Measles Clinical Quick Guide
Updated August 1, 2019

Clinical Presentation

Always consider measles when evaluating patients with fever and rash

Measles symptoms include:
- High fever (>101)
- Cough, coryza, and/or conjunctivitis
- Generalized maculopapular rash which usually begins at the hairline and spreads downwards to the neck, trunk, arms, legs and feet

Key Points

1) Ensure all health care personnel (HCP) have documented evidence of immunity on file at their work location
2) Encourage symptomatic patients to call BEFORE visiting a health care facility. Call ahead if referring a patient to another health care facility. Post signage directing staff and/or patients to identify anyone presenting with fever and rash
3) Mask (if tolerated) and place all patients with suspected measles in airborne isolation immediately. All staff should wear a fit-tested respirator (e.g. N95) when caring for patients with suspected/confirmed measles outbreaks in patients with febrile rash illness consistent with measles
4) Ask about risk factors (including recent travel internationally or to communities with current measles outbreaks) in patients with febrile rash illness consistent with measles
5) Obtain appropriate clinical specimens
6) Ensure all patients, including travelers, are up-to-date with their MMR vaccines
7) Providers serving communities impacted by outbreaks should follow the New Jersey Department of Health immunization and other guidance
8) Report all suspect measles cases immediately to the local health department. Do not wait for laboratory confirmation to report a case or institute infection control measures

Laboratory Testing

If you suspect measles, collect:
- A nasopharyngeal/throat swab for measles PCR testing (test not available commercially)
- Blood specimen for IgM/IgG
- Urine may also contain virus so, if feasible, collection of both respiratory and urine specimens can increase likelihood of detecting the virus

See Quick Guide for Measles Specimen Collection and Testing for additional information

Post-Exposure Prophylaxis (PEP)

- Non-immune individuals ≥6 months should receive MMR as PEP within 72 hours from first exposure, unless contraindicated
- Persons ≥ 1 year of age with 1 dose of MMR before exposure should receive a 2nd dose (if at least 28 days since previous dose)
- Immune globulin (IG) should be given to non-immune individuals who are exposed to measles and at high risk for complications including: infants <6 months, infants 6-12 months who didn’t receive MMR within 72 hours of exposure, non-immune pregnant women, and severely immunocompromised persons

Outbreak/Travel Vaccine Recommendations

HCP treating patients who live in/travel to outbreak communities or internationally should:
- Consider offering MMR vaccine to all infants 6-11 months of age without contraindications
- Offer MMR vaccine at the earliest opportunity to all unvaccinated eligible patients ≥ 1 year of age
- Offer a second dose of MMR vaccine to eligible patients ≥1 year who have previously received one dose of vaccine, separated by at least 28 days
- Offer teenagers and adults without documented evidence of immunity against measles two doses of MMR vaccine separated by at least 28 days. Extra doses of MMR are not harmful

Reporting

Report all suspect measles cases (febrile illness accompanied by generalized maculopapular rash) immediately (DO NOT WAIT FOR LABORATORY CONFIRMATION) to the local health department. If unable to reach the local health department, notify the NJDOH during regular business hours at (609) 826-5964. After business hours, or on the weekend, call NJDOH at (609) 392-2020.

For detailed information and outbreak-specific, laboratory, exposure, and clinical guidance, please see: http://www.nj.gov/health/cd/topics/measles.shtml
Health Care Provider Measles Screening Tool

Screening tool for health care providers when initially evaluating patients suspected of having measles to reduce the spread of measles and facilitate public health response. Intended for use in conjunction with public health professionals and additional laboratory, exposure, and clinical guidance documents available at http://www.nj.gov/health/cd/topics/measles.shtml

1. **Mask (if tolerated) and follow airborne precautions, immediately.** The preferred placement is in a single-patient airborne infection isolation room (AIIR) or negative pressure room. The patient should remain completely isolated from other patients and the exam room should not be used for 2 hours after the patient has departed. If AIIR is not available, place patient in a private room with the door closed. All health care staff entering the room should wear a fit-tested respirator (e.g., N-95).

2. **Determine if the patient has measles-like symptoms.** A clinically compatible case has fever (≥101), a generalized maculopapular rash, and at least one of the following: cough, coryza, or conjunctivitis. **If a patient is immunocompromised or vaccinated, symptoms may vary in timing and presentation.**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Details</th>
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| 1. Fever | | Onset date: __/__/______  
Highest temperature: _________ ( )Not Documented  
Documented by (circle): Health Care Provider Patient |
| 2. Rash | | Onset date: __/__/______  
Description: _____________________________  
Progression: ___________________________  
*Generally starts at head and moves downward/outward and fades in the same order* |
| 3. Cough | | Onset date: __/__/______ |
| 4. Coryza | | Onset date: __/__/______ |
| 5. Conjunctivitis | | Onset date: __/__/______ |
| 6. Koplik’s spots | | Onset date: __/__/______ |
| 7. Does patient report feeling very sick or appear very uncomfortable? | | Individuals with measles generally look and report feeling ill |

3. **Assess measles immune status and potential risk factors.**

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<tr>
<th>Yes</th>
<th>No</th>
<th>Details</th>
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</table>
| 1. Vaccinated for measles? | | If yes, dates of measles vaccine:  
#1: __/__/______  #2: __/__/______ |
| 2. Is there anything else that could cause these symptoms; such as antibiotics, new medication, recent vaccination, or other rash illness? | | If yes, what: ___________________________  
Common differential diagnoses: Kawasaki, scarlet fever, parvovirus, enterovirus, allergic reaction. |
| 3. Recent travel (within 1 month of onset)? | | If yes, where/when: ___________________________ |
| 4. Diagnosed with measles in the past?  
* History of disease should be confirmed by lab/medical record | | If yes, when: ___________________________ |
| 5. Exposure to a known measles case or anyone with similar symptoms? | | If yes, who/when/where: ___________________________ |
| 6. Contact with foreign international travelers? | | If yes, where/when: ___________________________ |

4. **Collect appropriate specimens (NP swab, urine, serology):**
https://www.state.nj.us/health/cd/documents/topics/measles/quickguide_measles_specimen_collection_testing.pdf

5. **Report all suspect measles cases immediately to the local health department where the patient resides.** Do not wait for laboratory confirmation to report a case or institute infection control measures. If unable to reach the local health department, notify the NJDOH during regular business hours at (609) 826-5964. After business hours, or on the weekend, call NJDOH at (609) 392-2020.

6. **Instruct patient to remain isolated through 4 days after rash onset.** Inform patient that Public Health may be in contact.