

## **APPENDIX A**

### **Summary of Botulism Cases Reported in 2001**

A total of 169 cases of botulism intoxication were reported to CDC in 2001. Among the 33 cases of foodborne intoxication, toxin type A accounted for 20 (61%) cases and toxin type E for 10 (30%) cases. The median age of patients was 46 years. One death was reported. There were 4 multicase outbreaks. They were associated with a commercial product and Alaskan native foods.

There were 112 reported cases of infant botulism. Toxin type B accounted for 67 (60%) cases and toxin type A for 45 (40%) cases. The median age of patients was 14 weeks; one death was reported.

There were 23 reported cases of wound botulism. Toxin type A accounted for all but one case. The median age of patients was 41 years; one death was reported.

There was 1 reported case of adult colonization botulism. This case was caused by toxin type F. The 45 year old patient survived.

**Table 1. Summary of Reported Botulism Cases - 2001**

**Foodborne**

33 cases

Median age: 46 years (range: 3-78 years)  
Death: 1 confirmed, 3 cases without information  
Gender: 17 (51%) male, 16 (49%) female  
Toxin type: 20 (61%) type A, 10 (30%) type E, 2 (6%) type B; 1 (3%) type F

4 multi-case outbreaks

**Infant**

112 cases

Median age: 14 weeks (range: 0 - 52 weeks)  
Death: 1 confirmed, 4 without information  
Gender: 62 (55%) male, 50 (45%) female  
Toxin type: 45 (40%) type A, 67 (60%) type B

**Wound**

23 cases

Median age: 41 years (range: 23 - 58 years)  
Death: 1 confirmed, 11 without information  
Gender: 9 (39%) male, 14 (61%) female  
Toxin type: 22 (96%) type A; 1 (4%) type B

**Adult Intestinal Colonization**

1 case

Age: 45 years  
Death: No death reported  
Gender: 1 (100%) female  
Toxin type: 1 (100%) type F

**Table 2. Cases of Botulism by State and Type  
January 1- December 31, 2001**

<u>State/District</u>	<u>Foodborne</u>	<u>Infant</u>	<u>Wound</u>	<u>Other*</u>	<u>Total</u>
AK	9				9
AR	1				1
AZ	1	2			3
CA	4	31	20		55
DE		6			6
GA		2			2
HI		2			2
KY		5			5
LA	1				1
MD		4		1	5
MN		2			2
MO		1			1
MT		1			1
NJ		6			6
NM			2		2
NV		1			1
NY		2			2
NYC		4			4
OH		4			4
OK		1			1
OR		2	1		3
PA		13			13
TN		4			4
TX	16	4			20
UT		4			4
VA		4			4
WA	1	6			7
WV		1			1
<b><u>Totals:</u></b>	<b>33</b>	<b>112</b>	<b>23</b>	<b>1</b>	<b>169</b>

\* Adult intestinal colonization

**Table 3. Cases of Foodborne Botulism by Month (N=33)  
January 1 - December 31, 2001**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Vehicle</u>	<u>Death</u>
January	AK*	52	Female	E	Beaver	No
	AK*	67	Female	E	Beaver	No
	AK*	43	Male	E	Beaver	No
	AK*	46	Female	E	Beaver	No
	CA	41	Female	F	Spaghetti sauce	No
March	WA	45	Female	A	Home canned asparagus	No
	CA	37	Male	E	Fish/Home Preserved	Unknown
April	CA	43	Female	E	Fish/Home Preserved	Unknown
June	AZ	25	Female	A	Pickled pigs feet	No
July	AK*	65	Female	E	Whitefish	No
	AK*	66	Male	E	Whitefish	No
	LA	77	Female	B	Home canned food	Yes
August	AK	47	Female	B	Unknown	No
	AK*	50	Female	E	Stink Eggs	No
	AK*	36	Female	E	Stink Eggs	No
	AR	51	Male	A	Unknown	No
	TX*	7	Male	A	Chili	No
	TX*	17	Male	A	Chili	No
	TX*	46	Male	A	Chili	No
	TX*	52	Male	A	Chili	No
	TX*	3	Female	A	Chili	No
	TX*	42	Male	A	Chili	No
	TX*	49	Male	A	Chili	No
	TX*	29	Male	A	Chili	No
	TX*	72	Male	A	Chili	No
	TX*	53	Female	A†	Chili	No
	TX*	50	Male	A†	Chili	No
	TX*	62	Female	A†	Chili	No
	TX*	45	Male	A†	Chili	No
	TX*	78	Male	A†	Chili	No
	TX*	17	Male	A†	Chili	No
	TX*	25	Female	A†	Chili	No
November	CA	50	Male	A	Unknown	Unknown

\* Cases involved in a multicase outbreak. AK (3 outbreaks), TX (1 outbreak)

†Toxin type in epidemiologically-linked case.

**Table 4. Cases of Infant Botulism by Month (N=112)  
January 1 - December 31, 2001**

<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin type</u>	<u>Death</u>
January	OH	11	Male	B	No
January	MN	5	Male	A	No
January	CA	6	Female	A	No
January	CA	14	Male	A	No
January	VA	10	Male	B	No
January	NV	15	Male	A	No
January	MD	16	Male	B	No
January	UT	6	Female	A	No
January	NJ	3	Female	B	No
February	DE	21	Female	B	No
February	VA	9	Female	B	No
February	CA	16	Female	B	No
February	KY	8	Male	B	No
February	NJ	23	Male	B	No
March	CA	21	Male	A	No
March	CA	24	Male	A	No
March	CA	25	Male	A	No
March	CA	27	Female	A	No
March	NY	8	Male	A	No
March	CA	4	Male	A	No
March	DE	14	Male	B	No
March	TN	4	Female	A	No
March	PA	18	Female	B	No
March	AZ	6	Male	A	No
March	HI	20	Female	B	No
March	WA	26	Male	A	Unknown
April	DE	6	Female	B	No
April	CA	12	Female	A	No
April	OK	44	Male	B	No
April	PA	21	Female	B	No
April	OH	8	Male	B	No
March	TN	12	Male	B	No
April	OR	20	Female	A	Unknown
April	PA	6	Female	B	No
April	CA	50	Male	A	No
April	MD	9	Male	B	No
April	OR	21	Female	A	No
April	NY	2	Male	B	No
April	TX	10	Female	A	No
April	CA	24	Female	A	No
May	DE	5	Female	B	No
May	NJ	19	Male	B	No
May	NJ	5	Male	B	No

**Table 4. Cases of Infant Botulism by Month (N=112)  
January 1 - December 31, 2001**

<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin type</u>	<u>Death</u>
May	PA	40	Female	B	No
May	UT	4	Male	B	Yes
May	WA	7	Male	A	No
May	WV	8	Female	B	Unknown
May	TX	0	Female	A	No
May	KY	27	Female	B	No
May	CA	13	Female	B	No
May	NYC	19	Female	B	No
June	DE	32	Male	B	No
June	NYC	34	Male	B	No
June	NYC	16	Male	B	No
June	PA	10	Male	B	No
June	UT	4	Male	A	No
July	MT	19	Male	A	No
July	CA	9	Male	B	No
July	CA	15	Male	A	No
July	UT	10	Male	A	No
July	WA	7	Female	A	No
July	WA	52	Male	A	No
July	TN	8	Female	B	No
July	GA	2	Female	B	No
July	WA	11	Female	B	No
July	KY	16	Male	B	No
August	MD	11	Male	B	No
August	PA	18	Male	B	No
August	MD	19	Male	A	No
August	TX	2	Male	B	No
August	CA	9	Female	A	No
August	CA	27	Male	B	No
August	HI	6	Female	B	No
August	KY	18	Female	B	No
August	MO	17	Female	B	No
August	CA	21	Male	B	No
September	DE	10	Female	B	No
September	CA	20	Female	A	No
September	CA	13	Female	A	No
September	CA	13	Male	A	No
September	PA	43	Female	B	No
September	AZ	13	Female	A	No
September	PA	15	Male	B	No
September	CA	17	Female	B	No
September	NJ	23	Male	B	No
September	CA	24	Male	A	No

**Table 4. Cases of Infant Botulism by Month (N=112)  
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<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin type</u>	<u>Death</u>
September	CA	14	Female	A	No
October	CA	21	Female	A	No
October	MN	21	Male	A	No
October	CA	25	Female	B	No
October	GA	6	Female	A	No
October	CA	21	Male	A	No
October	PA	28	Male	B	No
October	CA	3	Female	B	No
October	TX	5	Male	A	No
November	TN	14	Female	B	Unknown
November	CA	12	Male	A	No
November	CA	7	Male	B	No
November	NJ	18	Female	B	No
November	PA	11	Male	B	No
November	CA	18	Male	A	No
November	VA	9	Male	B	No
November	CA	8	Male	B	No
November	WA	22	Male	A	No
November	KY	3	Male	A	No
November	OH	9	Female	B	No
December	PA	18	Female	B	No
December	NYC	10	Female	B	No
December	PA	15	Female	B	No
December	VA	4	Male	B	No
December	OH	24	Male	B	No
December	PA	11	Male	B	No

**Table 5. Cases of Wound Botulism by Month (N=23)  
January 1 - December 31, 2001**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Exposures*</u>	<u>Death</u>
January	CA	38	Male	A	IDU	No
	CA	43	Male	A	IDU	No
March	OR	41	Male	A	IDU	Unknown
April	CA	50	Male	A	IDU	Unknown
May	NM	39	Male	A	Contaminated wound following MVA <sup>†</sup>	Yes
	CA	52	Male	A	IDU	No
	CA	41	Male	A	IDU	Unknown
June	CA	56	Male	A	IDU	No
July	CA	58	Female	A	IDU	Unknown
	CA	37	Male	A	IDU	No
	CA	30	Female	A	IDU	No
	CA	33	Female	A	IDU	Unknown
	CA	29	Female	A	IDU	Unknown
	CA	42	Male	A	IDU	No
September	CA	23	Male	A	IDU	No
October	CA	41	Female	A	IDU	Unknown
	CA	46	Female	A	IDU	No
November	CA	43	Female	A	IDU	Unknown
	CA	40	Female	B	IDU	Unknown
	NM	47	Male	A	IDU	No
December	CA	46	Male	A	IDU	No
	CA	48	Male	A	IDU	Unknown
	CA	35	Female	A	IDU	Unknown

\* IDU= Injection drug use

<sup>†</sup> MVA=Motor vehicle accident



**Table 6. Case of Adult Intestinal Colonization Botulism (N=1)  
January 1 - December 31, 2001**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Death</u>
October	MD	45	Female	F	No