

Component I: Core

Module C: Safety

Topic 3: Standard Precautions

Statement of Purpose

To prepare the learner with the basic knowledge and skills necessary with use of standard precautions and transmission based precautions.

Student Learning Outcomes

Upon completion of this topic, the learner will be able to:

1. Spell and define key terms.
2. Describe Standard Blood and Body Precautions.
3. State the role of the Centers for Disease Control.
4. Discuss the appropriate uses of Personal Protective Equipment (PPE).
5. Compare and contrast routes of disease transmission for tuberculosis, HIV and Hepatitis B and C.
6. Recognize situations that may expose health care workers to blood and body fluids.
7. Discuss five employer responsibilities associated with the Bloodborne Pathogen Standard.
8. Discuss the OSHA Categories I, II and III tasks.

Terminology

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| 1. Acute viral hepatitis diseases | 18. Gamma globulin |
| 2. Acquired Immune Deficiency Syndrome (AIDS) | 19. Health and Human Services (HHS) |
| 3. Airborne transmission | 20. Hepatitis B Immune Globulin (HBIG) |
| 4. Barrier | 21. Hepatitis B vaccine |
| 5. Biohazard | 22. Human Immunodeficiency Virus (HIV) |
| 6. Bloodborne pathogen | 23. Isolation |
| 7. Body fluid | 24. Intrauterine transmission |
| 8. Body Substance Isolation (BSI) | 25. OSHA 300, 300-A and 301 forms |
| 9. Category I, II and III tasks | 26. Other Potentially Infectious Material (OPIM) |
| 10. Centers for Disease Control and Prevention (CDC) | 27. Personal Protective Equipment (PPE) |
| 11. Contaminate | 28. Protozoa |
| 12. Contract | 29. Standard precautions |
| 13. Contact transmission | 30. Thoracentesis fluid |
| 14. Droplet transmission | 31. Transmission based precautions |
| 15. Emesis | 32. Tuberculosis |
| 16. Epistaxis | |
| 17. Fungi | |

References

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2. French, L.L., & Fordney, M.T. (2013). *Administrative Medical Assistant* (7th Ed.) Clifton Park, NY: Delmar, Cengage Learning.

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7. Dennerll, J.T., & Davis, P.E. (2010). *Medical Terminology: A Programmed Systems Approach* (10th Ed.). Clifton Park, NY: Delmar, Cengage Learning.
8. Proctor, D. B., & Young-Adams, A. P. (2011). *Kinn's The Medical Assistant: An Applied Learning Approach* (11th Ed.). Philadelphia, PA: Saunders Elsevier.

Websites

1. <http://www.hhs.gov>
2. <http://www.osha.gov/index.html>
3. <http://www.cdc.gov>
4. <http://cdc.gov/Workplace>

Content Outline/Theory Objectives	Suggested Learning Activities
<p>Objective 1 Spell and define key terms.</p> <ul style="list-style-type: none"> A. Review the terms listed in the terminology section. B. Spell the listed terms accurately. C. Pronounce the terms correctly. D. Use the terms in their proper contexts. 	<ul style="list-style-type: none"> A. Games: word searches, crossword puzzles, Family Feud, Jeopardy, bingo, spelling bee, hangman and concentration. B. Administer vocabulary pre-test and post-test. C. Discuss learning gaps and plan for applying vocabulary.
<p>Objective 2 Describe Standard Blood and Body Precautions.</p> <ul style="list-style-type: none"> A. Department of Health and Human Services' (HHS) Center for Disease Control (CDC). B. Protects health care workers by assuming that all body fluids are infected. C. Standard blood and body precautions apply to: <ul style="list-style-type: none"> 1. Blood and blood products. 2. Human tissues. 3. Semen and vaginal secretions. 4. Cerebrospinal, synovial, pleural, peritoneal, pericardial and amniotic fluids. 5. Other body fluids if visibly contaminated with blood. 6. Breast milk, although not on the list, is treated as contaminated because mothers can pass the HIV virus to their infants through breast milk. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use posters/videos/computer assisted learning/workbook activities. D. Students create posters that demonstrate blood and body fluids precautions; present to class. E. Review http://www.hhs.gov
<p>Objective 3 State the role of the Center for Disease Control (CDC).</p> <ul style="list-style-type: none"> A. Responsible for studying how diseases are contracted from pathogens <ul style="list-style-type: none"> 1. Viruses. 2. Bacteria. 3. Fungi. 4. Protozoa. B. Preventing the spread of disease <ul style="list-style-type: none"> 1. Universal precautions were introduced in 1985 and changed to Standard precautions in 1996 <ul style="list-style-type: none"> a. Health care providers must consider all patients to be infectious. b. All body fluids are treated as contaminated. c. Hands must be washed before and after handling body fluids. d. Gloves are worn when handling body fluids. e. Gowns, gloves, masks and goggles are worn when droplet exposure is a possibility. f. Barrier mouthpiece used to perform CPR. g. Body fluid spills cleaned with bleach. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use posters/videos/computer assisted learning/ workbook activities. D. Ask students to research the CDC website: www.cdc.gov <ul style="list-style-type: none"> 1. Discuss their findings. Describe when and how to utilize resources. E. Ask each student to research the "Workplace Safety and Prevention" section on the website http://cdc.gov/Workplace F. Ask each student to review the infection control page <ul style="list-style-type: none"> 1. Choose an infection control topic.

<ul style="list-style-type: none"> h. All needle sticks and splashes are reported. i. Workers with open lesions or dermatitis must avoid contact with patients. <p>2. Standard precautions were adopted in 1996 as the first part of the 2-tier precaution guidelines</p> <ul style="list-style-type: none"> a. Combination of standard precautions and techniques of body substance isolation (BSI). <ul style="list-style-type: none"> 1) Wash hands before and after each patient contact. 2) Wear gloves. 3) Use a mask and a form of eye protection. 4) Wear gowns considered to be disposable. 5) Rules for patient care equipment handling. 6) Environmental control of workspace. 7) Handling of linens and other clothing. 8) Use of Occupational Health and Safety Administration (OSHA) and Bloodborne Pathogen Standard. 9) Patient placement issues <ul style="list-style-type: none"> • Isolation procedures. • Personal Protective Equipment (PPE) worn for contact with all body fluids, whether or not blood is visible <ul style="list-style-type: none"> ○ Intended to protect all patients, workers and visitors. ○ Applies to blood, body fluids, wounds and mucous membranes. • Must consistently be used to reduce infectious disease transmission risks. <p>3. Transmission-based precautions were adopted in 1996 as the second part of the 2-tier precaution guidelines.</p> <ul style="list-style-type: none"> a. Intended for use with patients known or suspected of having diseases in the categories of high-frequency transmission. b. Used in addition to standard precautions. c. Based on routes of transmission <ul style="list-style-type: none"> 1) Airborne: tuberculosis, measles, varicella <ul style="list-style-type: none"> • Wear a mask. • Patient to wear a mask during transport outside of room. 	<p>2. Describe an experience you might have had or seen that exemplifies the chosen topic.</p>
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<ul style="list-style-type: none"> 2) Droplet: H. influenza, N. meningitis, mumps, rubella, streptococcus <ul style="list-style-type: none"> • Isolate the patient. • Wear mask within 3 feet of patient. • Limit patient transport. 3) Contact: herpes simplex, impetigo, scabies <ul style="list-style-type: none"> • Isolate the patient. • Wash hands. • Wear gloves and gown. • Limit patient transport. • Use dedicated patient care equipment. 	
<p>Objective 4 Discuss the appropriate uses of Personal Protective Equipment. (PPE).</p> <ul style="list-style-type: none"> A. PPE are used as barriers that can be used in various combinations <ul style="list-style-type: none"> 1. Gloves protect hands but do not prevent penetration from needles or sharp instruments. 2. Masks prevent exposure to mucous membranes of nose and mouth. 3. Gown protects against contamination to clothing. 4. Goggles prevent exposure to mucous membranes of eyes. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use posters/videos/computer assisted learning/ workbook activities. D. Demonstrate how to put on and take off PPE. E. Collaborative group exercise. <ul style="list-style-type: none"> 1. On a table have PPE and ask students to discuss the use of these in various situations that they describe. 2. Provide scenarios and ask students to choose the PPE they will need to protect themselves.
<p>Objective 5 Compare and contrast disease transmission for tuberculosis, HIV, and Hepatitis B and C.</p> <ul style="list-style-type: none"> A. Tuberculosis (TB) is present in sputum, skin lesions or feces and is transmitted by: <ul style="list-style-type: none"> 1. Direct contact, as in kissing. 2. Droplets, as in coughing. 3. Can be passed from mouth, to fingers, to food, to other objects or people. 4. Soiled dressings and clothing. 5. Can be transmitted from mouth to lungs, intestines, lymph glands, or body tissues. B. HIV/ AIDS <ul style="list-style-type: none"> 1. There is presently no cure for AIDS. 2. HIV causes AIDS through destruction of T-cells. 3. HIV found in semen, blood and other body fluids. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use posters/videos/computer assisted learning/workbook activities.

<ul style="list-style-type: none"> 4. Can penetrate mucous membranes. C. Acute viral hepatitis diseases <ul style="list-style-type: none"> 1. Hepatitis A – HAV. 2. Hepatitis B – HBV <ul style="list-style-type: none"> a. Most risks are to health care providers. b. Easier to contract than HIV. c. Preventable <ul style="list-style-type: none"> 1) Immunoglobulin after contact or exposure. 2) Hepatitis B vaccine protection. d. Once infected you are infected for life and can transmit the disease to others. 3. Hepatitis C – HCV. 4. Hepatitis D – HDV. 5. Hepatitis E – HEV. D. Transmission of HIV and Hepatitis B is the same for both viruses <ul style="list-style-type: none"> 1. Sexual contact. 2. Sharing of needles. 3. Receiving infected blood and blood products. 4. Intrauterine transmission and contact at birth. 5. Contact with infected body fluids. 	
<p>Objective 6 Recognize situations that may expose health care workers to blood and body fluids.</p> <ul style="list-style-type: none"> A. Venipuncture, obtaining arterial blood. B. Open wounds. C. Epistaxis. D. Vaginal bleeding. E. Stool. F. Emesis. G. Lumbar puncture with cerebrospinal fluid. H. Joint aspiration with synovial fluid. I. Thoracentesis with pleural fluid. J. Semen or vaginal secretions. K. Amniocentesis. L. Pregnancy exam. M. Vital signs from coughing, saliva, sneezing. N. Reception from coughing and sneezing. O. Oral procedures. P. Cleaning instruments. Q. Endoscopy. R. Administering medications. S. Throat cultures. T. Respiratory therapies. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings C. Use posters/videos/computer assisted learning/workbook activities.
<p>Objective 7 Discuss five employer responsibilities associated with the Bloodborne Pathogen Standard.</p> <ul style="list-style-type: none"> A. Purpose is to reduce occupational related cases of HIV and Hepatitis B. 	<ul style="list-style-type: none"> A. Lecture/Discussion B. Assigned Readings

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| <p>B. Effective March 1992 for all health care employers.</p> <p>C. Covers all employees who come into contact with blood and other potentially infectious materials (OPIM).</p> <p>D. Bloodborne Pathogen Standard</p> <ol style="list-style-type: none"> 1. Exposure determination, the employer must list job classifications and their exposure risk. 2. Controlling exposure <ol style="list-style-type: none"> a. List for prevention and compliance polices <ol style="list-style-type: none"> 1) Post standard precautions. 2) Establish work practice controls such as biohazard containers for sharp objects, fume hoods and splash guards. 3) Wear Personal Protective Equipment. 4) Maintain clean work areas: <ul style="list-style-type: none"> • Written schedule for cleaning and decontamination is followed. • Directions on how to dispose of needles and broken glass. • Directions on how to dispose of contaminated laundry. • Directions on how to dispose of biohazard waste. b. Produce a written plan that is accessible to all employees. c. Update plan annually or as necessary. 3. Hepatitis B vaccine offered by employer <ol style="list-style-type: none"> a. Free to employees. b. Employee to fill out declination form if vaccine declined. 4. Post-exposure follow up by employer. 5. Disposal of biohazard waste by employer. 6. Proper labeling of all containers. 7. Housekeeping and laundry guidelines followed. 8. Employee safety training with documentation of who attended is provided by the employer <ol style="list-style-type: none"> a. Must be during work hours. b. No cost to employees. c. Performed annually and updated. d. Training records must be kept for 3 years. <p>E. Employee responsibilities</p> <ol style="list-style-type: none"> 1. Attend and cooperate in safety training. 2. Obey policies. 3. Use standard precautions. 4. Use safe work practices. 5. Use work practice controls established by employer. 6. Report unsafe work conditions to employer. 7. Maintain clean work areas. | <p>C. Use posters/videos/computer assisted learning/workbook activities.</p> <p>D. Review</p> <ol style="list-style-type: none"> 1. http://www.osha.gov/recordkeeping/RKforms.html 2. www.osha.gov/recordkeeping/RKforms.html |
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<p>F. Employer follows up on employee exposure</p> <ol style="list-style-type: none"> 1. Confidential medical evaluation. 2. Circumstances of exposure. 3. Route of exposure. 4. Identify source of exposure. 5. Rinse or wash exposed area. 6. If eyes are involved, flush with large amounts of warm water. 7. Report to supervisor for documentation. 8. Test for HBV and HIV, if consent given. 9. Test source, if consent given. 10. Offer gamma globulin or HBIG vaccine. 11. Provide employee counseling. 12. Complete OSHA 300, 300-A and 301 forms. 13. Keep confidential records for 30 years. 	
<p>Objective 8 Discuss the OSHA Category I, II and III tasks.</p> <p>A. Routine safeguards when performing procedures or tasks, depending on the level of the task's risk.</p> <p>B. Category I task</p> <ol style="list-style-type: none"> 1. Expose a worker to blood, body fluids, tissues or contaminated fluids that could spill or splash. 2. May perform when assisting in minor surgery, such as the removal of a cyst <ol style="list-style-type: none"> a. This procedure requires that you wash your hands before and after, wear gloves, mask and protective eyewear or face shield as well as protective clothing. 3. Guidelines for disposal of sharp equipment and decontaminating work surfaces. <p>C. Category II Task</p> <ol style="list-style-type: none"> 1. May not have risk of exposure. 2. CPR with mouth-to-mouth resuscitation; gloves and barrier mouthpiece are recommended. 3. OSHA recommends precautions because of exposure to saliva to decrease transmitting infections. <p>D. Category III Task</p> <ol style="list-style-type: none"> 1. No specific protection. 2. Administering nose drops. 3. Instructing patient how to use a heating pad. 	<p>A. Lecture/Discussion</p> <p>B. Assigned Readings</p> <p>C. Use posters/videos/computer assisted learning/workbook activities.</p> <p>D. List procedures and tasks on overhead and discuss which is Category I, II or III.</p>