

# MEASLES: Identification and Management of Suspected Cases

## Do You Suspect Measles?

- Febrile rash illness **AND**
- Risk factors for measles (history of international travel, contact with travelers or links to a known outbreak or case, or no or unknown vaccine or immunity).
- **Note** that one dose of measles vaccine is about 93% effective at preventing measles

## Minimize Risk of Transmission

- Measles is a highly infectious airborne illness.
- Identify febrile rash illnesses prior to, or immediately upon arrival, to expedite evaluation in a private room and minimize patient exposures.
  - Have the patient avoid the waiting room (use a side/back entrance).
  - Have the patient wear a surgical mask.
  - Conduct patient evaluation in a room that can be left vacant for at least 2 hours after the patient's visit.

## Does the Patient Meet the Measles Clinical Case Definition?

- An illness with **BOTH** a generalized descending maculopapular rash **AND** a fever (at least 101°F) during the illness.
- **AND** at least one of the following:
  - Cough
  - Coryza
  - Conjunctivitis
  - Koplik spots (may not be present)

NO

## Manage as Clinically Indicated

### Consider Differential Diagnoses:

Fifth disease, enterovirus HIV, adenovirus or arbovirus infection, roseola infantum, scarlet fever, drug reaction, Kawasaki disease.

YES

## Call Immediately

Call Winnebago County Health Department at (920) 232-3000 (available 24 hours a day, 7 days a week).

### Laboratory Testing

- Nasopharyngeal (NP) and oropharyngeal (OP) swab in universal viral transport media for measles RT-PCR

**AND**

- Serum for measles specific IgG and IgM

### Suspect Case Management

- Isolate patient immediately
- Exclude from childcare/school/workplace for at least 4 days after the onset of rash.
- Reassess isolation based on diagnosis.
- Provide supportive treatment and treatment of complications.

## Positive Test OR High Suspicion for Active Measles Infection after Public Health Consultation?

- Manage as clinically indicated.
- Notify receiving facilities of diagnosis.
- Identify patients and staff that shared the same airspace with the case, up to two hours later.
- Determine immune status of these contacts.
- Provide vaccine within 3 days or IG within 6 days of exposure.
- Exclude healthcare staff without evidence of immunity from day 5 after **first exposure** through day 21 **last exposure**, unless they receive their 2<sup>nd</sup> MMR within 72 hrs of first exposure or are IgG positive.

## Immunization is the Key to Prevention

- Review the measles vaccination/immunity status of patients and staff at your practice.
- Links to refer to for reference listed below
- [https://www.cdc.gov/vaccines/index.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvaccines%2Fdefault.htm](https://www.cdc.gov/vaccines/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvaccines%2Fdefault.htm)
- <https://www.dhfswir.org/PR/portallInfoManager.do>
- <https://www.cdc.gov/measles/>



**Public Health**  
Prevent. Promote. Protect.

**Winnebago County  
Health Department**

### Suspect Measles Screening Tool – Medical Providers

**Clinical Case Definition of Measles:** An illness characterized by all the following: 1) A generalized maculopapular rash lasting  $\geq 3$  days, 2) Temp  $\geq 101^\circ\text{F}$ , 3) Cough, Coryza, or conjunctivitis.

Pt Name:

Date of Birth:

Address:

Phone:

County:

N	Y	Screening Criteria ( <i>clinical description</i> )	Information for 'Yes' responses
<input type="checkbox"/>	<input type="checkbox"/>	Any <b>known</b> measles exposure?	When?                      Where?
<input type="checkbox"/>	<input type="checkbox"/>	<b>Fever:</b> <i>(Often increases in a step-wise fashion; peaking between 103°-105°.)</i>	Temperature history:
<input type="checkbox"/>	<input type="checkbox"/>	<b>Rash:</b> <i>(Generally begins @hairline → face&amp; neck. Then gradually downward → hands&amp; feet.)</i>	Onset: Click or tap to enter a date. Description:
<input type="checkbox"/>	<input type="checkbox"/>	<b>Cough</b>	
<input type="checkbox"/>	<input type="checkbox"/>	<b>Runny nose (Coryza)</b>	
<input type="checkbox"/>	<input type="checkbox"/>	<b>Conjunctivitis</b>	
<input type="checkbox"/>	<input type="checkbox"/>	<b>Measles Immunization(s)?</b>	Dose #1: Dose #2: <input type="checkbox"/> Check this box if the last <b>measles</b> containing vaccine was given in the last 2 months*
<input type="checkbox"/>	<input type="checkbox"/>	<b>Koplik spots:</b> <i>Small blue-white spots on the buccal mucosa. (~1-2 days before and 1-2 days after the rash)</i>	
<input type="checkbox"/>	<input type="checkbox"/>	<b>Travel in last month</b>	Where: For how long:
<input type="checkbox"/>	<input type="checkbox"/>	<b>Visitors from out of area in the last month</b>	From where:
<input type="checkbox"/>	<input type="checkbox"/>	<b>Is this patient high risk or in a high-risk setting?</b> <input type="checkbox"/> Immunocompromised <input type="checkbox"/> Pregnant <input type="checkbox"/> Health Care Worker <input type="checkbox"/> Day Care worker/in Day Care <input type="checkbox"/> College student/Employed at a college <input type="checkbox"/> Contact to a measles case <input type="checkbox"/> Other:	

*If you suspect measles fill in this form and **call the local health department right away (Winnebago County Jurisdiction 920-232-3000-Call coverage 24/7).***

*Measles is a **Category 1** reportable illness and shall be reported **IMMEDIATELY** by telephone to the patient's local health officer, or to the local health officer's designee, upon identification of a case or suspected case. In addition to the immediate report, within 24 hours, complete and fax, mail, or submit a case report electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), or by other means.*

\*The occurrence of measles-like illness in recently vaccinated persons can pose particular difficulties... A positive measles IgM test cannot be used to confirm the diagnosis of measles in persons with measles-like illness who received measles vaccine 6–45 days before onset of rash due to the measles IgM antibody response to the vaccine. Specimens for viral isolation should be obtained in addition to serologic testing; isolation of wild type measles virus would allow confirmation of the case. In the absence of strain typing to confirm wild type infection, cases in persons with measles-like illness who received measles vaccine 6–45 days before onset of rash should be classified as confirmed cases only if a) they meet the clinical case definition and b) they are epidemiologically linked to a laboratory-confirmed case. (<https://www.cdc.gov/vaccines/pubs/surv-manual/chpt07-measles.html>).