

Infectious Diseases

Lesson Plan and Speaking Notes

Hepatitis

What are the three types of Hepatitis?

Virus – 3 forms of it: A, B, and C

Hepatitis A, Hepatitis B, and Hepatitis C are all contagious.

Hepatitis B and C are blood borne – can happen through infected blood or blood contaminated fluids coming into contact with skin, eyes, or mucus membranes.

Hepatitis A mainly comes from infected feces.

In its early stages, Hepatitis may cause flu-like symptoms, including:

Fatigue

Fever

Muscle aches

Loss of appetite

Nausea and vomiting

Diarrhea

Jaundice (a yellowing of the skin and whites of the eyes)

Some people may have no symptoms at all and may not even know they're infected.

If Hepatitis progresses, it affects the liver causing symptoms such as:

Jaundice

Foul breath, bitter taste in the mouth

Dark or "tea-colored" urine

White, light, or "clay-colored" stools

Hepatitis B

The major infectious hazard for health care workers

With Hepatitis B, 85% to 90% of patients recover from their illness completely within 6 months, without long-term complications.

Incubation period is between 1 and 5 months

Vaccine is available free, and is recommended to employees because of occupational exposure. If you decline to take vaccine, need to sign statement of refusal.

If there is exposure, the agency must make a confidential medical evaluation.

Hepatitis C

The most common blood borne infection in the U.S.

Average of 230,000 new cases per year

Incubation period is 2 to 26 weeks

75% to 85% of those who are infected with Hepatitis C do not recover completely, and develop a chronic condition that can lead to cirrhosis of the liver and death.

40% of liver disease is Hepatitis C related.

There is no vaccine for this.

Hepatitis A

Incubation period is 2 to 6 weeks

Rare if standard precautions are followed

Mainly comes from infected feces

Almost all previously healthy persons who develop Hepatitis A will completely recover from their illness in a few weeks or months without long-term complications.

Once a person recovers, he can no longer pass the virus to other people.

Immune globulin is given after an exposure.

Vaccine available

Risk and Prevention

Elderly patients have a compromised immune system, and are in and out of the hospital frequently, which places them at high risk for infectious diseases. We have to protect ourselves by assuming that everyone is infected.

What is the best prevention for all types of Hepatitis?

The best prevention of all forms of Hepatitis is Standard Precautions.

Vaccination

Hand washing

Gloves

Following protocol for isolation

Safe handling of soiled linens

Safe handling of sharps and needles

Influenza

Annual vaccination is recommended for health care workers because they are at high risk for contracting it, and there is a high risk they will pass it to the patients who have a high mortality rate from influenza.

The flu shots do not guarantee that patients and employees will not get influenza.

Some strains of flu are more deadly than others, but the elderly are always affected the worst by them.

Standard precautions, following isolation protocol

Tuberculosis

Caused by a bacteria

Causes a chronic lung condition and fatigue – used to be called consumption

Spread through the air by droplets when an infected person coughs, sneezes, or speaks

Mantoux test detects infection – This is the test you were given when first employed, and then get annually.

TB was decreasing until 1985, and then began to increase due to homelessness, immigration from TB prone areas, HIV cases, drug use with needles, and reduced resources for fighting it.

Health care facility populations have always had a higher rate, and health care workers are at a greater risk than others

May not be showing symptoms even though infected- but can still infect other people

Long course of medications to treat this

Standard precautions, following isolation protocol

MRSA

MRSA stands for Methicillin-resistant Staphylococcus aureus.

These are Staph bacteria that are resistant to almost all antibiotics.

It is not a super bug, and doesn't cause worse or more disease than other bacteria.

It is multi-drug resistant, so treatment options for it are limited.

Infection with MRSA is when the bacteria is multiplying in tissue and causing symptoms such as fever, respiratory symptoms, or purulent drainage.

The major reservoir of MRSA in a health care setting is infected and infectious patients, but furniture and equipment surfaces may also be contaminated.

MRSA spreads person to person, usually by the hands of staff.

Standard Precautions

Hand washing

Gloves, masks, and gowns depending on what sort of body substance staff would be in contact with

Cleaning patient furniture and equipment surfaces

Clostridium Difficile

C. difficile has become a common infection in health care facilities.

Causes diarrhea

Over use of antibiotics causes normal flora to be suppressed, and that creates an ideal environment for the growth of C. difficile.

It is spread by the fecal-oral route,

or from contact with contaminated environmental surfaces,

or from staff not washing hands.

Diagnosed by stool test

Patients with symptoms are more likely to be a source of contagion.

Standard precautions

Using gloves when any contact with feces might be possible

Herpes Zoster

Commonly called Shingles

15% of people get it in their lifetime, and its incidence increases with aging.

Chicken Pox is caused by Herpes Zoster.

Years later, after having chicken pox, lowered immunity or stress can cause reactivation of the virus along peripheral nerves.

This causes a red rash in a line on one side of the body.

It is very painful and itchy.

Usually there is no fever.

It is treated with an anti-viral agent.

It is spread by contact with lesions, and in some cases is airborne.

Exposure to Shingles can cause Chickenpox in a person without immunity.

Exposure to Chickenpox does not cause Shingles.

Only staff with immunity to Chickenpox should care for patients with shingles.

Standard Precautions

What are ways we can prevent the spread of infectious diseases?