10 question answers pertaining to Tuberculosis

1). TRUE. These are known manifestations of active TB infection.

2). TRUE. Latent TB organisms are not active, however patients should still receive drug therapy to prevent the disease from becoming active.

3). FALSE. TB is an airborne disease.

4). FALSE. Those who have less opportunity to be exposed are not at equal risk.

5). TRUE. Unlike skin testing, the Quantiferon Gold eliminates variance in results interpretation.

6). FALSE. Unlike skin testing, the Quantiferon Gold will not produce false positive results.

7). TRUE. Refer to OSHA Guidelines

8). FALSE. Unlike the TB skin test, the Quantiferon Gold does not rely on memory markers and should be repeated yearly for individuals at risk for exposure.

9). FALSE. The patient should be offered a surgical mask and staff should wear the correct size N-95 mask for which they were fitted.

10). FALSE Provide the patient with a common surgical mask as a particulate or N-95 mask is difficult for a patient with respiratory problems to breath through.

10 question answers pertaining to Standard Precautions

11. A, B, C, D. TB and disseminated shingles are airborne diseases. Patients who have or may have an infectious disease that is spread by the airborne route must be placed on Airborne Precautions in addition to Standard Precautions. Airborne Precautions (formerly respiratory isolation). A pt whose hygiene is questionable should be placed in a private room if they will contaminate the environment due to their unwillingness to cooperate with proper hygiene. MRSA is a contact disease. All person should be placed in a private room.
12. D. VRE and HIV are both contact diseases. Patients on Contact Precautions who are colonized or infected with the same microorganism may share a room provided there are no other factors, infections or circumstances that would require the use of a private room.

13. A. Sterile gloves are not needed with standard precautions. Disposable gloves are sufficient.

14. A. For a pt on standard precautions, personnel entering the patient's room should don any barrier protection attire that is necessary to move the patient from the bed to a stretcher or wheelchair in order to prevent contamination of skin and clothing while the patient is being moved. Personnel should remove their barrier apparel, including their gloves and wash their hands after moving the patient and prior to transport. The pt should be covered with a sheet; If the patient has a productive cough or is sneezing, provide the patient with a box of tissues and a small plastic bag for tissue disposal.

15. D. According to the CDC, an actual exposure to blood or body substances includes parenteral, mucous membrane, or skin contact (regardless of whether the skin is intact or broken).

16. D. The HIV pt already has a compromised immune system. Although his roommate may not have pneumonia, it has not been ruled out. TB and pneumonia are NOT the same microorganism. Same with C. Individuals who have an infection with the same microorganism may share a room provided that there are no other factors, infections, or circumstances present that would require the use of a private room. HIV is blood related and considered a contact disease. There would be no reason or purpose for the heart attack victim to come into contact with the individual’s blood.

17. A, C, D. B is incorrect because it is the one handed technique: Step 1: Place the cap on a flat surface, then remove your hand from the cap. Step 2: With one hand, hold the syringe and use the needle to "scoop up" the cap. Step 3: When the cap covers the needle completely, use the other hand to secure the cap on the needle hub. Be careful to handle the cap at the bottom only (near the hub).

18. D. TB, Chicken pox and Herpes Zoster are all airborne precaution pts. Meals and nutritional supplements will be delivered by Food Services personnel to all patients except those on Airborne Precautions.

19. A, B, C, D. All are correct. In accordance with the CDC, all answers were correct.

20. C. A private room is necessary if a pt 1) Has an infection that is transmitted in whole or in part by the airborne or droplet routes. These patients should be placed on Airborne or Droplet Precautions and given a private negative pressure room or a private room, respectively. 2) Has an infection or is colonized with a microorganism that is transmitted in whole or in part by contact. Such patients should be placed on Contact Precautions. 3. Produces body fluids or bloody drainage that is large in quantity and/or cannot be properly contained by the patient or by personnel. Such patients may include, but are not necessarily limited to, persons with profuse bleeding or persons who are grossly incontinent. When environmental contamination
by blood or body substances is considered likely to occur, a private room is indicated.

**10 question answers pertaining to Airborne Precautions**

21. A, B, C, D, and E. Although not discussed, pneumonia is also a airborne disease and all pts. Should be on Airborne Precautions.

22. Airborne Precautions require a negative pressure room in addition to a private room. Negative pressure rooms are specially designed to prevent the flow of air from the room into the corridors and common areas where susceptible persons may be exposed. This is accomplished through fans and vents that direct the airflow outside of the building and/or through HEPA filters.

23. B. While it is very true the WBC will be elevated, this is not a criteria specific to TB as any disease would elevate WBC.

24. A, B, C. Airborne Precautions may be initiated by any of the following individuals responsible for the patient's care: 1). Attending or Resident Physician 2). The Nurse 3). Hospital Epidemiologist or Infection Control personnel. In the event that a difference of opinion arises concerning the need for Airborne Precautions, the final decision regarding the institution of control measures will be made by the Hospital Epidemiologist or his/her designated representative.

25. D. None of the above. The patient has a cough. This could be TB, pneumonia, bronchitis, etc or nothing. All Airborne precaution pts need a private room with negative pressure. Unless being treated for the exact same microbacterial organisms and no other extraneous pt factors exist.

26. C. The child is contagious for about 5- 10 days, or until all of the blisters have dried or crusted off. Only when all the lesions are crusted can a child return to school or day care.

27. False. The Infection Control personnel has the responsibility and can override the Physician when there is a difference of opinion.

28. Contact Precautions. Contact transmission involves skin to skin contact and physical transfer of microorganisms to a susceptible host from an infected or colonized person, such as occurs when personnel turn patients, bathe patients or perform other patient care activities that require physical contact.

29. A, B and C. The brother is susceptible due to his history. The baby has not had all his/her vaccinations and should not be exposed to anything anyway at such a young age. If the wife has TB, why is she walking around! The friend is safe and must take the necessary airborne precautions to see his friend.

30. D. All apply and are correct per CDC.
10 question answers pertaining to Droplet Precautions

31. C. Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia among infants and children under 1 year of age. S/S include fever, runny nose, cough, and sometimes wheezing. RSV is spread from respiratory secretions through close contact with infected persons or contact with contaminated surfaces or objects. Infection can occur when infectious material contacts mucous membranes of the eyes, mouth, or nose, and possibly through the inhalation of droplets generated by a sneeze or cough.

32. A. On droplet precautions a private room is sufficient and the door may remain open. Transmission is due to large particle contact, per CDC Guidelines a mask is to be put on when within 3 feet of the pt or less.

33. B. Droplet transmission involves contact of the conjunctivae or the mucous membranes of the nose or mouth of a susceptible person with large particle droplets containing microorganisms generated from a person who exhibits a clinical disease or who is a carrier of the microorganism.

34. A, C and D Food service may not deliver trays to a person on airborne precautions not droplet precautions. On droplet precautions the door may remain open. The visitor is fine with the mask and gloves since droplets may be on the over the bed table or any surface the visitor may touch.

35. C. During transport, the patient must wear a surgical mask. Departments to where a patient may be transported, such as Diagnostic Imaging, Therapeutic Radiology, Rehabilitation Services, and others must be notified of the need for Droplet Precautions prior to the actual transport of the patient. Notification is the responsibility of unit personnel prior to transport of the patient. Only the employees working directly with the pt need to don and mask and gloves as the pt is already wearing a mask.

36. B. Droplet Precautions can be discontinued after 24 hours of effective antibiotic therapy has been given.

37. Standard. The pt requires the need for a private room, although special ventilation is not required and the door may remain open. In addition to Standard Precautions, a mask must be worn when working within three feet of the patient (or upon entering the room).

38. A, B, C, D, and E. Common diseases include, epiglotitis, pneumonia, meningitis, influenza, adenovirus, mumps, pavovirus B19, rubella per CDC Guidelines

39. D. Choose all that apply was a unnecessary statement as all the above was correct. In the event of a difference of opinion, the infection control representative may override the physician.
40. C. You may place 2 people in the same room if they have the same bacterial microorganisms and no other outside factors exist. The rash of unknown origin is called into question but the fractured hip does not play a part as an outside factor as it is not a problem that presents itself of any need of specific disease precautions.

10 question answers pertaining to Contact Precautions

41. D. Standard Precautions are the same as Universal Precautions and encompass all of the precautions discussed, Airborne, Contact and Droplet. Standard Precautions is an overview. Contact precautions are more specific.

42. B. Both scabies and impetigo are transmitted through contact of unclean surfaces and poor hygiene. Although the diseases are different, both infants are not old enough to walk and therefore, should not come in contact with each other. A. Is incorrect because a boy and a girl can not room together. One can only cohort with another if they have the same microbacterial organism and no other factors therefore C is also incorrect.

43. Center for Disease Control. The Centers for Disease Control/Hospital Infection Control Practices Advisory Committee (HICPAC) has revised the The Guideline for Isolation Precautions in Hospitals.

44. D,D, I and D and D 1). Direct contact transmission involves skin to skin contact and physical transfer of microorganisms to a susceptible host from an infected or colonized person, such as occurs when personnel turn patients, bathe patients or perform other patient care activities that require physical contact. Direct contact can also occur between patients that may have physical contact with each other. 2).Indirect contact transmission involves a susceptible host with a contaminated intermediate object, usually inanimate, in the patient's environment.

45. A. Choices B, C, and D are actually part of the Center for Disease Control guidelines. Although answer A makes a lot of sense and you can tell a patient this, people usually can not hold back a cough/sneeze.

46. 3,4,2,5 and 1, Everything you need to take care of your pt will be on a cart right outside the room. You put on the mask/gown/gloves before entering the room. You enter the room and care for your pt. Before leaving, you remove mask/gown/gloves and wash your hands.

47. A. Cytomegalovirus (CMV) (from the Greek cyto-, "cell", and -megalo-, "large") is a viral genus of the Herpesviruses group: in humans it is commonly known as HCMV or Human Herpesvirus 5 (HHV). Transmission of HCMV occurs from person to person through bodily fluids. Infection requires close, intimate contact with a person excreting the virus in their saliva, urine, or other bodily fluids. CMV can be sexually transmitted and can also be transmitted via breast milk, transplanted organs, and rarely from blood transfusions. Standards precautions are recommended by the CDC.
48. A, and D. The general rule of thumb is any illness/disease that is airborne. Both TB and chickenpox are transmitted through the air. Meningitis is transmitted by large particle droplets. MRSA is transmitted via contact.

49. A, B and E. According to the CDC, *Acinetobacter* causes a variety of diseases, ranging from pneumonia to serious blood or wound infections and the symptoms vary depending on the disease. Typical symptoms of pneumonia could include fever, chills, or cough. *Acinetobacter* may also “colonize” or live in a patient without causing infection or symptoms, especially in tracheostomy sites or open wounds.

50.1 and 3. Part A in answer number 2 is incorrect. Should read, “Gowns may be worn one time only, then disposed of in the regular (non-biohazardous) waste.” Everything else in this answer is correct.

**14 question answers pertaining to H1N1 Virus**

51. False. The H1N1 Swine virus is genetically different from the Human H1N1 virus.

52. B. Genes in the new virus were shown to be genetically similar to pig genes in North America and avian (bird) genes and now human genes.

53. C: Eating properly handled and cooked pork and pork products is safe. You should treat pork the same way we to Chicken to prevent the spread of salmonella when cooking.

54. A: The CDC is saying 5-7 days but new research has shown that a person can still spread the virus up to 8-10 days after the virus has subsided.

55. A: Blurred Vision. Symptoms are different for both children and adults but neither children nor adults have symptoms of blurred vision.

56. B: New reports have found: among deaths, inflammation and damage in the lungs extended all the way to the alveoli, tiny sacs at the farthest end of the lungs’ airways.

57. C: Compromised immune systems or being within 6 feet, puts one at risk. Pregnant women, obesity and indigenous peoples are all in the “at risk” populous.

58. B: Positive for influenza A, but negative for human H1 and H3 by influenza RT-PCR (i.e.,influenza A [unsubtypeable])and real-time RT-PCR specific for AH1N1 (swine-like) CONDUCTED BY A COMMERCIAL LABORATORY

59. A: Antivirals are drugs that can treat the symptoms of an influenza virus infection and reduce the spread of the illness to others, but only if they are administered early. These drugs have to be administered within 48 hours of the beginning of symptoms in order to be optimally effective.
60. D: The new influenza H1N1 is resistant to the older antiviral medications amantadine and rimantidine.

61. D: There are actual guidelines on how to administer this drug and it come in activated and non activated virus forms. I also may be given the same day as the flu shot but if done so, choose a different site of injection.

62. A: These infection control recommendations should apply to all patients with febrile respiratory illness (defined as fever [greater than 37.8° C] plus one or more of the following: rhinorrhea or nasal congestion; sore throat; cough).

63. B: False. There are actually 8 ways to prevent the spread of the virus, as mentioned in my live seminar, but handwashing is the number one and simplest way to prevent the spread of the virus.

64. A and C: According to the CDC standard, Droplet, Contact and Airborne precautions should be used for all patient care activities, and maintained for seven days after illness onset or until symptoms have resolved. In community and home settings, the use of facemasks and respirators generally are not recommended. The ill person should be asked to follow good cough etiquette and hand hygiene and to wear a facemask, if able, and one is available.