Leptospirosis

Merlin disease code=10090
Case report form (CRF): Leptospirosis CRF
PAPER CRF REQUIRED

Clinical criteria for case classification
Both of the following:
- Fever within the past two weeks
- And either of the following:
  - Two or more of the following:
    - Myalgia,
    - Or headache,
    - Or jaundice,
    - Or conjunctival suffusion without purulent discharge,
    - Or rash (i.e., maculopapular or petechial)
  - Or one or more of the following:
    - Aseptic meningitis,
    - Or gastrointestinal symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea),
    - Or pulmonary complications (e.g., cough, breathlessness, hemoptysis),
    - Or cardiac arrhythmias,
    - Or electrocardiograph abnormalities,
    - Or renal insufficiency (e.g., anuria, oliguria),
    - Or hemorrhage (e.g., intestinal, pulmonary, hematuria, hematemesis),
    - Or jaundice with acute renal failure.

Symptoms may be biphasic. Clinical presentation may range from very mild to fatal illness and in early stages can be confused with influenza or other more common febrile illnesses.

Laboratory criteria for case classification
Confirmatory:
One or more of the following:
- Isolation of Leptospira from a clinical specimen,
- Or fourfold or greater increase in Leptospira agglutination titer between acute- and convalescent-phase serum specimens,
- Or demonstration of Leptospira in a clinical specimen by direct immunofluorescence assay (DFA),
- Or Leptospira agglutination titer of ≥800 by microscopic agglutination test (MAT) in one or more serum specimens,
- Or detection of pathogenic Leptospira DNA (e.g., by polymerase chain reaction [PCR]) from a clinical specimen.

Presumptive:
One or more of the following:
- Leptospira MAT titer of ≥200 but <800 from one or more serum specimens,
- Or Demonstration of anti-Leptospira antibodies in a clinical specimen by indirect immunofluorescence assay (IFA),
- Or Demonstration of Leptospira in a clinical specimen by darkfield microscopy,
- Or Detection of IgM antibodies against Leptospira in an acute phase serum specimen.
**Epidemiological criteria for case classification**
Not applicable.

**Case classification**

**Confirmed:**
A person with confirmatory laboratory evidence.

**Probable:**
Either of the following:
- A clinically compatible illness in a person with presumptive laboratory evidence
- **Or** a clinically compatible illness in a person who is epidemiologically linked to a confirmed or probable case or exposure event (adventure race, triathlon, flooding, infected animal, etc. with associated laboratory-confirmed cases).

**Criteria to distinguish a new case from previous reports**
Not applicable.

**Comments**
Leptospirosis is shed in the urine of many wild and domestic animals including rodents, pigs, raccoons, deer, and dogs. Animal reservoirs are often healthy appearing. The organism can survive for extended periods in moist conditions and water and is transmitted through ingestion or contact with cuts. Exposure risks include contact with contaminated water or infected animals (especially rodents) in the month prior to symptom onset. Laboratory testing should be routed through the Bureau of Public Health Laboratories after consultation with a central office environmental epidemiologist.

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