

Hemolytic Uremic Syndrome (HUS)

Last revised February 14, 2012

I. IDENTIFICATION

- A. **CLINICAL DESCRIPTION:** Hemolytic uremic syndrome (HUS) is characterized by the acute onset of microangiopathic hemolytic anemia, renal injury, and low platelet count. Thrombotic thrombocytopenic purpura (TTP) is also characterized by these features but can also include central nervous system involvement and fever, and may have a more gradual onset. Most cases of HUS (but few cases of TTP) occur after an acute gastrointestinal illness (usually diarrhea). Therefore, criteria for diagnosing TTP on the basis of central nervous system involvement and fever are not provided because cases diagnosed clinically as post diarrheal TTP should also meet the criteria for HUS. These cases are reported as post diarrheal HUS.
- B. **REPORTING CRITERIA:** An acute illness diagnosed as HUS or TTP that both meets the laboratory criteria and began within three weeks of onset of an acute or bloody diarrhea.
- C. **LABORATORY CRITERIA FOR CONFIRMATION:** The following are both present at some time during the illness:
- Anemia (acute onset) with microangiopathic changes (e.g., schistocytes, burr cells, or helmet cells) on peripheral blood smears **AND**
 - Renal injury (acute onset), evidenced by either:
 - Hematuria **OR**
 - Proteinuria **OR**
 - Elevated creatinine level (e.g., ³ 1.0 mg/dl in a child <13 years of age or ³ 1.5 mg/dl in an adult, or ³ 50% increase over baseline).
- NOTE:** A low platelet count can usually, but not always, be detected early in the illness, however, it may then become normal or even high as the disease progresses. If a platelet count obtained within 7 days after onset of the acute gastrointestinal illness is not <150,000/mm³, other diagnoses should be considered.
- D. **WISCONSIN CASE DEFINITION:** A case that is laboratory confirmed.

II. ACTIONS REQUIRED / PREVENTION MEASURES

- A. **WISCONSIN DISEASE SURVEILLANCE CATEGORY II:**
Report to the patient's local health department either electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means within 72 hours upon recognition of a case or suspected case.
- B. **EPIDEMIOLOGY REPORTS REQUIRED:**
- *Electronically* – Report through WEDSS, including appropriate disease-specific tabs
OR
- C. *Paper Copy* – Acute and Communicable Diseases Case Report ([F-44151](#))
- D. **PUBLIC HEALTH INTERVENTIONS:**
In accordance with Wisconsin Administrative rule DHS 145.05, local public health should follow the methods of control recommended in the current edition of *Control of Communicable*

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

Diseases Manual, edited by David L. Heymann, published by the American Public Health Association.

III. CONTACTS FOR CONSULTATION

A. LOCAL HEALTH DEPARTMENT – REGIONAL OFFICES – TRIBAL AGENCIES:

<http://www.dhs.wisconsin.gov/localhealth/index.htm>

B. BCDER / COMMUNICABLE DISEASE EPIDEMIOLOGY SECTION: 608-267-9003

C. WISCONSIN STATE LABORATORY OF HYGIENE / BACTERIOLOGY: 608-263-3421

IV. RELATED REFERENCES

- Heymann DL, ed. Hemolytic Uremic Syndrome. In: *Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008: 182.
- Pickering LK, ed. Hemolytic Uremic Syndrome. In: *Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed, Elk Grove Village, IL: American Academy of Pediatrics, 2009: 295, 297, 863.