N442 Contagion Video handout_ Sollers

-Use your textbooks to understand epidemiology and nursing implications for communicable diseases.

1. **Do you think the discussion with the physician right after the main character's wife dies realistically portrays how a medical provider could explain such a phenomenon?**
   This discussion was somewhat realistic. The main character did not understand at first that she died, then the husband was grieving the loss.
2. **How many times do you touch your face during the movie?**
   At least 25.
   What do they quote as the range in which people touch their face in an hour?
   3-5x/minute
3. **Identify the chain of infection:**
   Respiratory and fomites
4. **What is/are the infectious agent?**
   Paramyxovirus
   MEV1-virus
5. **What diseases did they rule out?**
   Meningitis, West Nile, Enterovirus Encephalitis
6. **What is the reservoir?**
   Pigs and bats. Respiratory track and the central nervous system. The mortality rate is in the low 20s.
7. **What are the portals of entry? The portals of exit?**
   Touching someone infected – mouth, eyes, nose
8. **What are the fomites? Can the virus live for 6 days on a box?**
   Fomites are things that can transmit germs (like doorknobs) or any physical object capable of transmitting disease organisms.
9. **What is the process they take to determine what the disease is?**
   They perform an autopsy and analyze samples at the CDC. They rule out everything that it cannot be and figure out how it attaches to human DNA (lock and key). Autopsy and analyze the samples furthers at the CDC
10. **What agencies get involved?**
    World Health Organization, BSL4 facilities, the CDC
11. **What precipitates these agencies getting involved?**
    The World Health Organization was involved because it happened across the globe.
12. **What is the role of these agencies?**
    To control the virus, develop a vaccine, and educate the public on an action plan
13. **What is the time frame from onset to manifestations of symptoms i.e. incubation period and then to death?**
    24 hours- but it was stated that people can carry the virus and not show any symptoms for weeks
14. **What are the actions taken by the CDC in terms of containing the infection?**

Screening for symptoms and quarantine.
School closing in Minneapolis
Close the boarders, airports, roadblocks

15. **What is an "R naught" (R_0) ?**
    The rate of reproduction of the virus
16. **What do the investigators do to protect themselves?**
    They wear masks and full body suits at the CDC. Some CDC members even tell their family members early about the virus so that they can get out before states go on lockdown. Otherwise masks/gloves
17. **How do the personnel involved communicate the risks to the public?**
    Public statements daily on the news
18. **Calculate the mortality rate from the disease in the first 7 days in Minneapolis?**
    25%
19. **What does the epidemiologist from the WHO do to track the progression of the disease?**
    Videos from the casino, other camera tracking patient zero
20. **What is an epidemic? versus a Pandemic?**
    An epidemic is a widespread occurrence of an infectious disease in a community at a particular time.
    A pandemic is prevalent over a whole country or the world.
21. **What is a quarantine?**
    A quarantine is a state, period, or place of isolation in which people or animals that have arrived from elsewhere or been exposed to infectious or contagious disease are placed.
22. **Why does the husband not get sick? What type of immunity does he have?**
    He is immune. He has natural immunity
23. **What are the symptoms of the virus?** Symptoms are pretty vague, cough, headache, seizures, death
24. **How do they develop a vaccine?** They tested in the CDC lab on monkeys
25. **How is the vaccine administered?** Intranasal
26. **Is it a live virus vaccine versus an attenuated virus vaccine?**
    A live attenuated virus uses a living virus that has been weakened to the point that it is unable to cause disease.
27. **What sort of immunity does the vaccine provide?** Lifelong active immunity
28. **How can the vaccine be administered to the greatest number of people?**
    In the video it was mentioned putting it into water like fluoride to reach the most amount of people the fastest way possible

29. **How does the environment, transportation, communication, essential services, government, and health care facilities get involved?**
    - Nurses go on strike
    - Government and armed forces get involved to distribute the food and vaccines
30. **In your opinion do local, national, and global politics make a difference in the development and distribution of the vaccine?**
    Yes

Explain your opinion? Politics are involved in most local, national, and global decisions.

31. **Does it make a difference if there is a rush to develop the vaccine?**
    The vaccine might not be effective or it may cause adverse effects. It typically takes many years to ensure that vaccines will be effective.
32. **Does it make a difference that a vaccine may have other side effects? Ex: 1976—Swine Flu vaccine.**
    It depends on the individual receiving the vaccine
33. **As a community health nurse: Identify the primary, secondary, and tertiary prevention methods that could be used for infectious diseases at both the individual and community levels.**

    Primary – education

    - washing your hands & staying home

    Secondary – symptom screening

    Tertiary – quarantined individuals

34. **What are the steps that a community needs to do to respond to an infectious disease outbreak?**
    Control the spread of inaccurate information, try and keep the population calm. Ensuring social distancing and the use of proper hand hygiene.