

POLIOVIRUS INFECTION, NONPARALYTIC

Last revised July, 2011

I. IDENTIFICATION

A. **CLINICAL DESCRIPTION:** Most poliovirus infections are asymptomatic or cause mild febrile disease. Poliovirus infections occasionally cause aseptic meningitis and one out of 200 poliovirus type 1 infection results in paralytic poliomyelitis, characterized by acute onset of flaccid paralysis that is typically asymmetric and associated with a prodromal fever.

- Poliovirus is spread through fecal material, oral secretions, some aerosols and fomites.

*Note that this case definition applies only to poliovirus infections occurring in asymptomatic persons or those with mild, nonparalytic disease (e.g., those with a nonspecific febrile illness, diarrhea, or aseptic meningitis). Isolation of polioviruses from persons with acute paralytic poliomyelitis should continue to be reported as “paralytic poliomyelitis”.

B. **REPORTING CRITERIA:** Isolation of poliovirus from a person who is asymptomatic or has mild, nonparalytic disease.

C. **LABORATORY CRITERIA FOR CONFIRMATION:**

- Poliovirus isolate identification in an appropriate clinical specimen (e.g., stool, cerebrospinal fluid, oropharyngeal secretions), with confirmatory typing and sequencing conducted at the CDC Poliovirus Laboratory, as needed.

D. **WISCONSIN CASE DEFINITION:**

- Confirmed: Poliovirus isolate identified in an appropriate clinical specimen (e.g., stool, cerebrospinal fluid, oropharyngeal secretions), with confirmatory typing and sequencing conducted at the CDC Poliovirus Laboratory, as needed.
- Probable: none
- Suspected: none

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](#)) and
- Suspected Polio Case Worksheet: <http://www.cdc.gov/vaccines/pubs/surv-manual/appx/appendix14-2-polio-wrsht.pdf>

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*

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

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

- Contact the Immunization Program and/or the State Epidemiologist for Communicable Diseases for technical assistance and consultation. An epidemiologic investigation will be necessary to identify the source of infection, persons to whom infection may have spread, specimens to collect, and exposed susceptible persons to whom IPV should be offered.
- Actively search for individuals with illnesses that may have been initially diagnosed as Guillain-Barré Syndrome, polyneuritis, transverse myelitis, etc.

For further detailed information regarding control measures, please see the additional references cited at the end of this document. The Wisconsin Division of Public Health, Immunization Program should also be consulted regarding state-specific guidelines.

D. PREVENTION MEASURES:

Vaccination with inactivated polio vaccine (IPV)

- All children should routinely receive four doses of IPV at ages 2, 4, and 6–18 months and 4–6 years. The final dose in the IPV series should be administered at age > 4 years regardless of the number of previous doses. The minimum interval between dose 3 and dose 4 is 6 months.
- Routine poliovirus vaccination of adults (i.e., persons aged >18 years) residing in the United States is not necessary. Most adults have a minimal risk for exposure to polioviruses in the United States and most are immune as a result of vaccination during childhood or exposure to wild virus during the pre-vaccine era.
- Vaccination is recommended for adults who are at greater risk for exposure to polioviruses than the general population, including the following persons:
 - Travelers to areas or countries where polio is epidemic or endemic.
 - Members of communities or specific population groups with disease caused by wild polioviruses.
 - Laboratory workers who handle specimens that might contain polioviruses.
 - Health-care workers who have close contact with patients who might be excreting wild polioviruses.
 - Unvaccinated adults whose children will be receiving oral poliovirus vaccine.
- Identify communities with low vaccination coverage, assess current vaccination status and offer IPV.

III. CONTACTS FOR CONSULTATION

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

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

B. REGIONAL IMMUNIZATION PROGRAM REPRESENTATIVES:

<http://www.dhs.wisconsin.gov/immunization/regiondepts.htm>

C. BCDER/ IMMUNIZATION PROGRAM: (608) 267-9959

D. WISCONSIN STATE LABORATORY OF HYGIENE

Communicable Disease Division

Customer Service: (800) 862-1013 or (608) 262-6386

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

Clinical Supplies: (800) 862-1088 or (608) 265-2966

IV. RELATED REFERENCES

- Heymann DL, ed. *Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008:484-491
- Pickering LK, ed. Poliovirus Infections. In: *Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009:541-545
- Atkinson W, ed. Rubella. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 12th ed. Washington DC: Public Health Foundation, 2011: 249-262. Available at: <http://www.cdc.gov/vaccines/pubs/pinkbook/pink-chapters.htm>
- Centers for Disease Control and Prevention. Manual for the surveillance of vaccine-preventable diseases. Centers for Disease Control and Prevention, Atlanta, GA, 2008. Available at: <http://www.cdc.gov/vaccines/pubs/surv-manual>
- CDC. Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) regarding routine poliovirus vaccination, MMWR 2009; 58(30); 829-830
- Poliomyelitis Prevention in the United States, MMWR 2000; 49 (RR-05):1-22