1. A patient in the Emergency Room is diagnosed with bacterial meningitis due to Neisseria meningitidis. The patient was not properly isolated, and several employees entered her room without wearing a mask. Which employees should receive PEP?
   a. The phlebotomist who drew blood on the patient
   b. The respiratory therapist who intubated the patient
   c. The radiology technician that preformed the chest radiograph
   d. The employee from admissions that registered the patient

2. What is one of the classic features of Meningococcal disease along with fever, malaise and headache symptoms?
   a. Lymphadenopathy
   b. Seizure
   c. Petechial or purpuric rash
   d. Altered mental status

3. The Microbiology lab calls IP to report a CSF Gram stain result. From infection prevention and control standpoint, the most concerning result would be?
   a. Gram-negative rods
   b. Gram-positive cocci in pairs
   c. Acid-fast bacilli
   d. Gram-negative diplococci

4. Antimicrobial chemoprophylaxis is indicated for contacts of patient with Neisseria Meningitidis isolated from oropharyngeal, conjunctival, or respiratory specimens.
   a. True
   b. False

5. Droplet precautions for Neisseria Meningitidis may be discontinued after completion of 24 hours of appropriate antibiotic treatment.
   a. True
   b. False

6. Which antibiotic is recommended for chemoprophylaxis of Neisseria Meningitidis patients and close contacts?
   a. Rifampin
   b. Ciprofloxacin
   c. Ceftriaxone
   d. All the above
7. Which of the following is not one of the three C’s of Measles?
   a. Cough
   b. Confusion
   c. Coryza
   d. Conjunctivitis

8. The animal reservoir for measles is:
   a. Aedes aegypti mosquito
   b. Angolan fruit bat
   c. Bactrian camel
   d. Hippo
   e. None of the above

9. Where does the measles rash typically first appear?
   a. Arms
   b. Palms
   c. Chest
   d. Face

10. Which of the following can have a measles-like rash?
    a. Kawasaki disease
    b. Drug reaction
    c. Parvovirus
    d. All of the above

11. What is the average time for onset of symptoms after exposure to measles?
    a. 24 hours
    b. 2 to 4 days
    c. 5 to 10 days
    d. 8 to 12 days

12. When can you stop using airborne precautions for someone with measles?
    a. 24 hours after last documented fever
    b. 4 days after rash onset
    c. 7 days after rash disappears
    d. 21 days after onset of symptoms
13. Isolation management for Measles in a healthcare setting involve all but which of the following:
   a. HCP’s should follow Standard Precautions
   b. Airborne infection isolation in a single room with negative pressure and a particulate filter
   c. Airborne infection isolation for 4 days after the appearance of rash
   d. The same isolation management is recommended for atypical measles and measles vaccine-induced fever or rash

14. Steps involved in control of outbreaks of mumps in healthcare settings include all of the following except:
   a. Definition of target population
   b. Identification of symptomatic persons needing vaccination
   c. Exclusion of susceptible HCP who are exempt from vaccination (e.g., medical or religious reasons) from the affected institution or setting until the outbreak is terminated
   d. Active surveillance for mumps until 2 incubation periods (i.e., 5 to 6 weeks) have elapsed since onset of the last case.

15. Which laboratory test methods are preferred to detect an active infection of Neisseria meningitidis:
   1-ELISA
   2-Kovac’s Oxidase Test
   3-PCR
   4-Mass spectrometry
   a. 2, 3
   b. 1, 3
   c. 1, 2, 4
   d. 1, 3, 4

16. Immunoglobulins are available for which of the following?
   1 – Tetanus
   2 – Rubella
   3 – Pertussis
   4 – Varicella-zoster
   a. 1, 2, 3
   b. 2, 3, 4
   c. 1, 3, 4
   d. 1, 2, 4
17. The greatest health risk with Rubella is associated with which of the following groups?

a. Persons with HIV
b. Fetal infections during pregnancy
c. Individuals aged 65 and over
d. Unvaccinated children

18. Individuals infected with non-congenital rubella are contagious from a few days before the onset of symptoms (7 days before rash) to 7 to 14 days after the rash. How long should children with congenital rubella be considered contagious?

a. 2 weeks of age
b. 6 months of age
c. 1 year of age
d. They will be contagious for their entire life

19. Which of the following treatment options is not recommended for rubella?

a. Supportive treatment
b. Immunoglobulin
c. MMR vaccine
d. All of the above are recommended treatment options

20. There is a suspected case of measles in the ED, and the patient has been admitted. An NP swab was taken, placed in viral transport media, and sent to the lab where it was frozen at -20 degrees C for 12 hours and then thawed and placed in culture. The culture results are negative for measles virus. Which of the following should the IP request for this patient? (check all that apply)

a. A new sample should be collected and placed in a -20 degree C environment immediately.
b. A new sample should be collected and placed in culture immediately.
c. The patient should be placed in an airborne infection isolation room.
d. The patient should be placed in a standard room without isolation precautions.

21. One confirmed case of the disease is considered an urgent public health situation, and the IP should immediately report suspected and confirmed cases to the health dept.

a. Chickenpox
b. Influenza
c. Measles
d. Legionnaires’ disease
22. The Health Dept. informs the IP that a nurse in has been diagnosed with measles after returning from a trip to Europe. His symptoms began 2 days ago, and he last worked 9 days ago. The incubation period for measles is 8-12 days, and the period of contagion is 1-2 days prior to onset of symptoms. How should the IP follow up on this report?

a. Inform Occupational Health about the infection so that they can furlough the employee for the appropriate amount of time.

b. Determine the susceptibility to measles of all the HCP and patient who had contact with the nurse in the past 12 days.

c. Place all susceptible patients who were cared for by the nurse in Airborne Isolation.

d. The IP does not need to conduct any follow up.
CIC Quiz Week 7: Measles, Mumps, Rubella & Neisseria Meningitidis

Answers:
1. B
2. C
3. D
4. B
5. A
6. D
7. B
8. E
9. D
10. D
11. D
12. B
13. D: isolation is not required for atypical measles and measles vaccine-induced fever or rash.
14. B: vaccination is not recommended in persons already infected but should be administered to susceptible persons in the early course of the outbreak
15. A: PCR and Kovac’s oxidase test are used to detect active infections.
16. D
17. B
18. C, unless they have had repeated negative virus cultures or the nasopharynx and urine
19. C
20. B&C
21. C
22. A