

RABIES (Human)

Last revised June 27, 2011

I. IDENTIFICATION

- A. **CLINICAL DESCRIPTION:** An almost invariably fatal acute encephalomyelitis caused by the rabies virus.
- B. **REPORTING CRITERIA:** Clinical diagnosis initially; laboratory confirmation required to meet case definition.
- C. **LABORATORY CRITERIA FOR CONFIRMATION:**
- detection of Lyssavirus antigens in a clinical specimen (preferably the brain or the nerves surrounding hair follicles in the nape of the neck) by direct fluorescent antibody test, **or**
 - isolation (in cell culture or in a laboratory animal) of a Lyssavirus from saliva or central nervous system tissue, **or**
 - identification of Lyssavirus specific antibody (i.e. by indirect fluorescent antibody (IFA) test or complete rabies virus neutralization at 1:5 dilution) in the CSF, **or**
 - identification of Lyssavirus specific antibody (i.e. by indirect fluorescent antibody (IFA) test or complete rabies virus neutralization at 1:5 dilution) in the serum of an unvaccinated person, **or**
 - detection of Lyssavirus viral RNA (using reverse transcriptase-polymerase chain reaction [RT-PCR]) in saliva, CSF, or tissue.
- D. **WISCONSIN CASE DEFINITION:** A clinically compatible case that is laboratory confirmed by testing at a state or federal public health laboratory.

II. ACTIONS REQUIRED / PREVENTION MEASURES

- A. **WISCONSIN DISEASE SURVEILLANCE CATEGORY I:** Report **IMMEDIATELY BY TELEPHONE** to the patient's local health department upon identification of a confirmed or suspected case. The local health department shall then notify the state epidemiologist **immediately** of any confirmed or suspected cases. Within 24, hours submit a case report 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.
- B. **EPIDEMIOLOGY REPORTS REQUIRED:**
- *Electronically* – Report through WEDSS, including appropriate disease-specific tabs
OR
 - *Paper Copy* – *Acute and Communicable Diseases Case Report (F-44151)*
- C. **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 Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association. Additionally:

- Ensure that appropriate infection control precautions are being taken at the facility in which the patient is hospitalized, even if the case is not yet confirmed.
- Identify contacts of case-patient who were potentially exposed to rabies via contact with patient's saliva or cerebrospinal fluid and evaluate them for possible rabies post-exposure prophylaxis.
In healthcare settings, workers should be evaluated for potential exposure using a specific fact sheet and questionnaire available at <http://www.dhs.wisconsin.gov/communicable/Rabies/PDFfiles/HealthworkerRabiesRiskFactsheet.pdf> and <http://www.dhs.wisconsin.gov/communicable/Rabies/PDFfiles/HealthcareRabiesRiskQuestionnaire.pdf>
- Conduct a source investigation (performed in cooperation with the BCD) upon laboratory confirmation of a human rabies case.
- An algorithm for animal bite and rabies prevention management can be found at <http://hanplus.wisc.edu/DISEASES/rabies/introduction.htm>

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 RABIES UNIT: (608) 262-7323

IV. RELATED REFERENCES

- Heymann DL, ed. Rabies. In: *Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008:498-508.
- Pickering LK, ed. Rabies. In: *Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009:552-559.
- Wisconsin Rabies Prevention Flowchart
<http://hanplus.wisc.edu/DISEASES/rabies/introduction.htm>
- Centers for Disease Control and Prevention. Human Rabies Prevention - United States, 2008. Recommendations of the Advisory Committee on Immunization Practices. *MMWR* 2008;57(No. RR-3). <http://www.cdc.gov/mmwr/pdf/rr/rr5703.pdf>