	109	194	171	662	211	4651	

(Continued)

TABLE 10A

## NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
MICHIGAN	77	225	422	706	284	142	408	590	287	387	285	209	5	445	575	5047	
MINNESOTA	30	114	305	314	56	42	54	166	385	133	105	95	290	204	887	3180	
MISSISSIPPI	.	67	99	43	139	26	14	98	217	146	86	.	5	11	6	957	
MISSOURI	33	274	291	187	144	117	264	329	280	599	260	150	125	339	448	3840	
MONTANA	8	19	108	66	14	122	118	11	1	196	27	4	1	.	.	695	
NEBRASKA	5	2	.	1	.	1	5	1	2	4	3	17	18	51	106	216	
NEVADA	6	4	.	21	3	.	4	2	2	13	9	4	10	.	51	129	
NEW HAMPSHIRE	11	10	38	5	29	29	3	7	8	76	21	18	20	10	5	290	
NEW JERSEY	120	223	150	160	155	180	177	222	331	599	285	428	558	171	385	4144	
NEW MEXICO	216	107	434	100	333	184	85	176	175	327	108	111	118	59	76	2609	
NEW YORK	362	1578	313	267	602	231	347	321	557	427	219	677	689	219	735	7544	
NORTH CAROLINA	92	61	276	911	514	200	284	1059	1105	560	164	136	154	67	246	5829	
NORTH DAKOTA	4	11	13	176	135	20	5	5	37	95	47	2	2	1	51	604	
OHIO	42	103	110	377	187	84	68	575	266	246	203	295	137	135	308	3136	
OKLAHOMA	88	78	63	81	176	116	87	209	77	116	147	129	208	163	39	1777	
OREGON	32	26	22	15	59	317	116	53	50	73	59	111	89	36	70	1128	
PENNSYLVANIA	290	229	420	588	564	609	356	442	437	501	1544	559	223	157	416	7335	
RHODE ISLAND	9	53	24	13	14	144	147	27	29	45	24	70	9	17	22	647	
SOUTH CAROLINA	10	93	74	107	100	31	58	111	172	110	75	23	94	62	90	1210	
SOUTH DAKOTA	6	.	18	282	34	16	50	59	152	119	37	9	14	2	4	802	
TENNESSEE	85	304	984	248	248	181	547	1028	692	418	228	321	947	463	338	7032	
TEXAS	716	462	477	351	777	583	540	1141	464	726	284	902	748	668	656	9495	

(Continued)

TABLE 10A

## NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
UTAH	80	14	39	26	209	889	94	30	200	680	199	43	14	42	42	2601	
VERMONT	4	8	58	3	3	4	3	6	2	2	6	2	5	2	.	108	
VIRGINIA	41	141	274	234	55	232	148	498	429	351	435	207	56	45	326	3472	
WASHINGTON	169	247	152	101	156	242	290	680	245	143	153	92	93	46	316	3125	
WEST VIRGINIA	8	26	14	11	17	25	15	24	.	27	29	13	8	5	16	238	
WISCONSIN	181	501	370	217	181	188	353	205	133	60	12	14	67	73	52	2607	
WYOMING	.	.	.	.	.	.	.	3	.	4	1	1	1	.	2	12	
TOTAL	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	10134	163362	

TABLE 10B  
NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
ALABAMA	6	6	3	3	6	3	.	2	11	5	7	7	5	5	8	77	
ALASKA	1	1	3	8	2	4	2	6	4	.	6	1	.	4	.	42	
ARIZONA	312	261	208	181	150	259	225	212	197	263	279	287	202	192	158	3386	
ARKANSAS	4	1	6	3	1	1	2	1	2	.	2	.	4	2	4	33	
CALIFORNIA	1497	1689	2175	1577	1957	1831	1689	1478	1323	1269	1130	1000	767	631	610	20623	
COLORADO	57	106	82	96	65	71	52	44	61	87	83	58	57	64	55	1038	
CONNECTICUT	15	24	25	21	17	13	26	13	25	18	15	23	15	20	15	285	
DELAWARE	.	.	.	.	1	1	1	1	2	3	.	5	1	5	11	31	
DISTRICT OF COLUMBIA	20	23	30	4	19	24	18	13	15	28	10	4	.	.	.	208	
FLORIDA	6	7	7	4	9	4	8	9	5	12	10	11	8	10	7	117	
GEORGIA	17	28	13	29	31	27	32	44	198	41	30	26	43	47	53	659	
HAWAII	36	47	41	42	36	57	72	63	68	57	67	31	25	25	17	684	
IDAHO	.	.	.	.	1	.	3	7	13	2	4	9	9	6	8	62	
ILLINOIS	213	253	285	283	340	222	208	204	157	192	167	124	163	159	22	2992	
INDIANA	18	19	25	29	21	24	8	12	17	17	14	8	11	13	15	251	
IOWA	5	11	24	18	8	8	7	5	11	9	13	15	6	9	10	159	
KANSAS	9	6	9	9	12	13	7	6	9	5	9	4	12	11	7	128	
KENTUCKY	.	1	1	2	2	4	.	2	6	2	.	13	2	.	2	37	
LOUISIANA	29	33	22	21	19	16	8	13	10	12	14	11	15	5	5	233	
MAINE	3	2	.	4	.	1	4	.	1	.	6	.	.	.	1	22	
MARYLAND	34	35	23	20	31	11	31	45	61	32	32	18	29	21	19	442	
MASSACHUSETTS	61	73	89	103	95	71	60	69	66	73	50	90	81	60	43	1084	

(Continued)

TABLE 10B  
NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1986-2000

STATE	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
MICHIGAN	34	53	47	53	50	45	82	51	39	59	54	34	.	37	30	668
MINNESOTA	27	27	23	32	26	20	20	16	75	28	53	40	39	37	22	485
MISSISSIPPI	.	2	4	4	2	1	2	.	1	.	.	.	2	.	1	19
MISSOURI	11	15	21	21	26	18	8	7	10	8	11	11	11	14	18	210
MONTANA	5	4	7	2	7	9	1	1	1	6	1	.	2	.	.	46
NEBRASKA	6	1	.	.	5	.	.	.	.	.	1	.	1	15	10	39
NEVADA	2	2	4	6	4	1	2	.	.	5	.	6	8	6	14	60
NEW HAMPSHIRE	3	3	4	9	2	2	3	3	2	3	3	2	2	7	3	51
NEW JERSEY	34	41	58	51	44	43	42	42	49	69	49	46	85	59	44	756
NEW MEXICO	74	151	165	145	124	110	75	89	52	78	65	74	53	48	38	1341
NEW YORK	231	192	144	142	155	122	93	125	128	107	81	101	126	93	86	1926
NORTH CAROLINA	17	25	27	18	39	26	23	30	22	32	20	34	23	24	22	382
NORTH DAKOTA	15	14	12	16	5	1	3	5	.	.	1	1	1	1	1	76
OHIO	12	18	15	24	21	10	9	6	5	9	16	7	13	10	21	196
OKLAHOMA	35	16	11	9	10	11	9	4	5	14	8	4	3	6	4	149
OREGON	14	17	18	27	39	31	19	47	32	37	61	54	60	51	38	545
PENNSYLVANIA	76	45	55	76	55	62	42	44	36	30	49	41	36	24	24	695
RHODE ISLAND	10	5	8	12	3	7	13	5	12	19	18	8	4	10	12	146
SOUTH CAROLINA	4	6	9	5	10	7	9	1	7	5	3	7	5	1	3	82
SOUTH DAKOTA	95	60	67	72	43	55	32	28	16	21	17	11	9	8	2	536
TENNESSEE	11	13	17	6	8	12	14	14	13	21	14	20	9	11	10	193
TEXAS	301	265	320	294	329	240	137	104	111	141	75	149	115	161	108	2850

(Continued)

TABLE 10B  
 NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
UTAH	46	32	37	42	30	41	13	24	29	23	8	50	21	21	38	455	
VERMONT	1	2	1	1	5	.	1	2	.	2	2	.	.	2	.	19	
VIRGINIA	16	27	30	19	15	24	15	28	33	43	15	15	27	19	19	345	
WASHINGTON	105	77	109	87	117	111	97	115	141	120	112	101	93	66	89	1540	
WEST VIRGINIA	2	3	4	2	1	.	.	2	.	.	2	.	.	.	1	17	
WISCONSIN	37	18	50	50	33	38	23	14	20	12	16	12	4	4	3	334	
WYOMING	.	.	.	.	.	.	.	5	.	.	1	.	.	1	1	8	
TOTAL	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	1732	46762	

TABLE 10C

## NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
ALABAMA	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	4	
ALASKA	.	.	.	.	2	.	.	1	.	.	.	.	.	.	.	3	
ARIZONA	30	43	38	30	35	17	6	5	5	22	73	26	9	13	20	372	
ARKANSAS	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	
CALIFORNIA	201	181	258	274	232	171	151	105	81	91	102	105	103	54	65	2174	
COLORADO	6	3	7	11	5	4	3	3	3	5	6	10	5	3	8	82	
CONNECTICUT	1	5	2	1	1	2	2	.	3	3	1	1	3	.	1	26	
DELAWARE	1	.	.	.	.	.	.	1	1	.	.	.	.	.	.	3	
DISTRICT OF COLUMBIA	1	1	1	1	.	1	.	.	.	2	.	.	.	.	.	7	
FLORIDA	.	.	.	1	1	2	.	.	.	.	1	1	1	.	.	7	
GEORGIA	2	2	.	1	2	2	1	2	19	.	1	1	.	4	6	43	
HAWAII	1	1	.	1	.	.	1	.	.	1	1	.	2	.	.	8	
IDAHO	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	2	
ILLINOIS	35	19	54	27	15	9	9	26	10	18	15	16	22	16	1	292	
INDIANA	.	2	1	2	2	3	.	.	2	1	.	.	1	1	1	16	
IOWA	.	.	1	1	1	.	1	.	1	.	1	.	.	.	4	10	
KANSAS	.	2	.	.	2	2	.	.	1	1	.	1	1	.	1	11	
KENTUCKY	.	.	.	.	.	.	1	.	.	.	2	.	.	.	.	3	
LOUISIANA	1	.	2	.	.	1	.	2	.	1	1	1	.	2	.	11	
MAINE	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	1	
MARYLAND	1	2	.	.	1	2	2	4	3	.	2	2	2	1	2	24	
MASSACHUSETTS	4	7	5	11	14	10	2	.	.	6	4	10	3	7	6	89	

(Continued)

TABLE 10C

## NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
MICHIGAN	2	1	1	5	5	3	2	3	2	7	1	4	.	3	3	42	
MINNESOTA	.	.	5	1	2	1	1	.	3	4	2	3	3	5	1	31	
MISSISSIPPI	.	1	1	.	1	.	.	.	.	.	.	.	.	.	.	3	
MISSOURI	.	.	.	2	.	3	1	.	2	1	.	.	.	.	.	9	
MONTANA	1	.	.	.	1	.	.	.	.	.	.	1	.	.	.	3	
NEBRASKA	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	2	
NEVADA	.	.	.	.	1	1	.	.	.	1	4	1	2	.	1	11	
NEW HAMPSHIRE	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	
NEW JERSEY	2	2	7	3	3	1	.	3	5	3	3	4	2	3	7	48	
NEW MEXICO	6	11	5	5	4	7	4	6	6	3	3	1	4	2	5	72	
NEW YORK	2	10	12	11	6	4	6	6	7	7	2	8	8	9	8	106	
NORTH CAROLINA	1	.	3	.	.	1	.	.	2	1	1	1	5	1	3	19	
OHIO	.	1	1	1	3	3	.	1	4	4	1	.	2	2	.	23	
OKLAHOMA	3	3	.	1	1	.	.	1	3	1	.	.	1	2	2	18	
OREGON	.	4	1	6	2	1	6	7	3	2	3	4	5	3	3	50	
PENNSYLVANIA	12	4	2	3	1	5	.	2	3	2	.	1	.	.	1	36	
RHODE ISLAND	.	2	.	2	1	.	.	.	2	1	1	3	.	1	.	13	
SOUTH CAROLINA	.	.	.	.	.	.	1	1	.	.	.	.	.	1	1	4	
SOUTH DAKOTA	1	.	.	1	.	1	.	.	.	.	.	.	.	.	.	3	
TENNESSEE	4	1	.	1	1	.	.	4	1	.	.	1	2	.	1	16	
TEXAS	46	32	36	35	33	43	11	26	20	25	18	25	14	14	10	388	
UTAH	.	2	2	2	1	1	1	.	3	1	5	2	1	5	3	29	

(Continued)

TABLE 10C

## NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1986-2000

STATE	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
VERMONT	1	.	.	1	.	.	.	.	.	1	.	.	.	.	.	3
VIRGINIA	.	1	1	7	3	.	1	2	2	4	5	2	1	2	2	33
WASHINGTON	7	6	17	9	10	9	6	10	8	9	14	15	5	2	5	132
WEST VIRGINIA	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	2
WISCONSIN	.	5	7	7	4	2	5	.	1	1	2	3	.	1	1	39
WYOMING	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
TOTAL	373	356	472	466	398	312	224	221	207	229	275	253	208	158	174	4326

TABLE 10D  
 NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1986-2000

STATE	YEAR														TOTAL	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		2000
ALABAMA	1	.	2	.	2	.	1	1	.	.	.	2	.	.	.	9
ALASKA	1	.	.	1	.	.	.	1	.	.	.	.	.	.	.	3
ARIZONA	2	6	.	7	4	6	2	3	3	4	16	8	11	5	4	81
ARKANSAS	.	.	.	1	.	.	.	.	1	.	1	.	.	.	.	3
CALIFORNIA	62	152	114	120	110	86	69	65	51	50	40	27	25	20	23	1014
COLORADO	3	4	6	10	1	3	2	7	2	2	1	2	3	2	.	48
CONNECTICUT	.	1	3	4	2	.	2	.	.	.	1	.	5	.	.	18
DISTRICT OF COLUMBIA	.	.	.	.	1	.	.	.	.	.	2	.	.	.	.	3
FLORIDA	.	1	.	.	1	1	2	1	.	.	3	.	1	.	1	11
GEORGIA	1	1	3	1	.	1	.	2	3	.	1	1	1	1	.	16
HAWAII	.	.	.	1	2	.	.	.	.	.	1	1	.	.	.	5
ILLINOIS	5	11	15	14	8	4	18	2	3	10	4	.	7	5	.	106
INDIANA	2	1	.	2	1	2	2	1	1	.	.	.	2	.	.	14
IOWA	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
KANSAS	2	1	.	.	.	.	3	.	.	.	1	.	.	.	.	7
KENTUCKY	.	1	.	.	.	.	.	.	1	.	.	.	1	.	.	3
LOUISIANA	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	2
MAINE	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	2
MARYLAND	1	.	1	1	.	2	2	.	.	.	.	1	.	.	2	10
MASSACHUSETTS	2	1	8	5	5	6	2	.	.	2	5	3	5	2	2	48
MICHIGAN	.	3	2	5	3	3	.	1	1	1	1	2	.	3	2	27
MINNESOTA	1	4	2	3	2	.	.	1	2	1	1	2	1	2	.	22

(Continued)

TABLE 10D  
 NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
MISSOURI	.	2	4	3	.	1	.	.	.	.	.	.	.	.	.	10	
MONTANA	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	2	
NEBRASKA	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	
NEVADA	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1	
NEW HAMPSHIRE	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	
NEW JERSEY	1	2	1	2	.	2	1	2	1	.	5	2	5	1	3	28	
NEW MEXICO	4	.	2	4	1	2	.	1	2	.	1	2	2	.	.	21	
NEW YORK	6	5	6	3	6	4	5	.	4	4	1	3	2	1	7	57	
NORTH CAROLINA	.	2	.	.	2	1	.	.	.	.	1	2	1	1	.	10	
NORTH DAKOTA	.	.	1	1	.	.	2	.	.	.	.	.	.	.	.	4	
OHIO	.	3	2	1	.	.	.	.	1	.	1	.	.	1	1	10	
OKLAHOMA	1	.	1	2	.	2	1	.	.	.	1	1	.	.	.	9	
OREGON	.	4	.	2	1	.	1	1	2	1	2	4	2	1	1	22	
PENNSYLVANIA	4	.	11	4	3	.	2	.	1	2	.	3	.	.	1	31	
RHODE ISLAND	2	2	.	.	.	.	2	.	.	.	.	2	.	1	.	9	
SOUTH DAKOTA	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	2	
TENNESSEE	.	3	1	1	.	.	.	3	2	.	.	1	.	.	.	11	
TEXAS	12	9	14	11	14	8	1	6	7	5	5	4	9	1	2	108	
UTAH	.	.	.	3	1	1	.	.	1	.	.	.	.	.	1	7	
VERMONT	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1	
VIRGINIA	.	.	.	.	1	1	.	1	2	2	1	1	3	.	1	13	
WASHINGTON	5	3	7	2	5	7	3	5	2	5	5	4	1	2	4	60	

(Continued)

TABLE 10D

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1986-2000

STATE	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
WISCONSIN	.	9	2	1	3	2	1	.	.	.	2	.	.	.	.	20
WYOMING	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
TOTAL	118	232	211	216	181	145	126	105	94	90	103	79	87	49	56	1892

TABLE 10E

## NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1986-2000

STATE	YEAR																	TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000			
ALABAMA	.	46	47	66	141	86	48	138	112	97	.	.	.	.	.	781		
ALASKA	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	1		
ARIZONA	.	.	7	.	.	1	.	.	.	3	.	.	.	.	.	11		
ARKANSAS	.	1	.	1	.	1	.	.	.	.	.	.	.	.	.	3		
CALIFORNIA	553	649	1127	713	772	753	728	721	645	811	614	582	570	426	467	10131		
COLORADO	.	53	48	58	59	26	62	116	134	26	.	.	.	.	7	589		
CONNECTICUT	1	1	.	.	.	.	.	.	1	.	.	.	.	2	1	6		
DISTRICT OF COLUMBIA	21	11	2	.	.	.	.	1	.	3	.	.	.	.	.	38		
FLORIDA	.	.	.	.	.	.	1	1	22	2	.	.	.	.	.	26		
GEORGIA	70	145	249	174	188	209	123	378	1693	4	.	3	3	.	12	3251		
HAWAII	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1		
IDAHO	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1		
ILLINOIS	.	2	1	.	2	.	1	.	.	.	.	.	.	3	.	9		
INDIANA	.	55	354	71	102	67	31	.	.	.	.	.	.	.	.	680		
IOWA	2	6	95	12	9	4	7	6	48	.	.	.	.	.	.	189		
LOUISIANA	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1		
MAINE	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2		
MARYLAND	1	.	.	.	.	.	2	.	3	.	.	1	.	.	1	8		
MASSACHUSETTS	.	.	.	.	.	.	.	.	.	1	1	2	.	.	.	4		
MICHIGAN	.	1	1	3	.	.	2	.	.	.	.	.	.	1	.	8		
MINNESOTA	8	18	14	76	36	17	15	53	2	.	3	1	1	6	16	266		
MISSISSIPPI	.	25	101	87	132	234	101	284	243	187	93	.	.	.	.	1487		

(Continued)

TABLE 10E

## NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1986-2000

STATE	YEAR																TOTAL
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
MISSOURI	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	3	
MONTANA	12	19	143	28	24	5	.	.	.	1	.	.	.	.	.	232	
NEBRASKA	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	
NEVADA	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	2	
NEW HAMPSHIRE	25	15	12	12	32	9	.	.	.	.	2	.	.	.	.	107	
NEW JERSEY	1	.	.	.	.	.	.	5	2	4	.	.	2	2	1	17	
NEW MEXICO	.	4	.	.	.	.	.	.	.	.	.	4	.	.	.	8	
NEW YORK	122	.	.	.	1	.	.	1	1	3	2	1	3	9	4	147	
NORTH CAROLINA	.	.	.	3	.	.	.	.	1	.	.	.	.	.	.	4	
NORTH DAKOTA	.	.	2	.	3	4	3	3	22	31	10	.	.	.	.	78	
OHIO	.	2	.	.	1	.	.	3	.	1	.	5	1	2	2	17	
OKLAHOMA	.	.	.	.	.	1	.	.	.	1	1	.	1	.	.	4	
OREGON	.	.	9	1	.	1	2	.	.	.	.	.	.	.	1	14	
PENNSYLVANIA	.	.	.	.	.	.	.	.	.	.	.	.	.	2	4	6	
RHODE ISLAND	4	10	2	1	12	63	1	.	.	.	.	.	.	.	.	93	
SOUTH CAROLINA	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1	
SOUTH DAKOTA	.	.	.	7	3	.	.	.	.	.	.	.	.	.	.	10	
TENNESSEE	1	.	.	.	.	.	.	.	1	1	.	.	.	2	31	36	
TEXAS	2	1	.	.	1	1	1	.	.	1	.	.	15	33	85	140	
UTAH	6	3	10	7	13	82	.	.	2	1	.	.	.	.	.	124	
VERMONT	.	1	10	.	7	.	2	.	.	.	.	.	.	.	.	20	
VIRGINIA	.	.	.	.	.	.	1	1	.	1	.	1	.	.	2	6	

(Continued)

TABLE 10E

## NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1986-2000

STATE	YEAR													TOTAL		
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999	2000
WASHINGTON	2	.	.	.	.	.	.	10	2	1	.	.	.	.	.	15
WEST VIRGINIA	8	5	4	10	2	8	3	12	.	.	.	.	.	.	.	52
WISCONSIN	69	61	49	34	39	30	82	52	.	.	.	.	.	.	.	416
TOTAL	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	636	19046

Figure 1. Reported *S. sonnei* Isolates by Region, United States 1986-2000

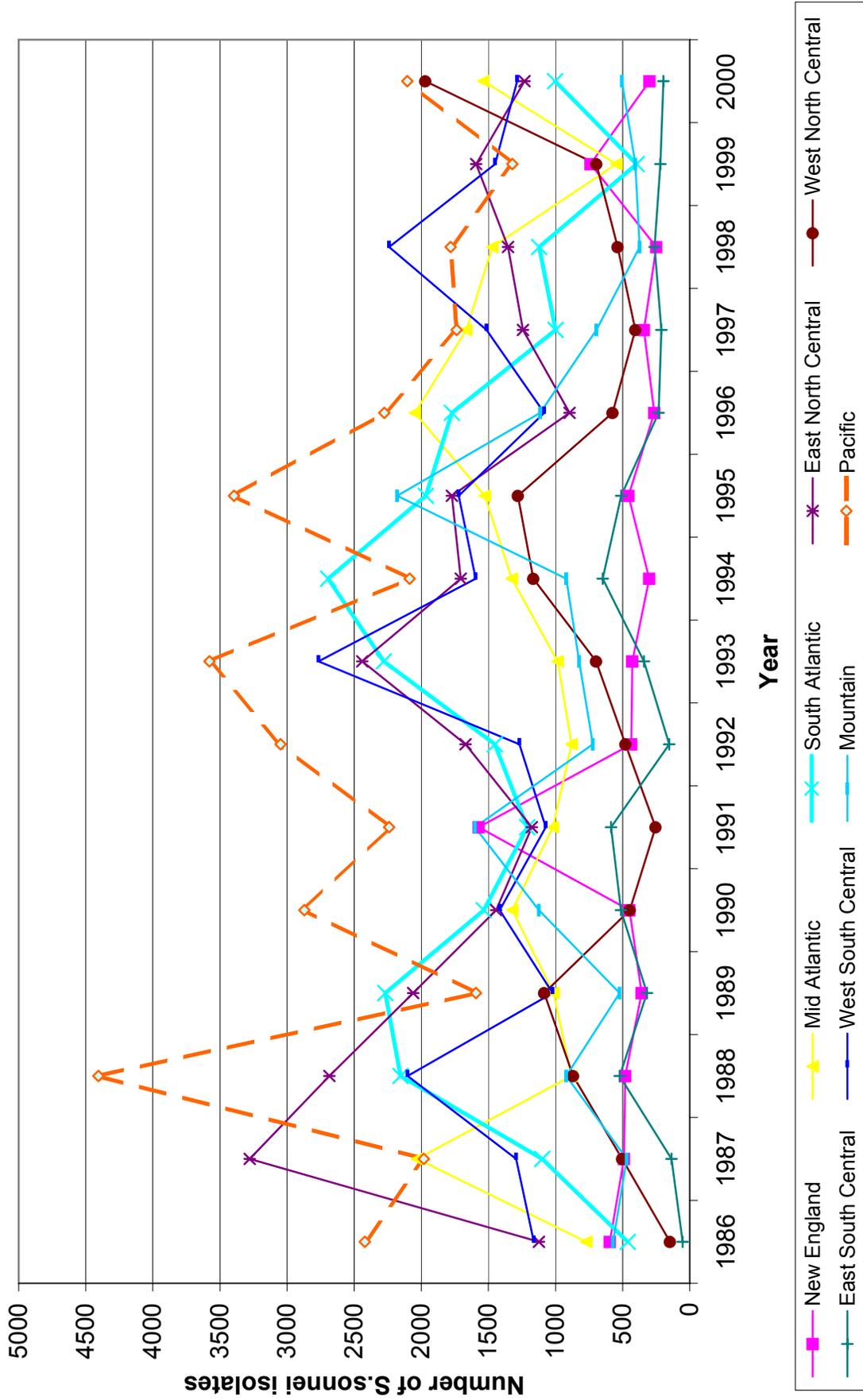
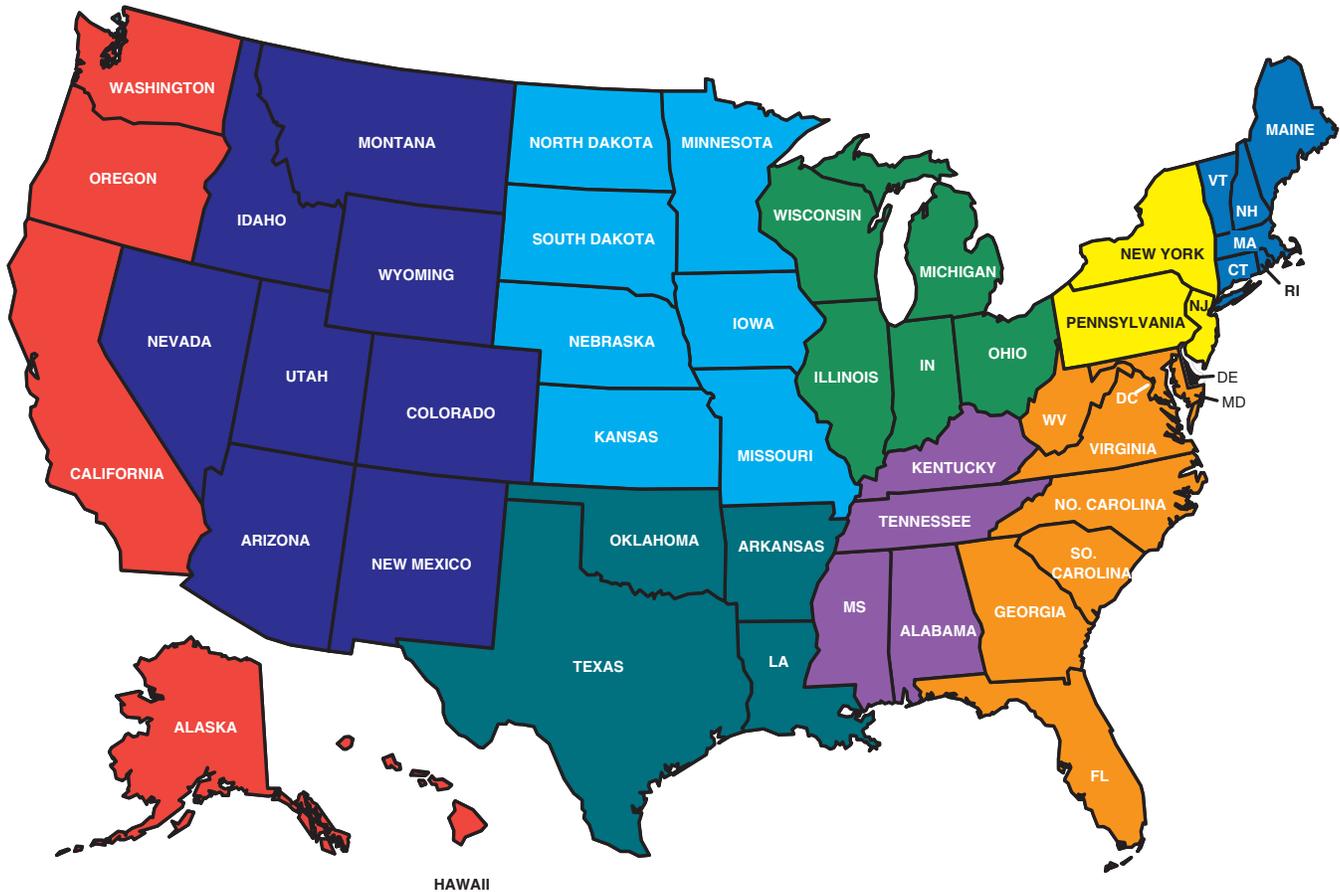


Figure 2 - Region Map for *S. sonnei* isolates, United States 1986-2000



Based on Census Regions and Divisions of the United States

**New England**

Connecticut  
Massachusetts  
Maine  
New Hampshire  
Rhode Island  
Vermont

**Mid Atlantic**

New Jersey  
New York  
Pennsylvania

**E. N. Central**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

**W. N. Central**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

**S. Atlantic**

Dist of Columbia  
Delaware  
Florida  
Georgia  
Maryland  
North Carolina  
South Carolina  
Virginia  
West Virginia

**E. S. Central**

Alabama  
Kentucky  
Mississippi  
Tennessee

**W. S. Central**

Arkansas  
Louisiana  
Oklahoma  
Texas

**Mountain**

Arizona  
Colorado  
Idaho  
Montana  
New Mexico  
Nevada  
Utah  
Wyoming

**Pacific**

Alaska  
California  
Hawaii  
Oregon  
Washington