

**North Carolina Department of Health and Human Services  
Division of Public Health • Epidemiology Section  
Communicable Disease Branch**



**ATTENTION HEALTH CARE PROVIDERS:**

Please report relevant clinical findings about this disease event to the local health department.

**ANTHRAX  
Confidential Communicable Disease Report—Part 2  
NC DISEASE CODE: 3**

**ATTENTION Local Health Department Staff: There is no Part 2 Wizard for this disease.  
Enter all information from this form into the NC EDSS question packages.**

If sending this form to the Health Care Provider, remember to attach a cover letter from your agency indicating the part(s) of the form the provider should complete.

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN / /

**NC EDSS LAB RESULTS** Verify if lab results for this event are in NC EDSS. If not present, enter results.

Specimen Date	Specimen #	Specimen Source	Type of Test	Test Result(s)	Description (comments)	Result Date	Lab Name—City/State
/ /						/ /	
/ /						/ /	
/ /						/ /	

**PREDISPOSING CONDITIONS**

Any immunosuppressive conditions?  Y  N  U  
Specify \_\_\_\_\_

**CLINICAL FINDINGS**

Is/was patient symptomatic for this disease?  Y  N  U  
If yes, symptom onset date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

**Fever**  Y  N  U  
 Yes, subjective  No  
 Yes, measured  Unknown  
 Highest measured temperature \_\_\_\_\_  
 Fever onset date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

**Fatigue or malaise or weakness**  Y  N  U

**Shock**  Y  N  U  
 Was systolic BP <90mm Hg  Y  N  U  
 Shock was  Septic  Hypovolemic

**Swollen lymph nodes** (lymphadenopathy or lymphadenitis)  Y  N  U  
 Distribution  Regional  Unilateral  Bilateral  Unknown  
 Location  Preauricular  Inguinal  Cervical  Femoral  Axillary

**Altered mental status**  Y  N  U  
 Patient displayed (select all that apply)  
 Confusion  Coma  Disorientation

**Headache**  Y  N  U  
**Stiff neck**  Y  N  U  
**Meningitis**  Y  N  U

(continued)

**CLINICAL FINDINGS (continued)**

**Elevated CSF protein**  Y  N  U  
**Elevated CSF cell count**  Y  N  U  
**Encephalomyelitis/**  
**meningoencephalitis**  Y  N  U

**Joint pains (arthralgias)**  Y  N  U  
**Muscle aches / pains (myalgias)**  Y  N  U  
**Skin lesions**  Y  N  U  
 Please describe (check all that apply)  
 Papule  Pustule  Vesicle  Bulla(e)  Ulcer

**Skin lesion characterized by coal black scab surrounded by non-tender swollen rim (black eschar)**  Y  N  U

**Oropharyngeal/mucosal lesion(s)** (stomatitis)  Y  N  U  
**Cough**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Productive  Y  N  U  
 Describe (check all that apply)  
 Clear  Purulent  Bloody (hemoptysis)

**Shortness of breath/difficulty breathing/ respiratory distress**  Y  N  U  
**Acute Respiratory Distress Syndrome (ARDS)**  Y  N  U  
**Pneumonia**  Y  N  U  
**Did the patient have a chest x-ray?**  Y  N  U  
 If yes, describe (check all that apply):  
 Normal  Infiltrate  Diffuse infiltrates/findings suggestive of ARDS  Mediastinal widening  Pleural effusion  Hilar adenopathy  Other

**Chest CT scan performed**  Y  N  U  
 Describe (check all that apply)  
 Infiltrate  Normal  Pleural effusion  Hilar Adenopathy  Mediastinal adenopathy  Other

**Hemorrhagic pleural effusion**  Y  N  U  
**Chest pain**  Y  N  U  
**Nausea**  Y  N  U  
**Vomiting**  Y  N  U  
**Abdominal pain or cramps**  Y  N  U  
**Diarrhea**  Y  N  U  
 Describe (select all that apply)  
 Bloody  Non-bloody  Watery  Other  
 Maximum number of stools in a 24-hour period: \_\_\_\_\_

**Bacteremia**  Y  N  U  
 Date of positive blood culture (mm/dd/yyyy) \_\_\_\_/\_\_\_\_/\_\_\_\_

**Septicemia / sepsis**  Y  N  U  
**Other symptoms, signs, clinical findings, or complications consistent with this illness**  Y  N  U  
 Please specify: \_\_\_\_\_

**Clinical classification**  
 Cutaneous  Inhalational  Gastrointestinal  Unknown  Oropharyngeal  Meningitis/meningoencephalitis

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN / /

**TREATMENT**

Did the patient take an antibiotic for this illness?  Y  N  U  
 If yes, specify antibiotic name: \_\_\_\_\_

Were antibiotics taken before culture specimen collected?  Y  N  U  
 Specify culture site(s) \_\_\_\_\_

Were antibiotics given in the 24 hours before culture?  Y  N  U

Was antibiotic prophylaxis given prior to illness onset?  Y  N  U

**TRAVEL/IMMIGRATION**

The patient is:  
 Resident of NC  
 Resident of another state or US territory  
 Foreign Visitor  
 Refugee  
 Recent Immigrant  
 Foreign Adoptee  
 None of the above

Did patient travel during the 7 days prior to onset of symptoms?  Y  N  U  
 List travel dates and destinations:  
 From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 \_\_\_\_\_

Does patient know anyone else with similar symptom(s) who had the same or similar travel history?  Y  N  U  
 List persons and contact information:  
 \_\_\_\_\_  
 \_\_\_\_\_

**HEALTH CARE FACILITY AND BLOOD & BODY FLUID EXPOSURE RISKS**

During the 7 days prior to onset of symptoms, did the patient work in a laboratory?  Y  N  U  
 If yes, specify and give details: \_\_\_\_\_

**HOSPITALIZATION INFORMATION**

Was patient hospitalized for this illness >24 hours?  Y  N  U  
 Hospital name: \_\_\_\_\_  
 City, State: \_\_\_\_\_  
 Hospital contact name: \_\_\_\_\_  
 Telephone: (\_\_\_\_) \_\_\_\_\_  
 Admit date (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Discharge date (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_

Additional travel/residency information:  
 \_\_\_\_\_

**OTHER EXPOSURE INFORMATION**

Does the patient know anyone else with similar symptoms?  Y  N  U  
 If yes, specify: \_\_\_\_\_

During the 7 days prior to onset of symptoms, did the patient:  
 Work in a post office or handle mail or packages?  Y  N  U  
 Name of facility \_\_\_\_\_  
 Street address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Zip code \_\_\_\_\_ County \_\_\_\_\_  
 Date(s) of work at this facility:  
 From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Specify any dates not present at work \_\_\_\_\_

**ISOLATION/QUARANTINE/CONTROL MEASURES**

Did local health director or designee implement additional control measures?  Y  N  
 If yes, specify: \_\_\_\_\_

**CHILD CARE/SCHOOL/COLLEGE**

Patient in child care?  Y  N  U  
 Patient a child care worker or volunteer in child care?  Y  N  U  
 Patient a parent or primary caregiver of a child in child care?  Y  N  U  
 Is patient a student?  Y  N  U  
 Is patient a school WORKER/VOLUNTEER in NC school setting?  Y  N  U  
 Give details: \_\_\_\_\_

Visit a post office, mail, or package facility?  Y  N  U  
 Name of facility \_\_\_\_\_  
 Street address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Zip code \_\_\_\_\_ County \_\_\_\_\_  
 Date(s) of visit(s) at this facility:  
 From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_

During the 7 days prior to onset of symptoms, did the patient serve in the US Military?  Y  N  U  
 If yes, specify where and give dates of service: \_\_\_\_\_

**BEHAVIORAL RISK & CONGREGATE LIVING**

During the 7 days prior to onset of symptoms, did the patient live in any congregate living facilities (correctional facility, barracks, shelter, commune, boarding school, camp, dormitory/sorority/fraternity)?  Y  N  U  
 Name of facility: \_\_\_\_\_  
 Dates of contact: \_\_\_\_\_

During the 7 days prior to onset of symptoms, did the patient attend social gatherings or crowded settings?  Y  N  U  
 If yes, specify: \_\_\_\_\_

In what setting was the patient most likely exposed?

<input type="checkbox"/> Restaurant	<input type="checkbox"/> Place of Worship
<input type="checkbox"/> Home	<input type="checkbox"/> Outdoors, including woods or wilderness
<input type="checkbox"/> Work	<input type="checkbox"/> Athletics
<input type="checkbox"/> Child Care	<input type="checkbox"/> Farm
<input type="checkbox"/> School	<input type="checkbox"/> Pool or spa
<input type="checkbox"/> University/College	<input type="checkbox"/> Pond, lake, river or other body of water
<input type="checkbox"/> Camp	<input type="checkbox"/> Hotel / motel
<input type="checkbox"/> Doctor's office/ Outpatient clinic	<input type="checkbox"/> Social gathering, other than listed above
<input type="checkbox"/> Hospital In-patient	<input type="checkbox"/> Travel conveyance (airplane, ship, etc.)
<input type="checkbox"/> Hospital Emergency Department	<input type="checkbox"/> International
<input type="checkbox"/> Laboratory	<input type="checkbox"/> Community
<input type="checkbox"/> Long-term care facility /Rest Home	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Military	<input type="checkbox"/> Unknown
<input type="checkbox"/> Prison/Jail/ Detention Center	

**FOOD RISK AND EXPOSURE**

Note: For GI Anthrax Only  
 During the 7 days prior to onset of symptoms did the patient do any of the following:  
 Handle raw meat other than poultry?  Y  N  U  
 If yes, specify: \_\_\_\_\_

**CLINICAL OUTCOMES**

Discharge/Final diagnosis: \_\_\_\_\_

Survived?  Y  N  U  
 Died?  Y  N  U  
 Died from this illness?  Y  N  U  
 Date of death (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_

Autopsy performed?  Y  N  U  
 Patient autopsied in NC?  Y  N  U  
 County of autopsy: \_\_\_\_\_  
 Autopsied outside NC, specify where: \_\_\_\_\_

Source of death information (select all that apply):  
 Death certificate  
 Autopsy report final conclusions  
 Hospital/discharge physician summary  
 Other

Eat ground beef/hamburger?  Y  N  U  
 If yes, specify: \_\_\_\_\_

Eat pork/pork products?  Y  N  U  
 If yes, specify: \_\_\_\_\_

Eat wild game meat (bear, buffalo, deer, wild boar, etc.)?  Y  N  U  
 If yes, specify: \_\_\_\_\_

Eat other meat/meat products  
 If yes, specify: \_\_\_\_\_

<b>Patient's Last Name</b>	<b>First</b>	<b>Middle</b>	<b>Suffix</b>	<b>Maiden/Other</b>	<b>Alias</b>	<b>Birthdate (mm/dd/yyyy)</b> / /
						<b>SSN</b> / /

**OUTDOOR EXPOSURE**

During the 7 days prior to onset of illness:  
**Did the patient participate in any outdoor activities?** .....  Y  N  U  
 If yes, specify:

Was patient exposed to wild animals? .  Y  N  U  
 If yes, specify type of animal and dates of exposure:

**What was location of the exposure?**  
 North Carolina  
 County \_\_\_\_\_  
 US (not North Carolina)  
 State \_\_\_\_\_  
 Foreign  
 Country \_\_\_\_\_

**Did patient skin/eviscerate (gut) wild animal or have contact with wild animal carcass?**  Y  N  U  
 Specify animal(s): \_\_\_\_\_  
 Specify exposure(s) (contact with) (check all that apply):  
 Hide  Bone  Blood  
 Hair  Raw meat  Excreta

**Did patient work in wildlife law enforcement?** .....  Y  N  U  
**Did patient work in wildlife rehabilitation?** .....  Y  N  U  
 If yes, specify type of wildlife \_\_\_\_\_

**CASE INTERVIEWS/INVESTIGATIONS**

**Was the patient interviewed?** .....  Y  N  U  
 Date of interview (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_  
**Were interviews conducted with others?** .....  Y  N  U  
 Who was interviewed?

**Were health care providers consulted?** .....  Y  N  U  
 Who was consulted?

**Medical records reviewed (including telephone review with provider/office staff)?** .....  Y  N  U  
**Specify reason if medical records were not reviewed:**

**Notes on medical record verification:**

**GEOGRAPHICAL SITE OF EXPOSURE**

**In what geographic location was the patient MOST LIKELY exposed?**  
 Specify location:  
 In NC  
 City \_\_\_\_\_  
 County \_\_\_\_\_  
 Outside NC, but within US  
 City \_\_\_\_\_  
 State \_\_\_\_\_  
 County \_\_\_\_\_  
 Outside US  
 City \_\_\_\_\_  
 Country \_\_\_\_\_  
 Unknown

**Is the patient part of an outbreak of this disease?** .....  Y  N

**Notes:**

**ANIMAL EXPOSURE**

**During the 7 days prior to onset of symptoms, did the patient have exposure to animals (includes animal tissues, animal products, or animal excreta)?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient own, work at, or visit a pet store, animal shelter, and/or animal breeder/wholesaler/distributor?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient work with animal importation?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient / household contact work at, live on, or visit a farm, ranch, or dairy?** .....  Y  N  U  
 If yes, specify and give details:

**Was patient exposed to animals associated with agriculture or aviculture (domestic/semi-domestic animals)?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient have contact with commercial animal products (i.e. wool, hair, hides, fur, raw/smoked meat, bones, bone meal)?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient work at or visit a slaughterhouse (abattoir), meat-packing plant, poultry or wild game processing facility?** .....  Y  N  U  
 If yes, specify and give details:

**Has patient otherwise slaughtered animals or been a butcher, meat cutter, or meat processor?** .....  Y  N  U  
 If yes, specify and give details:

**Did the patient work at or visit a fair with livestock or a petting zoo?** .....  Y  N  U  
 If yes, specify and give details:

**Did the patient work at or visit a zoo, zoological park, or aquarium?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient work in a veterinary practice or animal laboratory, animal research setting, biomedical laboratory, or an animal diagnostic laboratory?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient work with anthrax vaccines?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient necropsy animals?** .....  Y  N  U  
 If yes, specify and give details:

**Did patient work with B. anthracis?** .....  Y  N  U  
 If yes, specify and give details:

**Notes:**

**VACCINE**

**Has patient/contact ever received anthrax vaccine?** .....  Y  N  U  
 If yes, provide the vaccine name, the source of the vaccine, date of vaccination, and source of the vaccine information:

**Notes:**

# **Anthrax (*Bacillus anthracis*)**

## **2010 Case Definition**

CSTE Position Statement Number: 09-ID-10

### **Clinical description**

- **Cutaneous Anthrax:** An acute illness, or post-mortem examination revealing a painless skin lesion developing over 2 to 6 days from a papular through a vesicular stage into a depressed black eschar with surrounding edema. Fever, malaise and lymphadenopathy may accompany the lesion.
- **Inhalation Anthrax:** An acute illness, or post-mortem examination revealing a prodrome resembling a viral respiratory illness, followed by hypoxia, dyspnea or acute respiratory distress with resulting cyanosis and shock. Radiological evidence of mediastinal widening or pleural effusion is common.
- **Gastrointestinal Anthrax:** An acute illness, or post-mortem examination revealing severe abdominal pain and tenderness, nausea, vomiting, hematemesis, bloody diarrhea, anorexia, fever, abdominal swelling and septicemia.
- **Oropharyngeal Anthrax:** An acute illness, or post-mortem examination revealing a painless mucosal lesion in the oral cavity or oropharynx, with cervical adenopathy, edema, pharyngitis, fever, and possibly septicemia.
- **Meningeal Anthrax:** An acute illness, or post-mortem examination revealing fever, convulsions, coma, or meningeal signs. Signs of another form will likely be evident as this syndrome is usually secondary to the above syndromes.

### **Case classification**

**Suspected:** An illness suggestive of one of the known anthrax clinical forms. No definitive, presumptive, or suggestive laboratory evidence of *B. anthracis*, or epidemiologic evidence relating it to anthrax.

**Probable:**

A clinically compatible illness that does not meet the confirmed case definition, but with one of the following:

- Epidemiological link to a documented anthrax environmental exposure;
- Evidence of *B. anthracis* DNA (for example, by LRN-validated polymerase chain reaction) in clinical specimens collected from a normally sterile site (such as blood or CSF) or lesion of other affected tissue (skin, pulmonary, reticuloendothelial, or gastrointestinal);
- Positive result on testing of clinical serum specimens using the Quick ELISA Anthrax-PA kit;
- Detection of Lethal Factor (LF) in clinical serum specimens by LF mass spectrometry
- Positive result on testing of culture from clinical specimens with the RedLine Alert test.

**Confirmed:**

A clinically compatible illness with one of the following:

- Culture and identification of *B. anthracis* from clinical specimens by the Laboratory Response Network (LRN);
- Demonstration of *B. anthracis* antigens in tissues by immunohistochemical staining using both *B. anthracis* cell wall and capsule monoclonal antibodies;
- Evidence of a four-fold rise in antibodies to protective antigen between acute and convalescent sera or a four-fold change in antibodies to protective antigen in paired convalescent sera using Centers for Disease Control and Prevention (CDC) quantitative anti-PA IgG ELISA testing;
- Documented anthrax environmental exposure AND evidence of *B. anthracis* DNA (for example, by LRN-validated polymerase chain reaction) in clinical specimens collected from a normally sterile site (such as blood or CSF) or lesion of other affected tissue (skin, pulmonary, reticuloendothelial, or gastrointestinal).