

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.

Durham County Health Department
Communicable Disease Control
414 East Main Street
Durham, NC 27701

Telephone: (919) 560-7600
Fax: (919) 560-7716

FOODBORNE POISONING: MUSHROOM
Confidential Communicable Disease Report—Part 2
NC DISEASE CODE: 131

REMINDER to Local Health Department staff: 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



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

Table with 8 columns: Specimen Date, Specimen #, Specimen Source, Type of Test, Test Result(s), Description (comments), Result Date, Lab Name—City/State



Is/was patient symptomatic for this disease? Y N U

If yes, symptom onset date (mm/dd/yyyy):

CHECK ALL THAT APPLY:

Fever Y N U

Yes, subjective No
Yes, measured Unknown

Highest measured temperature
Fever onset date (mm/dd/yyyy):

Drowsy Y N U

Sweats (diaphoresis) Y N U

Thirst Y N U

Extreme thirst Y N U

Dehydration Y N U

Signs of dehydration (choose all that apply):

- Decreased skin turgor
Dry mucous membranes
Non-palpable pulse
Sunken eyes
Decreased urine output

Light-headedness (pre-syncope) Y N U

Dizziness Y N U

Altered mental status Y N U

Patient displayed (select all that apply):

- Delirium Depression Hallucinations
Disorientation Excitability Illusions
Coma Drowsiness

Memory loss Y N U

Memory loss was: Short term Long term

Periods of drowsiness followed by hyperactivity Y N U

Incoherent speech Y N U

Headache Y N U

Seizures/convulsions Y N U

Please specify

- New onset
Exacerbation of underlying seizure disorder

Other Unknown

Ataxia Y N U

Mouth tingling/burning Y N U

Numbness of lips or tongue Y N U

Facial flushing Y N U

Pain or paresthesia of the face and/or lower extremities Y N U

Hot/cold temperature sensory reversals Y N U

Acute onset of peripheral neuropathy Y N U

Muscle paralysis Y N U

Skin rash Y N U

Skin itching (pruritis) Y N U

Aching teeth Y N U

Shortness of breath/difficulty breathing/respiratory distress Y N U

Respiratory arrest Y N U

Palpitations Y N U

Cardiac arrhythmias or cardiac arrest Y N U

Hypotension Y N U

Lowest recorded blood pressure

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:

Excessive urination Y N U

Organ failure Y N U

If yes, specify:

REASON FOR TESTING

Why was the patient tested for this condition?

- Symptomatic of disease
Screening of asymptomatic person with reported risk factor(s)
Exposed to organism causing this disease (asymptomatic)
Household contact to a person reported with this disease
Other, specify:
Unknown

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): / /

ISOLATION/QUARANTINE/CONTROL MEASURES

Did local health director or designee implement additional control measures? Y N

If yes, specify:

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

**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): \_\_\_\_/\_\_\_\_/\_\_\_\_

**TRAVEL/IMMIGRATION**

The patient is:

Resident of North Carolina

Resident of another state or US territory

None of the above

Did patient have a travel history during the 24 hours prior to onset of symptoms? .....  Y  N  U

Travel dates: From: \_\_\_\_\_ until \_\_\_\_\_

To city: \_\_\_\_\_

To country: \_\_\_\_\_

Does patient know anyone else with similar symptom(s) who had the same or similar travel history? .....  Y  N  U

Name: \_\_\_\_\_

Additional travel/residency information:

**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

Type of school: \_\_\_\_\_

Is patient a school WORKER / VOLUNTEER in NC school setting? .....  Y  N  U

Give details: \_\_\_\_\_

**BEHAVIORAL RISK & CONGREGATE LIVING**

During the 24 hours 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 24 hours 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?

Restaurant

Home

Work

Child Care

School

University/College

Camp

Doctor's office/ Outpatient clinic

Hospital In-patient

Hospital Emergency Department

Laboratory

Long-term care facility /Rest Home

Military

Prison/Jail/Detention Center

Place of Worship

Outdoors, including woods or wilderness

Athletics

Farm

Pool or spa

Pond, lake, river or other body of water

Hotel / motel

Social gathering, other than listed above

Travel conveyance (airplane, ship, etc.)

International

Community

Other (specify) \_\_\_\_\_

Unknown

**FOOD RISK AND EXPOSURE**

Where does the patient/patient's family typically buy groceries?

Store name: \_\_\_\_\_

Store city: \_\_\_\_\_

Shopping center name/address: \_\_\_\_\_

During the 24 hours prior to onset of symptoms, did the patient:

Eat any food items that came from a produce stand, flea market, or farmer's market? .....  Y  N  U

Specify source: \_\_\_\_\_

Eat any food items that came from a store or vendor where they do not typically shop for groceries? .....  Y  N  U

Specify source(s): \_\_\_\_\_

Eat mushrooms or food containing mushrooms harvested from the wild? .....  Y  N  U

Describe the mushrooms and location where they were collected: \_\_\_\_\_

Are any of the wild harvested mushrooms still available for testing? .....  Y  N  U

Eat raw salads or vegetables other than sprouts? .....  Y  N  U

Specify raw salad or vegetable:

Bagged salad greens without toppings, type: \_\_\_\_\_

Salad with toppings, specify: \_\_\_\_\_

Lettuce, type: \_\_\_\_\_

Spinach

Tomatoes, type: \_\_\_\_\_

Cucumbers

Mushrooms, type: \_\_\_\_\_

Onions, type: \_\_\_\_\_

Potatoes, type: \_\_\_\_\_

Other, specify: \_\_\_\_\_

Eat at a group meal? .....  Y  N  U

Specify:

Place of Worship

School:

Social function

Other, Specify: \_\_\_\_\_

Eat food from a restaurant? .....  Y  N  U

Name: \_\_\_\_\_

Location: \_\_\_\_\_

**OTHER EXPOSURE INFORMATION**

Does the patient know anyone else with similar symptoms? .....  Y  N  U

If yes, specify: \_\_\_\_\_

**CASE INTERVIEWS/INVESTIGATIONS**

Was the patient interviewed? .....  Y  N  U

Were interviews conducted with others? .....  Y  N  U

Who was interviewed?

Friend

Date of Interview: \_\_\_\_\_

Location of Interview: \_\_\_\_\_

Interpreter Used:

Co-Worker

Date of Interview: \_\_\_\_\_

Location of Interview: \_\_\_\_\_

Interpreter Used:

Relative

Date of Interview: \_\_\_\_\_

Location of Interview: \_\_\_\_\_

Interpreter Used:

Other

Date of Interview: \_\_\_\_\_

Location of Interview: \_\_\_\_\_

Interpreter Used: \_\_\_\_\_

Were health care providers consulted? .....  Y  N  U

Who was consulted?

Physician

PA/FNP

Infectious disease physician

Other

Medical records reviewed? .....  Y  N  U

Sources:

Hospital

Clinic/Health Care provider

Other \_\_\_\_\_

Please 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 regarding setting of exposure:

## Foodborne poisoning: mushroom

### 2007 Case Definition (North Carolina)

#### Clinical description

Mushroom poisoning is caused by the consumption of raw or cooked fruiting bodies (mushrooms, toadstools) of a number of species of fungi. The toxins involved in mushroom poisoning are produced naturally by the fungi themselves and most mushrooms that cause human poisoning cannot be made nontoxic by cooking, canning, freezing, or any other means of processing.

Mushroom poisonings are generally acute and are manifested by a variety of symptoms and prognoses, depending on the amount and species consumed. Mushroom poisonings are generally categorized by their physiological effects. There are four categories of mushroom toxins: protoplasmic poisons (poisons that result in generalized destruction of cells, followed by organ failure); neurotoxins (compounds that cause neurological symptoms such as profuse sweating, coma, convulsions, hallucinations, excitement, depression, spastic colon); gastrointestinal irritants (compounds that produce rapid, transient nausea, vomiting, abdominal cramping, and diarrhea); and disulfiram-like toxins. Mushrooms in this last category are generally nontoxic and produce no symptoms unless alcohol is consumed within 72 hours after eating them, in which case a short-lived acute toxic syndrome is produced.

The most important mushroom poisonings from a public health perspective are those caused by *Amanita phalloides* mushrooms, which produce a heat stable toxin that causes nausea, vomiting, diarrhea, thirst, pupil dilatation, collapse, coma and death; and *Muscaria* type mushrooms, that cause symptoms including salivation, perspiration, pupil dilatation, and wheezing or difficulty breathing. Symptoms from these two types of mushrooms can develop within minutes to 24 hours after consumption of toxic mushrooms in food, whether cooked or not.

#### Laboratory criteria for diagnosis

Laboratory tests exist for the *Amanita* toxins, but they are not widely available. Diagnosis for all types of mushroom poisonings is usually made on the basis of symptoms in patients with mushroom exposures, and is often aided by correct identification by someone who is well versed in identifying mushroom types of the mushroom species the patient consumed.

#### Case classification

Confirmed: a clinically compatible case in someone with mushroom exposures