

BOTULISM INVESTIGATION FORM

FOODBORNE BOTULISM **INFANT BOTULISM** **WOUND BOTULISM** **OTHER BOTULISM**

PERSON PROVIDING INFORMATION

Name of Person Being Interviewed: _____ Relationship to Patient: _____ Preferred Language: _____

If patient is less than 18 years old, provide parent/proxy's name: _____

Has the patient or patient's proxy been notified by the reporter of this diagnosis or lab result? No Unknown Yes

BASIC DEMOGRAPHIC DATA

First Name: _____ Middle Name: _____ Last Name: _____

DOB: ___/___/_____ Age: _____ years months Current Sex: Female Male Unknown

Marital Status: Married Single, never married Widowed Annulled
 Domestic partner Interlocutory Legally separated Divorced
 Polygamous Refused to answer Unknown

Is the patient deceased? No Unknown Yes Date of Death: ___/___/_____

Street Address 1: _____ Street Address 2: _____

City: _____ State: _____ Zip Code: _____

County: _____ Country of birth: _____

Home Phone: (____) - _____ - _____ Cell Phone: (____) - _____ - _____ Work Phone: (____) - _____ - _____
Ext. _____

Ethnicity: Hispanic or Latino Not Hispanic or Latino Unknown

Race: American Indian/Alaska Native Asian Native Hawaiian/Other Pacific Islander White
 Unknown Black/African American

Primary Occupation: _____ Industry: _____

Name and location of employer: _____

INVESTIGATION SUMMARY

Jurisdiction: _____ Investigation Start Date: ___/___/_____ Investigation Status: Open Closed

Investigator: _____

REPORTING SOURCE

Date of Report: ___/___/_____ Reporting Source: _____

CLINICAL

Physician's Name: _____ Phone Number: (____) - ____ - ____ Ext. _____

Was patient hospitalized for this illness? No Unknown Yes If yes: Hospital Name: _____

Admission Date: ____/____/____ Discharge Date: ____/____/____ Duration of Stay _____ day(s)

Diagnosis Date: ____/____/____ Illness Onset Date: ____/____/____ Illness End Date: ____/____/____

Age at Onset: _____ days hours minutes months unknown weeks years

Did the patient die from this illness? No Unknown Yes Date of Death: ____/____/____

EPIDEMIOLOGIC

Is this patient a food handler? No Unknown Yes

Is this case part of an outbreak? No Unknown Yes If yes, outbreak name: _____

Case Status: Confirmed Not a Case Probable MMWR Week: _____ MMWR Year: _____

Disease Acquisition

Where was the disease acquired?: Imported, Undetermined Source State/County Indigenous International
 In State, Out of Jurisdiction Out of State Unknown

Imported Country: _____ Imported State: _____ Imported City: _____

Imported County: _____

FOODBORNE BOTULISM INVESTIGATION QUESTIONS (skip to next section if not Foodborne)

Symptoms

Abdominal Pain: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Nausea: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Vomiting: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Diarrhea: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Blurred vision: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Diplopia: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Photophobia: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Dysphasia: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Dysphonia: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Muscle Weakness: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If yes to muscle weakness, specify: _____	
Dyspnea: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Fatigue: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Dry Mouth: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Urinary Retention: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Constipation: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Dizziness: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Paresthesias: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If yes to paresthesias, specify where: _____	
Convulsions: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Other Symptoms: _____	

Signs

Ptosis: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Extraocular palsy: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Fixed pupils: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If 'yes' to fixed pupils specify: _____
Decreased corneal reflex: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Facial paralysis: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Symmetrical facial paralysis: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Decreased gag reflex: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Weakness/paralysis of extremities: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If 'yes' to weakness/paralysis specify: _____
Decreased ability to protrude tongue: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If 'yes' to sensory findings, specify: _____
Sensory findings: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Symmetrical ataxia: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Ataxia: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If yes to DTR's, specify: _____
DTRs: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Respiratory impairment: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Nystagmus: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Vital capacity: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Tracheostomy: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	Fever (>100.4°F) <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes
Abnormal mental status: <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	

Wound Information

Does the patient have a wound? No Unknown Yes If yes, where is the wound? _____
When was the wound sustained? _____ How was the wound treated? _____

Drugs Taken Information

Did this patient take antibiotics, anticholinergics, or phenothiazines during the last week? No Unknown Yes
List meds: _____

Differential Diagnosis: Were the following conditions considered and ruled out?

Stroke (CVA) <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If yes, what test was done: _____	Results: _____
Guillain-Barre Syndrome <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If yes, what test was done: _____	Results: _____
Myasthenia gravis <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes	If yes, what test was done: _____	Results: _____

Tick paralysis No Unknown Yes If yes, what test was done: _____ Results: _____
 Lambert-Eaton syndrome No Unknown Yes If yes, what test was done: _____ Results: _____
 Toxic exposures No Unknown Yes If yes, what kind of exposure _____ Results: _____
 Poliomyelitis No Unknown Yes If yes, what test was done: _____ Results: _____

Notified:

State epidemiologist: No Unknown Yes Date: ___/___/_____
 BCL No Unknown Yes Date: ___/___/_____
 CDC No Unknown Yes Date: ___/___/_____
 CDC Infant Botulism No Unknown Yes Date: ___/___/_____
 FDA No Unknown Yes Date: ___/___/_____
 USDA No Unknown Yes Date: ___/___/_____

Diagnosis

Tentative diagnosis: _____
 Current status of Patient _____
 What diagnoses have been ruled out? _____

Recommendations by EIS Officer

Induce emesis: No Unknown Yes Purgation: No Unknown Yes Antitoxin: No Unknown Yes
 Antibiotics: No Unknown Yes Surgery: No Unknown Yes Other recommendations: No Unknown Yes

Clinical Criteria for Case Classification

Does the patient have diplopia, blurred vision, and bulbar weakness and is symmetric descending paralysis present? No Unknown Yes
 Did the patient ingest the same food as another patient with a laboratory-confirmed case? No Unknown Yes
 Did the patient have any other epidemiologic link without laboratory confirmation? No Unknown Yes
 Description of link: _____

Laboratory Criteria for Case Classification

Was botulinum toxin detected in serum, stool, or patient's food? No Unknown Yes
 Was *Clostridium botulinum* isolated from stool? No Unknown Yes

PHEP PROJECT - GENERAL

Date of presumptive diagnosis: ___/___/_____

CONTROL MEASURES IMPLEMENTED (Answer all)

Date first control measures initiated: ___/___/_____ Other measures: _____
 Education case/contacts: No Unk Yes N/A Exclusions from food handling: No Unk Yes N/A
 Exclusions from healthcare: No Unk Yes N/A Exclusions from daycare/school: No Unk Yes N/A
 Immunization: No Unk Yes N/A Prophylaxis: No Unk Yes N/A
 Identification of exposed individuals: No Unk Yes N/A Identification of additional cases: No Unk Yes N/A
 Identification of likely source of infection: No Unk Yes N/A Collection of food: No Unk Yes N/A
 Notify state/federal partner agencies/organizations: No Unknown Yes N/A

DAY CARE

Is this patient associated with a day care facility? No Unknown Yes
 Attend a day care center? No Unknown Yes Work at a day care center? No Unknown Yes
 Live with a day care center attendee? No Unknown Yes What is the name of the day care facility? _____
 What type of day care facility? Adult day health care Adult day social care Alzheimer's specific day care
 Child care center Child care provided by friend, relative, neighbor In-home care giver
 Is food prepared at this facility? No Unknown Yes Does this facility care for diapered persons? No Unknown Yes

DRINKING WATER EXPOSURE

What is the source of tap water at home? Do not use tap water Municipal, city, or county Other _____ Private well Unknown

If "Private Well", how was home well water treated? Both filtered and disinfected Disinfected Filtered
 Neither filtered nor disinfected Unknown

What is the source of tap water at school/work? Do not use tap water Municipal, city, or county Other _____ Private well Unknown

If "Private Well", how was school/work well water treated? Both filtered and disinfected Disinfected Filtered
 Neither filtered nor disinfected Unknown

Did the patient drink untreated water in the 7 days prior to onset of illness (e.g., from a river while camping)? No Unknown Yes

UNDERLYING CONDITIONS

Did the patient have any of the following underlying conditions?

- | | | |
|---|--|---|
| <input type="checkbox"/> CSF leak | <input type="checkbox"/> Hodgkin's disease | <input type="checkbox"/> IVDU |
| <input type="checkbox"/> Alcohol abuse | <input type="checkbox"/> Asthma | <input type="checkbox"/> Atherosclerotic cardiovascular disease (ASCVD)/CAD |
| <input type="checkbox"/> Burns | <input type="checkbox"/> Cerebral vascular accident (CVA) stroke | <input type="checkbox"/> Chronic GI illness/diarrhea |
| <input type="checkbox"/> Cirrhosis/liver failure | <input type="checkbox"/> Cochlear implant | <input type="checkbox"/> Current smoker |
| <input type="checkbox"/> Deaf/profound hearing loss | <input type="checkbox"/> Diabetes mellitus (insulin-dependent) | <input type="checkbox"/> Emphysema/COPD |
| <input type="checkbox"/> Gastric surgery (type): _____ | <input type="checkbox"/> Heart failure | <input type="checkbox"/> Hematologic disease (type): _____ |
| <input type="checkbox"/> Immunodeficiency (type): _____ | <input type="checkbox"/> Immunoglobulin deficiency | <input type="checkbox"/> Immunosuppressive therapy (steroids, chemotherapy) |
| <input type="checkbox"/> Leukemia | <input type="checkbox"/> Multiple myeloma | <input type="checkbox"/> Nephrotic Syndrome |
| <input type="checkbox"/> None | <input type="checkbox"/> Organ transplant (organ): _____ | <input type="checkbox"/> Other liver disease (type): _____ |
| <input type="checkbox"/> Other malignancy (type): _____ | <input type="checkbox"/> Other prior illness (type): _____ | <input type="checkbox"/> Other renal disease (type): _____ |
| <input type="checkbox"/> Peptic ulcer | <input type="checkbox"/> Renal failure/dialysis | <input type="checkbox"/> Sickle cell anemia |
| <input type="checkbox"/> Splenectomy/asplenia | <input type="checkbox"/> Systemic lupus erythematosus (SLE) | <input type="checkbox"/> Unknown |

RELATED CASES

Does the patient know of any similarly ill persons? No Unknown Yes

If yes, did the health department collect contact information about other similarly ill persons and investigate further? No Unknown Yes

Are the other cases related to this one? No, sporadic Unknown Yes, household Yes, not household Yes, outbreak

OTHER CLINICAL DATA

Was botulism laboratory confirmed from a patient specimen? No Unknown Yes

Was *C. botulinum* isolated in culture from a patient specimen? No Unknown Yes

If food is known or thought to be the source:

Please specify food type: Commercial Home canned Other: _____ Other home cooked

Was food tested? No Unknown Yes

If food was positive, what was its toxin type: A B E F Other: _____

ADMINISTRATIVE

General Comments: _____

PHA4 SUPERVISOR REVIEW

Date Due: ___/___/_____
(Incomplete)

Investigation ready for supervisor review: Reviewed (Complete) Reviewed

Date investigation ready for supervisor review: ___/___/_____
(Incomplete)

Reviewed (Not a case) Yes

Review comments (completed by supervisor): _____

State Epidemiologist's Recommendations:

Create the appropriate ALNBS investigation: 1. Botulism, foodborne, 2. Botulism, infant, 3. Botulism, other/unspecified, or 4. Botulism, wound.

Clinical syndrome

The clinical syndrome of botulism, whether foodborne, infant, wound, or intestinal colonization, is dominated by the neurologic symptoms and signs resulting from a toxin-induced blockade of the voluntary motor and autonomic cholinergic junctions and is quite similar for each cause and toxin type. Incubation periods for foodborne botulism are reported to be as short as 6 hours or as long as 10 days, but generally the time between toxin ingestion and onset of symptoms ranges from 18 – 36 hours.

Types of Botulism: Foodborne, Wound, Infant, Child or adult botulism from intestinal colonization.

Diagnosis/Signs & Symptoms Adult

- Acute onset of gastrointestinal autonomic (ex. Dry mouth, difficulty focusing)
- Cranial nerve (diplopia, dysarthria, dysphagia) dysfunction
- Descending peripheral muscle weakness
- Ventilatory compromise

Diagnosis/Signs & Symptoms Infant/Child

- Poor feeding, diminished suckling and crying ability
- Constipation is often seen in infants and in some has preceded the onset of neurologic abnormalities by many days.
- Neck and Peripheral weakness (floppy babies)
- Loss of facial expression
- Extraocular muscle paralysis, dilated pupils
- Depression of deep tendon reflexes
- Ventilatory failure

Important Phone Numbers:

- General CDC 1-800-232-4636
- National Botulism Surveillance 1-404-639-2206
- Infant Botulism 1-510-231-7600
- Consult with CDC National Center for Environmental Health and Agency for Toxic Substances and Disease Registry. 24/7 1-770-488-7100
- BCL 1-334-260-3400