
INSERVICE: "BLOODBORNE PATHOGENS"

BLOODBORNE DISEASES

Healthcare workers could be exposed on the job to several blood borne diseases that include: non-A Hepatitis; non-B Hepatitis; Hepatitis B; syphilis; malaria; and HIV. OSHA has issued standards to protect all healthcare workers. Your employer must comply with protective standards, but the ultimate responsibility in prevention is you, yourself. Some medical staff is at higher risk than others due to patient contact (surgeons; surgery staff; intensive care and emergency workers and staff), but all are equally at risk.

TRANSMISSION

The most common blood borne diseases that you could be exposed to are: HIV, and HBV (Hepatitis – B). Hepatitis is inflammation of the liver. HBV infects more than 8700 healthcare workers a year, including 200 deaths. Symptoms are: flu-like symptoms severe enough to require hospitalization. You may also not have symptoms at all. Blood, saliva, and other body fluid can spread the disease. It also can be easily spread to sexual partners, and unborn infants.

HIV is the human immunodeficiency virus that attacks the body's immune system. When it develops into a disease, this is AIDS – Acquired Immune Deficiency Syndrome. A person with HIV: may carry the virus without developing the disease for years; will eventually develop the disease AIDS; may suffer from flu-like symptoms such as fever, diarrhea, and fatigue; may develop AIDS-related illnesses such as cancer, lung, and neuro symptoms.

In the workplace, HIV and HBV may be present in: blood; saliva; semen; vaginal secretions; spinal, pleural, amniotic, or any other bodily fluid; tissue or organs from live or dead humans; cell or tissue cultures; blood or tissue from infected animals. Blood borne pathogens enter the body via: needle sticks; scalpels; broken glass; exposed dental wires; anything that can pierce, puncture or cut the skin.

EXPOSURE CONTROL

Contaminated rooms can spread the diseases, such as in dialysis units, or rooms occupied with infected patients. They must be cleansed strictly according to OSHA standards for the prevention of Blood borne Diseases. Risks of developing diseases in the workplace are serious. All facilities must have an Exposure Control Plan. As an employee, you must know what to do if you feel that you have been exposed.

REDUCING YOUR RISK

- Know which patients are carrying a blood borne pathogen, or have a disease
- Utilize personal protective equipment (PPE): gloves, masks, eye shields, gowns
- Dispose of waste according to the Biohazard System in the facility
- Never re-cap needles; dispose in contaminated sharps containers
- Use Standard Precautions: GOOD HANDWASHING TECHNIQUE (even after removing gloves. Use other Precautions as pertaining to the specific patient.
- Never store food in refrigerators with blood, or other bodily fluids
- If protective clothing is being used (gown, mask) dispose of properly
- Wear gloves when in contact with any type of bodily fluid
- Handle contaminated laundry in color-coded, leak proof bags per policy
- "Biohazard Area": means potentially hazardous materials are being handled here ○ Use extreme caution when obtaining and transporting a specimen of bodily fluid
- Use the facility policy for cleaning up spills of bodily fluid
- Wet floors are a hazard not only for injuries, but also for pathogen exposure; wipe up spills, or see that they are wiped up according to facility policy

PROTECTING YOURSELF

Your employer should make available the Hepatitis-B vaccine. It is administered over a 6-month period. They are very safe and effective. The series of three (3) injections makes you 85-97% safe from contracting the disease, for your lifetime. Once you have received the series, you need not take it again. Antibody testing may be obtained for a titer level revealing that you are immune. Certain medical conditions may prohibit you from taking the vaccine series, including some allergies. Check with your doctor.

If you feel that you have been exposed to blood borne pathogen disease, contact the supervisor. Blood tests may be done, with medical follow-up. There is no antibody currently available for Hepatitis-B, or for HIV exposure. Once you have been exposed, you may be required to have blood testing done for many years. As an employee, you will be required to complete ongoing educational training pertaining to Blood borne

Pathogens. It is possible to protect yourself from diseases on the job, simply by knowing the facts and taking proper precautions. Working together with your fellow employees and employer will do this. As a healthcare worker you can be confident in your ability to safely care for the well being of others and yourself. Work Safe, Smart and be Protected!

- - - - - TAKE THE TEST ON THE BACK - - - - -
"BLOOD BORNE PATHOGENS"
TEST

Circle the correct answer

1. T F OSHA Standards cover only surgeons and ambulances drivers.
2. T F HIV and HBV are the only blood borne diseases you face.
3. T F Mucous membranes are a potential route of entry
4. T F All medical instruments are considered sharps
5. T F HBV dies as soon as it comes in contact with air
6. T F Exposure Control Plans are not mandatory
7. T F Standard precautions means treating all blood and body fluids as potentially infectious.
8. T F All needles must be bent before placing them in a sharps container
9. T F Hands need not be washed if you have worn gloves during a procedure
10. T F Antiseptic hand cleaner can be used instead of running water to wash hands.
11. T F Make sure to store food close to you when working with blood so you don't have to leave the room
12. T F Choose the protective equipment that is needed based upon the patient's requirements.
13. T F Try to avoid giving unprotected mouth-to-mouth resuscitation.
14. T F Only use gloves once.
15. T F You received one vaccine injection for the Hepatitis-B series. You are safely protected.
16. T F You forgot to return to get the second injection. It has been a year. You will be protected if you receive it now.
17. T F Sharps are placed in yellow containers in the medicine rooms
18. T F If you are exposed to a blood borne pathogen, you most likely will contract the disease.
19. T F Terminal cleaning of an exposed room may include bleach disinfecting.
20. T F Gloves can adequately protect any cuts you may have on your hands.

NAME _____ DATE _____

INSERVICE:

"TUBERCULOSIS"

INCIDENCE OF TUBERCULOSIS

Tuberculosis is not evenly distributed among the population. The highest incidence is found in: African Americans, American Indians, Asians, Pacific Islanders, prison inmates, alcoholics, and IV drug users. Other is persons with risk factors such as HIV, or receiving chemotherapy Persons over 65 constitute a large number of TB infections. They account for 85% of nursing home residents, where there could be a large concentration of infected persons, who are immunosuppressed, and live within close proximity.

SPREAD OF INFECTION

The organism causing the disease, *Mycobacterium tuberculosis*, is carried by airborne droplets, and is highly contagious. The bacilli become established in the alveoli of the lungs and spreads throughout the body. The disease may take up to 10 weeks to fully develop. The initial infection may rapidly progress to a severe clinical illness in at-risk patients. For those who do not carry the above-mentioned risk factors, the disease may take months even years to replicate symptoms of the disease. There is rapid progression of TB with patients having HIV. Some procedures utilized in health care may also contribute to the spread of TB: abscesses, suctioning. Resp. therapy. Needle sticks may spread TB.

RISK FOR HEALTH CARE WORKERS

The risk of exposure or contracting of the disease is higher in at-risk areas such as: E.R., ICU, clinics, nursing homes, in-field workers. Facilities should ensure that appropriate TB prevention and control measures are taking to residents and staff to protect the spread of the disease. The following activities should take place: surveillance of staff, residents, and the facility; containment of the infection, with the appropriate course of treatment under supervision; assessment and monitoring of the disease progress, and of the facility infection control policies; education to residents, families, staff, visitors to ensure the compliance with the need for prevention and therapy.

DIAGNOSIS

Symptoms are: persistent cough, weight loss, loss of appetite or fever. This would be difficult to diagnose with positive HIV. The PPD Skin Test should be given to all health care workers yearly. A positive skin test does not mean that the person has TB, but a follow-up chest x-ray should be done. A sputum test may also be required. Residents of long-term care facilities should also be tested yearly. When TB is confirmed, the Health Dept. must be notified.

CONTAINMENT

Patients diagnosed with TB must begin medication immediately. When the positive diagnosis is made, and the patient exhibits symptoms, isolation under negative pressure is necessary. Repeat chest x-rays and sputum smears are obtained for follow-up. Persons in contact with the TB patient are at risk for contacting the disease, and must be monitored. Persons with a positive skin test, and negative chest x-ray should be monitored. If those persons have been exposed to an individual with TB, medications should be maintained for 6 months.

SUMMARY

Tracking the status of the patient with TB is essential. Both the therapy regimen and monitoring of testing must be included in the facilities' system. State and local health dept's. will assist in developing policies to train, contain, and maintain TB prevention. The incidence of TB is rising among residents in healthcare facilities. Steps must be taken to recognize, diagnose, treat and test individuals who have been exposed, and those who are at risk.

"TUBERCULOSIS"
TEST

Circle the correct answer

- 1. TB is evenly distributed among all segments of the population.**
a. true b. false
- 2. Isolation for TB should be:**
a. maintained for all persons who have been diagnosed
b. maintained in a negative pressure environment
c. maintained for at least 6 months
d. maintained until chest x-rays are negative
- 3. It is necessary that a person infected with TB be placed in isolation.**
a. true b. false
- 4. The method of diagnosing TB is:**
a. sputum test
b. chest x-ray
c. skin test
d. all of the above
- 5. Diagnosis of TB is difficult in those who are:**
a. elderly
b. infants
c. infected with HIV
d. all of the above
- 6. The organism causing TB is:**
a. Staphylococcus aureus
b. Methylocilllis verifius
c. Mycobacterium tuberculosis
d. Staphylococcus tuberculosis
- 7. All who are exposed to TB will eventually develop the disease.**
a. true b. false
- 8. A visitor in to a nursing home may contract TB.**
a. true b. false
- 9. Facilities can prevent the spread of TB with effective systems in:**
a. security
b. ventilation
c. communication
d. administration
- 10. Caring for a patient with NON-symptomatic TB would include:**
a. gown, gloves, mask, eye shields, good hand washing
b. gloves, good hand washing
c. mask, good hand washing
d. good hand washing

NAME

DATE
