Summary of Botulism Cases Reported in 2013

An overview of national botulism surveillance is available at:
http://www.cdc.gov/ncezid/dfwed/PDFs/bot-overview_508c.pdf

Summary of Botulism Cases Reported in 2013

A total of 153 laboratory-confirmed cases of botulism were reported to CDC in 2013. Foodborne botulism accounted for 2 (1%), infant botulism for 135 (88%), wound botulism for 14 (9%), and botulism of unknown or other etiology for 2 (1%) cases (Table 1).

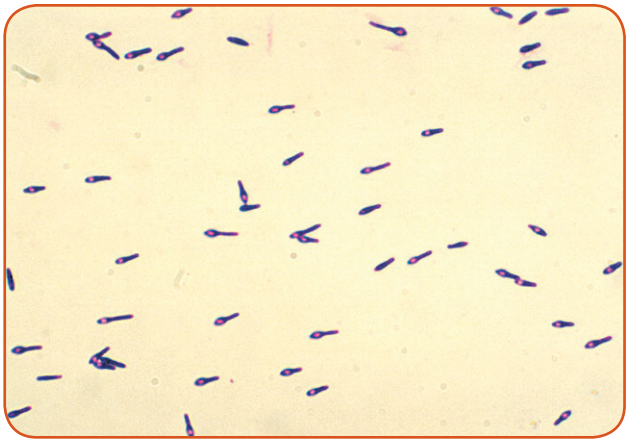
The 2 cases of laboratory-confirmed foodborne botulism were reported from two states (Table 2). Toxin type A accounted for 1 and toxin type E for 1. The patients were aged 57 and 87 years; both were women. There were no outbreaks (events with two or more cases) among laboratory-confirmed cases. One case was associated with home-canned peaches or pears; the other was associated with fish oil/blubber. One death was reported (Table 3).

There were 3 outbreaks of probable cases of foodborne botulism (clinically compatible illness with an epidemiologic link that is not laboratory-confirmed). One may have been associated with homemade turshi, a pickled vegetable dish (associated with 4 probable cases), one with fermented fish heads (2 cases), and one with seal oil/blubber (2 cases). All eight patients survived.

The 135 cases of infant botulism were reported from 29 states. Toxin type A accounted for 57 (42%), toxin type B for 74 (55%), toxin type Bf for 1 (<1%), and toxin type F (produced by *C. baratii*) for 3 (2%). The median age of patients was 16 weeks with a range of 1–43 weeks; 70 (52%) were girls. No deaths were reported (Table 4).

The 14 cases of wound botulism were reported from three states. Toxin type A accounted for 11 (79%), toxin type B for 1 (7%), and botulinum toxin type was not determined for 2 (14%). All but one of the patients was an injection drug user; that person had a leg fracture. The median age of patients was 46 years with a range of 21–60 years; 12 (86%) were men. No deaths were reported (Table 5).

The 2 cases of botulism of unknown or other etiology were reported from two states. Toxin type A accounted for 1 and toxin type F (produced by *C. baratii*) for 1. The patients were aged 36 and 60 years; both were women. No deaths were reported (Table 6).



A photomicrograph of *Clostridium botulinum* type A.

Table 1. Summary of reported botulism cases – United States, 2013

Foodborne-Confirmed (2 cases)	
Ages:	57 and 87 years
Death:	1 confirmed
Gender:	2 women
Toxin type:	1 type A, 1 type E
Outbreaks*:	None
Foodborne-Probable§ (8 cases)	
Median age:	34 years (range: 22–85 years)
Death:	0 confirmed
Gender:	5 (63%) men
Outbreaks*:	3
Infant (135 cases)	
Median age:	16 weeks (range: 1–43 weeks)
Death:	0 confirmed
Gender:	65 (48%) boys, 70 (52%) girls
Toxin type:	57 (42%) type A, 74 (55%) type B, 1 (<1%) type Bf, 3 (2%) type F
Outbreaks:	None
Wound (14 cases)	
Median age:	46 years (range: 21–60 years)
Death:	0 confirmed
Gender:	12 (86%) men, 2 (14%) women
Toxin type:	11 (79%) type A, 1 (7%) type B, 2 (14%) type not specified+
Outbreaks:	None
Unknown, Other (2 cases)	
Ages:	36 and 60 years
Death:	0 confirmed
Gender:	2 women
Toxin type:	1 type A, 1 type F
Outbreaks:	None

* Outbreaks defined as two or more cases resulting from a common exposure

§ Includes probable cases associated with outbreaks. Probable foodborne botulism is defined as a clinically compatible case with an epidemiologic link (e.g., ingestion of a home-canned food within the previous 48 hours)

+ Serum quantity not sufficient for toxin typing

Table 2. Confirmed cases of botulism by reporting jurisdiction and type (n=153) January 1–December 31, 2013

	Foodborne	Wound	Infant	Unknown, Other
Alaska	1			
Arkansas			1	
Arizona			1	
California		11	46	1
Colorado			4	
Delaware			3	
Idaho			1	
Illinois			1	
Iowa			3	
Kansas			1	
Kentucky			2	
Louisiana			3	
Maryland			8	
Massachusetts				1
Mississippi			2	
Missouri			1	
Nebraska			1	
Nevada			1	
New Jersey			4	
New Mexico			3	
New York			1	
New York City			3	
Ohio			5	
Oklahoma			1	
Oregon	1		3	
Pennsylvania		1	18	
Tennessee			1	
Texas		2	7	
Utah			2	
Virginia			3	
Washington			4	
Wyoming			1	
Total	**2**	**14**	**135**	**2**

Table 3a. Confirmed cases of foodborne botulism by month (n=2) January 1–December 31, 2013

Month	Age (years)	Gender	Toxin Type	Suspected or Confirmed Vehicle	Death
June	87	Female	A	Home-canned peaches or pears*	Yes
June	57	Female	E	Fish oil, blubber*	No

* Toxin not detected in food or food item not available for testing; food vehicle suspected based on epidemiologic evidence and known association with botulism

Table 3b. Outbreak-associated cases of probable foodborne botulism* (n=8) January 1–December 31, 2013

Month	Age (years)	Gender	Suspected Vehicle	Death
June	85	Male	Fermented fish heads	No
July	79	Female	Fermented fish heads	No
July	27	Female	Seal oil/blubber	No
July	38	Female	Seal oil/blubber	No
November	24	Male	Homemade turshi	No
November	22	Male	Homemade turshi	No
November	35	Male	Homemade turshi	No
December	33	Male	Homemade turshi	No

* Probable foodborne botulism: a clinically compatible case with an epidemiologic link (e.g., ingestion of a home-canned food within the previous 48 hours)

Table 4. Cases of infant botulism by month (n=135) January 1–December 31, 2013

Month	Age (weeks)	Gender	Toxin Type	Death
January	22	Male	B	No
January	21	Female	A	No
January	20	Male	A	No
January	18	Female	B	No
January	17	Male	B	No
January	26	Male	B	No
January	42	Female	B	No
January	4	Female	A	No
January	31	Male	A	No
January	20	Female	B	No
January	16	Female	A	No
January	18	Male	B	No
January	26	Female	A	No
January	13	Female	A	No
February	29	Male	B	No
February	5	Female	B	No

Table 4. Cases of infant botulism by month (n=135) January 1–December 31, 2013 (*continued*)

Month	Age (weeks)	Gender	Toxin Type	Death
February	10	Female	A	No
February	9	Male	B	No
February	6	Female	A	No
February	15	Male	A	No
February	25	Female	A	No
February	15	Female	B	No
February	28	Female	B	No
March	23	Female	A	No
March	21	Female	B	No
March	13	Female	A	Unknown
March	25	Female	A	No
March	7	Female	B	No
March	42	Female	B	No
March	26	Male	A	No
March	21	Female	B	Unknown
March	27	Male	B	No
March	19	Female	A	No
March	32	Male	A	No
March	29	Male	A	No
March	13	Male	B	No
March	24	Male	A	No
March	28	Male	B	No
March	24	Male	B	No
April	3	Male	B	No
April	22	Male	A	No
April	33	Female	A	No
April	15	Female	A	No
April	14	Male	A	No
April	25	Male	B	Unknown
April	4	Male	B	No
April	16	Male	A	No
April	30	Female	A	No
April	5	Female	B	No
May	23	Male	B	No
May	26	Male	B	No
May	13	Female	A	No
May	34	Female	B	No
May	22	Male	A	No
May	10	Female	B	No
May	15	Male	B	No

Table 4. Cases of infant botulism by month (n=135) January 1–December 31, 2013 (*continued*)

Month	Age (weeks)	Gender	Toxin Type	Death
May	35	Female	A	Unknown
May	32	Female	A	No
May	35	Female	B	No
May	18	Male	A	No
May	7	Male	B	No
June	9	Female	Bf	No
June	6	Male	A	Unknown
June	31	Male	B	No
June	27	Female	A	No
June	1	Male	F	Unknown
June	26	Female	B	No
June	12	Female	B	No
June	26	Male	A	No
June	23	Male	B	No
July	12	Male	A	No
July	10	Female	A	No
July	13	Female	B	No
July	21	Male	A	No
July	3	Male	F	No
July	2	Female	F	No
July	13	Female	B	No
July	19	Male	A	No
July	14	Female	A	No
July	21	Female	B	No
August	16	Female	B	No
August	7	Male	B	No
August	4	Female	A	Unknown
August	11	Female	B	No
August	6	Male	B	No
August	29	Female	B	No
August	26	Male	B	No
August	18	Male	B	No
August	20	Male	B	No
August	14	Female	A	No
September	16	Male	A	No
September	14	Male	A	No
September	9	Male	B	No
September	11	Female	B	No
September	12	Female	B	No

Table 4. Cases of infant botulism by month (n=135) January 1–December 31, 2013 (*continued*)

Month	Age (weeks)	Gender	Toxin Type	Death
September	25	Female	A	No
September	15	Female	A	No
September	23	Male	B	No
September	3	Female	A	Unknown
October	8	Male	B	No
October	26	Male	B	No
October	9	Female	B	No
October	4	Female	A	No
October	30	Male	A	No
October	5	Female	A	No
October	43	Male	B	No
October	10	Female	B	No
October	22	Male	A	No
October	42	Female	B	No
October	3	Male	B	No
October	27	Male	A	No
October	17	Male	A	No
October	3	Female	B	No
October	16	Female	B	No
October	42	Male	B	Unknown
November	16	Female	A	No
November	26	Female	A	No
November	13	Female	A	No
November	1	Female	A	No
November	21	Female	B	No
November	26	Female	B	No
November	24	Male	B	No
November	20	Male	B	No
November	12	Female	B	No
November	12	Male	B	No
November	15	Male	B	No
November	12	Male	A	No
November	9	Female	B	No
December	11	Female	B	Unknown
December	7	Female	B	Unknown
December	15	Male	A	No
December	19	Male	B	No
December	16	Female	B	Unknown
December	5	Male	B	Unknown
December	7	Male	B	Unknown

Table 5. Confirmed cases of wound botulism by month (n=14) January 1–December 31, 2013

Month	Age (years)	Gender	Toxin Type	Exposure*	Death
January	29	Female	Not specified[+]	IDU	No
January	31	Male	A	IDU	No
February	47	Male	B	Leg fracture	No
March	49	Male	A	IDU	No
April	24	Male	A	IDU	No
May	56	Male	Not specified[+]	IDU	No
June	45	Male	A	IDU	No
July	38	Male	A	IDU	No
October	60	Female	A[§]	IDU	No
November	56	Male	A	IDU	No
November	59	Male	A	IDU	No
December	21	Male	A	IDU	No
December	43	Male	A	IDU	No
December	58	Male	A[§]	IDU	No

* IDU = injection drug user
[+] Serum quantity not sufficient for toxin typing
[§] Toxin type was inconclusive by mouse bioassay; type A toxin was identified by mass spectrometry (Endopep-MS) at CDC

Table 6. Confirmed cases of unknown or other type of botulism by month (n=2) January 1–December 31, 2013

Month	Age (years)	Gender	Toxin Type	Exposure	Death
November	36	Female	A	Unknown	No
December	60	Female	F	Unknown	No

References

[1] 2012 Case Definitions: Nationally Notifiable Conditions Infectious and Non-Infections Case. (2012). Atlanta, GA: Centers for Disease Control and Prevention. Available at: http://wwwn.cdc.gov/NNDSS/script/casedef.aspx?CondYrID=622&DatePub=2011-01-01

Recommended Citation:
Centers for Disease Control and Prevention (CDC). Botulism Annual Summary, 2013. Atlanta, Georgia: US Department of Health and Human Services, CDC, 2015.

NCEZID Atlanta:
For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333 MS C-09
Telephone: 1-404-639-2206
Email: cdcinfo@cdc.gov