



Communicable Disease Case Reporting and Investigation Protocol **MYCOBACTERIOSES, NON-TUBERCULOUS MYCOBACTERIAL (NTM) DISEASE**

I. IDENTIFICATION AND DEFINITION OF CASES

A. Clinical Description: Clinical syndromes associated with the pathogenic species of non-tuberculous mycobacteria (NTM) can be classified as follows:

- Disseminated disease—often in the presence of severe immunodeficiency such as that determined by HIV/AIDS—can be caused by *Mycobacterium avium* complex (MAC), *M. kansasii*, *M. haemophilum*, and *M. genavense*. *M. abscessus*, and *M. fortuitum* can infect intravenous catheter and indwelling lines, causing disseminated disease. In the presence of disseminated NTM, symptoms include fever, weight loss, and fatigue. Diagnosis can be obtained through isolation in blood, liver, or bone marrow culture.
- Pulmonary disease resembling tuberculosis can be caused by MAC, *M. kansasii*, *M. xenopi*, *M. abscessus*, *M. simiae*, and *M. malmoense*. It should be suspected in cases of prolonged respiratory symptoms, especially in patients with underlying chronic pulmonary disease.
- Lymphadenitis, primarily cervical, can be caused by MAC and *M. kansasii*.
- Skin ulcers can be caused by *M. ulcerans* (“Buruli Ulcer”), *M. fortuitum*, *M. chelonae*, *M. abscessus*, and *M. marinum*. These infections may appear as nodular or ulcerating; at times they spread along the lymphatics.
- Posttraumatic wound infections can be caused by *M. fortuitum*, *M. chelonae*, *M. abscessus*, *M. marinum*, and MAC.
- Nosocomial disease: surgical wound infections and catheter-related infections (bacteremia, peritonitis, post-injection abscess) can be caused by *M. fortuitum*, *M. chelonae*, and *M. abscessus*.

B. Laboratory Criteria:

Confirmatory laboratory evidence: Isolation of non-tuberculous mycobacteria from the affected area of the body, **AND** evidence of clinical disease for which no other diagnosis has been made.

NOTE: A single isolate of non-tuberculous mycobacteria without compatible clinical evidence of disease does not meet the case definition.

C. Wisconsin Surveillance Case Definition:

Confirmed: Laboratory confirmation of non-tuberculous mycobacteria with evidence of compatible clinical disease.

II. REPORTING

A. Wisconsin Disease Surveillance Category II – Methods for Reporting: This disease shall be reported to the patient’s local health officer or to the local health officer’s designee within 72 hours of recognition of a case or suspected case, per Wis. Admin. Code § [DHS 145.04 \(3\) \(b\)](#). Report electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), or mail or fax a completed Acute and Communicable Disease Case Report ([F-44151](#)) to the address on the form.

B. Responsibility for Reporting: According to Wis. Admin. Code § [DHS 145.04\(1\)](#), persons licensed under Wis. Stat. ch. [441](#) or [448](#), laboratories, health care facilities, teachers, principals, or nurses serving a school or daycare center, and any person who knows or suspects that a person has a communicable disease identified in [Appendix A](#).

C. Clinical Criteria for Reporting: Isolation of non-tuberculous mycobacteria from the affected area of the body, **AND** evidence of clinical disease for which no other diagnosis has been made.

NOTES:

- A single isolate of non-tuberculous mycobacteria without compatible clinical evidence of disease does not meet the case definition.
- A single positive culture from a wound or tissue is generally considered diagnostic.
- In general, the diagnosis of disease requiring treatment is based on repeated isolations of many colonies from symptomatic patients with progressive illness.

- D. **Laboratory Criteria for Reporting:** Laboratory confirmation of non-tuberculous mycobacteria with evidence of compatible clinical disease.

III. CASE INVESTIGATION

- A. **Responsibility for case investigation:** It is the responsibility of the local health department (LHD) to investigate or arrange for investigation of suspected or confirmed cases as soon as is reasonably possible. A case investigation may include information collected by phone, in person, in writing, or through review of medical records or communicable disease report forms, as necessary and appropriate.
- B. **Required Documentation:** Complete the WEDSS disease incident investigation report, including appropriate, disease-specific tabs.
- C. **Additional Investigation Responsibilities:** None

IV. PUBLIC HEALTH INTERVENTIONS AND PREVENTION MEASURES

In accordance with Wis. Admin. Code § [DHS 145.05](#), local public health agencies should follow the methods of control recommended in the current editions of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association, and the American Academy of Pediatrics' *Red Book: Report of the Committee on Infectious Diseases*, unless otherwise specified by the state epidemiologist.

V. CONTACTS FOR CONSULTATION

- A. Local health departments and tribal health agencies:
<https://www.dhs.wisconsin.gov/lh-depts/index.htm>
- B. Bureau of Communicable Diseases, Communicable Diseases Epidemiology Section: 608-267-9003
- C. Bureau of Communicable Diseases, Wisconsin Tuberculosis Program: 608-261-6319
- D. Wisconsin State Laboratory of Hygiene: 1-800-862-1013

VI. RELATED REFERENCES

- A. Heymann DL, ed. Disease Due to Other Mycobacteria. In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 648-650.
- B. Pickering LK, ed. Diseases Caused by Nontuberculous Mycobacteria. In: *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015: 831-839.
- C. Pfyffer, Gaby E. 2015. Mycobacterium: General Characteristics, Laboratory Detection, and Staining Procedures*, p. 536-569. In Jorgensen J., Pfaller M., Carroll K., Funke G., Landry M., Richter S., and Warnock D. (ed), *Manual of Clinical Microbiology, Eleventh Edition*. ASM Press, Washington, DC. doi:10.1128/9781555817381.ch30.
- D. Centers for Disease Control and Prevention website:
<https://www.cdc.gov/HAI/organisms/mycobacterium.html>