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Ferris State University Exposure Control Plan and Infectious Diseases

FERRIS STATE UNIVERSITY
SAFETY, HEALTH, ENVIRONMENTAL AND RISK MANAGEMENT

FERRIS STATE UNIVERSITY REVISION 2

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1. PURPOSE OF THE EXPOSURE CONTROL PROGRAM

a. The purpose of this program is to provide a comprehensive infection control system that maximizes protection against communicable diseases for all employees for the Ferris State University. Promote safe work practices, ensure medical treatment and minimize injury and illness experienced by employees. Universal precautions shall be observed at all times and shall be expanded to include all body fluids and other potentially infectious material.
b. Goals of the Program:
    i. Train and educate all employees on the types, transmission, cause, and effects of infectious diseases.
    ii. Influence employees' attitudes toward health and safety when exposed to an infectious disease.
    iii. Train and educate employees in appropriate skills that will decrease exposure risk.
    iv. Train and educate employees in proper follow-up procedures, should an exposure occur. Encourage participation for employee assistance and critical incident stress debriefing (CSID) programs.
    v. Provide employees with immunizations and personal protective equipment (PPE) needed for protection from communicable diseases.
    vi. Prohibit discrimination of any member for health reasons, including infection or seroconversion, or both, with HIV, HBV, or HCV.
    vii. Regard all medical information as strictly confidential. No employee's health information will be released without the signed written consent of said employee.
        1. Relative to the above goal, MIOSHA has enacted the Blood borne Infectious Disease Standard (Part 554). The purpose of this standard is to "reduce" occupational exposure to hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV), and other blood borne pathogens that employee's may encounter in their workplace.

2. Definitions:

a. **Biologically hazardous conditions:** means equipment, containers, rooms, materials, and experimental animals, animals infected with HBV or HIV virus, or combinations thereof that contain, or are contaminated with, blood or other potentially infectious material.
b. Blood: means human blood, human blood components, and products made from human blood.
c. **Bloodborne pathogens:** means pathogenic microorganisms that are present in human blood and can cause disease in humans. These

pathogens include hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

d. **Clinical laboratory:** means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious material
e. **Contamination:** means the presence of an infectious agent on body surfaces, also on clothes, instruments, surfaces and tools or other inanimate articles or substances including water, food, other liquids and solids. The presence of foreign material that adulterates or renders impure a material the composition of which is thereby degraded.
f. **Contaminated:** means the presence or the reasonably anticipated presence of blood or other potentially infectious material on an item or surface. To make impure or unsuitable by contact or mixture with something unclean.
g. **Contaminated laundry:** means laundry which has been soiled with blood or other potentially infectious materials or which may contain sharps.
h. **Contaminated sharps:** means any contaminated object that can penetrate the skin, including any of the following:
    1. Needles
    2. Scalpels
    3. Broken glass
    4. Exposed ends of dental wires
i. **Decontamination:** means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe or handling, use, or disposal.
j. **Disinfect:** means to inactivate virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms, on inanimate objects.
k. **Engineering controls:** means controls, for example, sharps disposal containers, self-sheathing needles, or safer medical devices, such as sharps with engineered sharps injury protections and needleless systems, which isolate or remove the bloodborne pathogen hazard from the workplace.
l. **Exposure:** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties. "Exposure" Proximity or contact with a source of a disease agent in such a manner that effective transmission of the agent or harmful effects of the agent may occur.
m. **Exposure incident:** means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious material that result from the performance of an employee's duties.

n. **Handwashing facilities:** means facilities that provide an adequate supply of running, potable water, soap, and single-use towels or a hot-air drying machine.
o. **Licensed health care professional:** means a person whose legally permitted scope of practice allows him or her to independently perform the activities required by MIOSHA Part 554 Bloodborne Infections Diseases R 325.70013 Rule 13 concerning hepatitis B vaccination and post-exposure evaluation and follow-up.
p. OPIM: Other Potentially Infections Material
q. **Personal protective equipment:** or **"PPE"** means specialized clothing or equipment that is worn by an employee to protect him or her from a hazard. General work clothes, such as uniforms, pants, shirts, or blouses that are not intended to function as protection against a hazard are not considered personal protective equipment.
r. **PND:** Planning Neighborhood Development
s. **Regulated waste:** means any of the following:
    i. Liquid or semi liquid blood or other potentially infectious material.
    ii. Contaminated items that would release blood or other potentially infectious material in a liquid or semi liquid state if compressed.
    iii. Items that are caked with dried blood or other potentially infectious material and which are capable of releasing these materials during handling.
    iv. Contaminated sharps.
    v. Pathological and microbiological waste that contains blood and other potentially infectious material.
t. **SHERM** – Safety, Health, Environmental and Risk Management
u. **Sterilize:** means the use of a physical or chemical procedure to destroy all microbial life, including highly resistant bacterial endospores.
v. **Universal precautions:** means a method of infection control that treats all human blood and other potentially infectious material as capable of transmitting HIV, HBV, and other bloodborne pathogens.
w. Work practices: means controls that reduce the likelihood of exposure to bloodborne pathogens by altering the manner in which a task is performed
    i. **Company Name:** Ferris State University
    ii. **Date of Preparation:** October 16, 2017
    iii. **Revision Date:**
x. EXPOSURE DETERMINATION
y. MIOSHA Bloodborne Infectious Diseases Standard states that all employees who have duties which potentially expose them to blood or other potentially infectious material are determined to have **a reasonably anticipated risk** of exposure to bloodborne pathogens and are acknowledged in the Exposure Control Plan.
    i. Safety Administrator and Risk Management Department originally determined which job classifications include potential exposure to bloodborne pathogens with a Job Descriptions. The exposure

determinations are made without regard to the use of personal protective equipment.

ii. Job classifications which have been determined to have a reasonably anticipated risk of

iii. Exposure to blood borne pathogens, either by the nature of the occupation or by specific tasks, which an employee is, required to perform as part of their job.

iv. Information regarding job classifications, which are covered by the provisions of the Exposure Control Program, will be updated annually based on information received from affected departments.

v. The following employee job classifications at the Ferris State University are Category A due to expected occupational exposure to blood or Other Potentially Infectious Material (OPIM),* regardless of frequency.

vi. (Category "A" Job Classification)

z. **Ferris State University employees in the following job classifications** have reasonably anticipated risk of exposure to bloodborne pathogens:

i. Plumbers

ii. Custodians cleaning of body fluids and other Bio-matter

iii. Maintenance Worker (Parks) Pools and Public Restroom cleaning activities

iv. Law Enforcement Officers - Medical first aid provider, prisoner exposure

v. Allied Health clinical faculty and staff – exposure to patients

aa. Universal precautions Shall be observed at the Ferris State University in the provision of first aid, the removal of sharps and waste from the first aid station, and the housekeeping of any first aid area in order to prevent contact with blood or OPIM. All blood and OPIM shall be considered infectious regardless of the perceived status of the source individual.

bb. Engineering and work practice controls where engineering controls such as hand washing facilities, eyewash stations, sharps disposal containers, biological safety cabinets, ventilating laboratory hoods, and safer sharps devices will reduce employee exposure by either eliminating or isolating the hazard, they must be used.

cc. SHERM Director and departments will review tasks and procedures performed to determine where engineering controls can be implemented or updated. Where scissors are used in a medical procedure and become contaminated, they will be decontaminated using a germicide approved by the Environmental Protection Agency.

dd. The following engineering controls are to be used throughout the Ferris State University:

i. Safer sharps devices are to be used, where appropriate, in order to reduce the risk of injury from needlesticks and from other sharp medical instruments.

ii. Hand washing facilities are readily accessible to all employees who have a potential for exposure. Waterless antiseptic hand cleansers or antiseptic towelettes must be available to employees at risk of exposure if running water is not readily available. If waterless cleansers or towelettes must be used, the employee must follow-up with a soap and water wash as soon as feasible.

iii. Emergency eyewash stations are in close proximity to workstations where employees perform tasks that produce splashes of potentially infectious materials. Eyewash stations should meet the MIOSHA Standards Requirements:

1. **NOTE:** The eyewash station must be flushed on a regular basis. A log documenting the flush is required.

iv. Sharps containers are used to properly store and dispose of sharps. Approved sharps containers are designed to isolate the cut or puncture hazard associated with handling sharp items. Approved sharps containers are:

1. puncture-resistant
2. red in color or labeled with a biohazard warning label
3. leak-proof on the sides and bottom
4. closable

ee. Ways to Avoid Contact with Body Fluids

ff. **Gloves.** When possible, avoid direct skin contact with body fluids. Disposable

i. Single use, waterproof, latex, or vinyl gloves should be available.

ii. Vinyl or Nitrile gloves should be used with employees who have a latex allergy or a high potential for developing a latex allergy. The use of gloves is intended to reduce the risk of contact with blood and body fluids for the employee as well as to control the spread of infectious agents from employee to employee.

iii. Gloves should be worn when direct contact with any type of body fluids. Incidents involving contact with any bodily fluids.

iv. **Do Not Reuse Gloves.** After each use, gloves should be removed without touching the outside of the glove and disposed of in a biohazard waste container. After removing the gloves, the hands should be washed according to the hand washing procedure within this procedure.

gg. **Protective Clothing.** If spattering of body fluids is anticipated, the clothing of the employee exposed shall be protected with an apron, Tyvek suit or gown and the face protected with a facemask and eye goggles or face shield. The apron, Tyvek suit or gown should be disposed of after it is used. The goggles and mask should be disposed of properly.

hh. **Other potentially infectious materials include**:

i. Semen,

ii. Vaginal secretions,
iii. Amniotic fluid,
iv. Cerebrospinal fluid,
v. Peritoneal fluid,
vi. Pleural fluid,
vii. Pericardial fluid,
viii. Synovial fluid,
ix. Saliva in dental procedures,
x. Any body fluid that is visibly contaminated with blood,
xi. All body fluids in situations where it is difficult or impossible to differentiate between body fluids.

ii. Handwashing facilities:

i. Are available to the employees who incur exposure to blood or other potentially infectious materials. MIOSHA requires that these facilities be readily accessible after incurring exposure. At the Ferris State University, handwashing facilities will be described in the local area supplement (if applicable). For areas not maintaining local area, supplements the following locations are available:
    1. Restrooms- nearest available to location. Notify supervisor and close until decontaminated.
    2. Mobile operations should contact supervisor and soap and water or use Waterless Antiseptic Hand Cleaner shall be brought to you. Remember Do Not Contaminate any other areas.
        a. Upon providing first aid or incurring exposures when handwashing facilities are not feasible, the Ferris State University is required to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towels or antiseptic towelettes. If these alternatives are used, the affected employee shall wash their hands with soap and running water as soon as feasible.
        b. After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.
        c. If employees incur exposure to their skin or mucous membranes, then the employee shall need to washes and or flush with water as appropriate as soon as feasible following contact.

jj. Needles:

i. Needles are not used in the Ferris State University, except by trained and authorized employees. If needles are used, they

shall not be recapped unless required by a medical procedure, must not be bent or broken and must be disposed of in a labeled, closeable, leak-proof, puncture-resistant container and treated as a Biohazard (Sharps Container)

kk. Work Area Restrictions:

i. In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses.

ll. Personal Protective Equipment:

i. All personal protective equipment used in patient treatment, first aid or housekeeping involving blood or OPIM by a Ferris State University employee shall be provided without cost to employees. Employee personal protective equipment shall be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment shall be considered appropriate only if it does not permit blood or OPIM to pass through or reach the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the protective equipment will be used.

ii. Protective clothing shall be provided to housekeeping employees involved in cleaning up routine and non-routine contamination. It shall include but not be limited to:

1. Safety glasses
2. Goggles if splash hazard exists
3. Face Shield
4. Nitrile gloves
5. Latex glove
6. Rubber gloves
7. Tyvek Suit (if requested)
8. Tyvek Boot/Shoe Covers (if requested)

iii. Additional personal protective equipment may include depending on the recognized hazards:

1. Rubber or other impermeable apron
2. Rubber boots
3. Vinyl or rubber rain suit type body protection
4. Respirator with appropriate filter cartridge,
5. Face shield
6. Tyvek Suit
7. Tyvek Boot/Shoe Covers

iv. All personal protective equipment shall be cleaned, laundered, and disposed of by the employer at no cost to employees. Repairs and replacements of any PPE shall be made by the employer at no cost to employees.

v. All personal protective equipment will be removed prior to leaving the work area. If visibly contaminated, the equipment shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.
vi. The following procedure has been developed to facilitate leaving the equipment at the work area:
vii. If an employee were to have another person's blood or OPIM splash or soak their clothing, they would remove the contaminated clothing as soon as possible. This clothing would be laundered at the employer's expense. The clothing would be identified as contaminated and any employee, of any employer, exposed to it would be notified and protected from exposure.
viii. Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes.
ix. Availability and location of gloves will be described in local area supplemental plan or available upon request to the supervisor.
x. Disposable gloves used at this company are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.
xi. Utility gloves may be decontaminated for re-use provided that if the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.
    1. **NOTE:** All Contaminated PPE. Equipment and Clothing shall be put into approved Biohazard containment bags and disposed of or laundry per standards and regulations.

mm. Housekeeping: First aid stations and areas involved in a first aid incident will be cleaned and decontaminated according to the local area supplemental plan. For areas not maintaining local area supplements, the following procedure is available in Appendix C.

i. Decontamination will be accomplished by utilizing the one or more of the following materials:
ii. Bleach solutions (If a bleach and water solution between 1:100 and 1:10 is used, it must be prepared on an as needed basis. Bleach loses its disinfectant quality when stored in water.)
iii. EPA registered tuberculocidal germicides.
    1. All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or OPIM materials, as well as the end of the work shift if the surface may have become contaminated since the last cleaning.

nn. Regulated Waste Disposal:

i. All bins, pails, cans, and similar receptacles for regulated waste disposal in the first aid station or any area normally involved in first aid shall be appropriately colored or labeled as containing biohazards and shall be inspected, emptied and decontaminated on a regularly scheduled basis.
ii. Disposal of feminine hygiene products and bandages or tissue used in self-administered first aid (bloody nose, small cut) are not considered regulated waste and will be disposed of in the normal waste stream.

oo. Contingency Plans:

i. Where circumstances can be foreseen in which recommended standard operating procedures could not be followed, the employer shall prepare contingency plans for employee protection, incident investigation and medical follow-up. See Appendix A.

pp. Hepatitis B Vaccine:

i. All employees who have been identified as having exposure to blood or OPIM will be offered the Hepatitis B vaccine, at no cost to the employee. The vaccine will be offered within 10 working days of their initial assignment to work involving the potential for occupational exposure to blood or OPIM.
ii. Employees who decline the Hepatitis B vaccine will sign a copy of the attached waiver (see Appendix B).
iii. Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost. The Supervisor with the assistance of the Birkam Health Center has responsibility for assuring that the vaccine is offered, the waivers are signed, etc. The designated health care professional identified by the SHERM Director will administer the vaccine.

qq. Post-Exposure Evaluation and Follow-Up:

i. When an employee incurs an exposure incident shall be reported to the SHERM Director.
ii. All employees who incur an exposure incident shall be offered post-exposure evaluation along with follow-up by a Licensed Health Care Professional (Birkam Health Center or Med1) in accordance with the MIOSHA Occupational Health Bloodborne Infections Diseases Part 554 Standard.
    1. This follow-up will include the following:
    2. Documentation of the route of exposure and the circumstances related to the incident.
    3. If possible, the identification of the source individual and, if possible, the status of the source individual.
    4. The blood of the source individual shall be tested (after consent obtained) for HIV/HBV infectivity.
    5. Results of testing of the source individual shall be made available to the exposed employee with the exposed

employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.

6. The employee shall be offered the option of having his or her own blood collected for testing of their HIV/HBV serological status. The blood sample will be preserved for at least 90 days to allow the employee to decide if the blood should be tested for HIV serological status.
7. However, if the employee decides prior to the time that testing was or shall be conducted then the appropriate action can be taken and the blood sample discarded.
8. The employee shall be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service in consultation with a licensed physician treating the exposed employee.
9. The employee shall be given appropriate, confidential counseling concerning precautions to take during the period after the exposure incident. Counseling on risk reduction and the risks and benefits of HIV testing in accordance with state law. The employee shall also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.
10. The SHERM Director designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy.

rr. Interaction with Health Care Professionals:

i. The health care professional who is responsible for the hepatitis B vaccination is provided with a copy of these rules and appendices. Written opinions are provided to the SHERM Director.

ii. Written opinions will be provided in the following instances:

1. When the employee is sent to obtain the Hepatitis B vaccine.
2. Whenever the employee is sent to a health care professional following an exposure incident.
3. Health care professionals shall be instructed to limit their written opinions:
4. Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident;
5. A statement that the employee has been informed of the results of the evaluation, and;
6. A statement that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. (Note: The written

opinion to the employer is not to reference any personal medical information.)

7. Any limitations on the employee's use of personal protective clothing or equipment.

ss. Training

i. Training for all Category A employees will be conducted prior to initial assignment to tasks where occupational exposure may occur. Training will be conducted in the following manner:

1. Training for employees shall include an explanation of:
2. The MIOSHA Part 554 Bloodborne Infectious Disease Standard
3. Epidemiology and symptomatology of bloodborne diseases
4. Modes of transmission of bloodborne pathogens
5. This Exposure Control Plan, (i.e. points of the plan, lines of responsibility, how the plan will be implemented, access to the plan, etc.)
6. Procedures, which might cause exposure to blood or other potentially infectious materials at this facility.
7. Control methods that shall be used at the facility to control exposure to blood or other potentially infectious materials.
8. Personal protective equipment shall be made available at each facility and whom the employee shall contact concerning its use.
9. Post Exposure evaluation and follow-up
10. Signs and labels used at the facility
11. Hepatitis B vaccine program (per. Ferris State University procedure)
12. Proper disposal of any contaminated clothing, equipment and PPE
13. How to handle and search for Sharps
14. Training sessions shall afford employees many opportunities for discussion and the answering of questions by a knowledgeable trainer.
15. The training shall include opportunities for supervised practice with personal protective equipment and other equipment which is designed to reduce the likelihood for exposure and which will be used in the employee's work.
16. **NOTE:** Supervisors shall coordinate Training Program for Employees.

ii. Training may include but is not limited to:

1. Ferris State University Blood Borne Infectious diseases procedures, policies
2. Personal protective equipment demonstration

3. Employees will review the Ferris State University Exposure Control Plan
4. Local area supplement (if applicable)
5. MIOSHA Part 554 Blood Borne Infectious Diseases Standard
6. **NOTE:** This training shall be given annually to all Category A employees as designated in the Exposure Determination section.

tt. Recordkeeping:

i. The SHERM Department shall maintain in the Worker's Comp file, a record for each employee with occupational exposure to include:
   1. Name
   2. Social Security Number
   3. Hepatitis B vaccine from status
   4. Copies of any past exposure/evaluation or follow-up
   5. Employer shall ensure record confidentiality
   6. Kept for duration of employment plus 30 years

uu. Training Records:

i. The Department shall maintain a record for each employee with occupational exposure to include:
   1. Date(s)
   2. Summary of Contents
   3. Names and qualifications of trainers
   4. Names and job titles of all trainees
   5. Maintain records for three (3) years

vv. Guide to Applicable Regulations:

i. MIOSHA Occupational Health rule 325.70001-70018, Bloodborne Infectious Diseases
ii. MIOSHA Part 554 Bloodborne Infectious Diseases (as amended 6-28-01)
iii. TB FACT SHEET: RESPIRATORY PROTECTION, MIOSHA CET 5880-3/04
iv. MIOSHA Part 451 Respiratory Protection

APPENDIX A: STANDARD OPERATING PROCEDURE FOR BLOODBORNE INFECTIOUS DISEASE CONTROL MEASURES

1. Task/Procedure: Non Routine Exposure or Potential Exposure, and Clean up of contamination Blood and blood-contaminated material may contain viruses, bacteria, and parasites that can cause harm to exposed individuals. In order to reduce exposure to these bloodborne pathogens for all employees shall use the following procedures when cleaning up blood.
2. **Routine Cleaning**: During the course of routine cleaning Custodians/Housekeepers may encounter small drops of blood and feminine hygiene receptacles with used products. If normal bathroom cleaning

procedures are followed when dealing with these situations, there is no risk of exposure to bloodborne pathogens. If a situation arises, in which you observe more that a few drops of blood, do not attempt to clean the area. Only those employees whom are specifically trained, as Blood Spill Responders should deal with these situations following the procedures listed below.

3. **II. Response to Blood Spill/Incident:**
    a. The first step in responding to a Blood Spill is to select and don the appropriate personnel protective equipment. Always check PPE for tears or damage before wearing. Select the following PPE based on the situation.
        i. **Gloves:** Mandatory for all blood clean-up
        ii. **Face Mask:** Use if clean up of blood is above chest level or when splashing may occur.
        iii. **Disposable Coveralls:** Use when splashing may occur.
        iv. **Booties**: Use if walking on blood-contaminated area is unavoidable.
        v. Safety Glasses: Mandatory for all blood clean-up
    b. If any sharp objects or broken glass is contaminated with blood, remove objects with tongs or dustpan and place in a ridged sealable container, place container in a restricted access area. (Bio-Hazard Bag or Container should be used)
    c. Place absorbent powder or pad on blood. All liquid material should be completely absorbed into powder/pad.
    d. Remove pad with gloved hand and place in garbage bag. Remove powder with scoop and place in garbage bag.
    e. Spray a registered EPA disinfectant (ie. Aura HB, Virex TB, and Crew NA) on contaminated area, let stand for several minutes (10 minutes) and wipe clean with either: paper towel, disposable mop/sponge, reusable mop, or extraction device (if carpet or furniture is involved).
    f. Decontaminate any reusable equipment by placing bucket of disinfectant solution and allowing it to soak. Dump wastewater down sanitary drain.
    g. Place all disposable clean-up material in garbage bag.
    h. Remove PPE with caution, making sure gloves are removed last. Dispose of into garage bag and double bag all waste.
    i. Wash hands and notify your Supervisor that a Blood Spill Kit was used for a clean up. Supervisors should replace any disposable equipment after each clean up.
    j. If any infectious material gets onto personal clothing, employer shall provide cleaning services at no charge to the affected individual(s). This shall be prevented to the best of the individual's capability through means of PPE coveralls.

APPENDIX B

1. **Cleaning up Potential Body Fluids and Appropriate Disinfectants**
    a. Approved Spray and or Disinfectant Bleach

b. One of the most commonly used chemicals for disinfection is a homemade solution of household bleach and water. Since a solution of bleach and water loses its strength quickly, it should be mixed fresh before each clean up to make sure it is effective.

c. Recipe for Bleach Disinfecting Solution

d. 9 parts cool water

e. 1 part household bleach

f. Add the household bleach to the water.

g. Gently mix the solution.

h. **NOTE:** If blood is visible or suspected contact, you need to contact your supervisor to have a qualified and trained employee complete all of the cleaning, clean up, and report your exposure

2. Clean-up Procedure Using Bleach Solution:

a. Block off the area of the spill from patrons until clean-up and disinfection is complete. Put on disposable latex/nitrile gloves to prevent contamination of hands. Wipe up the spill using paper towels or absorbent material and place in a plastic red/orange biohazard garbage bag. Gently pour bleach solution or spray disinfectant spray onto all contaminated areas of the surface. Let the bleach solution/disinfectant remain on the contaminated area for at least 10 minutes. Wipe up the remaining bleach solution/disinfectant. All non-disposable cleaning materials used such as mops and scrub brushes should be disinfected by saturating with bleach solution and air-dried. Unless contaminated then they shall be disposed of and put into biohazard bag.

b. Remove gloves and PPE and place in plastic biohazard garbage bag with all soiled cleaning materials. Double-bag and securely tie-up plastic garbage bags and discard into proper biohazard container.

c. Thoroughly wash hands with soap and water or Waterless Antiseptic Hand Cleaner.

APPENDIX C

1. PROCEDURE FOR BIOHAZARD CLEANUP

NOTE: Biohazards include <u>ALL BODY FLUIDS</u>

a. Employees performing all biohazard clean up shall follow this procedure. **Safety glasses shall be worn at all times during this process.**

b. Identify the biohazard through your Supervisor or work order. (All body fluids in situations where it is difficult or impossible to differentiate between body fluids)

c. Move the vehicle to the designated biohazard station. Only clean in the designated area.

d. The individual performing cleanup, shall visually confirm contamination to be cleaned without coming in contact with it. If the contamination is not apparent, ask your Supervisor or review Ferris State University Biohazard program.

e. Assemble all equipment necessary for cleanup, including the disinfectant or mixing bleach cleaner solution. Refer to mixture instructions kept with the disinfectant/cleaner.
f. Wear all required personal protection equipment listed below in the following order:
    i. Tyvek suit
    ii. Disposable gloves (latex) or (nitrile)
    iii. Disposable face shield
    iv. Secondary reusable gloves
    v. Mask Shield, Dust Mask (under face shield) (if applicable)
g. Visually inspect rear molded plastic seat area for sharps (e.g. needles, broken glass, knives) or any other contraband.
    i. If any sharps are found, remove them by mechanical means (tongs) and place them in the sharps container. Refer to procedure on sharps container.
    ii. If any illegal contraband, which could be considered evidence, is found, it should not be removed. Report it to your Supervisor immediately.
h. Soak up any liquid or semi-liquid fluids, using disposable sponges or paper towels.
i. Clean contaminated area with the proper mixture of the disinfectant/cleaner and designated brush.
j. Soak up any liquid cleaning solution with disposable sponges.
k. Disinfect contaminated area by spraying germicidal over the entire area.
l. Allow germicidal to remain on contaminated surface for at least 10 minutes.
m. Soak up germicidal using a disposable sponge.
n. If contaminated area is on a fabric seat, it should be rinsed with generous amounts of water under low pressure and allowed to air dry for at least 24 hours before reuse.
o. Under **no** circumstances should water under high pressure be used. (No high pressure is to be used air)
p. Put all contaminated disposable cleaning supplies in a red/orange biohazard bag then put inside the designated biohazard waste receptacle.
q. Discard unused disinfectant/cleaner solution in drain and rinse bucket with water.
r. Disinfect all non-disposable equipment in the cleanup, allowing germicidal to remain on equipment for at least 10 minutes.
s. Rinse equipment with water under low pressure.
t. Remove all personal protective equipment before leaving the cleanup area in the following order.
    i. Remove contaminated secondary reusable gloves and decontaminate using germicidal.
    ii. Remove face shield and discard it in the red/orange biohazard bag then put inside the biohazard waste receptacle.

iii. Remove Tyvek suit and discard it in the red/orange biohazard bag then put inside the biohazard waste receptacle.
iv. After the Waterless Antiseptic Hand Cleaner has remained on the secondary reusable gloves for at least 10 minutes, rinse, and dry them with paper towels, and discard towels in the red/orange biohazard bag then put inside the biohazard waste receptacle.
v. Remove and seal red/orange biohazard bag and dispose into the biohazard waste receptacle located outside of the garage.
vi. Discard red/orange biohazard bag containing contaminated cleaning supplies in the outside biohazard waste dumpster.
vii. Remove safety protective gloves using the sterile procedure and discard them in the waste receptacle.

u. Thoroughly wash hands and any other exposed, possibly contaminated skin, with disinfectant soap or Waterless Antiseptic Hand Cleansers.
v. Relocate all reusable equipment in its proper storage area and install a new red/orange biohazard bag inside the biohazard waste receptacle.
    i. **NOTE:** After completion of the above biohazard cleanup, report any sharps, personal exposure, or any other unusual circumstances to your immediate Supervisor.

2. Procedure for TB Tuberculosis Cleanup

a. TB Tuberculosis Clean Up Procedure:
    i. The TB bacillus [Mycobacterium (M.) tuberculosis] is carried through the air in tiny infectious droplet nuclei of 1 to 5 microns in diameter. These droplets may be generated when a person with pulmonary and laryngeal TB disease coughs, speaks, sings, sneezes, or spits.
b. Cleaning:
    i. The individual performing cleanup, shall visually confirm contamination to be cleaned without coming in contact with it. If the contamination is not apparent, ask your Supervisor or review Ferris State University Biohazard Clean Up Form.
c. Assemble all equipment necessary for cleanup, including the disinfectant or mixing bleach cleaner solution. Refer to mixture instructions kept with the disinfectant/cleaner.
d. Tuberculosis is generally transmitted only through the air, not by surface contact.
e. Open as many windows as possible.
f. Leave the vehicle unoccupied with the windows open for at least an hour after the end of the journey.
g. A sign shall be placed on the vehicle indicating when the car can be used again.
    NOTE: Follow same PPE procedures as required in Appendix C PROCEDURE FOR BIOHAZARD CLEANUP
h. Wear all required personal protection equipment listed below in the following order:

i. Tyvek suit
ii. Disposable gloves (latex) or (nitrile)
iii. Disposable face shield
iv. Secondary reusable gloves
v. Mask Shield, Dust Mask or N95

i. Use a Disinfectant spray that kills the TB Bacilli Allow germicidal to remain on contaminated surface for at least 10 minutes.
j. Soak up germicidal using a disposable sponge
k. If contaminated area is on a fabric seat, it should be rinsed with generous amounts of water under low pressure and allowed to air dry for at least 24 hours before reuse
l. Put all contaminated disposable cleaning supplies in a red/orange biohazard bag then put inside the designated biohazard waste receptacle.
m. Thoroughly wash hands and any other exposed, possibly contaminated skin, with disinfectant soap or Waterless Antiseptic Hand Cleaner.

APPENDIX D

1. **Vaccination Option for Employers:**
   a. An employer may elect to postpone the administration of the hepatitis B vaccine if the following conditions exist:
   b. The primary job assignment of such designated first aid providers is not the rendering of first aid.
   c. Any first aid rendered by such persons is rendered only as a collateral duty responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred.
   d. Full training and personal protective equipment shall be provided to these employees.
   e. Provision for a reporting procedure that ensures that all first aid incidents involving the presence of blood or OPIM will be reported to the employer before the end of the work shift during which the first aid incident occurred.
   f. The report must include the names of all first aid providers who rendered assistance, regardless of whether personal protective equipment was used, must describe the first aid incident and including the time and date.
   g. Provision for the full hepatitis B vaccination series to be made available as soon as possible, but in no event later than 24 hours, to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood or OPIM regardless of whether or not a specific "exposure incident," as defined by the standard, has occurred.
   h. In the event of a bonafide exposure incident, the portion of the standard relating to post exposure evaluation and follow-up would apply.

APPENDIX E

Ferris State University
Big Rapids, Michigan

HEPATITIS B Vaccination Declination:

EMPLOYEE DECLINES THE HEPATITIS B VACCINATION

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

I confirm that I have completed and understand the training provided to me.

2. Print Name: _____
3. Job Classification: _____
4. Date: _____
5. Signature: _____

APPENDIX F: Infectious Diseases

1. **AIDS:** AIDS is a severe, life-threatening clinical condition, first recognized as a distinct syndrome in 1981. By early 1995, about 500,000 cases of AIDS had been reported in the United States. Over the past decade in the United States, a shift in the distribution of AIDS cases by risk behaviors or factors has occurred with the largest rate of increase in reported AIDS cases occurring among women and minority populations, including adolescents.
    a. **Transmission**
        i. Epidemiological evidence indicates that HIV can be transmitted person to person through sexual contact, the sharing of HIV-contaminated needles and syringes, in addition, transfusion of infected blood or its components. While the virus has on occasion been found in saliva, tears, urine, and bronchial secretions, transmissions after contact with these secretions has not been reported. From 15% to 30% of infants born to HIV-infected mothers are infected before, during, or shortly after birth treatment of pregnant women results in marked reduction of infant infections. Breastfeeding by HIV-infected women can transmit infection to their infants. After direct exposure of healthcare workers to HIV-infected blood through injury with needles and other sharp objects, the rate of seroconversion is less than 0.5%, much lower than the risk of HBV infection (about 25%) after a similar exposure. In summary, established modes of transmission in the U.S. are via: Blood-to-blood contact, by use of HIV-contaminated needles during intravenous drug injection. A mucous membrane exposure. A penetrating injury with a needle or sharp object containing HIV infected blood. Tissue or organ transplantation. Blood transfusion. (Transfusion of blood, blood components, or clotting factor concentrates is now rarely a mode of HIV transmission in the U.S. because of exclusion of infected donors, viral inactivation treatment of clotting factor concentrates, and the availability of recombinant clotting factors.) Unprotected sexual intercourse, including anal intercourse (regardless of the gender or sexual orientation of the partner), vaginal intercourse, or oral intercourse. HIV is transmitted through semen (including pre-ejaculatory fluid), vaginal fluids (including menstrual blood, cervical discharge, and the natural fluids that lubricate the vagina), and blood.
2. **Common cold:** disease of the upper respiratory system. Also called acute viral nasopharyngitis.
    a. Transmission:
        i. The viruses that cause the common cold are transmitted presumably by direct person-to-person contact or by inhalation of airborne droplet. More importantly, the viruses are transmitted indirectly by hands and articles freshly soiled by discharges of the

nose and throat of an infected person. Rhinovirus and probably other similar viruses are transmitted by contaminated hands carrying viruses to the mucous membranes of the eye or nose. The virus concentration in respiratory secretions is usually highest up to 7 to 10 days before a person develops symptoms of illness. Viruses continue to be present in respiratory secretions for 2 to 3 days after symptoms, begin. Students and staff have already spread viruses before they begin to feel ill.

3. **HIV:** Human immunodeficiency virus (HIV) leads to acquired immune deficiency syndrome (AIDS), which cripples a human's immune system. AIDS has been categorized as an epidemic by the CDC and the life expectancy has been extended despite the lack of a vaccination or cure. While on its own, the Ebola virus is much more deadly in the short term, most AIDS victims eventually succumb to death from an AIDS related sickness
    a. **Transmission: See AIDS**
4. **Hepatitis B Virus (HBV):** HBV (not HIV) is also found in saliva and other body fluids such as urine, vomits, nasal secretions, sputum, and feces. It is not possible to know whether these body fluids contain blood borne pathogens therefore, **all body fluids should be considered potentially infectious.** Thus universal precautions should be observed by all when handling or being exposed to any blood or body fluids
    a. **Transmission:**
        i. The hepatitis B virus is transmitted through blood or body fluids, such as infected discharge from a wound, semen, cervical secretions, and saliva. Blood and serum contain the highest quantities of virus; saliva contains the least. HBV is spread when blood or body fluids containing the virus get into broken skin or onto mucous membranes inside the mouth, eyes, rectum, or genital tract. HBV spread requires contact with infected fluid through the skin via a needle stick, contamination of a cut, blood transfusion (now rare in the United States as the result of current donor screening practices), sharing or reusing of unsterilized needles and sexual activities. HBV can survive in the dried state for 1 week or longer. Therefore, contact of exposed skin and mucous membranes with contaminated inanimate objects may transmit infection. HBV is not transmitted by the fecal-oral route. The incubation period is usually 45 to 180 days; average 60 to 80 days.
5. **Hepatitis C** (formerly Hepatitis Non-A Non-B) is a viral infection of the liver caused by the hepatitis C virus (HCV). It often has signs and symptoms indistinguishable from hepatitis A or B infection. In most cases the signs and symptoms are not as severe. Acute disease tends to be mild, with slow onset. In children most infections are asymptomatic. For those adults or children who do display illness, symptoms include loss of appetite, stomach pain, nausea, and vomiting. Jaundice (yellowing of the skin, whites of the eyes, mucous membranes, and other body fluids) occurs in only 25 percent of persons with

HCV. Approximately 65 to 70 percent of individuals with HCV become chronic (long-term) carriers of the virus. These carriers may or may not display symptoms.

   a. **Transmission**
      i. The hepatitis C virus is spread by exposure to blood from an infected person and blood products from HCV-infected people. Other body fluids contaminated with infected blood also can be sources of infection (IV drug users, sexual contacts). Transmission of the virus from mother to fetus is 5 percent. Breastfeeding is not currently contraindicated secondary to maternal HCV infection. The incubation period ranges from 2 weeks to 6 months most commonly 6 to 9 weeks.

6. **Influenza (Flu):** symptoms are sore throat, fever, headache, muscle pains, weakness, coughing, and discomfort. Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness. Some people, such as older people, young children, and people with certain health conditions, are at high risk for serious flu complications. The best way to prevent the flu is by being vaccinated each year.
   a. **Transmission:**
      i. The viruses that cause influenza are highly communicable—the organisms are readily transmitted from one individual to another through contact with droplets from the nose and throat of an infected person during coughing and sneezing. Individuals are most infectious in the 24 hours before the onset of symptoms and during the period of peak symptoms. The virus is shed in the secretions up to 7 days after the onset of symptoms, but it may last longer in young children and those with weakened immune systems. Infection with the “flu” does not make a person immune. The viruses that cause influenza frequently change, and people may be infected with a new strain. The incubation period is short, usually 1 to 3 days.
7. **Tuberculosis:** generally attacks the lungs, but may affect central nervous system, circulatory system, lymphatic system, bones, joints, genitourinary system, and skin.
   a. **Transmission:**
      i. TB is transmitted person to person through the air when the person with infectious TB coughs, sneezes, spits, or sings, and releases infected droplets of mucous. These droplets remain viable and suspended in the air for several hours. TB is not spread by kissing, sharing utensils, or other objects, such as books or clothing. Direct invasion of the TB germ through mucous membranes or breaks in the skin may occur but is rare. Several factors determine how the germ is transmitted. The presence of cough and of sputum that is smear and culture positive for TB increases risk. Prolonged sharing of indoor air with a person who has infectious TB increases risk. Children younger than 12

generally are not infectious because they have little cough and sputum production. Therefore, childhood disease represents transmission from an adult or adolescent. The incubation period from exposure to either findings on exam or a positive skin test is 2 to 12 weeks. The risk of developing disease is highest in the first 2 years following infection. Infected persons with suppressed immune systems (HIV) have a higher risk for disease.

b. Recommended TB mask usage:

i. Fit test is required and provide all employees required to wear either a Dust Mask, N95, or approved respirator mask.
ii. Masks shall be worn in the following situations:
    1. OPIM is present or suspected to be present
    2. During administration of aerosol treatments
iii. Other high risk situations where masks should be worn:
    1. Known or suspected meningitis patient
    2. Patients with influenza
    3. Patients in need of airway procedures
iv. Masks shall be used if known or suspected TB patients.
v. Masks are to be kept as an inventory item.
vi. Replace Dust Mask or N95 respirator after one time use.
vii. Extra masks can be found in tool crib.
viii. Masks will be refitted as needed (change in facial hair, extreme weight change, Scarring, etc.)

8. Head Lice:

a. What are head lice?

i. The head louse, or *Pediculus humanus capitis*, is a parasitic insect that can be found on the head, eyebrows, and eyelashes of people. Head lice feed on human blood several time a day and live close to the human scalp. Head lice are not known to spread disease.

b. What do head lice look like?

i. Head lice have three forms: the egg (also called a nit), the nymph, and the adult.
ii. **Egg/Nit:** Nits are lice eggs laid by the adult female head louse at the base of the hair shaft nearest the scalp. Nits are firmly attached to the hair shaft and are oval-shaped and very small (about the size of a knot in thread) and hard to see. Nits often appear yellow or white although live nits sometimes appear to be the same color as the hair of the infested person. Nits are often confused with dandruff, scabs, or hair spray droplets. Head lice nits usually take about 8–9 days to hatch. Eggs that are likely to hatch are usually located no more than ¼ inch from the base of the hair shaft. Nits located further than ¼ inch from the base of hair shaft may very well be already hatched, non-viable nits, or empty nits or casings. This is difficult to distinguish with the naked eye.

iii. **Nymph:** A nymph is an immature louse that hatches from the nit. A nymph looks like an adult head louse, but is smaller. To live, a nymph must feed on blood. Nymphs mature into adults about 9–12 days after hatching from the nit.

iv. **Adult:** The fully-grown and developed adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white in color. Adult head lice may look darker in persons with dark hair than in persons with light hair. To survive, adult head lice must feed on blood. An adult head louse can live about 30 days on a person's head but will die within one or two days if it falls off a person. Adult female head lice are usually larger than males and can lay about six eggs each day.

c. Prevention & Control:

i. Head lice are spread most commonly by direct head-to-head (hair-to-hair) contact. However, much less frequently, they are spread by sharing clothing or belongings onto which lice have crawled or nits attached to shed hairs may have fallen. The risk of being infested by a louse that has fallen onto a carpet or furniture is very small. Head lice survive less than 1–2 days if they fall off a person and cannot feed; nits cannot hatch and usually die within a week if they are not kept at the same temperature as that found close to the scalp.

ii. The following are steps that can be taken to help prevent and control the spread of head lice:

iii. Avoid head-to-head (hair-to-hair) contact during play and other activities at home, school, and elsewhere (sports activities, playground, slumber parties, and camp).

iv. Do not share clothing such as hats, scarves, coats, sports uniforms, hair ribbons, or barrettes.

v. Do not share combs, brushes, or towels. Disinfest combs and brushes used by an infested person by soaking them in hot water (at least 130°F) for 5–10 minutes.

vi. Do not lie on beds, couches, pillows, carpets, or stuffed animals that have recently been in contact with an infested person.

vii. Machine wash and dry clothing, bed linens, and other items that an infested person wore or used during the 2 days before treatment using the hot water (130°F) laundry cycle and the high heat drying cycle. Clothing and items that are not washable can be dry-cleaned OR sealed in a plastic bag and stored for 2 weeks.

viii. Vacuum the floor and furniture, particularly where the infested person sat or lay. However, spending much time and money on housecleaning activities is not necessary to avoid re-infestation by lice or nits that may have fallen off the head or crawled onto furniture or clothing.

d. Do not use fumigant sprays or fogs; they are not necessary to control head lice and can be toxic if inhaled or absorbed through the skin.

9. **Pubic Lice:**
    a. **What are pubic lice?**
        i. Also called crab lice or "crabs," pubic lice are parasitic insects found primarily in the pubic or genital area of humans. Pubic lice infestation is found worldwide and occurs in all races, ethnic groups, and levels of society.
    b. **What do pubic lice look like?**
        i. Pubic lice have three forms: the egg (also called a nit), the nymph, and the adult.
        ii. **Nit:** Nits are lice eggs. They can be hard to see and are found firmly attached to the hair shaft. They are oval and usually yellow to white. Pubic lice nits take about 6–10 days to hatch.
        iii. **Nymph:** The nymph is an immature louse that hatches from the nit (egg). A nymph looks like an adult pubic louse but it is smaller. Pubic lice nymphs take about 2–3 weeks after hatching to mature into adults capable of reproducing. To live, a nymph must feed on blood.
        iv. **Adult:** The adult pubic louse resembles a miniature crab when viewed through a strong magnifying glass. Pubic lice have six legs; their two front legs are very large and look like the pincher claws of a crab. This is how they got the nickname "crabs." Pubic lice are tan to grayish-white in color. Females lay nits and are usually larger than males. To live, lice must feed on blood. If the louse falls off a person, it dies within 1–2 days.
    c. **Treatment:**
        i. A lice-killing lotion containing 1% permethrin or a mousse containing pyrethrins and piperonyl butoxide can be used to treat pubic ("crab") lice. These products are available over-the-counter without a prescription at a local drug store or pharmacy. These medications are safe and effective when used exactly according to the instructions in the package or on the label.
        ii. Lindane shampoo is a prescription medication that can kill lice and lice eggs. However, lindane is not recommended as a first-line therapy. Lindane can be toxic to the brain and other parts of the nervous system; its use should be restricted to patients who have failed treatment with or cannot tolerate other medications that pose less risk. Lindane should not be used to treat premature infants, persons with a seizure disorder, women who are pregnant or breast-feeding, persons who have very irritated skin or sores where the lindane will be applied, infants, children, the elderly, and persons who weigh less than 110 pounds.
        iii. Malathion* lotion 0.5% (Ovide*) is a prescription medication that can kill lice and some lice eggs; however, Malathion lotion (Ovide*) currently has not been approved by the U.S. Food and Drug Administration (FDA) for treatment of pubic ("crab") lice.

iv. Oral ivermectin has been used successfully to treat lice; however, ivermectin currently has not been approved by the U.S. Food and Drug Administration (FDA) for treatment of lice.

d. **How to treat pubic lice infestations:** (Warning: See special instructions for treatment of lice and nits on eyebrows or eyelashes. The lice medications described in this section should not be used near the eyes.)
    i. Wash the infested area; towel dry.
    ii. Carefully follow the instructions in the package or on the label. Thoroughly saturate the pubic hair and other infested areas with lice medication. Leave medication on hair for the time recommended in the instructions. After waiting the recommended time, remove the medication by following carefully the instructions on the label or in the box.
    iii. Following treatment, most nits will still be attached to hair shafts. Nits may be removed with fingernails or by using a fine-toothed comb.
    iv. Put on clean underwear and clothing after treatment.
    v. To kill any lice or nits remaining on clothing, towels, or bedding, machine-wash and machine-dry those items that the infested person used during the 2–3 days before treatment. Use hot water (at least 130°F) and the hot dryer cycle.
    vi. Items that cannot be laundered can be dry-cleaned or stored in a sealed plastic bag for 2 weeks.
    vii. All sex partners from within the previous month should be informed that they are at risk for infestation and should be treated.
    viii. Persons should avoid sexual contact with their sex partner(s) until both they and their partners have been successfully treated and reevaluated to rule out persistent infestation.
    ix. Repeat treatment in 9–10 days if live lice are still found.
    x. Persons with pubic lice should be evaluated for other sexually transmitted diseases (STDs).

10. Scabies:

a. What is scabies?
    i. Scabies is an infestation of the skin by the human itch mite (Sarcoptes scabiei var. hominis). The microscopic scabies mite burrows into the upper layer of the skin where it lives and lays its eggs. The most common symptoms of scabies are intense itching and a pimple-like skin rash. The scabies mite usually is spread by direct, prolonged, skin-to-skin contact with a person who has scabies.
    ii. Scabies is found worldwide and affects people of all races and social classes. Scabies can spread rapidly under crowded conditions where close body and skin contact is frequent. Institutions such as nursing homes, extended-care facilities, and

prisons are often sites of scabies outbreaks. Childcare facilities also are a common site of scabies infestations.

b. What are the signs and symptoms of scabies infestation?

i. The most common signs and symptoms of scabies are intense itching (pruritus), especially at night, and a pimple-like (papular) itchy rash. The itching and rash each may affect much of the body or be limited to common sites such as the wrist, elbow, armpit, webbing between the fingers, nipple, penis, waist, belt-line, and buttocks. The rash also can include tiny blisters (vesicles) and scales. Scratching the rash can cause skin sores; sometimes these sores become infected by bacteria.

ii. Tiny burrows sometimes are seen on the skin; these are caused by the female scabies mite tunneling just beneath the surface of the skin. These burrows appear as tiny raised and crooked (serpiginous) grayish-white or skin-colored lines on the skin surface. Because mites are often few in number (only 10-15 mites per person), these burrows may be difficult to find.

iii. They are found most often in the webbing between the fingers, in the skin folds on the wrist, elbow, or knee, and on the penis, breast, or shoulder blades.

iv. The head, face, neck, palms, and soles often are involved in infants and very young children, but usually not adults and older children.

c. How can I remove scabies mites from my house or carpet?

i. Scabies mites do not survive more than 2-3 days away from human skin. Items such as bedding, clothing, and towels used by a person with scabies can be decontaminated by machine-washing in hot water and drying using the hot cycle or by dry-cleaning. Items that cannot be washed or dry-cleaned can be decontaminated by removing from any body contact for at least 72 hours.

d. How can I remove scabies mites from my clothes?

i. Scabies mites do not survive more than 2-3 days away from human skin. Items such as bedding, clothing, and towels used by a person with scabies can be decontaminated by machine-washing in hot water and drying using the hot cycle or by dry-cleaning. Items that cannot be washed or dry-cleaned can be decontaminated by removing from any body contact for at least 72 hours

11. Other Widespread Viruses or Diseases

a. There is potential for unknown or uncommon viruses or diseases to become nation-wide or centrally located concerns. In this event, it will be up to the Safety and Health Department at Ferris State University to address this matter accordingly.

b. Adequate Response:

i. In certain extreme circumstances, there may be need to discontinue or cancel events, classes, and all meetings to ensure spread of disease or virus is limited. This will be handled on a case by case issue.
ii. The sooner the issue may be addressed, the quicker resolution may be found. There should be no delay in reporting concerns, potential outbreaks, or response to an outbreak, from all forms of involvement at Ferris State.