Public Health Service
DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control
and Prevention (CDC)

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TO: State and Territorial Epidemiologists
State and Territorial Public Health Laboratory Directors

THROUGH: Director, Division of Bacterial and Mycotic Diseases

SUBJECT: Surveillance for Botulism
Summary of 2005 Data

Attached is the summary of laboratory-confirmed and epidemiologically-linked botulism cases from January 1 through December 31, 2005. The information provided has been compiled from reports submitted by state epidemiologists, the CDC botulism laboratory, the Infant Botulism Treatment and Prevention Program (in conjunction with the California Department of Health Services), CDC epidemiologists and the CDC botulism antitoxin release database. We are indebted to Jean Lee, MPH, for her work to assemble the data for this report. If the attached 2005 data from your state are incomplete or inaccurate, please contact:

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The Enteric Diseases Epidemiology Branch (EDEB) maintains intensive surveillance for cases of botulism in the United States. All data regarding antitoxin releases and laboratory confirmation of cases are recorded annually by CDC. Epidemiologists from EDEB are available 24 hours a day to answer calls from state and local health departments or physicians treating potential cases of botulism at (770) 488-7100.

We plan to make this report publicly available on our website: http://www.cdc.gov/ncidod/dbmd/diseaseinfo/botulism_a.htm under Botulism, additional information. We look forward to continuing to work together toward the control of this important public health problem.

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APPENDIX A

Summary of Botulism Cases Reported in 2005

A total of 145 cases of botulism intoxication were reported to CDC in 2005. Among the 18 cases of foodborne intoxication, toxin type A accounted for 7 (39%) cases, toxin type B for 1 (5%) case, and toxin type E for 10 (56%) cases. The median age of patients was 35 years. Two deaths were reported. There were four multi-case outbreaks. They were caused by fish (type unspecified), stinkfish, stinkhead, and an unknown food, respectively.

There were 96 reported cases of infant botulism. Toxin type B accounted for 52 (54%) cases and toxin type A for 44 (46%) cases. The median age of patients was 17 weeks; no deaths were reported.

There were 28 reported cases of wound botulism. Toxin type A accounted for 25 (89%) cases, toxin type B for 2 (7%) cases, and unknown toxin type for 1 (4%) case. All cases occurred in injecting drug users. The median age of patients was 45 years; no deaths were reported.

There were 3 reported cases of botulism of other or unknown source. Toxin type F accounted for 2 (67%) cases, and type A accounted for 1 (33%) case. One toxin type F case was associated with adult intestinal colonization. The sources of the type F cases and the type A case were unknown. The case patients were 56, 84, and 74 years of age respectively; 1 death was reported.

Table 1. Summary of Reported Botulism Cases - 2005

Foodborne

18 cases

Median age: 35 years (range: 1-82 years)
Death: 2 confirmed
Gender: 10 (56%) male, 8 (44%) female
Toxin type: 7 (39%) type A, 1 type B (5%), 10 (56%) type E

4 multi-case outbreaks

Infant

96 cases

Median age: 17 weeks (range: 2 - 60 weeks)
Death: 0 confirmed
Gender: 53 (55%) male, 43 (45%) female
Toxin type: 44 (46%) type A, 52 (54%) type B

Wound

28 cases

Median age: 45 years (range: 28 - 57 years)
Death: 0 confirmed, 2 without information
Gender: 23 (82%) male, 5 (18%) female
Toxin type: 25 (89%) type A, 2 (7%) type B, 1 (4%) unknown

Other, Unknown

3 cases

Median Age: 74 years (range: 56-84 years)
Death: 1 confirmed
Gender: 3 (100%) female
Toxin type: 1 (33%) type A, 2 (67%) type F (*Clostridium baratii*)

Table 2. Cases of Botulism by State and Type
January 1 - December 31, 2005

State/District	Food	Wound	Infant	Other	Total
AK	8				8
AL			1		1
AZ			1		1
CA	3	24	42		69
CO			1		1
DE			2		2
FL			1		1
ID			1		1
IL			1	1*	2
KY			1		1
LA			1		1
MA	1				1
MD			5		5
MI	1				1
MO			1		1
MT				1**	1
NC	1		1		2
NH			1		1
NJ	2		9		11
NM			1		1
NV			1		1
NYC			4		4
OK	1		1		2
OR			2		2
PA	1		11		12
TX			1	1*	2
UT			3		3
VA			1		1
WA		4	2		6
Total	18	28	96	3	145

*Unknown source
**Adult intestinal

Table 3. Cases of Foodborne Botulism by Month (N=18)
January 1 - December 31, 2005

Month	State	Age (years)	Gender	Toxin Type	Vehicle	Death
January	MA	75	M	A	unknown	No
	MI	82	M	B	unknown**	Yes
May	CA	30	M	A	pruno††	No
July	NJ*	45	M	E	fish	No
	NJ*	16	F	E	fish	No
	OK	14	F	A	home-canned venison stew***	No
August	AK*[1]	27	F	E†	stinkfish	No
	AK*[1]	33	M	E	stinkfish	No
	AK*[1]	37	F	E†	stinkfish	No
	AK*[1]	69	M	E	stinkfish	No
	AK*[2]	19	F	E	stinkhead	No
	AK*[2]	23	F	E	stinkhead	No
	AK*[2]	47	F	E	stinkhead	No
	AK*[2]	1	M	E	stinkhead	No
September	NC	64	F	A	unknown	No
November	CA*	82	M	A	unknown	Yes
	CA*	17	M	A	unknown	No
	PA	63	M	A	unknown†††	No

*Cases involved in multicase outbreaks

[1] Group 1 multicase outbreak in AK

[2] Group 2 multicase outbreak in AK

†Toxin type derived from epidemiologically linked case

**Multiple suspected sources with history of improper food storage

†† Homemade alcoholic beverage

***Linked epidemiologically, not laboratory confirmed

†††History of homecanning

Table 4. Cases of Infant Botulism by Month (N=96)
January 1 - December 31, 2005

Month	State	Onset Age (weeks)	Sex	Toxin Type	Death
January	CA	7	M	B	No
	CA	29	M	A	No
	CA	12	F	A	No
	NJ	50	F	B	No
	NYC	11	M	B	No
	PA	13	F	B	No
	PA	16	M	B	No
	UT	20	F	A	No
February	CA	18	M	B	No
	CA	34	M	A	No
	CA	43	F	A	No
	NJ	12	F	A	No
	PA	28	M	B	No
	PA	20	M	B	No
	UT	16	M	A	No
March	CA	14	M	A	No
	CA	8	M	A	No
	DE	39	F	B	No
	FL	34	F	A	No
	MD	25	F	B	No
	OK	10	F	A	No
	PA	20	M	B	No
April	CA	12	F	B	No
	PA	16	F	B	No
May	CA	24	M	B	No
	CA	6	F	A	No
	CA	3	M	A	No
	IL	12	M	A	No
	KY	12	M	B	No
	MD	28	M	B	No
	MD	13	M	B	No
	NJ	15	F	B	No
	NJ	12	M	B	No
	NYC	22	F	B	No
	PA	24	M	B	No
	PA	21	F	B	No
	UT	10	M	A	No
	VA	21	M	B	No
June	CA	26	M	A	No
	CA	19	M	B	No
	CA	23	F	A	No
	CA	28	F	B	No
	CA	19	M	A	No
	CA	20	M	A	No

Table 4. Cases of Infant Botulism by Month (N=95)
January 1 - December 31, 2005

Month	State	Onset Age (weeks)	Sex	Toxin Type	Death
	DE	40	M	B	No
	LA	3	M	B	No
	NV	60	F	A	No
	PA	22	M	B	No
July	AL	5	M	B	No
	CA	16	M	A	No
	CA	19	F	B	No
	CA	30	M	A	No
	CA	6	F	B	No
	NH	17	F	B	No
	NJ	21	M	B	No
	NJ	17	M	B	No
August	AZ	13	M	A	No
	CA	4	F	B	No
	CA	20	F	B	No
	CA	16	M	B	No
	CA	10	F	B	No
	CA	20	M	A	No
	MD	3	M	B	No
	NJ	4	M	B	No
	WA	31	M	A	No
September	CA	24	F	A	No
	CA	23	F	B	No
	CA	14	M	A	No
	CA	20	F	A	No
	CA	4	F	A	No
	OR	16	F	A	No
	OR	19	F	A	No
	TX	10	M	A	No
October	CA	17	F	A	No
	CA	46	F	A	No
	CA	9	F	A	No
	CA	6	M	A	No
	CA	30	M	A	No
	ID	16	M	A	No
	NJ	4	F	B	No
	NYC	19	M	B	No
	PA	2	F	B	No
	PA	17	F	B	No
November	CA	8	F	A	No
	CA	9	F	A	No
	CO	8	F	A	No
	NYC	6	F	B	No
December	CA	5	M	B	No

Table 4. Cases of Infant Botulism by Month (N=95)

January 1 - December 31, 2005

Month	State	Onset Age (weeks)	Sex	Toxin Type	Death
	CA	19	F	B	No
	CA	24	M	A	No
	MD	15	M	B	No
	MO	9	F	A	No
	NC	12	M	B	No
	NJ	10	M	B	No
	NM	52	M	B	No
	WA	17	M	A	No

Table 5. Cases of Wound Botulism by Month (N=28)
January 1 - December 31, 2005

Month	State	Age (years)	Gender	Toxin Type	Exposure*	Death
January	CA	38	F	A	IDU	No
	WA	37	M	A	IDU	Unknown
	WA	50	M	A	IDU	Unknown
February	CA	28	M	A	IDU	No
March	CA	47	M	A	IDU	No
	CA	43	M	B	IDU	No
	CA	57	M	A	IDU	No
	CA	43	M	A	IDU	No
	WA	34	F	A	IDU	No
May	CA	51	F	A	IDU	No
June	CA	40	M	A	IDU	No
July	CA	48	M	A	IDU	No
	CA	38	M	B	IDU	No
	CA	53	M	Unknown†	IDU	No
	CA	35	M	A	IDU	No
August	CA	43	M	A	IDU	No
	CA	49	M	A	IDU	No
	CA	51	M	A	IDU	No
	CA	34	M	A	IDU	No
	CA	50	F	A	IDU	No
September	CA	30	M	A	IDU	No
	CA	51	M	A	IDU	No
	CA	53	F	A	IDU	No
	CA	36	M	A	IDU	No
October	CA	56	M	A	IDU	No
	CA	36	M	A	IDU	No
November	CA	46	M	A	IDU	No
	WA	51	M	A	IDU	No

*IDU = injection drug user
† Serum quantity not sufficient for toxin typing

Table 6. Cases of Botulism, Other (N=3)
January 1 - December 31, 2005

Month	State	Age (years)	Gender	Toxin Type	Exposure	Death
March	MT	56	F	F (*C. baratii*)*	Unknown	N
June	IL	84	F	F(*C. baratii*)*	Unknown	Y
September	TX	74	F	A	Unknown	N

* Botulinum toxin Type F produced by *Clostridium baratii*