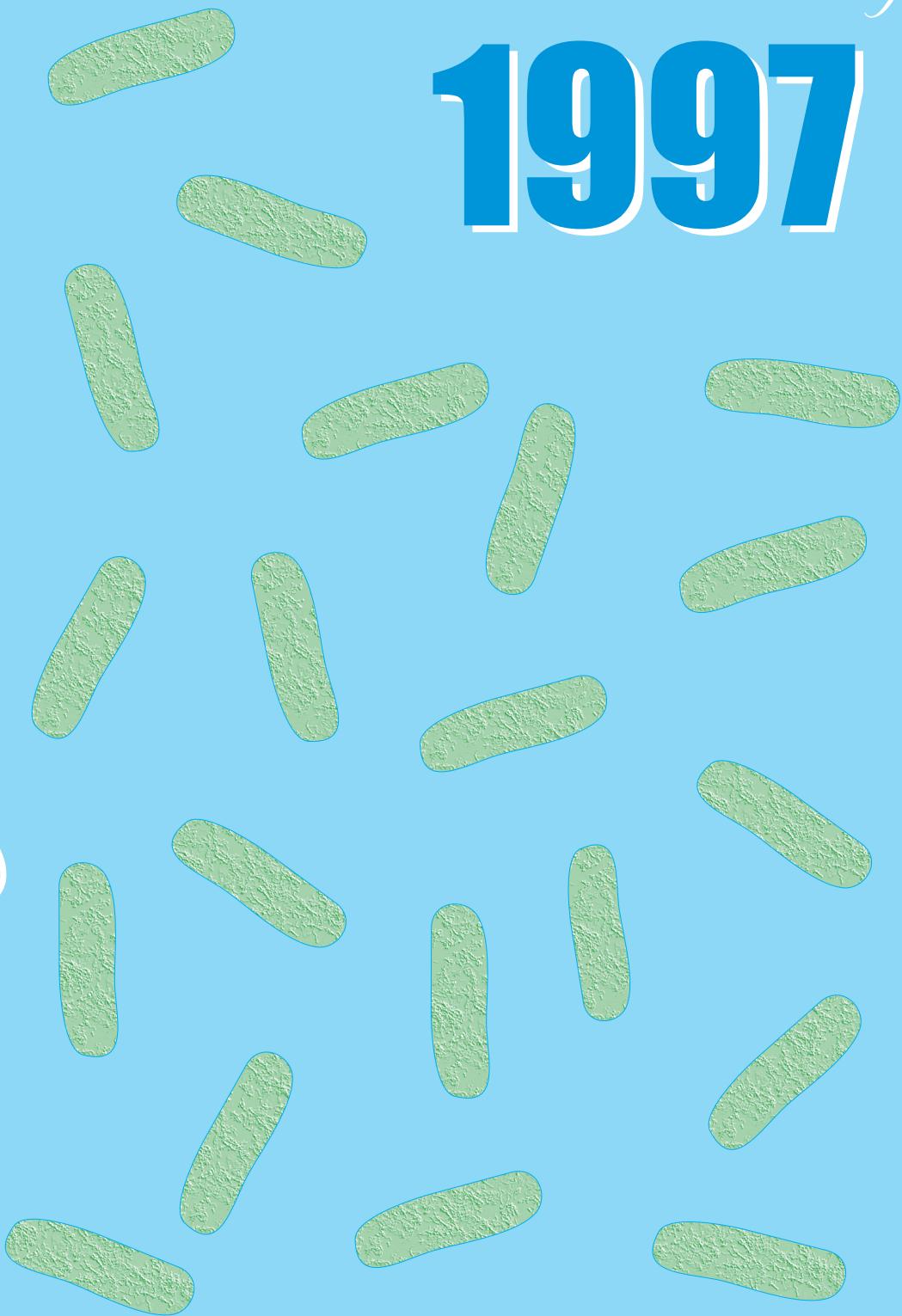


Shigella



Annual Summary
1997



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, 1997

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 (FDDB) 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.

			Carbohydrate fermentation		
Species	Group	Serotypes	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.



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TABLE 1
SHIGELLA SUBGROUPS REPORTED TO THE CDC
FOR 1997

RANK	SPECIES	NUMBER	PERCENT
1	SONNEI	8807	71.5
2	FLEXNERI	2573	20.9
3	BOYDII	253	2.1
4	DYSENTERIAE	79	0.6
	SUBTOTAL	11712	95.1
	UNKNOWN	602	4.9
	TOTAL	12314	100.0

TABLE 2
NUMBER OF REPORTED ISOLATES OF SHIGELLA
SEROTYPES FOR 1997

RANK	SEROTYPE	NUMBER	PERCENT
1	SONNEI	8807	71.5
2	FLEXNERI UNSPECIFIED	1214	9.9
3	FLEXNERI 2 UNSPECIFIED	423	3.4
4	FLEXNERI 3 UNSPECIFIED	248	2.0
5	FLEXNERI 1 UNSPECIFIED	238	1.9
6	BOYDII UNSPECIFIED	130	1.1
7	FLEXNERI 6	118	1.0
8	FLEXNERI 4 UNSPECIFIED	108	0.9
9	FLEXNERI 2A	85	0.7
10	BOYDII 2	54	0.4
11	FLEXNERI 5 UNSPECIFIED	47	0.4
12	DYSENTERIAE UNSPECIFIED	38	0.3
13	FLEXNERI 3A	26	0.2
14	BOYDII 4	20	0.2
15	FLEXNERI 1B	18	0.1
16	DYSENTERIAE 2	17	0.1
17	FLEXNERI 4A	13	0.1
18	BOYDII 1	12	0.1
19	BOYDII 14	11	0.1
20	FLEXNERI 2B	11	0.1
21	DYSENTERIAE 3	10	0.1
22	BOYDII 10	9	0.1
23	FLEXNERI 3B	7	0.1
24	DYSENTERIAE 1	6	0.0
25	FLEXNERI 1A	6	0.0
26	DYSENTERIAE 9	5	0.0
27	BOYDII 8	4	0.0
28	FLEXNERI 3C	4	0.0
29	FLEXNERI VARIANT Y	4	0.0
30	BOYDII 5	3	0.0
31	FLEXNERI VARIANT X	3	0.0
32	BOYDII 12	2	0.0
33	BOYDII 18	2	0.0
34	BOYDII 19	2	0.0
35	BOYDII 3	2	0.0
36	DYSENTERIAE 11	2	0.0
37	BOYDII 15	1	0.0
38	BOYDII 9	1	0.0
39	DYSENTERIAE 6	1	0.0
UNKNOWN		602	4.9
TOTAL		12314	100.0

TABLE 3
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF SHIGELLA WERE REPORTED FOR 1997

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	97	81	12	190
1 TO 4 YRS	1100	1057	82	2239
5 TO 9 YRS	811	772	54	1637
10 TO 19 YRS	362	290	18	670
20 TO 29 YRS	566	293	29	888
30 TO 39 YRS	445	333	14	792
40 TO 49 YRS	222	219	12	453
50 TO 59 YRS	119	94	8	221
60 TO 69 YRS	73	64	6	143
70 TO 79 YRS	35	29	4	68
80+ YEARS	15	6	.	21
UNKNOWN AGE	780	689	3523	4992
TOTAL	4625	3927	3762	12314

TABLE 3A
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF BOYDII WERE REPORTED FOR 1997

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	1	1	2	4
1 TO 4 YRS	8	12	2	22
5 TO 9 YRS	11	8	1	20
10 TO 19 YRS	6	6	1	13
20 TO 29 YRS	7	4	.	11
30 TO 39 YRS	4	8	.	12
40 TO 49 YRS	4	7	.	11
50 TO 59 YRS	5	2	.	7
60 TO 69 YRS	7	3	.	10
70 TO 79 YRS	.	3	.	3
80+ YEARS	2	1	.	3
UNKNOWN AGE	11	16	110	137
TOTAL	66	71	116	253

TABLE 3B
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF DYSENTERIAE WERE REPORTED FOR 1997

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	1	.	.	1
1 TO 4 YRS	6	7	1	14
5 TO 9 YRS	1	4	.	5
10 TO 19 YRS	4	2	.	6
20 TO 29 YRS	5	3	1	9
30 TO 39 YRS	3	2	.	5
40 TO 49 YRS	3	1	.	4
50 TO 59 YRS	1	3	.	4
60 TO 69 YRS	1	1	.	2
UNKNOWN AGE	1	.	28	29
TOTAL	26	23	30	79

TABLE 3C
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF FLEXNERI WERE REPORTED FOR 1997

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	17	14	2	33
1 TO 4 YRS	194	157	8	359
5 TO 9 YRS	85	85	11	181
10 TO 19 YRS	39	46	1	86
20 TO 29 YRS	88	88	6	182
30 TO 39 YRS	67	113	4	184
40 TO 49 YRS	40	58	.	98
50 TO 59 YRS	31	20	2	53
60 TO 69 YRS	19	18	.	37
70 TO 79 YRS	13	7	.	20
80+ YEARS	2	1	.	3
UNKNOWN AGE	134	145	1058	1337
TOTAL	729	752	1092	2573

TABLE 3D
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF SONNEI WERE REPORTED FOR 1997

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	78	66	8	152
1 TO 4 YRS	891	878	71	1840
5 TO 9 YRS	713	672	42	1427
10 TO 19 YRS	313	236	16	565
20 TO 29 YRS	464	196	22	682
30 TO 39 YRS	368	209	10	587
40 TO 49 YRS	175	153	12	340
50 TO 59 YRS	82	68	6	156
60 TO 69 YRS	46	42	6	94
70 TO 79 YRS	22	19	4	45
80+ YEARS	11	4	.	15
UNKNOWN AGE	631	528	1745	2904
TOTAL	3794	3071	1942	8807

TABLE 3E

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF UNKNOWN WERE REPORTED FOR 1997

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
1 TO 4 YRS	1	3	.	4
5 TO 9 YRS	1	3	.	4
20 TO 29 YRS	2	2	.	4
30 TO 39 YRS	3	1	.	4
50 TO 59 YRS	.	1	.	1
UNKNOWN AGE	3	.	582	585
TOTAL	10	10	582	602

TABLE 4

MEDIAN AGE OF PERSONS FROM WHOM ISOLATES OF SHIGELLA WERE REPORTED
BY SUBGROUP FOR 1983-1997

SUBGROUP	YEAR														
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
BOYDII	23	23	15	8	22	22	24	10	21	18	20	20	15	10	19
DYSENTERIAE	22	20	25	29	29	29	29	20	20	26	29	26	30	26	19
FLEXNERI	20	21	24	22	22	23	23	19	19	19	18	19	18	22	16
SONNEI	7	8	8	8	7	8	8	8	9	8	7	8	8	8	8
UNKNOWN	12	10	9	9	9	7	9	8	9	11	8	7	7	8	26

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

TABLE 5

NUMBER OF REPORTED SHIGELLA ISOLATES BY RESIDENCE
FOR 1983-1997

RESIDENCE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
PRIVATE HOME	3003	1401	1952	1530	1490	1574	1533	1501	3344	854	1489	920	815	342	608	22356
INSTITUTION	40	16	32	103	13	9	8	1	.	3	35	6	14	5	11	296
INDIAN RESERVATION	54	67	44	85	108	448	525	345	89	42	56	111	376	253	180	2783
OTHER	1024	916	792	872	396	174	70	49	97	37	38	35	28	95	174	4797
UNKNOWN	10836	10315	9056	9682	14757	20131	13836	15410	12975	13987	17893	17711	18097	13376	11341	209403
TOTAL	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	239635

TABLE 5A
NUMBER OF REPORTED S. BOYDII ISOLATES BY RESIDENCE
FOR 1983-1997

RESIDENCE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
PRIVATE HOME	23	19	19	24	25	28	27	30	29	10	10	12	12	5	12	285
INSTITUTION	.	1	.	.	1	.	.	.	.	.	1	1	.	1	1	5
INDIAN RESERVATION	.	.	2	2	.	.	.	.	.	.	.	5	33	6	6	48
OTHER	16	14	13	19	1	1	.	.	2	.	.	1	.	1	1	68
UNKNOWN	377	352	326	328	442	439	368	281	214	211	193	211	237	233	233	4540
TOTAL	416	386	358	373	356	472	466	398	312	224	221	207	229	275	253	4946

TABLE 5B

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY RESIDENCE
FOR 1983-1997

RESIDENCE	YEAR									TOTAL
	1983	1984	1985	1986	1987	1988	1989	1990	1991	
PRIVATE HOME	16	12	10	7	12	23	14	17	16	3
INSTITUTION	.	1	.	1	.	.	.	.	.	.
INDIAN RESERVATION	.	.	.	.	.	.	1	.	.	4
OTHER	11	12	10	7	3	1	.	.	.	2
UNKNOWN	158	154	189	104	216	187	202	164	128	119
TOTAL	185	179	209	118	232	211	216	181	145	126
										105
										94
										90
										79
										2273

TABLE 5C

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY RESIDENCE
FOR 1983-1997

RESIDENCE	YEAR									TOTAL
	1983	1984	1985	1986	1987	1988	1989	1990	1991	
PRIVATE HOME	660	361	312	333	324	325	326	311	270	195
INSTITUTION	1	4	1	8	3	1	.	.	1	.
INDIAN RESERVATION	20	42	39	80	85	108	97	93	43	30
OTHER	277	223	191	171	78	28	8	7	16	1
UNKNOWN	3266	3122	2990	2975	3270	3876	3251	3620	3383	3024
TOTAL	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250
										3101
										3019
										2704
										2573
										52307

TABLE 5D

NUMBER OF REPORTED S. SONNEI ISOLATES BY RESIDENCE
FOR 1983-1997

RESIDENCE	YEAR							TOTAL
	1983	1984	1985	1986	1987	1988	1990	
PRIVATE HOME	2207	961	1575	1117	1070	1167	1146	1246
INSTITUTION	39	10	31	84	9	7	8	639
INDIAN RESERVATION	34	24	5	2	20	248	407	248
OTHER	716	667	560	670	307	144	62	42
UNKNOWN	6279	6128	4904	5432	9876	13462	8619	9699
TOTAL	9275	7790	7075	7305	11282	15028	10242	11116
							10734	12446
							10106	14811
							1217	1785
							2935	1181
							727	8807
							160618	160618

TABLE 5E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP
BY RESIDENCE FOR 1983-1997

RESIDENCE	YEAR							TOTAL
	1983	1984	1985	1986	1987	1988	1990	
PRIVATE HOME	97	48	36	49	59	31	20	17
INSTITUTION	.	.	.	11	.	.	.	.
INDIAN RESERVATION	.	1	.	1	92	21	4	.
OTHER	4	.	18	5	7	.	1	.
UNKNOWN	756	559	647	843	1067	2164	1325	1559
TOTAL	857	608	701	909	1134	2287	1366	1602
							1214	1764
							2931	1175
							1181	726
							727	595
							1602	19491

TABLE 6

NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1997

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	4	8	6	9	12	17	14	9	17	16	7	11	130
BOYDII 1	.	.	.	.	1	1	3	.	.	2	1	4	12
BOYDII 2	4	4	3	8	7	7	4	7	4	4	1	1	54
BOYDII 3	.	1	.	.	.	.	.	.	1	.	.	.	2
BOYDII 4	1	1	1	1	2	1	5	1	1	4	.	2	20
BOYDII 5	1	.	.	.	.	.	.	.	1	1	.	.	3
BOYDII 8	.	.	1	.	.	.	.	2	.	.	.	1	4
BOYDII 9	.	.	.	.	.	.	.	.	.	1	.	.	1
BOYDII 10	.	.	1	1	1	1	2	.	2	.	1	.	9
BOYDII 12	1	1	.	.	.	.	.	.	.	.	.	.	2
BOYDII 14	1	.	.	1	1	.	1	2	2	2	1	.	11
BOYDII 15	.	.	.	.	1	.	.	.	.	.	.	.	1
BOYDII 18	.	1	.	.	.	.	.	1	.	.	.	.	2
BOYDII 19	1	.	1	.	.	.	.	.	.	.	.	.	2
DYSENTERIAE	1	3	14	.	.	.	2	6	3	1	3	5	38
DYSENTERIAE 1	.	.	.	.	.	2	1	.	1	.	.	2	6
DYSENTERIAE 2	.	1	2	1	.	.	5	2	.	3	2	1	17
DYSENTERIAE 3	.	.	1	2	2	.	1	3	1	.	.	.	10
DYSENTERIAE 6	.	.	.	.	.	.	.	.	.	.	1	.	1
DYSENTERIAE 9	.	.	1	1	.	.	.	1	1	.	1	.	5
DYSENTERIAE 11	.	.	.	.	1	1	.	.	.	.	.	.	2
FLEXNERI	66	84	96	87	72	102	89	123	111	122	134	128	1214
FLEXNERI 1 UNSPECIFIED	20	17	19	22	13	22	15	32	22	23	12	21	238
FLEXNERI 1A	.	.	1	.	.	.	1	1	2	1	.	.	6
FLEXNERI 1B	4	1	.	2	.	1	.	2	3	.	2	3	18
FLEXNERI 2 UNSPECIFIED	38	24	36	51	35	31	48	44	34	23	27	32	423
FLEXNERI 2A	9	7	4	5	4	6	10	9	8	13	6	4	85
FLEXNERI 2B	.	.	2	1	.	.	2	4	1	1	.	.	11
FLEXNERI 3 UNSPECIFIED	17	17	13	24	33	15	38	21	22	21	17	10	248
FLEXNERI 3A	.	1	.	1	3	3	4	4	2	3	3	2	26

(Continued)

TABLE 6
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1997

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
FLEXNERI 3B	.	.	1	1	2	1	.	.	.	1	1	.	7
FLEXNERI 3C	1	.	.	.	1	.	.	.	1	.	.	1	4
FLEXNERI 4 UNSPECIFIED	10	7	12	9	8	10	12	9	16	6	6	3	108
FLEXNERI 4A	3	.	.	3	2	.	1	.	1	3	.	.	13
FLEXNERI 5 UNSPECIFIED	3	7	3	3	2	4	6	6	2	5	4	2	47
FLEXNERI 6	4	10	8	10	9	12	10	13	15	15	4	8	118
FLEXNERI VARIANT X	.	.	.	.	2	.	.	.	.	.	1	.	3
FLEXNERI VARIANT Y	.	1	.	.	1	.	.	.	.	1	1	.	4
SONNEI	436	432	474	368	451	538	716	1112	1045	1193	1003	1039	8807
UNKNOWN	13	30	46	23	32	53	27	86	80	53	48	111	602
TOTAL	638	658	746	634	698	828	1017	1500	1399	1518	1287	1391	12314

TABLE 7
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1983-1997

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	168	160	142	122	177	228	306	359	415	433	320	264	3094
BOYDII 1	5	9	10	12	16	8	20	20	21	22	12	18	173
BOYDII 2	49	38	45	59	78	86	105	136	144	92	72	53	957
BOYDII 3	2	2	1	2	4	1	.	.	2	.	1	.	15
BOYDII 4	17	7	12	16	14	21	31	36	35	22	19	12	242
BOYDII 5	5	6	1	4	5	3	3	5	8	5	3	1	49
BOYDII 6	.	.	.	.	.	1	4	2	1	1	.	.	9
BOYDII 7	1	2	.	1	.	.	1	2	.	1	.	1	9
BOYDII 8	.	.	2	.	1	1	.	4	1	1	1	3	14
BOYDII 9	.	.	1	1	2	.	.	1	2	5	1	.	13
BOYDII 10	5	5	4	5	11	11	24	26	19	16	8	14	148
BOYDII 11	.	.	1	1	1	.	2	1	2	1	1	1	11
BOYDII 12	1	2	.	.	1	.	.	4	3	2	.	1	14
BOYDII 13	1	.	.	.	.	.	.	1	.	1	.	.	3
BOYDII 14	9	4	5	11	14	12	26	30	18	19	12	10	170
BOYDII 15	.	.	1	.	1	.	.	1	1	.	.	.	4
BOYDII 16	.	.	.	1	.	.	.	.	.	.	.	.	1
BOYDII 17	.	.	.	.	.	1	.	.	.	.	.	.	1
BOYDII 18	2	1	.	2	3	.	.	2	1	2	2	2	17
BOYDII 19	1	.	1	.	.	.	.	.	.	.	.	.	2
DYSENTERIAE	93	88	97	106	73	96	131	160	221	191	217	107	1580
DYSENTERIAE 1	9	4	7	11	7	6	15	21	11	20	2	19	132
DYSENTERIAE 2	18	30	16	15	17	25	41	32	30	27	23	15	289
DYSENTERIAE 3	6	5	9	8	19	10	19	33	27	10	14	9	169
DYSENTERIAE 4	2	6	2	2	2	3	2	7	4	3	2	3	38
DYSENTERIAE 5	.	.	.	.	1	.	.	.	2	.	.	.	3
DYSENTERIAE 6	.	.	.	.	1	.	2	1	1	.	1	.	6
DYSENTERIAE 7	.	1	.	1	2	1	.	1	.	1	.	.	7
DYSENTERIAE 8	.	1	.	.	1	.	1	.	.	.	1	.	4
DYSENTERIAE 9	.	1	1	3	6	2	4	4	2	3	5	3	34

(Continued)

TABLE 7
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1983-1997

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	2046	2031	2185	2124	2127	2070	2634	3112	3264	3216	2670	2661	30140
FLEXNERI 1 UNSPECIFIED	330	303	321	296	347	362	451	509	530	534	366	323	4672
FLEXNERI 1A	43	51	56	54	62	43	56	85	87	64	46	32	679
FLEXNERI 1B	61	68	60	53	48	89	64	184	159	73	68	77	1004
FLEXNERI 2 UNSPECIFIED	409	370	368	392	481	423	541	611	521	443	368	370	5297
FLEXNERI 2A	132	140	139	151	149	157	208	251	212	178	116	126	1959
FLEXNERI 2B	30	29	31	18	17	30	27	43	45	34	29	17	350
FLEXNERI 3 UNSPECIFIED	182	180	173	212	244	178	317	254	252	258	194	201	2645
FLEXNERI 3A	65	74	73	60	70	76	103	108	129	94	66	63	981
FLEXNERI 3B	7	7	18	9	9	12	11	23	6	10	10	8	130
FLEXNERI 3C	3	3	4	9	9	5	10	5	6	5	4	3	66
FLEXNERI 4 UNSPECIFIED	138	97	121	136	148	149	176	188	193	144	126	125	1741
FLEXNERI 4A	33	38	42	62	39	38	45	53	49	56	39	42	536
FLEXNERI 4B	5	2	2	4	6	6	9	2	6	2	3	2	49
FLEXNERI 5 UNSPECIFIED	25	22	25	19	28	48	42	34	39	30	20	24	356
FLEXNERI 6	101	89	103	121	106	120	196	194	229	180	149	96	1684
FLEXNERI VARIANT X	.	.	1	.	2	.	.	.	.	1	1	.	5
FLEXNERI VARIANT Y	3	1	2	.	2	.	.	1	1	1	2	.	13
SONNEI	9257	8026	8777	8627	9914	11497	14767	20208	20077	19539	15938	13991	160618
UNKNOWN	1068	1017	1080	1138	1422	1462	1782	2150	2377	2186	1863	1946	19491
TOTAL	14332	12920	13939	13868	15688	17282	22179	28906	29154	27928	22796	20643	239635

TABLE 8

NUMBER OF REPORTED SHIGELLA ISOLATES BY REGION
FOR 1983-1997

REGION	YEAR						TOTAL
	1983	1984	1985	1986	1987	1988	
NEW ENGLAND	543	354	861	729	645	651	546
MID-ATLANTIC	2050	1094	1607	1263	2331	1179	1310
EAST NORTH CENTRAL	1881	1863	1494	1550	3816	3597	2673
WEST NORTH CENTRAL	530	495	387	330	671	1151	1359
SOUTH ATLANTIC	990	997	683	686	1425	2562	2568
EAST SOUTH CENTRAL	155	114	188	60	219	683	482
WEST SOUTH CENTRAL	1619	1263	1218	1611	1671	2535	1408
MOUNTAIN	1525	1150	1223	1137	1174	1692	1161
PACIFIC	5664	5385	4215	4906	4812	8286	4465
TOTAL	14957	12715	11876	12272	16764	22336	15972
							16505
							14923
							19511
							18783
							19330
							14071
							12314
							239635

TABLE 8A

NUMBER OF REPORTED S. SONNEI ISOLATES BY REGION
FOR 1983-1997

REGION	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
NEW ENGLAND	383	214	713	596	491	481	358	448	1573	435	428	302	456	264	341	7483
MID-ATLANTIC	1629	823	1128	772	2030	883	1015	1321	1020	880	985	1325	1527	2048	1664	19050
EAST NORTH CENTRAL	1470	1458	1110	1123	3279	2685	2061	1443	1176	1671	2440	1707	1773	896	1242	25534
WEST NORTH CENTRAL	414	354	246	147	503	870	1084	446	255	478	698	1166	1281	575	405	8922
SOUTH ATLANTIC	705	704	450	462	1099	2155	2268	1535	1210	1451	2280	2695	1966	1772	999	21751
EAST SOUTH CENTRAL	124	103	179	52	136	523	319	513	587	152	341	649	511	232	211	4632
WEST SOUTH CENTRAL	1071	767	817	1161	1293	2103	1022	1415	1072	1268	2765	1595	1721	1085	1514	20669
MOUNTAIN	654	575	554	571	470	921	522	1124	1601	722	824	920	2180	1115	695	13448
PACIFIC	2825	2792	1878	2421	1981	4407	1593	2871	2240	3049	3578	2087	3396	2275	1736	39129
TOTAL	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	160618

TABLE 8B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY REGION
FOR 1983-1997

REGION	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
NEW ENGLAND	142	114	128	93	109	127	150	122	94	107	92	106	115	94	123	1716
MID-ATLANTIC	335	256	377	341	278	257	269	254	227	177	211	213	206	179	188	3768
EAST NORTH CENTRAL	345	344	326	314	361	422	439	465	339	330	287	238	289	267	185	4951
WEST NORTH CENTRAL	90	103	108	168	134	156	168	125	115	77	67	121	71	105	82	1690
SOUTH ATLANTIC	93	102	90	116	154	143	101	156	124	137	173	343	196	122	120	2170
EAST SOUTH CENTRAL	30	10	8	6	9	8	9	10	8	2	4	18	7	7	20	156
WEST SOUTH CENTRAL	491	435	346	380	328	376	333	367	280	170	136	141	188	113	184	4268
MOUNTAIN	774	509	548	496	556	503	472	381	491	371	382	353	464	441	484	7225
PACIFIC	1924	1879	1602	1653	1831	2346	1741	2151	2034	1879	1709	1568	1483	1376	1187	26363
TOTAL	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	52307

TABLE 8C

NUMBER OF REPORTED S. BOYDII ISOLATES BY REGION
FOR 1983-1997

REGION	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
NEW ENGLAND	7	10	8	6	14	7	16	17	12	4	.	5	11	6	14	137
MID-ATLANTIC	8	8	16	16	21	17	10	10	6	11	15	12	5	13	184	
EAST NORTH CENTRAL	42	38	35	37	28	64	42	29	20	16	30	19	31	19	23	473
WEST NORTH CENTRAL	6	4	1	1	2	6	5	5	7	3	.	7	6	3	4	60
SOUTH ATLANTIC	11	2	3	6	7	5	10	8	8	5	10	27	7	10	7	126
EAST SOUTH CENTRAL	1	1	.	1	2	2	1	1	.	1	.	.	.	2	.	12
WEST SOUTH CENTRAL	47	35	33	54	36	39	37	35	44	11	33	24	27	19	27	501
MOUNTAIN	48	34	66	43	59	52	48	47	30	14	14	18	32	91	41	637
PACIFIC	246	254	196	209	192	276	290	246	181	164	123	92	103	120	124	2816
TOTAL	416	386	358	373	356	472	466	398	312	224	221	207	229	275	253	4946

TABLE 8D

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY REGION
FOR 1983-1997

REGION	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
NEW ENGLAND	2	6	5	4	4	12	9	8	6	6	.	.	3	6	6	77
MID-ATLANTIC	7	7	16	11	7	18	9	9	6	8	2	6	6	6	8	126
EAST NORTH CENTRAL	22	20	20	7	27	21	23	15	11	21	4	6	11	8	2	218
WEST NORTH CENTRAL	6	2	3	3	8	8	7	3	1	6	1	2	1	2	2	55
SOUTH ATLANTIC	15	4	1	2	4	4	2	5	6	4	4	5	2	8	5	71
EAST SOUTH CENTRAL	.	1	1	1	2	.	2	.	1	1	1	1	.	.	2	12
WEST SOUTH CENTRAL	8	26	20	13	12	17	15	14	10	2	9	10	5	7	6	174
MOUNTAIN	20	19	14	9	10	8	25	7	12	5	12	9	6	18	12	186
PACIFIC	105	95	129	68	159	121	126	118	93	73	72	55	56	48	36	1354
TOTAL	185	179	209	118	232	211	216	181	145	126	105	94	90	103	79	2273

TABLE 8E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP
BY REGION FOR 1983-1997

REGION	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
NEW ENGLAND	9	10	7	30	27	24	13	51	72	3	.	1	1	3	2	253
MID-ATLANTIC	71	.	70	123	.	.	1	.	.	6	3	7	2	1	284	
EAST NORTH CENTRAL	2	3	3	69	121	405	108	144	97	116	55	.	1	.	5	1129
WEST NORTH CENTRAL	14	32	29	11	24	111	95	51	25	25	62	72	32	14	1	598
SOUTH ATLANTIC	166	185	139	100	161	255	187	190	217	130	393	1720	10	.	5	3858
EAST SOUTH CENTRAL	.	.	.	71	148	153	273	320	149	422	355	284	93	.	2268	
WEST SOUTH CENTRAL	2	.	2	3	2	.	1	1	3	2	.	1	3	1	.	21
MOUNTAIN	29	13	41	18	79	208	94	96	114	62	116	136	31	.	6	1043
PACIFIC	564	365	410	555	649	1136	715	773	754	730	731	647	812	614	582	10037
TOTAL	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	19491

TABLE 9

NUMBER OF REPORTED SHIGELLA SUBGROUP ISOLATES BY YEAR FOR 1983-1997

SUBGROUP	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
BOYDII	416	386	358	373	356	472	466	398	312	224	221	207	229	275	253	4946
DYSENTERIAE	185	179	209	118	232	211	216	181	145	126	105	94	90	103	79	2273
FLEXNERI	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	52307
SONNEI	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	160618
UNKNOWN	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	19491
TOTAL	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	239635

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
ALABAMA	111	78	155	50	122	444	332	514	450	160	341	479	383	110	193	3922
ALASKA	3	11	19	2	5	9	14	7	30	19	21	14	10	59	3	226
ARIZONA	788	450	599	513	512	365	291	498	577	399	369	401	815	695	694	7966
ARKANSAS	34	14	22	27	44	94	43	20	91	18	100	61	96	100	60	824
CALIFORNIA	5091	4873	3845	4489	4341	7883	4132	5703	4473	5217	5175	3757	5347	3879	3222	71427
COLORADO	230	277	101	158	290	371	411	385	216	364	614	529	485	484	199	5114
CONNECTICUT	173	101	107	112	203	162	233	192	108	131	212	146	148	121	81	2230
DELAWARE	.	2	25	1	.	20	60	109	4	7	60	11	125	66	21	511
DISTRICT OF COLUMBIA	1	.	.	188	240	142	12	59	45	63	26	19	199	200	8	1202
FLORIDA	85	106	181	64	35	487	500	199	378	263	248	721	319	275	245	4106
GEORGIA	245	211	196	133	331	657	518	620	532	560	494	2062	176	173	244	7152
HAWAII	146	166	154	81	82	59	69	60	80	119	89	193	102	86	55	1541
IDAHO	18	25	5	.	.	1	2	.	1	13	16	30	74	54	39	277
ILLINOIS	1051	1008	973	1020	2516	1593	883	932	759	910	1142	1030	1215	525	842	16399
INDIANA	226	247	86	76	296	925	306	350	334	209	173	181	103	71	30	3613
IOWA	67	98	19	22	108	320	82	47	30	42	45	323	240	115	72	1630
KANSAS	62	52	63	65	21	52	82	62	56	83	110	57	106	32	80	983
KENTUCKY	23	29	16	10	2	34	16	11	204	28	45	83	86	45	40	672
LOUISIANA	192	242	127	279	440	517	325	214	120	87	303	314	378	344	114	3996
MAINE	9	12	12	6	7	7	9	5	4	9	2	4	.	6	.	92
MARYLAND	227	152	95	101	428	540	151	147	50	276	262	201	226	447	176	3479
MASSACHUSETTS	314	197	683	541	324	325	244	341	1387	240	256	209	288	169	299	5817

(Continued)

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MICHIGAN	179	173	261	113	283	473	772	342	193	494	645	329	454	341	249	5301
MINNESOTA	91	111	175	66	163	349	426	122	80	90	236	467	166	164	141	2847
MISSISSIPPI	21	7	17	.	95	205	134	274	261	117	382	461	333	179	.	2486
MISSOURI	227	151	59	45	291	316	213	170	139	273	336	292	609	272	161	3554
MONTANA	19	15	51	26	42	258	97	46	136	120	12	2	203	28	5	1060
NEBRASKA	2	1	3	11	3	.	1	5	1	6	1	2	4	4	17	61
NEVADA	30	4	2	8	6	4	27	8	2	6	3	2	19	13	13	147
NEW HAMPSHIRE	16	13	28	39	28	54	27	63	40	6	10	10	79	26	21	460
NEW JERSEY	384	358	158	268	216	216	202	226	220	274	388	675	342	480	4796	
NEW MEXICO	327	304	374	300	273	606	254	462	303	164	272	235	408	177	192	4651
NEW YORK	1197	404	857	723	1785	475	423	770	361	451	453	697	548	305	790	10239
NORTH CAROLINA	254	315	99	110	88	306	932	555	228	307	1089	1130	593	186	173	6365
NORTH DAKOTA	7	24	19	19	25	28	193	143	25	13	13	59	126	58	3	755
OHIO	189	239	114	54	127	128	403	212	97	77	585	276	260	221	307	3289
OKLAHOMA	70	55	128	127	97	75	93	187	130	97	214	85	132	157	134	1781
OREGON	70	99	55	46	51	50	51	101	350	144	108	87	113	125	173	1623
PENNSYLVANIA	469	301	392	382	278	488	671	623	676	400	488	477	535	1593	604	8377
RHODE ISLAND	23	19	26	25	72	34	28	30	214	163	32	43	65	43	83	900
SOUTH CAROLINA	53	107	36	14	99	83	112	110	38	68	113	180	115	78	30	1236
SOUTH DAKOTA	74	58	49	102	60	86	362	81	72	82	87	168	140	54	20	1495
TENNESSEE	193	167	192	101	321	1002	256	257	193	561	1049	709	440	242	343	6026
TEXAS	1130	785	749	1077	769	847	691	1154	875	690	1277	602	898	382	1080	13006

(Continued)

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
UTAH	105	72	91	132	51	88	80	254	1014	108	54	235	705	212	95	3296
VERMONT	8	12	5	6	11	69	5	15	4	6	8	2	6	8	2	167
VIRGINIA	111	99	33	57	169	305	260	74	257	165	530	466	401	456	226	3609
WASHINGTON	354	236	142	288	333	285	199	288	369	396	820	398	278	284	212	4882
WEST VIRGINIA	14	5	18	18	35	22	23	21	33	18	38	.	27	31	13	316
WISCONSIN	236	196	60	287	594	478	309	260	260	464	271	154	73	32	29	3703
WYOMING	8	3	.	.	.	.	.	.	.	.	8	2	4	2	1	28
TOTAL	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	14071	12314	239635

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
ALABAMA	87	69	150	42	69	391	262	365	361	111	200	356	281	103	184	3031
ALASKA	2	7	16	·	4	6	5	2	26	17	13	10	10	53	2	173
ARIZONA	288	253	212	169	202	112	73	309	294	166	149	196	523	327	373	3646
ARKANSAS	28	11	18	23	42	87	38	19	89	16	99	58	96	97	60	781
CALIFORNIA	2496	2506	1714	2176	1670	4209	1448	2632	1632	2580	2806	1657	3126	1993	1508	34153
COLORADO	152	145	47	92	124	228	236	255	112	245	444	329	365	394	129	3297
CONNECTICUT	141	72	81	95	172	132	207	172	93	101	199	117	127	104	57	1870
DELAWARE	·	1	25	·	·	20	60	108	3	6	58	8	122	66	16	493
DISTRICT OF COLUMBIA	1	·	146	205	109	7	39	20	45	12	4	166	188	4	946	
FLORIDA	63	103	178	58	27	480	495	188	371	252	237	694	305	261	233	3945
GEORGIA	60	23	43	43	155	392	313	399	293	404	68	149	131	141	213	2827
HAWAII	83	91	71	44	34	18	24	22	23	46	26	125	44	17	23	691
IDAHO	8	12	1	·	·	·	1	·	10	9	17	72	50	30	210	
ILLINOIS	773	745	674	767	2231	1238	559	567	524	674	910	860	995	339	702	12558
INDIANA	193	220	75	56	219	545	202	224	238	168	160	161	85	57	22	2625
IOWA	48	80	7	15	90	200	51	29	18	27	34	263	231	101	57	1251
KANSAS	44	36	49	54	12	43	73	48	41	73	104	47	100	22	75	821
KENTUCKY	22	27	15	10	·	33	14	9	200	27	43	76	84	43	27	630
LOUISIANA	134	195	84	249	407	492	304	195	103	78	288	304	365	329	102	3629
MAINE	2	5	11	3	5	6	5	3	3	5	2	3	·	·	·	53
MARYLAND	199	122	65	64	391	516	130	115	35	239	213	134	194	413	154	2984
MASSACHUSETTS	216	116	592	474	243	223	125	227	1300	176	187	143	206	109	194	4531

(Continued)

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MICHIGAN	140	133	224	77	225	422	706	284	142	408	590	287	387	285	209	4519
MINNESOTA	52	60	122	30	114	305	314	56	42	54	166	385	133	105	95	2033
MISSISSIPPI	15	7	14	.	67	99	43	139	26	14	98	217	146	86	.	971
MISSOURI	217	142	54	33	274	291	187	144	117	264	329	280	599	260	150	3341
MONTANA	4	3	3	8	19	108	66	14	122	118	11	1	196	27	4	704
NEBRASKA	2	1	1	5	2	.	1	.	1	5	1	2	4	3	17	45
NEVADA	25	3	1	6	4	.	21	3	.	4	2	2	13	9	4	97
NEW HAMPSHIRE	6	4	16	11	10	38	5	29	29	3	7	8	76	21	18	281
NEW JERSEY	321	329	304	120	223	150	160	155	180	177	222	331	599	285	428	3984
NEW MEXICO	136	137	242	216	107	434	100	333	184	85	176	175	327	108	111	2871
NEW YORK	901	241	479	362	1578	313	267	602	231	347	321	557	427	219	677	7522
NORTH CAROLINA	230	289	71	92	61	276	911	514	200	284	1059	1105	560	164	136	5952
NORTH DAKOTA	4	20	7	4	11	13	176	135	20	5	5	37	95	47	2	581
OHIO	168	214	94	42	103	110	377	187	84	68	575	266	246	203	295	3032
OKLAHOMA	54	27	104	88	78	63	81	176	116	87	209	77	116	147	129	1552
OREGON	32	58	15	32	26	22	15	59	317	116	53	50	73	59	111	1038
PENNSYLVANIA	407	253	345	290	229	420	588	564	609	356	442	437	501	1544	559	7544
RHODE ISLAND	12	11	10	9	53	24	13	14	144	147	27	29	45	24	70	632
SOUTH CAROLINA	48	99	33	10	93	74	107	100	31	58	111	172	110	75	23	1144
SOUTH DAKOTA	47	15	6	6	.	18	282	34	16	50	59	152	119	37	9	850
TENNESSEE	173	156	179	85	304	984	248	181	547	1028	692	418	228	321	5792	
TEXAS	682	378	432	716	462	477	351	777	583	540	1141	464	726	284	902	8915

(Continued)

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
UTAH	40	20	48	80	14	39	26	209	889	94	30	200	680	199	43	2611
VERMONT	6	6	3	4	8	58	3	3	4	3	6	2	2	6	2	116
VIRGINIA	97	67	23	41	141	274	234	55	232	148	498	429	351	435	207	3232
WASHINGTON	212	130	62	169	247	152	101	156	242	290	680	245	143	153	92	3074
WEST VIRGINIA	7	.	12	8	26	14	11	17	25	15	24	.	27	29	13	228
WISCONSIN	196	146	43	181	501	370	217	181	188	353	205	133	60	12	14	2800
WYOMING	1	2	.	.	.	.	.	.	.	.	3	.	4	1	1	12
TOTAL	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	10262	8807	160618

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
ALABAMA	23	8	4	6	6	3	3	6	3	.	2	11	5	7	7	94
ALASKA	1	4	2	1	1	3	8	2	4	2	6	4	.	6	1	45
ARIZONA	462	175	337	312	261	208	181	150	259	225	212	197	263	279	287	3808
ARKANSAS	6	3	3	4	1	6	3	1	1	2	1	2	.	2	.	35
CALIFORNIA	1702	1669	1410	1497	1689	2175	1577	1957	1831	1689	1478	1323	1269	1130	1000	23396
COLORADO	66	115	46	57	106	82	96	65	71	52	44	61	87	83	58	1089
CONNECTICUT	32	24	23	15	24	25	21	17	13	26	13	25	18	15	23	314
DELAWARE	.	.	.	.	.	.	.	1	1	1	1	2	3	.	5	14
DISTRICT OF COLUMBIA	.	.	20	23	30	4	19	24	18	13	15	28	10	4	208	
FLORIDA	20	3	3	6	7	7	4	9	4	8	9	5	12	10	11	118
GEORGIA	20	7	17	28	13	29	31	27	32	44	198	41	30	26	560	
HAWAII	57	74	82	36	47	41	42	36	57	72	63	68	57	67	31	830
IDAHO	9	13	4	.	.	.	1	.	1	3	7	13	2	4	9	65
ILLINOIS	240	230	260	213	253	285	283	340	222	208	204	157	192	167	124	3378
INDIANA	24	21	10	18	19	25	29	21	24	8	12	17	17	14	8	267
IOWA	9	14	8	5	11	24	18	8	8	7	5	11	9	13	15	165
KANSAS	17	15	14	9	6	9	9	12	13	7	6	9	5	9	4	144
KENTUCKY	1	2	1	.	1	1	2	2	4	.	2	6	2	.	13	37
LOUISIANA	57	46	40	29	33	22	21	19	16	8	13	10	12	14	11	351
MAINE	7	7	1	3	2	.	4	.	1	4	.	1	.	6	.	36
MARYLAND	18	28	30	34	35	23	20	31	11	31	45	61	32	32	18	449
MASSACHUSETTS	93	72	88	61	73	89	103	95	71	60	69	66	73	50	90	1153

(Continued)

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MICHIGAN	36	37	27	34	53	47	53	50	45	82	51	39	59	54	34	701
MINNESOTA	27	20	30	27	27	23	32	26	20	20	16	75	28	53	40	464
MISSISSIPPI	6	.	3	.	2	4	4	2	1	2	.	1	.	.	.	25
MISSOURI	8	7	5	11	15	21	21	26	18	8	7	10	8	11	11	187
MONTANA	4	7	14	5	4	7	2	7	9	1	1	1	6	1	.	69
NEBRASKA	.	.	2	6	1	.	.	5	.	.	.	.	.	1	.	15
NEVADA	5	.	1	2	2	4	6	4	1	2	.	.	5	.	6	38
NEW HAMPSHIRE	5	2	3	3	4	9	2	2	3	3	3	2	3	3	2	49
NEW JERSEY	58	53	51	34	41	58	51	44	43	42	42	49	69	49	46	730
NEW MEXICO	177	158	114	74	151	165	145	124	110	75	89	52	78	65	74	1651
NEW YORK	217	156	282	231	192	144	142	155	122	93	125	128	107	81	101	2276
NORTH CAROLINA	22	25	28	17	25	27	18	39	26	23	30	22	32	20	34	388
NORTH DAKOTA	3	4	6	15	14	12	16	5	1	3	5	.	.	1	1	86
OHIO	20	23	16	12	18	15	24	21	10	9	6	5	9	16	7	211
OKLAHOMA	16	25	22	35	16	11	9	10	11	9	4	5	14	8	4	199
OREGON	38	33	36	14	17	18	27	39	31	19	47	32	37	61	54	503
PENNSYLVANIA	60	47	44	76	45	55	76	55	62	42	44	36	30	49	41	762
RHODE ISLAND	4	6	11	10	5	8	12	3	7	13	5	12	19	18	8	141
SOUTH CAROLINA	5	8	2	4	6	9	5	10	7	9	1	7	5	3	7	88
SOUTH DAKOTA	26	43	43	95	60	67	72	43	55	32	28	16	21	17	11	629
TENNESSEE	17	10	13	11	13	17	6	8	12	14	13	21	14	20	203	
TEXAS	395	351	268	301	265	320	294	329	240	137	104	111	141	75	149	3480

(Continued)

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
UTAH	47	41	32	46	32	37	42	30	41	13	24	29	23	8	50	495
VERMONT	1	3	2	1	2	1	5	1	5	1	2	2	2	2	·	23
VIRGINIA	7	30	8	16	27	30	19	15	24	15	28	33	43	15	15	325
WASHINGTON	126	99	72	105	77	109	87	117	111	97	115	141	120	112	101	1589
WEST VIRGINIA	1	1	2	2	3	4	2	1	·	·	2	·	·	2	·	20
WISCONSIN	25	33	13	37	18	50	50	33	38	23	14	20	12	16	12	394
WYOMING	4	·	·	·	·	·	·	·	·	5	·	·	1	·	10	
TOTAL	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	2704	2573	52307

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
ALABAMA	1	1	.	1	1	1	1	.	.	.	.	.	.	.	.	6
ALASKA	.	.	1	.	.	.	.	2	.	.	1	.	.	.	.	4
ARIZONA	24	21	47	30	43	38	30	35	17	6	5	5	22	73	26	422
ARKANSAS	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1
CALIFORNIA	234	248	185	201	181	258	274	232	171	151	105	81	91	102	105	2619
COLORADO	9	5	2	6	3	7	11	5	4	3	3	3	5	6	10	82
CONNECTICUT	.	2	2	1	5	2	1	1	2	2	.	3	3	1	1	26
DELAWARE	.	.	.	1	.	.	.	.	.	.	1	1	.	.	.	3
DISTRICT OF COLUMBIA	.	.	.	1	1	1	.	1	.	.	.	.	2	.	.	7
FLORIDA	2	.	.	.	.	.	.	1	1	2	.	.	.	1	1	8
GEORGIA	5	.	1	2	2	.	1	2	2	1	2	1	2	19	.	39
HAWAII	2	.	1	1	.	1	.	.	1	.	.	.	1	1	.	9
IDAHO	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
ILLINOIS	27	22	23	35	19	54	27	15	9	9	26	10	18	15	16	325
INDIANA	7	4	1	.	2	1	2	2	3	.	.	2	1	.	.	25
IOWA	.	1	1	.	.	1	1	.	1	.	1	.	1	.	.	8
KANSAS	1	.	.	2	.	.	.	2	2	.	1	.	1	.	1	10
KENTUCKY	.	.	.	.	.	.	.	.	1	.	.	.	2	.	3	
LOUISIANA	1	.	2	1	.	2	.	.	1	.	2	.	1	1	1	12
MAINE	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1	
MARYLAND	1	.	.	1	2	.	.	1	2	2	4	3	.	2	2	20
MASSACHUSETTS	3	7	2	4	7	5	11	14	10	2	.	.	6	4	10	85

(Continued)

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MICHIGAN	3	2	7	2	1	1	5	5	3	2	3	2	7	1	4	48
MINNESOTA	3	1	.	.	5	1	2	1	1	.	3	4	2	3	26	
MISSISSIPPI	.	.	.	1	1	.	1	.	.	.	.	.	.	.	3
MISSOURI	1	2	.	.	.	2	.	3	1	.	2	1	.	.	12	
MONTANA	.	.	1	.	.	.	1	.	.	.	.	.	.	1	3
NEVADA	.	1	.	.	.	.	1	1	.	.	.	1	4	1	9
NEW HAMPSHIRE	2	.	3	.	.	1	.	.	.	.	.	.	.	.	6
NEW JERSEY	4	4	1	2	2	7	3	3	1	.	3	5	3	3	45	
NEW MEXICO	12	6	14	6	11	5	5	4	7	4	6	6	3	3	1	93
NEW YORK	3	3	14	2	10	12	11	6	4	6	6	7	7	2	8	101
NORTH CAROLINA	1	1	.	1	.	3	.	1	.	.	1	4	4	1	1	12
OHIO	1	2	2	.	1	1	1	3	3	.	1	4	4	1	.	24
OKLAHOMA	.	2	.	3	3	.	1	1	.	.	1	3	1	.	.	15
OREGON	.	2	3	.	4	1	6	2	1	6	7	3	2	3	4	44
PENNSYLVANIA	1	1	12	4	2	3	1	5	.	2	3	2	.	1	38	
RHODE ISLAND	1	.	1	.	2	.	2	1	.	.	2	1	1	3	14	
SOUTH CAROLINA	.	.	.	.	.	.	.	.	1	1	.	.	.	.	2
SOUTH DAKOTA	1	.	1	.	.	1	.	1	.	.	.	.	.	.	4
TENNESSEE	1	.	4	1	.	1	1	.	.	4	1	.	.	1	14	
TEXAS	45	33	31	46	32	36	35	33	43	11	26	20	25	18	25	459
UTAH	2	1	3	.	2	2	2	1	1	.	3	1	5	2	26	
VERMONT	1	1	.	1	.	.	1	.	.	.	1	.	.	.	5	

(Continued)

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
VIRGINIA	2	1	2	.	1	1	7	3	.	1	2	2	4	5	2	33
WASHINGTON	10	4	6	7	6	17	9	10	9	6	10	8	9	14	15	140
WEST VIRGINIA	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	2
WISCONSIN	4	8	2	.	5	7	7	4	2	5	.	1	1	2	3	51
WYOMING	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1	1
TOTAL	416	386	358	373	356	472	466	398	312	224	221	207	229	275	253	4946

TABLE 10D

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
ALABAMA	.	.	1	1	.	2	.	2	.	1	1	.	.	.	2	10
ALASKA	.	.	.	1	.	.	1	.	.	1	.	.	.	.	.	3
ARIZONA	14	1	3	2	6	.	7	4	6	2	3	3	4	16	8	79
ARKANSAS	.	.	.	.	.	1	.	.	.	.	1	.	1	.	.	3
CALIFORNIA	99	91	127	62	152	114	120	110	86	69	65	51	50	40	27	1263
COLORADO	3	12	5	3	4	6	10	1	3	2	7	2	2	1	2	63
CONNECTICUT	.	3	1	.	1	3	4	2	.	2	.	.	.	1	.	17
DISTRICT OF COLUMBIA	.	.	.	.	.	.	1	.	.	.	.	.	.	2	.	3
FLORIDA	.	.	.	1	.	.	1	1	2	1	.	.	3	.	9	
GEORGIA	1	1	.	1	1	3	1	.	1	.	2	3	.	1	1	16
HAWAII	1	1	.	.	.	1	2	.	.	.	.	.	1	1	7	
ILLINOIS	9	8	13	5	11	15	14	8	4	18	2	3	10	4	.	124
INDIANA	2	2	.	2	1	.	2	1	2	2	1	1	.	.	.	16
IOWA	2	.	.	1	.	.	.	.	.	.	.	.	.	.	.	3
KANSAS	.	1	.	2	1	.	.	.	3	.	.	.	1	.	8	
KENTUCKY	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.	2
LOUISIANA	.	1	1	.	.	1	.	.	.	.	.	.	.	.	.	3
MAINE	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	2
MARYLAND	8	2	.	1	.	1	1	.	2	2	.	.	.	.	1	18
MASSACHUSETTS	2	2	1	2	1	8	5	5	6	2	.	.	2	5	3	44
MICHIGAN	.	1	3	.	3	2	5	3	3	.	1	1	1	1	2	26
MINNESOTA	4	1	3	1	4	2	3	2	.	1	2	1	1	1	2	27

(Continued)

TABLE 10D
NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MISSOURI	.	.	.	.	2	4	3	.	1	.	.	.	.	.	.	10
MONTANA	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	2
NEBRASKA	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
NEVADA	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1
NEW HAMPSHIRE	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	2
NEW JERSEY	1	3	2	1	2	1	2	.	2	1	2	1	.	5	2	25
NEW MEXICO	2	3	4	4	.	2	4	1	2	.	1	2	.	1	2	28
NEW YORK	5	4	13	6	5	6	3	6	4	5	.	4	4	1	3	69
NORTH CAROLINA	1	.	.	2	.	.	2	1	.	.	.	.	.	1	2	9
NORTH DAKOTA	.	.	.	.	1	1	.	.	2	.	.	.	.	.	.	4
OHIO	.	2	.	3	2	1	.	.	2	1	.	.	1	.	1	10
OKLAHOMA	.	1	2	1	.	1	2	.	2	1	.	.	.	1	1	12
OREGON	.	1	.	4	.	2	1	.	1	1	1	2	1	2	4	19
PENNSYLVANIA	1	.	1	4	.	11	4	3	.	2	.	1	2	.	3	32
RHODE ISLAND	.	3	2	2	.	.	.	2	.	.	.	.	.	.	2	11
SOUTH CAROLINA	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
SOUTH DAKOTA	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	2
TENNESSEE	1	1	.	.	3	1	1	.	.	3	2	.	.	.	1	13
TEXAS	7	23	17	12	9	14	11	14	8	1	6	7	5	5	4	143
UTAH	.	2	2	.	.	.	3	1	1	.	.	1	.	.	.	10
VERMONT	.	.	.	.	.	.	.	.	.	.	.	1	.	.	1	.
VIRGINIA	5	1	.	.	.	.	.	1	1	.	1	2	2	1	1	15

(Continued)

TABLE 10D

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
WASHINGTON	5	2	2	5	3	7	2	5	7	3	5	2	5	5	4	62
WISCONSIN	11	9	2	.	9	2	1	3	2	1	.	.	.	2	.	42
WYOMING	1	1	.	.	.	.	.	.	.	.	1	1	.	.	.	3
TOTAL	185	179	209	118	232	211	216	181	145	126	105	94	90	103	79	2273

TABLE 10E
NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
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	560	359	409	553	649	1127	713	772	753	728	721	645	811	614	582	9996
COLORADO	-	-	1	-	53	48	58	59	26	62	116	134	26	-	-	583
CONNECTICUT	-	-	-	1	1	-	-	-	-	-	-	1	-	-	-	3
DELAWARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
DISTRICT OF COLUMBIA	-	-	-	21	11	2	-	-	-	-	1	-	3	-	-	38
FLORIDA	-	-	-	-	-	-	-	-	-	1	1	22	2	-	-	26
GEORGIA	159	180	135	70	145	249	174	188	209	123	378	1693	4	-	3	3710
HAWAII	3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	4
IDAHO	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
ILLINOIS	2	3	3	-	-	2	1	-	2	-	1	-	-	-	-	14
INDIANA	-	-	-	-	55	354	71	102	67	31	-	-	-	-	-	680
IOWA	8	3	3	2	6	95	12	9	4	7	6	48	-	-	-	203
LOUISIANA	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
MARYLAND	1	-	-	1	-	-	-	-	-	2	-	3	-	-	-	8
MASSACHUSETTS	-	-	-	-	-	-	-	-	-	-	-	1	1	2	4	
MICHIGAN	-	-	-	-	1	1	3	-	-	2	-	-	-	-	-	7
MINNESOTA	5	29	20	8	18	14	76	36	17	15	53	2	-	3	1	297
MISSISSIPPI	-	-	-	-	25	101	87	132	234	101	284	243	187	93	-	1487

(Continued)

TABLE 10E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MISSOURI	1	.	.	1	.	.	.	.	.	.	.	.	1	1	.	4
MONTANA	11	5	34	12	19	143	28	24	5	.	.	.	1	.	.	282
NEVADA	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2
NEW HAMPSHIRE	3	6	6	25	15	12	12	32	9	.	.	.	.	2	.	122
NEW JERSEY	.	.	.	1	.	.	.	.	.	.	5	2	4	.	.	12
NEW MEXICO	.	.	.	4	.	.	.	.	.	.	.	.	.	.	4	8
NEW YORK	71	.	69	122	.	.	.	1	.	.	1	1	3	2	1	271
NORTH CAROLINA	.	.	.	.	.	3	.	.	.	.	.	1	.	.	.	4
NORTH DAKOTA	.	6	.	.	2	.	3	4	3	3	22	31	10	.	.	84
OHIO	.	.	.	2	.	.	1	.	.	3	.	1	.	5	12	3
OKLAHOMA	.	.	.	.	.	.	.	1	.	.	.	1	1	.	.	19
OREGON	.	5	1	.	.	9	1	.	1	2	.	.	.	.	.	1
PENNSYLVANIA	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
RHODE ISLAND	6	2	1	4	10	2	1	12	63	1	.	.	.	.	.	102
SOUTH CAROLINA	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1
SOUTH DAKOTA	.	.	.	.	.	.	7	3	.	.	.	.	.	.	.	10
TENNESSEE	1	.	1	2	1	.	.	.	.	.	.	1	1	.	.	4
TEXAS	.	1	.	2	1	.	.	1	1	1	.	.	1	.	.	9
UTAH	16	8	6	6	3	10	7	13	82	.	.	2	1	.	.	154
VERMONT	.	2	.	.	1	10	.	7	.	2	.	.	.	.	.	22
VIRGINIA	.	.	.	.	.	.	.	.	.	1	1	.	1	.	1	4
WASHINGTON	1	1	.	2	.	.	.	.	.	10	2	1	.	.	.	17

(Continued)

TABLE 10E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1983-1997

STATE	YEAR										TOTAL					
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
WEST VIRGINIA	6	4	4	8	5	4	10	2	8	3	12	.	.	.	.	66
WISCONSIN	.	.	69	61	49	34	39	30	82	52	.	.	.	.	.	416
WYOMING	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
TOTAL	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	727	602	19491