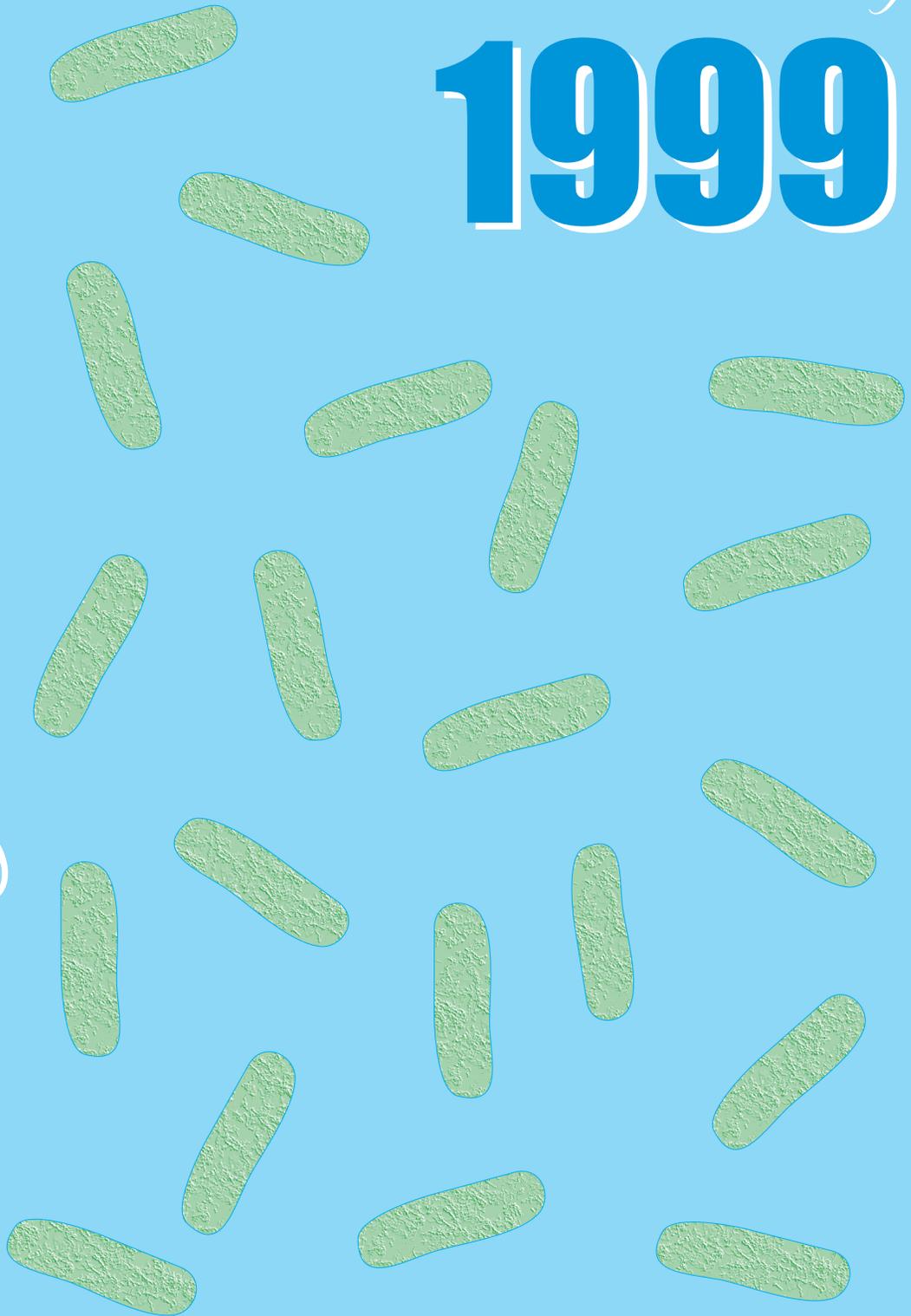


Annual Summary

1999

Shigella



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, 1999

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/. 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.

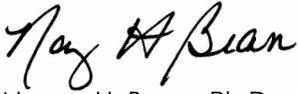
The Surveillance Outbreak Detection Algorithm (SODA), developed by BIMB and FDDB, is a statistical algorithm based on the National Surveillance Data. It is designed to detect unusual clusters of *Salmonella* and *Shigella* infection. SODA compares current *Salmonella* and *Shigella* isolates reported 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.



Eric Mintz, M.D., M.P.H.
Chief, Diarrheal Diseases Epidemiology Section
Foodborne and Diarrheal Diseases Branch



Nancy Strockbine, Ph.D.
Chief, National Reference Lab for *E. coli* and *Shigella*
Foodborne Diseases Laboratory Section
Foodborne and Diarrheal Diseases Branch



Nancy H. Bean, Ph.D.
Chief, Biostatistics and Information
Management Branch



Robert V. Tauxe, M.D., MPH
Chief, Foodborne and Diarrheal Diseases Branch

Division of Bacterial and Mycotic Diseases
National Center for Infectious Diseases
Centers for Disease Control and Prevention

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Foodborne and Diarrheal Diseases Branch
Mail Stop: A38
1600 Clifton Road
Atlanta, Georgia 30333
Telephone: 404-639-2206
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TABLE 1
SHIGELLA SUBGROUPS REPORTED TO THE CDC
FOR 1999

RANK	SPECIES	NUMBER	PERCENT
1	SONNEI	7363	73.0
2	FLEXNERI	2025	20.1
3	BOYDII	158	1.6
4	DYSENTERIAE	49	0.5
	SUBTOTAL	9595	95.2
	UNKNOWN	489	4.8
	TOTAL	10084	100.0

TABLE 2

NUMBER OF REPORTED ISOLATES OF SHIGELLA
SEROTYPES FOR 1999

RANK	SEROTYPE	NUMBER	PERCENT
1	SONNEI	7363	73.0
2	FLEXNERI UNSPECIFIED	916	9.1
3	FLEXNERI 2 UNSPECIFIED	361	3.6
4	FLEXNERI 1 UNSPECIFIED	169	1.7
5	FLEXNERI 2A	134	1.3
6	FLEXNERI 3 UNSPECIFIED	93	0.9
7	FLEXNERI 6	79	0.8
8	FLEXNERI 4 UNSPECIFIED	75	0.7
9	BOYDII UNSPECIFIED	70	0.7
10	FLEXNERI 3A	65	0.6
11	FLEXNERI 4A	34	0.3
12	BOYDII 2	28	0.3
13	FLEXNERI 5 UNSPECIFIED	28	0.3
14	FLEXNERI 1B	25	0.2
15	DYSENTERIAE UNSPECIFIED	24	0.2
16	BOYDII 4	16	0.2
17	FLEXNERI VARIANT Y	15	0.1
18	BOYDII 1	13	0.1
19	FLEXNERI 2B	13	0.1
20	DYSENTERIAE 2	12	0.1
21	BOYDII 14	8	0.1
22	FLEXNERI 1A	7	0.1
23	DYSENTERIAE 1	6	0.1
24	BOYDII 10	5	0.0
25	BOYDII 6	5	0.0
26	FLEXNERI 3C	5	0.0
27	DYSENTERIAE 3	4	0.0
28	FLEXNERI 3B	4	0.0
29	BOYDII 12	3	0.0
30	BOYDII 11	2	0.0
31	BOYDII 13	2	0.0
32	BOYDII 3	2	0.0
33	BOYDII 5	2	0.0
34	FLEXNERI VARIANT X	2	0.0
35	BOYDII 18	1	0.0
36	BOYDII 19	1	0.0
37	DYSENTERIAE 7	1	0.0
38	DYSENTERIAE 8	1	0.0
39	DYSENTERIAE 9	1	0.0
	UNKNOWN	489	4.8
	TOTAL	10084	100.0

TABLE 3

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF SHIGELLA WERE REPORTED FOR 1999

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	65	57	11	133
1 TO 4 YRS	876	909	108	1893
5 TO 9 YRS	737	613	87	1437
10 TO 19 YRS	275	208	21	504
20 TO 29 YRS	443	200	28	671
30 TO 39 YRS	342	243	20	605
40 TO 49 YRS	180	132	14	326
50 TO 59 YRS	104	76	2	182
60 TO 69 YRS	47	46	5	98
70 TO 79 YRS	36	23	1	60
80+ YEARS	16	12	2	30
UNKNOWN AGE	833	732	2580	4145
TOTAL	3954	3251	2879	10084

TABLE 3A

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF BOYDII WERE REPORTED FOR 1999

AGEGROUP	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
< 1 YR	.	1	.	1
1 TO 4 YRS	11	9	2	22
5 TO 9 YRS	6	9	7	22
10 TO 19 YRS	2	6	.	8
20 TO 29 YRS	3	4	.	7
30 TO 39 YRS	3	2	.	5
40 TO 49 YRS	4	1	.	5
50 TO 59 YRS	3	1	.	4
60 TO 69 YRS	2	1	.	3
70 TO 79 YRS	.	2	.	2
80+ YEARS	1	.	.	1
UNKNOWN AGE	14	8	56	78
TOTAL	49	44	65	158

TABLE 3B

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF DYSENTERIAE WERE REPORTED FOR 1999

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
1 TO 4 YRS	3	2	.	5
5 TO 9 YRS	2	.	.	2
20 TO 29 YRS	1	.	1	2
30 TO 39 YRS	2	1	.	3
40 TO 49 YRS	1	1	.	2
50 TO 59 YRS	2	1	.	3
80+ YEARS	.	1	.	1
UNKNOWN AGE	6	1	24	31
TOTAL	17	7	25	49

TABLE 3C

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF FLEXNERI WERE REPORTED FOR 1999

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	22	15	2	39
1 TO 4 YRS	180	150	19	349
5 TO 9 YRS	107	65	9	181
10 TO 19 YRS	38	27	1	66
20 TO 29 YRS	59	70	11	140
30 TO 39 YRS	60	102	8	170
40 TO 49 YRS	31	55	4	90
50 TO 59 YRS	22	23	2	47
60 TO 69 YRS	19	14	1	34
70 TO 79 YRS	6	8	.	14
80+ YEARS	3	3	1	7
UNKNOWN AGE	108	112	668	888
TOTAL	655	644	726	2025

TABLE 3D

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF SONNEI WERE REPORTED FOR 1999

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	43	39	9	91
1 TO 4 YRS	670	742	84	1496
5 TO 9 YRS	615	538	71	1224
10 TO 19 YRS	233	172	20	425
20 TO 29 YRS	376	126	16	518
30 TO 39 YRS	272	134	12	418
40 TO 49 YRS	142	74	10	226
50 TO 59 YRS	76	50	.	126
60 TO 69 YRS	26	30	4	60
70 TO 79 YRS	28	13	1	42
80+ YEARS	11	8	1	20
UNKNOWN AGE	705	607	1405	2717
TOTAL	3197	2533	1633	7363

TABLE 3E

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF UNKNOWN WERE REPORTED FOR 1999

AGEGROUP	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
< 1 YR	.	2	.	2
1 TO 4 YRS	12	6	3	21
5 TO 9 YRS	7	1	.	8
10 TO 19 YRS	2	3	.	5
20 TO 29 YRS	4	.	.	4
30 TO 39 YRS	5	4	.	9
40 TO 49 YRS	2	1	.	3
50 TO 59 YRS	1	1	.	2
60 TO 69 YRS	.	1	.	1
70 TO 79 YRS	2	.	.	2
80+ YEARS	1	.	.	1
UNKNOWN AGE	.	4	427	431
TOTAL	36	23	430	489

TABLE 4

MEDIAN AGE OF PERSONS FROM WHOM ISOLATES OF SHIGELLA WERE REPORTED
BY SUBGROUP FOR 1985-1999

SUBGROUP	YEAR														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
BOYDII	15	8	22	22	24	10	21	18	20	20	15	10	19	22	8
DYSENTERIAE	25	29	29	29	29	20	20	26	29	26	30	26	19	36	29
FLEXNERI	24	22	22	23	23	19	19	19	18	19	18	22	16	18	10
SONNEI	8	8	7	8	8	8	9	8	7	8	8	8	8	8	8
UNKNOWN	9	9	9	7	9	8	9	11	8	7	7	8	26	7	7

** MEDIAN CALCULATION EXCLUDES CALIFORNIA ISOLATES
AGE INFORMATION UNAVAILABLE FOR CALIFORNIA

TABLE 5

NUMBER OF REPORTED SHIGELLA ISOLATES BY RESIDENCE
FOR 1985-1999

RESIDENCE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
PRIVATE HOME	1952	1530	1490	1574	1533	1501	3344	854	1489	920	815	342	608	421	94	18467
INSTITUTION	32	103	13	9	8	1	.	3	35	6	14	5	11	6	2	248
INDIAN RESERVATION	44	85	108	448	525	345	89	42	56	111	376	253	180	104	102	2868
OTHER	792	872	396	174	70	49	97	37	38	35	28	95	174	342	176	3375
UNKNOWN	9056	9682	14757	20131	13836	15410	12975	13987	17893	17711	18097	13376	11341	11612	9710	209574
TOTAL	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	234532

TABLE 5A

NUMBER OF REPORTED S. BOYDII ISOLATES BY RESIDENCE
FOR 1985-1999

RESIDENCE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
PRIVATE HOME	19	24	25	28	27	30	29	10	10	12	12	5	12	5	.	248
INSTITUTION	.	.	.	1	.	.	.	.	.	1	1	.	1	.	.	4
INDIAN RESERVATION	.	2	2	.	.	.	.	.	.	.	5	33	6	.	6	54
OTHER	13	19	1	1	.	.	2	.	.	1	.	.	1	7	1	46
UNKNOWN	326	328	328	442	439	368	281	214	211	193	211	237	233	196	151	4158
TOTAL	358	373	356	472	466	398	312	224	221	207	229	275	253	208	158	4510

TABLE 5B
 NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY RESIDENCE
 FOR 1985-1999

RESIDENCE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
PRIVATE HOME	10	7	12	23	14	17	16	7	3	2	2	7	3	9	.	132
INSTITUTION	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1
INDIAN RESERVATION	.	.	.	.	.	.	1	.	.	.	.	4	.	.	.	5
OTHER	10	7	3	1	.	.	.	.	.	.	.	2	3	1	1	28
UNKNOWN	189	104	216	187	202	164	128	119	102	92	88	90	73	77	48	1879
TOTAL	209	118	232	211	216	181	145	126	105	94	90	103	79	87	49	2045

TABLE 5C
 NUMBER OF REPORTED S. FLEXNERI ISOLATES BY RESIDENCE
 FOR 1985-1999

RESIDENCE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
PRIVATE HOME	312	333	324	325	326	311	270	195	209	236	148	61	116	85	13	3264
INSTITUTION	1	8	3	1	.	.	.	.	1	.	2	1	.	1	.	18
INDIAN RESERVATION	39	80	85	108	97	93	43	30	44	61	104	115	132	84	63	1178
OTHER	191	171	78	28	8	7	16	1	1	16	9	12	35	32	29	634
UNKNOWN	2990	2975	3270	3876	3251	3620	3383	3024	2806	2788	2756	2515	2290	2005	1920	43469
TOTAL	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	48563

TABLE 5D

NUMBER OF REPORTED S. SONNEI ISOLATES BY RESIDENCE
FOR 1985-1999

RESIDENCE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
PRIVATE HOME	1575	1117	1070	1167	1146	1126	2955	639	1246	667	648	268	471	321	79	14495
INSTITUTION	31	84	9	7	8	1	.	3	34	4	11	4	10	5	1	212
INDIAN RESERVATION	5	2	20	248	407	248	45	12	12	50	267	101	42	20	33	1512
OTHER	560	670	307	144	62	42	78	36	37	18	18	81	134	301	145	2633
UNKNOWN	4904	5432	9876	13462	8619	9699	7656	9416	13010	11707	13867	9808	8150	8740	7105	141451
TOTAL	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	160303

TABLE 5E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP
BY RESIDENCE FOR 1985-1999

RESIDENCE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
PRIVATE HOME	36	49	59	31	20	17	74	3	21	3	5	1	6	1	2	328
INSTITUTION	.	11	.	.	.	.	.	.	.	1	.	.	.	.	1	13
INDIAN RESERVATION	.	1	1	92	21	4	.	.	.	.	.	.	.	.	.	119
OTHER	18	5	7	.	.	.	1	.	.	.	1	.	1	1	.	34
UNKNOWN	647	843	1067	2164	1325	1559	1527	1214	1764	2931	1175	726	595	594	486	18617
TOTAL	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	19111

TABLE 6

NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1999

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	1	2	4	3	5	11	4	10	8	11	6	5	70
BOYDII 1	.	2	3	.	.	1	.	2	2	1	.	2	13
BOYDII 2	2	2	3	1	3	3	.	3	5	2	4	.	28
BOYDII 3	1	.	.	.	.	1	.	.	.	.	.	.	2
BOYDII 4	.	2	.	1	.	.	.	5	5	2	1	.	16
BOYDII 5	.	.	.	.	.	1	1	.	.	.	.	.	2
BOYDII 6	.	.	.	.	.	.	2	2	.	1	.	.	5
BOYDII 10	.	.	.	1	.	.	1	.	2	.	1	.	5
BOYDII 11	1	.	1	.	.	.	.	.	.	.	.	.	2
BOYDII 12	.	.	.	.	1	.	1	1	.	.	.	.	3
BOYDII 13	.	.	.	.	.	.	.	.	.	.	1	1	2
BOYDII 14	1	.	.	2	1	.	2	.	1	1	.	.	8
BOYDII 18	.	.	.	.	1	.	.	.	.	.	.	.	1
BOYDII 19	.	.	.	.	.	.	.	1	.	.	.	.	1
DYSENTERIAE	3	1	4	3	.	1	1	5	1	1	2	2	24
DYSENTERIAE 1	1	1	.	1	.	.	3	.	.	.	.	.	6
DYSENTERIAE 2	.	3	1	.	.	2	.	.	1	2	2	1	12
DYSENTERIAE 3	.	.	2	.	.	1	.	.	.	.	1	.	4
DYSENTERIAE 7	.	.	.	.	1	.	.	.	.	.	.	.	1
DYSENTERIAE 8	.	.	.	.	.	.	.	1	.	.	.	.	1
DYSENTERIAE 9	.	.	.	.	.	.	.	.	1	.	.	.	1
FLEXNERI	72	61	75	81	76	62	89	72	110	85	68	65	916
FLEXNERI 1 UNSPECIFIED	10	4	21	6	14	17	10	15	18	28	15	11	169
FLEXNERI 1A	4	.	2	1	.	.	.	.	.	.	.	.	7
FLEXNERI 1B	3	2	3	1	1	3	3	.	1	3	3	2	25
FLEXNERI 2 UNSPECIFIED	41	21	22	16	29	29	29	49	32	40	30	23	361
FLEXNERI 2A	17	4	11	7	11	20	16	21	7	7	7	6	134
FLEXNERI 2B	1	1	3	.	.	1	5	1	.	.	1	.	13
FLEXNERI 3 UNSPECIFIED	12	5	9	6	5	5	5	9	12	9	7	9	93
FLEXNERI 3A	1	3	2	5	3	2	9	13	8	11	3	5	65

(Continued)

TABLE 6

NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1999

SERO TYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
FLEXNERI 3B	.	1	.	1	.	2	.	.	.	.	.	.	4
FLEXNERI 3C	1	.	1	.	1	.	.	.	1	.	1	.	5
FLEXNERI 4 UNSPECIFIED	7	6	9	4	4	5	5	11	10	9	2	3	75
FLEXNERI 4A	2	.	4	3	.	4	3	1	5	7	1	4	34
FLEXNERI 5 UNSPECIFIED	3	2	1	2	5	.	4	3	.	3	4	1	28
FLEXNERI 6	2	1	1	6	2	6	11	15	13	4	8	10	79
FLEXNERI VARIANT X	.	.	.	.	.	.	1	1	.	.	.	.	2
FLEXNERI VARIANT Y	1	1	2	3	1	2	1	3	.	.	1	.	15
SONNEI	457	336	327	277	452	560	784	989	922	822	762	675	7363
UNKNOWN	33	33	33	33	23	42	52	38	65	54	42	41	489
TOTAL	677	494	544	464	639	781	1042	1271	1230	1103	973	866	10084

TABLE 7
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1985-1999

SERO TYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	141	135	117	106	172	209	271	337	369	378	245	233	2713
BOYDII 1	6	9	12	9	18	8	18	20	29	23	13	21	186
BOYDII 2	49	36	49	57	70	82	101	127	126	87	66	47	897
BOYDII 3	3	2	1	2	2	3	.	.	2	.	.	.	15
BOYDII 4	18	9	11	17	14	19	28	42	41	21	18	12	250
BOYDII 5	4	5	1	3	3	4	2	3	6	4	3	1	39
BOYDII 6	1	.	.	.	.	1	6	3	1	3	.	.	15
BOYDII 7	1	2	.	1	.	.	.	1	.	1	.	.	6
BOYDII 8	.	.	1	.	1	2	.	3	1	1	.	3	12
BOYDII 9	.	.	1	.	.	.	.	1	1	4	.	.	7
BOYDII 10	5	4	4	6	10	11	20	26	17	16	8	13	140
BOYDII 11	1	.	2	1	1	.	2	2	2	.	1	1	13
BOYDII 12	1	2	.	.	2	1	2	5	2	2	.	1	18
BOYDII 13	1	.	.	.	.	.	.	.	.	1	1	1	4
BOYDII 14	9	3	4	13	14	10	28	29	16	19	11	8	164
BOYDII 15	.	.	1	.	1	.	.	1	.	.	.	.	3
BOYDII 16	.	.	.	1	.	.	.	.	.	.	.	.	1
BOYDII 17	.	.	.	.	.	1	.	.	.	.	.	.	1
BOYDII 18	2	1	.	2	4	.	.	2	1	2	2	3	19
BOYDII 19	2	.	1	.	1	.	.	1	1	1	.	.	7
DYSENTERIAE	88	78	94	95	69	81	116	127	184	140	195	100	1367
DYSENTERIAE 1	10	4	5	11	6	5	17	21	12	17	3	17	128
DYSENTERIAE 2	18	40	26	17	17	22	43	33	27	24	20	13	300
DYSENTERIAE 3	4	4	9	9	18	13	17	30	24	10	11	9	158
DYSENTERIAE 4	1	5	3	1	2	1	2	6	4	2	2	3	32
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	.	.	1	.	5
DYSENTERIAE 9	.	1	1	3	5	2	4	2	2	3	5	3	31

(Continued)

TABLE 7

NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1985-1999

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
DYSENTERIAE 10	.	.	.	.	.	.	.	.	.	.	1	.	1
DYSENTERIAE 11	.	.	.	.	1	1	1	1	.	1	.	.	5
DYSENTERIAE 12	.	.	.	.	.	.	1	1	.	1	.	.	3
DYSENTERIAE 13	.	.	.	.	.	.	1	.	1	.	.	.	2
FLEXNERI	1839	1850	1981	1941	1925	1869	2422	2754	3038	2949	2421	2474	27463
FLEXNERI 1 UNSPECIFIED	340	280	321	294	351	365	427	479	506	503	310	328	4504
FLEXNERI 1A	34	29	44	31	34	24	37	58	56	47	27	19	440
FLEXNERI 1B	59	58	64	53	48	94	61	116	127	68	66	71	885
FLEXNERI 2 UNSPECIFIED	449	383	387	410	483	437	533	651	523	477	374	368	5475
FLEXNERI 2A	114	125	120	113	139	150	173	239	168	153	105	108	1707
FLEXNERI 2B	29	15	30	21	16	27	30	28	27	23	19	16	281
FLEXNERI 3 UNSPECIFIED	198	174	184	211	222	174	314	247	255	240	187	190	2596
FLEXNERI 3A	50	60	46	44	52	62	83	88	64	57	39	45	690
FLEXNERI 3B	6	8	16	8	6	13	8	19	6	9	8	5	112
FLEXNERI 3C	5	.	4	4	6	5	10	3	4	6	6	3	56
FLEXNERI 4 UNSPECIFIED	147	109	130	138	154	157	177	192	191	152	123	127	1797
FLEXNERI 4A	28	29	34	56	27	37	31	37	37	50	31	36	433
FLEXNERI 4B	5	2	2	4	6	6	10	2	6	2	4	2	51
FLEXNERI 5 UNSPECIFIED	31	22	28	18	33	48	51	41	44	38	34	24	412
FLEXNERI 6	80	81	100	125	99	117	193	198	222	171	133	100	1619
FLEXNERI VARIANT X	.	.	1	.	2	.	3	2	2	1	2	.	13
FLEXNERI VARIANT Y	4	2	4	3	3	3	1	4	1	1	3	.	29
SONNEI	9307	7974	8898	8609	10099	11825	15240	20052	19639	19171	15638	13851	160303
UNKNOWN	1030	1005	1054	1136	1404	1436	1775	2090	2353	2179	1768	1881	19111
TOTAL	14120	12548	13791	13573	15545	17325	22262	28127	28141	27058	21905	20137	234532

TABLE 8

NUMBER OF REPORTED SHIGELLA ISOLATES BY REGION
FOR 1985-1999

REGION	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
NEW ENGLAND	861	729	645	651	546	646	1757	555	520	414	586	373	486	366	851	9986
MID-ATLANTIC	1607	1263	2331	1179	1310	1595	1263	1071	1215	1562	1758	2240	1874	1739	750	22757
EAST NORTH CENTRAL	1494	1550	3816	3597	2673	2096	1643	2154	2816	1970	2105	1190	1457	1580	1853	31994
WEST NORTH CENTRAL	387	330	671	1151	1359	630	403	589	828	1368	1391	699	494	623	806	11729
SOUTH ATLANTIC	683	686	1425	2562	2568	1894	1565	1727	2860	4790	2181	1912	1136	1275	534	27798
EAST SOUTH CENTRAL	188	60	219	683	482	799	915	305	768	1023	802	334	233	272	223	7306
WEST SOUTH CENTRAL	1218	1611	1671	2535	1408	1832	1409	1453	2943	1771	1944	1225	1731	2427	1688	26866
MOUNTAIN	1223	1137	1174	1692	1161	1655	2248	1174	1348	1436	2713	1665	1238	764	773	21401
PACIFIC	4215	4906	4812	8286	4465	6159	5302	5895	6213	4449	5850	4433	3665	3439	2606	74695
TOTAL	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	234532

TABLE 8A

NUMBER OF REPORTED S. SONNEI ISOLATES BY REGION
FOR 1985-1999

REGION	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
NEW ENGLAND	713	596	491	481	358	448	1573	435	428	302	456	264	341	248	739	7873
MID-ATLANTIC	1128	772	2030	883	1015	1321	1020	880	985	1325	1527	2048	1664	1470	547	18615
EAST NORTH CENTRAL	1110	1123	3279	2685	2061	1443	1176	1671	2440	1707	1773	896	1242	1354	1592	25552
WEST NORTH CENTRAL	246	147	503	870	1084	446	255	478	698	1166	1281	575	405	538	696	9388
SOUTH ATLANTIC	450	462	1099	2155	2268	1535	1210	1451	2280	2695	1966	1772	999	1121	396	21859
EAST SOUTH CENTRAL	179	52	136	523	319	513	587	152	341	649	511	232	211	262	218	4885
WEST SOUTH CENTRAL	817	1161	1293	2103	1022	1415	1072	1268	2765	1595	1721	1085	1514	2239	1449	22519
MOUNTAIN	554	571	470	921	522	1124	1601	722	824	920	2180	1115	695	374	405	12998
PACIFIC	1878	2421	1981	4407	1593	2871	2240	3049	3578	2087	3396	2275	1736	1781	1321	36614
TOTAL	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	160303

TABLE 8B
 NUMBER OF REPORTED S. FLEXNERI ISOLATES BY REGION
 FOR 1985-1999

REGION	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
NEW ENGLAND	128	93	109	127	150	122	94	107	92	106	115	94	123	102	99	1661
MID-ATLANTIC	377	341	278	257	269	254	227	177	211	213	206	179	188	247	176	3600
EAST NORTH CENTRAL	326	314	361	422	439	465	339	330	287	238	289	267	185	191	223	4676
WEST NORTH CENTRAL	108	168	134	156	168	125	115	77	67	121	71	105	82	79	95	1671
SOUTH ATLANTIC	90	116	154	143	101	156	124	137	173	343	196	122	120	136	127	2238
EAST SOUTH CENTRAL	8	6	9	8	9	10	8	2	4	18	7	7	20	9	5	130
WEST SOUTH CENTRAL	346	380	328	376	333	367	280	170	136	141	188	113	184	146	185	3673
MOUNTAIN	548	496	556	503	472	381	491	371	382	353	464	441	484	352	338	6632
PACIFIC	1602	1653	1831	2346	1741	2151	2034	1879	1709	1568	1483	1376	1187	945	777	24282
TOTAL	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	48563

TABLE 8C

NUMBER OF REPORTED S. BOYDII ISOLATES BY REGION
FOR 1985-1999

REGION	YEAR															TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
NEW ENGLAND	8	6	14	7	16	17	12	4	.	5	11	6	14	6	8	134
MID-ATLANTIC	16	16	16	21	17	10	10	6	11	15	12	5	13	10	12	190
EAST NORTH CENTRAL	35	37	28	64	42	29	20	16	30	19	31	19	23	25	23	441
WEST NORTH CENTRAL	1	1	2	6	5	5	7	3	.	7	6	3	4	4	6	60
SOUTH ATLANTIC	3	6	7	5	10	8	8	5	10	27	7	10	7	9	9	131
EAST SOUTH CENTRAL	.	1	2	2	1	1	.	1	.	.	.	2	.	.	.	10
WEST SOUTH CENTRAL	33	54	36	39	37	35	44	11	33	24	27	19	27	17	18	454
MOUNTAIN	66	43	59	52	48	47	30	14	14	18	32	91	41	22	23	600
PACIFIC	196	209	192	276	290	246	181	164	123	92	103	120	124	115	59	2490
TOTAL	358	373	356	472	466	398	312	224	221	207	229	275	253	208	158	4510

TABLE 8D

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY REGION
FOR 1985-1999

REGION	YEAR															TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
NEW ENGLAND	5	4	4	12	9	8	6	6	.	.	3	6	6	10	3	82
MID-ATLANTIC	16	11	7	18	9	9	6	8	2	6	6	6	8	7	2	121
EAST NORTH CENTRAL	20	7	27	21	23	15	11	21	4	6	11	8	2	9	9	194
WEST NORTH CENTRAL	3	3	8	8	7	3	1	6	1	2	1	2	2	1	2	50
SOUTH ATLANTIC	1	2	4	4	2	5	6	4	4	5	2	8	5	6	2	60
EAST SOUTH CENTRAL	1	1	1	2	.	2	.	1	1	1	.	.	2	1	.	13
WEST SOUTH CENTRAL	20	13	12	17	15	14	10	2	9	10	5	7	6	9	1	150
MOUNTAIN	14	9	10	8	25	7	12	5	12	9	6	18	12	16	7	170
PACIFIC	129	68	159	121	126	118	93	73	72	55	56	48	36	28	23	1205
TOTAL	209	118	232	211	216	181	145	126	105	94	90	103	79	87	49	2045

TABLE 8E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP
BY REGION FOR 1985-1999

REGION	YEAR															TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
NEW ENGLAND	7	30	27	24	13	51	72	3	.	1	1	3	2	.	2	236
MID-ATLANTIC	70	123	.	.	.	1	.	.	6	3	7	2	1	5	13	231
EAST NORTH CENTRAL	3	69	121	405	108	144	97	116	55	.	1	.	5	1	6	1131
WEST NORTH CENTRAL	29	11	24	111	95	51	25	25	62	72	32	14	1	1	7	560
SOUTH ATLANTIC	139	100	161	255	187	190	217	130	393	1720	10	.	5	3	.	3510
EAST SOUTH CENTRAL	.	.	71	148	153	273	320	149	422	355	284	93	.	.	.	2268
WEST SOUTH CENTRAL	2	3	2	.	1	1	3	2	.	1	3	1	.	16	35	70
MOUNTAIN	41	18	79	208	94	96	114	62	116	136	31	.	6	.	.	1001
PACIFIC	410	555	649	1136	715	773	754	730	731	647	812	614	582	570	426	10104
TOTAL	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	19111

TABLE 9

NUMBER OF REPORTED SHIGELLA SUBGROUP ISOLATES BY YEAR FOR 1985-1999

SUBGROUP	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
BOYDII	358	373	356	472	466	398	312	224	221	207	229	275	253	208	158	4510
DYSENTERIAE	209	118	232	211	216	181	145	126	105	94	90	103	79	87	49	2045
FLEXNERI	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	48563
SONNEI	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	160303
UNKNOWN	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	19111
TOTAL	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	234532

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
ALABAMA	155	50	122	444	332	514	450	160	341	479	383	110	193	220	63	4016
ALASKA	19	2	5	9	14	7	30	19	21	14	10	59	3	7	5	224
ARIZONA	599	513	512	365	291	498	577	399	369	401	815	695	694	348	413	7489
ARKANSAS	22	27	44	94	43	20	91	18	100	61	96	100	60	67	27	870
CALIFORNIA	3845	4489	4341	7883	4132	5703	4473	5217	5175	3757	5347	3879	3222	3033	2358	66854
COLORADO	101	158	290	371	411	385	216	364	614	529	485	484	199	164	164	4935
CONNECTICUT	107	112	203	162	233	192	108	131	212	146	148	121	81	66	70	2092
DELAWARE	25	1	.	20	60	109	4	7	60	11	125	66	21	38	11	558
DISTRICT OF COLUMBIA	.	188	240	142	12	59	45	63	26	19	199	200	8	.	.	1201
FLORIDA	181	64	35	487	500	199	378	263	248	721	319	275	245	539	154	4608
GEORGIA	196	133	331	657	518	620	532	560	494	2062	176	173	244	252	83	7031
HAWAII	154	81	82	59	69	60	80	119	89	193	102	86	55	51	36	1316
IDAHO	5	.	.	.	1	2	.	13	16	30	74	54	39	15	12	261
ILLINOIS	973	1020	2516	1593	883	932	759	910	1142	1030	1215	525	842	1308	1018	16666
INDIANA	86	76	296	925	306	350	334	209	173	181	103	71	30	43	118	3301
IOWA	19	22	108	320	82	47	30	42	45	323	240	115	72	46	62	1573
KANSAS	63	65	21	52	82	62	56	83	110	57	106	32	80	62	57	988
KENTUCKY	16	10	2	34	16	11	204	28	45	83	86	45	40	45	149	814
LOUISIANA	127	279	440	517	325	214	120	87	303	314	378	344	114	288	137	3987
MAINE	12	6	7	7	9	5	4	9	2	4	.	6	.	.	.	71
MARYLAND	95	101	428	540	151	147	50	276	262	201	226	447	176	69	58	3227
MASSACHUSETTS	683	541	324	325	244	341	1387	240	256	209	288	169	299	260	731	6297

(Continued)

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
MICHIGAN	261	113	283	473	772	342	193	494	645	329	454	341	249	5	489	5443
MINNESOTA	175	66	163	349	426	122	80	90	236	467	166	164	141	334	254	3233
MISSISSIPPI	17	.	95	205	134	274	261	117	382	461	333	179	.	7	11	2476
MISSOURI	59	45	291	316	213	170	139	273	336	292	609	272	161	136	353	3665
MONTANA	51	26	42	258	97	46	136	120	12	2	203	28	5	3	.	1029
NEBRASKA	3	11	3	.	1	5	1	6	1	2	4	4	17	19	68	145
NEVADA	2	8	6	4	27	8	2	6	3	2	19	13	13	20	6	139
NEW HAMPSHIRE	28	39	28	54	27	63	40	6	10	10	79	26	21	22	17	470
NEW JERSEY	358	158	268	216	216	202	226	220	274	388	675	342	480	652	236	4911
NEW MEXICO	374	300	273	606	254	462	303	164	272	235	408	177	192	177	109	4306
NEW YORK	857	723	1785	475	423	770	361	451	453	697	548	305	790	828	331	9797
NORTH CAROLINA	99	110	88	306	932	555	228	307	1089	1130	593	186	173	183	93	6072
NORTH DAKOTA	19	19	25	28	193	143	25	13	13	59	126	58	3	3	2	729
OHIO	114	54	127	128	403	212	97	77	585	276	260	221	307	153	150	3164
OKLAHOMA	128	127	97	75	93	187	130	97	214	85	132	157	134	213	171	2040
OREGON	55	46	51	50	51	101	350	144	108	87	113	125	173	156	91	1701
PENNSYLVANIA	392	382	278	488	671	623	676	400	488	477	535	1593	604	259	183	8049
RHODE ISLAND	26	25	72	34	28	30	214	163	32	43	65	43	83	13	29	900
SOUTH CAROLINA	36	14	99	83	112	110	38	68	113	180	115	78	30	99	64	1239
SOUTH DAKOTA	49	102	60	86	362	81	72	82	87	168	140	54	20	23	10	1396
TENNESSEE	192	101	321	1002	256	257	193	561	1049	709	440	242	343	958	476	7100
TEXAS	749	1077	769	847	691	1154	875	690	1277	602	898	382	1080	901	877	12869

(Continued)

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1985-1999

STATE	YEAR													TOTAL		
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997		1998	1999
UTAH	91	132	51	88	80	254	1014	108	54	235	705	212	95	36	68	3223
VERMONT	5	6	11	69	5	15	4	6	8	2	6	8	2	5	4	156
VIRGINIA	33	57	169	305	260	74	257	165	530	466	401	456	226	87	66	3552
WASHINGTON	142	288	333	285	199	288	369	396	820	398	278	284	212	192	116	4600
WEST VIRGINIA	18	18	35	22	23	21	33	18	38	.	27	31	13	8	5	310
WISCONSIN	60	287	594	478	309	260	260	464	271	154	73	32	29	71	78	3420
WYOMING	.	.	.	.	.	.	.	.	8	2	4	2	1	1	1	19
TOTAL	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	12485	10084	234532

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1985-1999

STATE	YEAR																	TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999			
ALABAMA	150	42	69	391	262	365	361	111	200	356	281	103	184	215	58	3148		
ALASKA	16	.	4	6	5	2	26	17	13	10	10	53	2	7	1	172		
ARIZONA	212	169	202	112	73	309	294	166	149	196	523	327	373	126	203	3434		
ARKANSAS	18	23	42	87	38	19	89	16	99	58	96	97	60	63	25	830		
CALIFORNIA	1714	2176	1670	4209	1448	2632	1632	2580	2806	1657	3126	1993	1508	1568	1227	31946		
COLORADO	47	92	124	228	236	255	112	245	444	329	365	394	129	99	95	3194		
CONNECTICUT	81	95	172	132	207	172	93	101	199	117	127	104	57	43	48	1748		
DELAWARE	25	.	.	20	60	108	3	6	58	8	122	66	16	37	6	535		
DISTRICT OF COLUMBIA	.	146	205	109	7	39	20	45	12	4	166	188	4	.	.	945		
FLORIDA	178	58	27	480	495	188	371	252	237	694	305	261	233	529	144	4452		
GEORGIA	43	43	155	392	313	399	293	404	68	149	131	141	213	205	31	2980		
HAWAII	71	44	34	18	24	22	23	46	26	125	44	17	23	24	11	552		
IDAHO	1	.	.	.	.	1	.	10	9	17	72	50	30	5	6	201
ILLINOIS	674	767	2231	1238	559	567	524	674	910	860	995	339	702	1116	835	12991		
INDIANA	75	56	219	545	202	224	238	168	160	161	85	57	22	29	104	2345		
IOWA	7	15	90	200	51	29	18	27	34	263	231	101	57	40	53	1216		
KANSAS	49	54	12	43	73	48	41	73	104	47	100	22	75	49	46	836		
KENTUCKY	15	10	.	33	14	9	200	27	43	76	84	43	27	42	149	772		
LOUISIANA	84	249	407	492	304	195	103	78	288	304	365	329	102	273	130	3703		
MAINE	11	3	5	6	5	3	3	5	2	3	.	.	.	.	.	46
MARYLAND	65	64	391	516	130	115	35	239	213	134	194	413	154	38	36	2737		
MASSACHUSETTS	592	474	243	223	125	227	1300	176	187	143	206	109	194	171	662	5032		

(Continued)

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1985-1999

STATE	YEAR																	TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999			
MICHIGAN	224	77	225	422	706	284	142	408	590	287	387	285	209	5	445	4696		
MINNESOTA	122	30	114	305	314	56	42	54	166	385	133	105	95	290	204	2415		
MISSISSIPPI	14	.	67	99	43	139	26	14	98	217	146	86	.	5	11	965		
MISSOURI	54	33	274	291	187	144	117	264	329	280	599	260	150	125	339	3446		
MONTANA	3	8	19	108	66	14	122	118	11	1	196	27	4	1	.	698		
NEBRASKA	1	5	2	.	1	.	1	5	1	2	4	3	17	18	51	111		
NEVADA	1	6	4	.	21	3	.	4	2	2	13	9	4	10	.	79		
NEW HAMPSHIRE	16	11	10	38	5	29	29	3	7	8	76	21	18	20	10	301		
NEW JERSEY	304	120	223	150	160	155	180	177	222	331	599	285	428	558	171	4063		
NEW MEXICO	242	216	107	434	100	333	184	85	176	175	327	108	111	118	59	2775		
NEW YORK	479	362	1578	313	267	602	231	347	321	557	427	219	677	689	219	7288		
NORTH CAROLINA	71	92	61	276	911	514	200	284	1059	1105	560	164	136	154	67	5654		
NORTH DAKOTA	7	4	11	13	176	135	20	5	5	37	95	47	2	2	1	560		
OHIO	94	42	103	110	377	187	84	68	575	266	246	203	295	137	135	2922		
OKLAHOMA	104	88	78	63	81	176	116	87	209	77	116	147	129	208	163	1842		
OREGON	15	32	26	22	15	59	317	116	53	50	73	59	111	89	36	1073		
PENNSYLVANIA	345	290	229	420	588	564	609	356	442	437	501	1544	559	223	157	7264		
RHODE ISLAND	10	9	53	24	13	14	144	147	27	29	45	24	70	9	17	635		
SOUTH CAROLINA	33	10	93	74	107	100	31	58	111	172	110	75	23	94	62	1153		
SOUTH DAKOTA	6	6	.	18	282	34	16	50	59	152	119	37	9	14	2	804		
TENNESSEE	179	85	304	984	248	248	181	547	1028	692	418	228	321	947	463	6873		
TEXAS	432	716	462	477	351	777	583	540	1141	464	726	284	902	748	668	9271		

(Continued)

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
UTAH	48	80	14	39	26	209	889	94	30	200	680	199	43	14	42	2607
VERMONT	3	4	8	58	3	3	4	3	6	2	2	6	2	5	2	111
VIRGINIA	23	41	141	274	234	55	232	148	498	429	351	435	207	56	45	3169
WASHINGTON	62	169	247	152	101	156	242	290	680	245	143	153	92	93	46	2871
WEST VIRGINIA	12	8	26	14	11	17	25	15	24	.	27	29	13	8	5	234
WISCONSIN	43	181	501	370	217	181	188	353	205	133	60	12	14	67	73	2598
WYOMING	.	.	.	.	.	.	.	.	3	.	4	1	1	1	.	10
TOTAL	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	9387	7363	160303

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1985-1999

STATE	YEAR																TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		
ALABAMA	4	6	6	3	3	6	3	·	2	11	5	7	7	5	5	73	
ALASKA	2	1	1	3	8	2	4	2	6	4	·	6	1	·	4	44	
ARIZONA	337	312	261	208	181	150	259	225	212	197	263	279	287	202	192	3565	
ARKANSAS	3	4	1	6	3	1	1	2	1	2	·	2	·	4	2	32	
CALIFORNIA	1410	1497	1689	2175	1577	1957	1831	1689	1478	1323	1269	1130	1000	767	631	21423	
COLORADO	46	57	106	82	96	65	71	52	44	61	87	83	58	57	64	1029	
CONNECTICUT	23	15	24	25	21	17	13	26	13	25	18	15	23	15	20	293	
DELAWARE	·	·	·	·	·	1	1	1	1	2	3	·	5	1	5	20	
DISTRICT OF COLUMBIA	·	20	23	30	4	19	24	18	13	15	28	10	4	·	·	208	
FLORIDA	3	6	7	7	4	9	4	8	9	5	12	10	11	8	10	113	
GEORGIA	17	17	28	13	29	31	27	32	44	198	41	30	26	43	47	623	
HAWAII	82	36	47	41	42	36	57	72	63	68	57	67	31	25	25	749	
IDAHO	4	·	·	·	·	1	·	3	7	13	2	4	9	9	6	58	
ILLINOIS	260	213	253	285	283	340	222	208	204	157	192	167	124	163	159	3230	
INDIANA	10	18	19	25	29	21	24	8	12	17	17	14	8	11	13	246	
IOWA	8	5	11	24	18	8	8	7	5	11	9	13	15	6	9	157	
KANSAS	14	9	6	9	9	12	13	7	6	9	5	9	4	12	11	135	
KENTUCKY	1	·	1	1	2	2	4	·	2	6	2	·	13	2	·	36	
LOUISIANA	40	29	33	22	21	19	16	8	13	10	12	14	11	15	5	268	
MAINE	1	3	2	·	4	·	1	4	·	1	·	6	·	·	·	22	
MARYLAND	30	34	35	23	20	31	11	31	45	61	32	32	18	29	21	453	
MASSACHUSETTS	88	61	73	89	103	95	71	60	69	66	73	50	90	81	60	1129	

(Continued)

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
MICHIGAN	27	34	53	47	53	50	45	82	51	39	59	54	34	.	37	665
MINNESOTA	30	27	27	23	32	26	20	20	16	75	28	53	40	39	37	493
MISSISSIPPI	3	.	2	4	4	2	1	2	.	1	.	.	.	2	.	21
MISSOURI	5	11	15	21	21	26	18	8	7	10	8	11	11	11	14	197
MONTANA	14	5	4	7	2	7	9	1	1	1	6	1	.	2	.	60
NEBRASKA	2	6	1	.	.	5	.	.	.	.	.	1	.	1	15	31
NEVADA	1	2	2	4	6	4	1	2	.	.	5	.	6	8	6	47
NEW HAMPSHIRE	3	3	3	4	9	2	2	3	3	2	3	3	2	2	7	51
NEW JERSEY	51	34	41	58	51	44	43	42	42	49	69	49	46	85	59	763
NEW MEXICO	114	74	151	165	145	124	110	75	89	52	78	65	74	53	48	1417
NEW YORK	282	231	192	144	142	155	122	93	125	128	107	81	101	126	93	2122
NORTH CAROLINA	28	17	25	27	18	39	26	23	30	22	32	20	34	23	24	388
NORTH DAKOTA	6	15	14	12	16	5	1	3	5	.	.	1	1	1	1	81
OHIO	16	12	18	15	24	21	10	9	6	5	9	16	7	13	10	191
OKLAHOMA	22	35	16	11	9	10	11	9	4	5	14	8	4	3	6	167
OREGON	36	14	17	18	27	39	31	19	47	32	37	61	54	60	51	543
PENNSYLVANIA	44	76	45	55	76	55	62	42	44	36	30	49	41	36	24	715
RHODE ISLAND	11	10	5	8	12	3	7	13	5	12	19	18	8	4	10	145
SOUTH CAROLINA	2	4	6	9	5	10	7	9	1	7	5	3	7	5	1	81
SOUTH DAKOTA	43	95	60	67	72	43	55	32	28	16	21	17	11	9	8	577
TENNESSEE	13	11	13	17	6	8	12	14	14	13	21	14	20	9	11	196
TEXAS	268	301	265	320	294	329	240	137	104	111	141	75	149	115	161	3010

(Continued)

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
UTAH	32	46	32	37	42	30	41	13	24	29	23	8	50	21	21	449
VERMONT	2	1	2	1	1	5	.	1	2	.	2	2	.	.	2	21
VIRGINIA	8	16	27	30	19	15	24	15	28	33	43	15	15	27	19	334
WASHINGTON	72	105	77	109	87	117	111	97	115	141	120	112	101	93	66	1523
WEST VIRGINIA	2	2	3	4	2	1	.	.	2	.	.	2	.	.	.	18
WISCONSIN	13	37	18	50	50	33	38	23	14	20	12	16	12	4	4	344
WYOMING	.	.	.	.	.	.	.	.	5	.	.	1	.	.	1	7
TOTAL	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	2207	2025	48563

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
ALABAMA	.	1	1	1	1	.	.	.	.	.	.	.	.	.	.	4
ALASKA	1	.	.	.	.	2	.	.	1	.	.	.	.	.	.	4
ARIZONA	47	30	43	38	30	35	17	6	5	5	22	73	26	9	13	399
ARKANSAS	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1
CALIFORNIA	185	201	181	258	274	232	171	151	105	81	91	102	105	103	54	2294
COLORADO	2	6	3	7	11	5	4	3	3	3	5	6	10	5	3	76
CONNECTICUT	2	1	5	2	1	1	2	2	.	3	3	1	1	3	.	27
DELAWARE	.	1	.	.	.	.	.	.	1	1	.	.	.	.	.	3
DISTRICT OF COLUMBIA	.	1	1	1	1	.	1	.	.	.	2	.	.	.	.	7
FLORIDA	.	.	.	.	1	1	2	.	.	.	.	1	1	1	.	7
GEORGIA	1	2	2	.	1	2	2	1	2	19	.	1	1	.	4	38
HAWAII	1	1	1	.	1	.	.	1	.	.	1	1	.	2	.	9
IDAHO	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1
ILLINOIS	23	35	19	54	27	15	9	9	26	10	18	15	16	22	16	314
INDIANA	1	.	2	1	2	2	3	.	.	2	1	.	.	1	1	16
IOWA	1	.	.	1	1	1	.	1	.	1	.	1	.	.	.	7
KANSAS	.	.	2	.	.	2	2	.	.	1	1	.	1	1	.	10
KENTUCKY	.	.	.	.	.	.	.	1	.	.	.	2	.	.	.	3
LOUISIANA	2	1	.	2	.	.	1	.	2	.	1	1	1	.	2	13
MAINE	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1
MARYLAND	.	1	2	.	.	1	2	2	4	3	.	2	2	2	1	22
MASSACHUSETTS	2	4	7	5	11	14	10	2	.	.	6	4	10	3	7	85

(Continued)

TABLE 10C
 NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1985-1999

STATE	YEAR																TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999		
MICHIGAN	7	2	1	1	5	5	3	2	3	2	7	1	4	.	3	46	
MINNESOTA	.	.	.	5	1	2	1	1	.	3	4	2	3	3	5	30	
MISSISSIPPI	.	.	1	1	.	1	.	.	.	.	.	.	.	.	.	3
MISSOURI	.	.	.	.	2	.	3	1	.	2	1	.	.	.	.	9
MONTANA	.	1	.	.	.	1	.	.	.	.	.	.	1	.	.	3
NEBRASKA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
NEVADA	.	.	.	.	.	1	1	.	.	.	1	4	1	2	.	10
NEW HAMPSHIRE	3	.	.	.	1	.	.	.	.	.	.	.	.	.	.	4
NEW JERSEY	1	2	2	7	3	3	1	.	3	5	3	3	4	2	3	42	
NEW MEXICO	14	6	11	5	5	4	7	4	6	6	3	3	1	4	2	81	
NEW YORK	14	2	10	12	11	6	4	6	6	7	7	2	8	8	9	112	
NORTH CAROLINA	.	1	.	3	.	.	1	.	.	2	1	1	1	5	1	16	
OHIO	2	.	1	1	1	3	3	.	1	4	4	1	.	2	2	25	
OKLAHOMA	.	3	3	.	1	1	.	.	1	3	1	.	.	1	2	16	
OREGON	3	.	4	1	6	2	1	6	7	3	2	3	4	5	3	50	
PENNSYLVANIA	1	12	4	2	3	1	5	.	2	3	2	.	1	.	.	36	
RHODE ISLAND	1	.	2	.	2	1	.	.	.	2	1	1	3	.	1	14	
SOUTH CAROLINA	.	.	.	.	.	.	.	1	1	.	.	.	.	.	1	3
SOUTH DAKOTA	.	1	.	.	1	.	1	.	.	.	.	.	.	.	.	3
TENNESSEE	.	4	1	.	1	1	.	.	4	1	.	.	1	2	.	15	
TEXAS	31	46	32	36	35	33	43	11	26	20	25	18	25	14	14	409	
UTAH	3	.	2	2	2	1	1	1	.	3	1	5	2	1	5	29	

(Continued)

TABLE 10C
 NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1985-1999

STATE	YEAR													TOTAL		
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997		1998	1999
VERMONT	.	1	.	.	1	.	.	.	.	.	1	.	.	.	.	3
VIRGINIA	2	.	1	1	7	3	.	1	2	2	4	5	2	1	2	33
WASHINGTON	6	7	6	17	9	10	9	6	10	8	9	14	15	5	2	133
WEST VIRGINIA	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	2
WISCONSIN	2	.	5	7	7	4	2	5	.	1	1	2	3	.	1	40
WYOMING	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
TOTAL	358	373	356	472	466	398	312	224	221	207	229	275	253	208	158	4510

TABLE 10D

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY STATE FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
ALABAMA	1	1	.	2	.	2	.	1	1	.	.	.	2	.	.	10
ALASKA	.	1	.	.	1	.	.	.	1	.	.	.	.	.	.	3
ARIZONA	3	2	6	.	7	4	6	2	3	3	4	16	8	11	5	80
ARKANSAS	.	.	.	.	1	.	.	.	.	1	.	1	.	.	.	3
CALIFORNIA	127	62	152	114	120	110	86	69	65	51	50	40	27	25	20	1118
COLORADO	5	3	4	6	10	1	3	2	7	2	2	1	2	3	2	53
CONNECTICUT	1	.	1	3	4	2	.	2	.	.	.	1	.	5	.	19
DISTRICT OF COLUMBIA	.	.	.	.	.	1	.	.	.	.	.	2	.	.	.	3
FLORIDA	.	.	1	.	.	1	1	2	1	.	.	3	.	1	.	10
GEORGIA	.	1	1	3	1	.	1	.	2	3	.	1	1	1	1	16
HAWAII	.	.	.	.	1	2	.	.	.	.	.	1	1	.	.	5
ILLINOIS	13	5	11	15	14	8	4	18	2	3	10	4	.	7	5	119
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	.	.	8
MASSACHUSETTS	1	2	1	8	5	5	6	2	.	.	2	5	3	5	2	47
MICHIGAN	3	.	3	2	5	3	3	.	1	1	1	1	2	.	3	28
MINNESOTA	3	1	4	2	3	2	.	.	1	2	1	1	2	1	2	25

(Continued)

TABLE 10D

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1985-1999

STATE	YEAR															TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
MISSOURI	.	.	2	4	3	.	1	.	.	.	.	.	.	.	.	10
MONTANA	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.	2
NEBRASKA	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1
NEVADA	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
NEW HAMPSHIRE	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1
NEW JERSEY	2	1	2	1	2	.	2	1	2	1	.	5	2	5	1	27
NEW MEXICO	4	4	.	2	4	1	2	.	1	2	.	1	2	2	.	25
NEW YORK	13	6	5	6	3	6	4	5	.	4	4	1	3	2	1	63
NORTH CAROLINA	.	.	2	.	.	2	1	.	.	.	.	1	2	1	1	10
NORTH DAKOTA	.	.	.	1	1	.	.	2	.	.	.	.	.	.	.	4
OHIO	2	.	3	2	1	.	.	.	.	1	.	1	.	.	1	11
OKLAHOMA	2	1	.	1	2	.	2	1	.	.	.	1	1	.	.	11
OREGON	.	.	4	.	2	1	.	1	1	2	1	2	4	2	1	21
PENNSYLVANIA	1	4	.	11	4	3	.	.	2	1	2	.	3	.	.	31
RHODE ISLAND	3	2	2	.	.	.	.	2	.	.	.	.	2	.	1	12
SOUTH CAROLINA	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
SOUTH DAKOTA	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	2
TENNESSEE	.	.	3	1	1	.	.	.	3	2	.	.	1	.	.	11
TEXAS	17	12	9	14	11	14	8	1	6	7	5	5	4	9	1	123
UTAH	2	.	.	.	3	1	1	.	.	1	.	.	.	.	.	8
VERMONT	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1
VIRGINIA	.	.	.	.	.	1	1	.	1	2	2	1	1	3	.	12

(Continued)

TABLE 10D

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY STATE FOR 1985-1999

STATE	YEAR															TOTAL
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
WASHINGTON	2	5	3	7	2	5	7	3	5	2	5	5	4	1	2	58
WISCONSIN	2	.	9	2	1	3	2	1	.	.	.	2	.	.	.	22
WYOMING	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
TOTAL	209	118	232	211	216	181	145	126	105	94	90	103	79	87	49	2045

TABLE 10E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
ALABAMA	.	.	46	47	66	141	86	48	138	112	97	.	.	.	.	781
ALASKA	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1
ARIZONA	.	.	.	7	.	.	1	.	.	.	3	.	.	.	.	11
ARKANSAS	1	.	1	.	1	.	1	.	.	.	.	.	.	.	.	4
CALIFORNIA	409	553	649	1127	713	772	753	728	721	645	811	614	582	570	426	10073
COLORADO	1	.	53	48	58	59	26	62	116	134	26	.	.	.	.	583
CONNECTICUT	.	1	1	.	.	.	.	.	.	1	.	.	.	.	2	5
DISTRICT OF COLUMBIA	.	21	11	2	.	.	.	.	1	.	3	.	.	.	.	38
FLORIDA	.	.	.	.	.	.	.	1	1	22	2	.	.	.	.	26
GEORGIA	135	70	145	249	174	188	209	123	378	1693	4	.	3	3	.	3374
HAWAII	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	1
IDAHO	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	1
ILLINOIS	3	.	2	1	.	2	.	1	.	.	.	.	.	.	3	12
INDIANA	.	.	55	354	71	102	67	31	.	.	.	.	.	.	.	680
IOWA	3	2	6	95	12	9	4	7	6	48	.	.	.	.	.	192
LOUISIANA	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1
MARYLAND	.	1	.	.	.	.	.	2	.	3	.	.	1	.	.	7
MASSACHUSETTS	.	.	.	.	.	.	.	.	.	.	1	1	2	.	.	4
MICHIGAN	.	.	1	1	3	.	.	2	.	.	.	.	.	.	1	8
MINNESOTA	20	8	18	14	76	36	17	15	53	2	.	3	1	1	6	270
MISSISSIPPI	.	.	25	101	87	132	234	101	284	243	187	93	.	.	.	1487
MISSOURI	.	1	.	.	.	.	.	.	.	.	1	1	.	.	.	3

(Continued)

TABLE 10E
 NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
MONTANA	34	12	19	143	28	24	5	.	.	.	1	.	.	.	.	266
NEBRASKA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
NEVADA	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	2
NEW HAMPSHIRE	6	25	15	12	12	32	9	.	.	.	.	2	.	.	.	113
NEW JERSEY	.	1	.	.	.	.	.	.	5	2	4	.	.	2	2	16
NEW MEXICO	.	.	4	.	.	.	.	.	.	.	.	.	4	.	.	8
NEW YORK	69	122	.	.	.	1	.	.	1	1	3	2	1	3	9	212
NORTH CAROLINA	.	.	.	.	3	.	.	.	.	1	.	.	.	.	.	4
NORTH DAKOTA	6	.	.	2	.	3	4	3	3	22	31	10	.	.	.	84
OHIO	.	.	2	.	.	1	.	.	3	.	1	.	5	1	2	15
OKLAHOMA	.	.	.	.	.	.	1	.	.	.	1	1	.	1	.	4
OREGON	1	.	.	9	1	.	1	2	.	.	.	.	.	.	.	14
PENNSYLVANIA	1	.	.	.	.	.	.	.	.	.	.	.	.	.	2	3
RHODE ISLAND	1	4	10	2	1	12	63	1	.	.	.	.	.	.	.	94
SOUTH CAROLINA	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
SOUTH DAKOTA	.	.	.	.	7	3	.	.	.	.	.	.	.	.	.	10
TENNESSEE	.	1	.	.	.	.	.	.	.	1	1	.	.	.	2	5
TEXAS	1	2	1	.	.	1	1	1	.	.	1	.	.	15	33	56
UTAH	6	6	3	10	7	13	82	.	.	2	1	.	.	.	.	130
VERMONT	.	.	1	10	.	7	.	2	.	.	.	.	.	.	.	20
VIRGINIA	.	.	.	.	.	.	.	1	1	.	1	.	1	.	.	4
WASHINGTON	.	2	.	.	.	.	.	.	10	2	1	.	.	.	.	15

(Continued)

TABLE 10E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1985-1999

STATE	YEAR														TOTAL	
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
WEST VIRGINIA	4	8	5	4	10	2	8	3	12	.	.	.	.	.	.	56
WISCONSIN	.	69	61	49	34	39	30	82	52	.	.	.	.	.	.	416
TOTAL	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	596	489	19111