

N442 Contagion Video handout

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

1. Do you think the discussion with the physician right after his wife dies realistically portrays how a medical provider could explain such a phenomenon?
Yes, he did not know the cause of death which is common before an autopsy is done.
2. How many times do you touch your face during the movie?
At least 80 times

What do they quote as the range in which people touch their face in an hour?
2,000 - 3,000 times per day

3. Identify the chain of infection:
infectious agent → reservoir → portal of exit → mode of transmission → portal of entry → susceptible host

4. What is/are the infectious agent?
Boron → Bat → pig

5. What diseases did they rule out?
H1N1, flu, Measles

6. What is the reservoir?
the ~~blastoid~~ where the ~~agent~~ lives, ~~animals, the~~

7. What are the portals of entry? The portals of exit?
Respiratory

8. What are the fomites? Can the virus live for 6 days on a box?
Lives on a surface, no

9. What is the process they take to determine what the disease is?
They trace the steps from where it started

10. What agencies get involved?
CDC, Minnesota Health dept, Sussman in San Fran
dept of homeland security, CIA, WHO
FEMA

11. What precipitates these agencies getting involved?

The continued spread of the virus world wide that occurs daily.

12. What is the role of these agencies?

To determine the cause + spread of the disease

13. What is the time frame from onset to manifestations of symptoms i.e. incubation period and then to death?

A few days

14. What are the actions taken by the CDC in terms of containing the infection?

Quarantining people + shutting of state borders
wash hands, stay home

15. What is an "R naught" (R_0)?

Reproductive rate of the virus

$$\frac{\# \text{ of new cases}}{\# \text{ of existing cases}}$$

16. What do the investigators do to protect themselves?

airborne precautions

17. Calculate the mortality rate from the disease in the first 7 days in Minneapolis?

$$\frac{17,021}{847}$$

18. What does the epidemiologist from the WHO do to track the progression of the disease?

Track from onset of symptoms \rightarrow death

19. What is an epidemic? versus a Pandemic?

Epidemic is a disease that affects a large # of people within a community, pop. of region

A Pandemic is globally

20. What is a quarantine?

restriction on the movement of ppl, animals, + goods which is intended to spread the disease or pests

21. Why does the husband not get sick? What type of immunity does he have?

He has passive immunity

22. What are the symptoms of the virus?
Sore throat, fever, severe headache, sore throat

23. How do they develop a vaccine?
By determining how to grow the virus + how to produce antibodies

24. How is the vaccine administered?
intranasally

25. Is it a live virus vaccine versus an attenuated virus vaccine?

live is from wild viruses or bacteria
~~the~~ attenuated is weakened

What is the difference?
live the virus goes in the body live rather than dead

26. What sort of immunity does the vaccine provide?
Active immunity

27. How can the vaccine be administered to the greatest number of people?
By having a vaccine center/clinic for ~~eg~~ everyone to go to.

28. How does the environment, transportation, communication, essential services, government, and health care facilities get involved?
They get involved w/ the essential things have to keep running + are more at risk to contract the virus

29. In your opinion do local, national, and global politics make a difference in the development and distribution of the vaccine?
Yes

Explain your opinion?

they create caos + make people scared

30. Does it make a difference if there is a rush to develop the vaccine?

People have more hesitations

31. Does it make a difference that a vaccine may have other side effects? Ex:
1976—Swine Flu vaccine.
People may not want to get the vaccine due to side effects or the unknowns as seen w/ covid.

32. 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 - vaccine + education, quarantine
secondary - screening
tertiary - isolation

33. What are the steps that a community needs to do to respond to an infectious disease outbreak?

Find out how + where it started, shut things down, + develop a vaccine