

# Hemolytic Uremic Syndrome (HUS)

**FOR STATE USE ONLY**

Status:  Confirmed  Probable  
 Suspect  Not a case

Investigator: \_\_\_\_\_ Agency: \_\_\_\_\_  
 Phone number: \_\_\_\_\_

Reviewer initials: \_\_\_\_\_  
 Referred to another state: \_\_\_\_\_

**CASE**

Last name: \_\_\_\_\_ Date of Birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Estimated?  Age: \_\_\_\_\_  
 First and middle name: \_\_\_\_\_ Gender:  Female  Male  Other \_\_\_\_\_  
 Maiden name: \_\_\_\_\_ Suffix: \_\_\_\_\_ Pregnant:  Yes  No  Unk Est. delivery date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Address line: \_\_\_\_\_ Marital status:  Single  Married  Separated  
 Divorced  Parent with partner  Widowed  
 Zip: \_\_\_\_\_ City: \_\_\_\_\_ Race:  American Indian or Alaskan Native  Unknown  
 Black or African American  White  
 Hawaiian or Pacific Islander  Asian  
 State: \_\_\_\_\_ County: \_\_\_\_\_ Ethnicity:  Hispanic or Latino  Not Hispanic or Latino  Unknown  
 Phone: (\_\_\_\_) - \_\_\_\_ - \_\_\_\_ Type: \_\_\_\_\_  
 Long-term care resident:  Yes  No  Unknown Parent/Guardian name: \_\_\_\_\_  
 Facility name: \_\_\_\_\_ Parent/Guardian phone: (\_\_\_\_) - \_\_\_\_ - \_\_\_\_ Type: \_\_\_\_\_

**EVENT**

Diagnosis date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Onset date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Event outcome:  Survived this illness  Died from this illness  
 Died unrelated to this illness  
 Date of Death: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Unknown  
 Event exception:  Case could not be found  
 Case could not be interviewed  
 Case refused interview  
 Other – see notes  
 Outbreak related:  Yes  No  Unknown  
 Outbreak name: \_\_\_\_\_  
 Exposure setting: \_\_\_\_\_  
 Epi-linked:  Yes  No  Unk To whom: \_\_\_\_\_  
 Location acquired:  In USA, in reporting state  
 In USA, outside reporting state  
 Outside USA  
 Unknown  
 State: \_\_\_\_\_ Country: \_\_\_\_\_

Healthcare provider information

Last name: \_\_\_\_\_  
 First name: \_\_\_\_\_  
 Title:  ARNP  MD  PA  
 DO  NP  
 Facility name: \_\_\_\_\_  
 Address line 1: \_\_\_\_\_  
 Address line 2: \_\_\_\_\_  
 Zip code: \_\_\_\_\_ City: \_\_\_\_\_  
 State: \_\_\_\_\_ County: \_\_\_\_\_  
 Phone: (\_\_\_\_) - \_\_\_\_ - \_\_\_\_ Type: \_\_\_\_\_

**LABORATORY FINDINGS**

Laboratory: \_\_\_\_\_ Accession #: \_\_\_\_\_ Collection date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Date received: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Specimen source: \_\_\_\_\_ Test type: \_\_\_\_\_  
 Result type:  Preliminary  Final Result date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Result:  Positive  Negative  
 Organism: \_\_\_\_\_ Serotype: \_\_\_\_\_

Laboratory: \_\_\_\_\_ Accession #: \_\_\_\_\_ Collection date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
 Date received: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Specimen source: \_\_\_\_\_ Test type: \_\_\_\_\_  
 Result type:  Preliminary  Final Result date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Result:  Positive  Negative  
 Organism: \_\_\_\_\_ Serotype: \_\_\_\_\_

Laboratory: \_\_\_\_\_ Accession #: \_\_\_\_\_ Collection date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

CONFIDENTIAL

PATIENT NAME: \_\_\_\_\_

Iowa Department of Public Health

|  |                                    |   |
|--|------------------------------------|---|
| Date received: _____ / _____ / _____   | Specimen source: _____             | Test type: _____  |
| Result type: <input type="checkbox"/> Preliminary <input type="checkbox"/> Final | Result date: _____ / _____ / _____ | Result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative |
| Organism: _____  | Serotype: _____                    |   |

**OCCUPATIONS**

Interpret 'occupation' very loosely and consider every person to have at least one 'occupation'.

|   |  |
|---|--|
| Occupation type: _____  | Job title: _____   |
| Worked after symptom onset: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown   | Facility name: _____   |
| Date worked from: _____ / _____ / _____   | Address: _____   |
| Date worked to: _____ / _____ / _____   | Zip code: _____  |
| Removed from duties: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown          | City: _____ State: _____ County: _____   |
| Date removed: _____ / _____ / _____   | Phone: (____)____-____-____ Ext: _____ Type: _____   |
| Handle food: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown                  | Work in a health care setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown |
| Attend or provide child care: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | Direct patient care duties: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown    |
| Attend school: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown                | Health care worker type: _____   |
| Work in a lab setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown        |  |

|   |   |
|---|---|
| Occupation type: _____  | Job title: _____  |
| Worked after symptom onset: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown   | Facility name: _____  |
| Date worked from: _____ / _____ / _____   | Address: _____  |
| Date worked to: _____ / _____ / _____   | Zip code: _____   |
| Removed from duties: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown          | City: _____ State: _____ County: _____  |
| Date removed: _____ / _____ / _____   | Phone: (____)____-____-____ Ext: _____ Type: _____  |
| Handle food: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown                  | Work in a health care setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown                            |
| Attend or provide child care: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | Direct patient care duties in lab or health care setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown |
| Attend school: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown                | Health care worker type: _____  |
| Work in a lab setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown        |   |

**HOSPITALIZATIONS**

Was the case hospitalized?  Yes  No  Unknown

|                          |   |                                       |
|--------------------------|---|---------------------------------------|
| Hospital: _____          | Admission date: _____ / _____ / _____   | Discharge date: _____ / _____ / _____ |
| Days hospitalized: _____ | Isolated at entry: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk  | Isolation type (entry): _____         |
|                          | Currently isolated: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | Current isolation type: _____         |

**CLINICAL INFO & DIAGNOSIS**

|  |   |
|--|---|
| Developed anemia: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown  | Diarrhea within 3 weeks of onset of HUS: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk                |
| Microangiopathic changes present (schistocytes, burr cells, or helmet cells on peripheral blood smear) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | Clinical indicators: <input type="checkbox"/> Elevated creatine level <input type="checkbox"/> Proteinuria <input type="checkbox"/> Hematuria |
| Antacids taken: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown  | Brand Name: _____   |
| TTP Diagnosis <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk  | Onset Date _____ / _____ / _____  |

|                 |  |  |
|-----------------|--|--|
| <b>Symptoms</b> | Diarrhea <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours        | Abdominal cramps <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours        |
|                 | Nausea <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours          | Chills <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours                  |
|                 | Vomiting <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours        | Fever <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours                   |
|                 | Headache <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours        | Visible bloody diarrhea <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours |
|                 | Muscle weakness <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk _____ Days/Hours |  |
|                 | First symptom: _____   | Most severe symptom: _____   |

**OTHER LAB FINDINGS**

Food, Medication, or environmental samples tested?  Yes  No  Unk Describe samples: \_\_\_\_\_  
 For what were the samples tested?  E. coli or EHEC \_\_\_\_\_  
 Salmonella  Shigella \_\_\_\_\_  
 Laboratory: \_\_\_\_\_ Positive?  Yes  No  Unk PFGE performed?  Yes  No  Unk

**PFGE Pattern:**

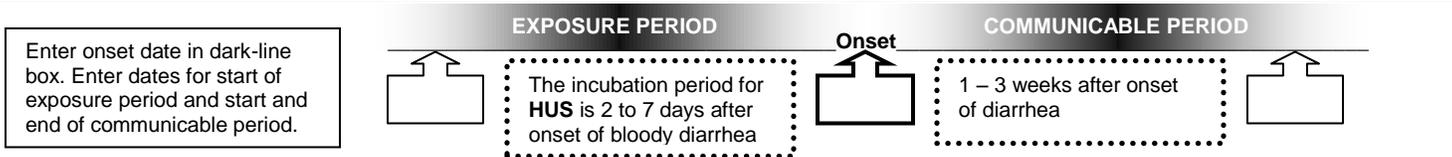
|             |  |             |  |              |  |              |  |
|-------------|--|-------------|--|--------------|--|--------------|--|
| IAX Pattern |  | JXB Pattern |  | Xbal-Pattern |  | Blnl-Pattern |  |
|-------------|--|-------------|--|--------------|--|--------------|--|

**TREATMENT**

Antibiotics prescribed?  Yes  No  Unknown

|  |  |  |
|--|--|--|
| Antibiotic: _____<br>Date started: ____/____/____<br>Dose: _____<br>Unit: <input type="checkbox"/> mg <input type="checkbox"/> ml <input type="checkbox"/> IU # of days: _____<br># of times a day: _____ Route: _____ | Antibiotic: _____<br>Date started: ____/____/____<br>Dose: _____<br>Unit: <input type="checkbox"/> mg <input type="checkbox"/> ml <input type="checkbox"/> IU # of days: _____<br># of times a day: _____ Route: _____ | Antibiotic: _____<br>Date started: ____/____/____<br>Dose: _____<br>Unit: <input type="checkbox"/> mg <input type="checkbox"/> ml <input type="checkbox"/> IU # of days: _____<br># of times a day: _____ Route: _____ |
|--|--|--|

**INFECTION TIMELINE**



**RISK FACTORS/TRAVEL (include 10 days before onset of diarrhea)**

|  |                          |                                |                             |
|--|--------------------------|--------------------------------|-----------------------------|
| Travel within Iowa? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk  | City in Iowa: _____      | Departure date: ____/____/____ | Return date: ____/____/____ |
| Travel within U.S.? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk  | State: _____ City: _____ | Departure date: ____/____/____ | Return date: ____/____/____ |
| Travel outside U.S.? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | Country: _____           | Departure date: ____/____/____ | Return date: ____/____/____ |

Restaurants visited?  Yes  No  Unknown *If Yes, complete the table below:*

| Restaurant | Address/Zip | Date visited   | Foods eaten | Others ill?  |
|------------|-------------|----------------|-------------|--|
|            |             | ____/____/____ | _____       | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |
|            |             | ____/____/____ | _____       | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |
|            |             | ____/____/____ | _____       | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |
|            |             | ____/____/____ | _____       | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |
|            |             | ____/____/____ | _____       | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |

Attended Group Gatherings?  Yes  No  Unknown *If Yes, complete the following table:*

| Type of gathering | Address/Zip | Date visited   | Foods consumed | Foods prepared | Others ill?  |
|-------------------|-------------|----------------|----------------|----------------|--|
|                   |             | ____/____/____ | _____          | _____          | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |
|                   |             | ____/____/____ | _____          | _____          | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |
|                   |             | ____/____/____ | _____          | _____          | <input type="checkbox"/> Yes<br><input type="checkbox"/> No <input type="checkbox"/> Unk |

**Dietary Information – In the 10 days prior to onset of diarrheal symptoms did the case:**

Purchase food products?  Yes  No  Unknown *If Yes, complete the table below:*

| Store name | Address | City/State/Zip | County | Date purchased |
|------------|---------|----------------|--------|----------------|
|            |         |                |        | ____/____/____ |
|            |         |                |        | ____/____/____ |
|            |         |                |        | ____/____/____ |

**Meat and poultry**

**Were any of the following consumed?**  Poultry  Ground meat  Meat other than ground meat:

Was the meat fully cooked?  Yes  No  Unknown

List all source/types: \_\_\_\_\_

List all brand names: \_\_\_\_\_

From dates consumed:     /     /     ,     /     /     To dates consumed:     /     /     ,     /     /

**Other meat and poultry products**

**Deli/luncheon meat**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Raw/partially cooked eggs:**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Unpasteurized products**

**Unpasteurized milk:**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Unpasteurized juice:**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Other unpasteurized products:**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Other products**

**Health supplements:**  Yes  No  Unk     From date consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Infant formula:**  Yes  No  Unk     From date consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Baby food:**  Yes  No  Unk     From date consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Fruits and vegetables**

**Raw fruits:**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Raw vegetables:**  Yes  No  Unk     From dates consumed:     /     /     To dates consumed:     /     /

List all source/types: \_\_\_\_\_     List all brand names: \_\_\_\_\_

**Other**

**Leftover foods consumed:**  Yes  No  Unk     Reheated:  Yes  No  Unk     From date consumed:     /     /     To date consumed:     /     /

**Animal Exposures – In the 10 days prior to the onset of diarrhea**

Check all that apply

**Visit or live on a farm:**  Yes  No  Unknown

**Exposed to manure:**  Yes  No  Unknown

**Farm animal contact:**  Yes  No  Unknown     Animals: \_\_\_\_\_

**Reptile contact:**  Yes  No  Unknown      Iguana  Lizard  Turtle  Other \_\_\_\_\_

**Reptile lived with case:**  Yes  No  Unknown

**Other animal contact in home:**  Yes  No  Unknown     Animal: \_\_\_\_\_     Animal sick:  Yes  No  Unk

**Visited a petting zoo:**  Yes  No  Unknown     Touched animals:  Yes  No  Unk     Animal: \_\_\_\_\_

Zoo name: \_\_\_\_\_     Address/Zip/County: \_\_\_\_\_

**Water Exposures – In the 10 days prior to the onset of diarrhea**

Went swimming?  Yes  No  Unknown *If Yes, complete the table below:*

| Type  | Location Type  | Date visited          | Facility name/ Street address & Zip |
|---|--|-----------------------|-------------------------------------|
| <input type="checkbox"/> Hot tub/spa<br><input type="checkbox"/> Kiddie pool<br><input type="checkbox"/> River/stream<br><input type="checkbox"/> Lake<br><input type="checkbox"/> Pond<br><input type="checkbox"/> Water park<br><input type="checkbox"/> Swimming pool<br><input type="checkbox"/> Water fountain/ splash pad<br><input type="checkbox"/> Other _____ | <input type="checkbox"/> Hotel/motel<br><input type="checkbox"/> Indoor private<br><input type="checkbox"/> Indoor public<br><input type="checkbox"/> Outdoor private<br><input type="checkbox"/> Outdoor public | _____ / _____ / _____ | _____<br>_____                      |

**Water supply**

**Home:**  Bottled  Commercial Delivery  Municipal  Rural water  Well  
**Work:**  Bottled  Commercial Delivery  Municipal  Rural water  Well  
**School:**  Bottled  Commercial Delivery  Municipal  Rural water  Well  
**Child care:**  Bottled  Commercial Delivery  Municipal  Rural water  Well

**Other Exposures – In the 10 days prior to the onset of diarrhea did the case:**

**Wear diapers:**  Yes  No  Unk **Have contact with diapers:**  Yes  No  Unknown  
**Have contact with immunocompromised person:**  Yes  No  Unk  
**Have sex with someone with similar symptoms:**  Yes  No  Unk  
**Participate in outdoor activities:**  Yes  No  Unk

**Setting:**  Home  Work  Other \_\_\_\_\_  
**Sexual preference:**  Hetero  Homo  Bisexual  Unknown  
**Activities:**  Camping  Canoeing  Fishing  Hiking  Hunting  Rafting  Trapping

**CONTACTS**

Number of people living in case's household: \_\_\_\_\_

Are there close contacts of the case with same symptoms:  Yes  No  Unknown

| Name   | DOB               | Gender   | Address/Phone   |
|--|-------------------|--|---|
| _____  | _____/_____/_____ | <input type="checkbox"/> Male<br><input type="checkbox"/> Female | _____<br>Zip code: _____ Phone: _____ - _____ - _____       |
| Relationship to case   | List symptoms     | Symptom onset date   | Is contact a case?  |
| <input type="checkbox"/> Spouse <input type="checkbox"/> Sexual contact<br><input type="checkbox"/> Child <input type="checkbox"/> Family member (non-household)<br><input type="checkbox"/> Sibling <input type="checkbox"/> Friend/acquaintance<br><input type="checkbox"/> Roommate <input type="checkbox"/> Contact- work/school/etc<br><input type="checkbox"/> Parent/ guardian <input type="checkbox"/> Unknown/Other | _____             | _____/_____/_____  | <input type="checkbox"/> Yes<br><input type="checkbox"/> No |

*If this contact is a case create a new event and/or case for this contact.*

| Name   | DOB               | Gender   | Address/Phone   |
|--|-------------------|--|---|
| _____  | _____/_____/_____ | <input type="checkbox"/> Male<br><input type="checkbox"/> Female | _____<br>Zip code: _____ Phone: _____ - _____ - _____       |
| Relationship to case   | List symptoms     | Symptom onset date   | Is contact a case?  |
| <input type="checkbox"/> Spouse <input type="checkbox"/> Sexual contact<br><input type="checkbox"/> Child <input type="checkbox"/> Family member (non-household)<br><input type="checkbox"/> Sibling <input type="checkbox"/> Friend/acquaintance<br><input type="checkbox"/> Roommate <input type="checkbox"/> Contact- work/school/etc<br><input type="checkbox"/> Parent/ guardian <input type="checkbox"/> Unknown/Other | _____             | _____/_____/_____  | <input type="checkbox"/> Yes<br><input type="checkbox"/> No |

*If this contact is a case create a new event and/or case for this contact.*

| Name   | DOB               | Gender   | Address/Phone   |
|--|-------------------|--|---|
| _____  | _____/_____/_____ | <input type="checkbox"/> Male<br><input type="checkbox"/> Female | _____<br>Zip code: _____ Phone: _____ - _____ - _____       |
| Relationship to case   | List symptoms     | Symptom onset date   | Is contact a case?  |
| <input type="checkbox"/> Spouse <input type="checkbox"/> Sexual contact<br><input type="checkbox"/> Child <input type="checkbox"/> Family member (non-household)<br><input type="checkbox"/> Sibling <input type="checkbox"/> Friend/acquaintance<br><input type="checkbox"/> Roommate <input type="checkbox"/> Contact- work/school/etc<br><input type="checkbox"/> Parent/ guardian <input type="checkbox"/> Unknown/Other | _____             | _____/_____/_____  | <input type="checkbox"/> Yes<br><input type="checkbox"/> No |

NOTES:

---

---

---

---

---

---

---

---

---

---