01/31/2019
Guidance for measles diagnosis and testing

Measles outbreaks continue to occur in multiple European countries with over 40,000 cases reported in the first half of 2018 alone; approximately half of the cases in the WHO European Region have been in the Ukraine. Approximately 900 cases have been reported in Israel. We have had 29 confirmed cases in Washington State and are seeing new cases each week. We are advising providers to suspect measles in any unimmunized patient with fever and rash.

Actions requested: Review the following recommendations:

- Consider measles in patients who present with a febrile rash illness, especially among patients that are unimmunized, have unknown measles immunization status, or had possible exposure to another measles case. Measles should be highly suspected in persons with fever and maculopapular rash and any of the following: cough, coryza (runny nose), and/or conjunctivitis (red eyes).
- Cases of measles are occurring concurrently to the influenza/respiratory virus season and it is possible to see rashes with these viruses; consider testing for these viruses.
- If measles is suspected, mask and isolate the patient (in negative air pressure room when possible)
- Call your local health department to arrange testing at the WA State Public Health Laboratories. All health care providers must receive approval from LHJ prior to submission. (509)684-2262
- Collect the following specimens for measles testing:
  - Nasopharyngeal (NP) swab for rubeola PCR and culture (preferred respiratory specimen)
    - Swab the posterior nasal passage with a Dacron™ or rayon swab and place the swab in 2–3 ml of viral transport medium. Store specimen in refrigerator and transport on ice.
    - Throat swab also acceptable.
  - Urine for rubeola PCR and culture
    - Collect at least 50 ml of clean voided urine in a sterile container and store in refrigerator.
  - Serum for rubeola IgM and IgG testing
    - Draw at least 4-5 ml blood (yields about 1.5 ml serum) in a red or tiger top (serum separator) tube. Store specimen in refrigerator and transport on ice.
- Specimens for measles testing SHOULD NOT BE COLLECTED prior to onset of a rash
- If patients present with known measles exposure and viral prodrome, providers should ask patients to stay away from all public settings, monitor themselves for rash onset and either:
  - Return to the clinic for specimen collection once a rash occurs (instruct patient to call prior to arrival to allow isolation), OR
  - Self-collect urine at the time of rash onset (send a urine cup home with the patient with instructions)
- Report all suspected measles cases immediately by calling (509-684-2262) Public Health is available for consultation about testing of suspected measles cases.

Reminders:
- During an outbreak of measles, health-care facilities should require all health-care personnel have documentation of 2 doses of MMR vaccine or laboratory
evidence of measles immunity or laboratory confirmation of disease regardless of birth year.

Resources

Washington State Department of Health
Measles assessment checklist for providers: https://www.doh.wa.gov/Portals/1/Documents/Pubs/348-490-MeaslesAssessmentQuicksheetProviders.docx
Measles guideline: https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/NotifiableConditions/Measles
CDC measles http://www.cdc.gov/measles/hcp/index.html
CDC Provider Resources for Vaccine Conversations with Patients https://www.cdc.gov/vaccines/hcp/conversations/index.html

For questions, please contact:

Northeast Tri County Health District Offices:

Colville: 509-684-2262
Newport: 509-447-3131
Republic: 509-775-3111