

APPENDIX A

Summary of Botulism Cases Reported in 2002

A total of 130 cases of botulism intoxication were reported to CDC in 2002. Among the 21 cases of foodborne intoxication, toxin type E accounted for 14 (67%) cases, toxin type A for 5 (24%) cases, and toxin type B for 2 (9%) cases. The median age of patients was 49 years; no deaths were reported. There were 3 multicase outbreaks, all associated with Alaskan native foods.

There were 81 reported cases of infant botulism. Toxin type B accounted for 56 (69%) cases and toxin type A for 25 (31%) cases. The median age of patients was 15 weeks; no deaths were reported.

There were 24 reported cases of wound botulism. Toxin type A accounted for 22 cases while toxin type B accounted for one case. Due to insufficient specimen quantity, toxin type could not be determined for one case. The median age of patients was 45 years; no deaths were reported.

There were 2 reported cases of adult colonization botulism. Toxin type A accounted for one case and toxin type F accounted for the other case. The patients, 52 and 63 years old, respectively, survived.

There were 2 botulism cases of unknown etiology. Toxin type A accounted for both cases. The patients, 54 and 80 years old, survived.

Table 1. Summary of Reported Botulism Cases - 2002

Foodborne

21 cases

Median age: 49 years (range: 0.5-83 years)
Deaths: 0 (1 case without information)
Gender: 11 (52%) male, 10 (48%) female
Toxin type: 14 (67%) type E, 5 (24%) type A, 2 (9%) type B

3 multi-case outbreaks

Infant

81 cases

Median age: 15 weeks (range: 0 - 52 weeks)
Deaths: 0 (3 cases without information)
Gender: 38 (47%) male, 43 (53%) female
Toxin type: 56 (69%) type B, 25 (31%) type A

Wound

24 cases

Median age: 45 years (range: 30 - 66 years)
Deaths: 0 (8 cases without information)
Gender: 20 (83%) male, 4 (17%) female
Toxin type: 22 (92%) type A; 1 (4%) type B; 1 (4%) toxin type not determined

Adult Intestinal Colonization

2 cases

Age: 52 and 63 years
Deaths: 0
Gender: 2 (100%) female
Toxin type: 1 (50%) type F, 1 (50%) type A

Botulism, Type Unknown

2 cases

Age: 54 and 80 years
Deaths: 0
Gender: 2 (100%) female
Toxin type: 2 (100%) type A

**Table 2. Cases of Botulism by State and Type
January 1- December 31, 2002**

<u>State/District</u>	<u>Foodborne</u>	<u>Infant</u>	<u>Wound</u>	<u>Other*</u>	<u>Total</u>
AK	14				14
AZ		3			3
CA		20	20		40
CO		3			3
CT		1			1
DE		2			2
GA		1			1
HI		1			1
IL		1			1
IN		1			1
KY		1			1
ME	2	1			3
MI		1			1
MN		2			2
MO		2			2
NJ		3			3
NM		1			1
NYC		4			4
OH		4			4
OK		1			1
OR	1	2		1	4
PA	1	16			17
SC	1				1
TN		3			3
TX	1			1	2
UT		3			3
VA	1	3			4
WA		1	4	2	7
<u>Totals:</u>	21	81	24	4	130

* Adult intestinal colonization or unknown

**Table 3. Cases of Foodborne Botulism by Month (N=21)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Vehicle</u>	<u>Death</u>
January	ME	40	Male	A	Home-canned tomatoes	No
	ME	13	Male	A	Home-canned tomatoes	No
June	VA	6 months	Male	A	Home-canned beef and peas	No
July	AK*	67	Female	E [†]	Traditional AK Native food	No
	AK*	83	Male	E [†]	Traditional AK Native food	No
	AK*	79	Female	E [†]	Traditional AK Native food	No
	AK*	51	Female	E [†]	Traditional AK Native food	No
	AK*	83	Male	E [†]	Traditional AK Native food	No
	AK*	79	Female	E [†]	Traditional AK Native food	No
	AK*	46	Male	E	Traditional AK Native food	No
	AK*	13	Female	E [†]	Traditional AK Native food	No
	AK*	46	Male	E	Traditional AK Native food	No
	AK*	42	Male	E	Traditional AK Native food	No
	SC	49	Male	B	Home-canned pickles	Unknown
	August	AK	69	Male	E	Traditional AK Native food
September	AK*	73	Female	E	Traditional AK Native food	No
	AK*	38	Female	E	Traditional AK Native food	No
	AK*	45	Female	E	Traditional AK Native food	No
	OR	20	Female	A	Home-canned chicken soup	No
November	TX	75	Male	A	Unknown	No
December	PA	77	Female	B	Home-canned peppers	No

* Cases involved in 3 multicas e outbreaks in AK.

[†]Toxin type derived from epidemiologically-linked case.

**Table 4. Cases of Infant Botulism by Month (N=81)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin type</u>	<u>Death</u>
January	CA	39	Male	B	No
January	CA	11	Male	A	No
January	CA	18	Male	B	No
January	PA	12	Male	B	No
January	NJ	28	Female	B	No
January	ME	9	Female	B	No
January	WA	24	Male	A	No
February	CA	28	Female	A	No
February	CA	34	Female	B	No
February	MI	4	Male	A	No
February	OR	0	Male	A	No
March	CA	12	Female	B	No
March	CA	31	Female	B	No
March	CA	18	Female	B	No
March	DE	24	Male	B	No
March	AZ	16	Male	B	No
March	AZ	8	Female	A	No
March	PA	16	Male	B	No
March	PA	9	Male	B	No
March	TN	16	Female	A	No
March	TN	12	Female	B	No
April	PA	4	Female	B	No
April	PA	6	Male	B	No
April	UT	28	Female	A	No
April	VA	16	Female	B	No
April	VA	16	Male	B	No
May	CA	16	Female	B	No
May	CA	21	Female	A	No
May	CA	4	Male	A	No
May	CA	16	Female	A	No
May	CA	20	Male	A	No
May	MO	12	Female	B	No
May	NYC	19	Male	B	No
May	OH	16	Female	B	No
June	CA	15	Male	A	No
June	CO	20	Female	A	No
June	CT	20	Male	B	No
June	PA	24	Female	B	No

**Table 4 (cont). Cases of Infant Botulism by Month (N=81)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin type</u>	<u>Death</u>
June	PA	4	Female	B	No
June	PA	10	Male	B	No
June	IN	13	Male	B	No
June	NYC	3	Female	B	No
July	CA	9	Female	B	No
July	CA	32	Female	A	No
July	GA	16	Male	B	No
July	PA	8	Female	B	No
July	PA	12	Male	B	No
July	PA	4	Male	B	No
July	UT	6	Male	A	No
August	CA	18	Female	A	No
August	AZ	28	Male	A	No
August	IL	15	Female	B	No
August	PA	24	Female	B	No
August	PA	12	Female	B	No
August	MN	12	Female	B	No
August	NM	4	Female	A	No
August	NYC	15	Male	B	No
August	UT	40	Female	A	No
September	OK	2	Male	A	No
September	PA	3	Female	B	No
September	TN	3	Female	B	Unknown
October	CO	24	Female	A	No
October	DE	3	Female	B	No
October	PA	8	Female	B	No
October	NJ	16	Male	B	Unknown
October	MN	22	Male	B	No
October	NYC	14	Male	B	No
October	OH	52	Female	B	No
October	VA	4	Female	B	No
November	CA	18	Female	B	No
November	NJ	3	Female	B	Unknown
November	KY	15	Male	B	No
December	HI	8	Male	B	No
December	CA	27	Male	A	No
December	CA	11	Male	B	No
December	CO	16	Male	B	No

**Table 4 (cont). Cases of Infant Botulism by Month (N=81)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin type</u>	<u>Death</u>
December	PA	8	Female	B	No
December	OH	12	Female	B	No
December	OH	20	Male	B	No
December	OR	0	Male	A	No
December	KS	12	Male	A	No

**Table 5. Cases of Wound Botulism by Month (N=24)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Exposure*</u>	<u>Death</u>
Janurary	CA	39	Male	A	IDU	No
	WA	50	Male	A	IDU	No
Feburary	CA	37	Male	A	IDU	No
April	CA	49	Male	A	IDU	Unknown
	CA	41	Female	A	IDU	No
	CA	48	Male	Unknown [†]	IDU	Unknown
	WA	43	Female	A	IDU	No
June	CA	43	Male	A	IDU	No
	CA	51	Male	A	IDU	No
July	CA	54	Male	A	IDU	No
	CA	43	Male	A	IDU	Unknown
	CA	43	Male	B	IDU	Unknown
August	CA	45	Male	A	IDU	No
	CA	50	Male	A	IDU	No
	CA	45	Male	A	IDU	No
	WA	51	Male	A	IDU	No
September	CA	50	Female	A	IDU	No
	CA	40	Male	A	Unknown	Unknown
October	CA	30	Male	A	IDU	Unknown
	CA	66	Male	A	IDU	Unknown
November	CA	37	Male	A	IDU	Unknown
	CA	46	Male	A	IDU	No
	WA	54	Female	A	IDU	No

* IDU= Injection drug use

[†] Serum quantity not sufficient for toxin typing

**Table 6. Cases of Adult Intestinal Colonization Botulism (N=2)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Death</u>
April	TX	52	Female	F	No
August	OR	63	Female	A	No

**Table 7. Botulism Cases of Unknown Etiology (N=2)
January 1 - December 31, 2002**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Death</u>
October	WA	54	Female	A	No
December	WA	80	Female	A	No