

GUIDELINES FOR THE PREVENTION OF BLOODBORNE PATHOGEN DISEASE TRANSMISSION DURING STUDENT ACTIVITIES

The "Guidelines for the Prevention of Bloodborne Infectious Diseases During Student Activities" were developed for use by school corporations as they develop a policy on the use of universal precautions during student athletic, extracurricular, or recreational activities. The purpose of such a policy is to minimize the possibility of transmission of bloodborne pathogens during school athletic events or extracurricular activities.

The guidelines primarily address prevention of the transmission of bloodborne pathogens, such as the Hepatitis B virus (HBV) and the Human Immunodeficiency Virus (HIV). However, school corporations may also want to address common sense precautions against the spread of less serious communicable diseases in a policy.

The guidelines were written with not only obvious contact sports such as football and wrestling in mind, but should be applicable to any activity in which blood may be present due to a student injury.

Guidelines

School corporations should understand that this document contains guidelines for their use in developing local policies. The Indiana State Department of Health, Indiana Department of Education and The Indiana High School Athletic Association strongly recommend that each school corporation develop their own policy regarding the prevention of bloodborne pathogen transmission during school activities.

During school activities in which an injury occurs that results in bleeding, responsible individuals should follow the appropriate guidelines as set forth by their school corporation's bloodborne pathogen exposure control plan.

Bloodborne Pathogens

Bloodborne pathogens, such as HBV, Hepatitis C (HCV), and HIV, are serious infectious agents which are present in blood as well as other body fluids such as semen and vaginal secretions of infected individuals. While there are a number of diseases caused by bloodborne pathogens, HBV, HCV, and HIV infection are the most common.

The hepatitis B and C viruses cause dangerous inflammation of the liver. Some infected individuals become carriers and suffer long-term consequences. Long term carriage can eventually cause cirrhosis of the liver and liver carcinoma. HIV is the virus that causes Acquired Immune Deficiency Syndrome (AIDS). AIDS weakens the immune system, making a person susceptible to infections their immune systems normally would fight off. There is no known cure for AIDS.

The precise risk of HIV transmission during exposure to open wounds or mucous membranes such as eyes, ears, nose and mouth to contaminated blood is not known. However, scientific evidence suggests it is extremely low but not zero.

Although the Centers for Disease Control and Prevention (CDC) does not give exact statistical information on transmission of HBV through open wound or mucous membrane exposure, CDC does state that these exposures account for a small proportion of reported cases of hepatitis B infection in the United States.

Therefore students/athletes, coaches, and officials must understand that while it is theoretically possible for HIV and HBV to be transmitted by blood from one individual through the open wound or mucous membrane of another individual, the probability of this occurring during school activities is

low. The chance of transmission of HIV and HBV in this manner, however is not zero. Precautions should be taken to ensure that no transmission can occur.

Preventing Transmission of Bloodborne Pathogens during School Athletic Events and Extracurricular Activities

School corporations should assure that a person is designated at each athletic, extracurricular, or recreational activity event to assist injured students. Athletic trainers, coaches, or any employee whose job duties include assisting injured students/athletes should use disposable examination gloves to prevent exposure to blood when treating athletes who are bleeding, be offered preexposure prophylaxis with hepatitis B vaccine, and be covered under the school's OSHA Bloodborne Pathogen Exposure Control Plan.

If followed, the measures listed below ensure that the risk of transmission of bloodborne pathogens during school activities remains extremely low:

1. For students/ athletes participating in activities that involve person-to-person contact, skin wounds (such as scratches, abrasions, and lacerations) and potentially infectious skin lesions (such as weeping sores) should be securely covered with bandages or simple wraps to prevent leakage of blood or serous fluid during the activity.
2. The injured student/ athlete should perform his/her own wound care whenever possible. Barriers, such as latex or other protective gloves, should be used by those providing care.
3. Students/ athletes should be instructed not to handle other people's blood. Students should not be asked to assist in controlling a bleeding injury, clean blood contaminated environmental surfaces (such as wrestling mats), or handle contaminated laundry.
4. Lacerations or wounds with substantial bleeding (more than superficial scratches or small lacerations), should be treated promptly. Blood on the skin of the injured student/athlete and on that of other participants should be washed off thoroughly with soap and water or with premoistened towelettes. The injured student/athlete should be permitted to return to the activity only after the wound has been securely covered or wrapped.
5. If clothing or equipment or wound bandage appears to be wet with blood or if blood has penetrated both sides of a uniform fabric, the equipment or clothing should be changed and blood on the skin should be washed (by the injured student/ athlete) as soon as possible. Small amounts of dried blood on clothing or equipment do not constitute a risk of transmission of bloodborne pathogens, therefore a change of uniform is not necessary.
6. Skin contaminated with blood should be washed with soap and water. Although liquid chemical disinfectants effective against specific bloodborne pathogens and other micro-organisms are widely available, such disinfectants are not intended for direct contact with the skin. Direct physical contact with such agents may result in skin irritation or other toxic reactions. Also, these disinfectants are not intended for and may not be effective for disinfecting athletic uniforms while they are being worn by athletes.
7. Disposable toweling should be used to clean all environmental surfaces when blood is present. The surface should then be cleaned with tuberculocidal germicide registered with the Environmental Protection Agency (EPA) and used according to the label instructions or a 10% household bleach solution (1 part household bleach mixed with 9 parts of water) mixed within 24 hours of use. These measures are effective for most surfaces. Surfaces should be allowed to dry sufficiently to prevent possible injuries due to slipping during subsequent activities.

NOTE: Disposable towels are recommended for use in all cleanup. Gloves should be worn by individuals performing cleanup procedures. Towels, latex or protective gloves and other materials used in cleanup, as well as any disposable materials used to stem bleeding, should be placed in a plastic bag which can be tightly secured. Most waste will not meet the requirements for regulated waste, thus can be disposed of in the regular trash. If the following conditions are met the waste must be disposed of in accordance with the Indiana Infectious Waste Rule:

- A. Blood can be released from the contaminated material when squeezed.
 - B. Caked or dried blood can be released from the contaminated material when handled.
8. Individuals whose job duties do not include assisting injured students /athletes should be instructed not to handle blood but should contact the proper individual to assist the student /athlete.
9. After each activity, any equipment or uniform/clothing soiled with blood should be laundered. Items soiled with blood should remain separate from non-contaminated items. Items soiled with blood (i.e. cloth towels) should be placed in the laundry immediately after soiling occurs. Standard laundry cycles should be used according to the washer and detergent manufacturers' recommendations. Laundry personnel should use appropriate physical barriers, such as protective gloves, to prevent contact with soiled laundry. If school personnel handle laundry, the personnel should be offered pre-exposure prophylaxis with hepatitis B vaccine and be covered under the school's OSHA Bloodborne Pathogen Exposure Control Plan.
10. Although bloodborne pathogens have not been shown to be transmitted by contact with saliva; towels, cups, and water bottles should not be shared. Respiratory and other illnesses can be transmitted by contact with these items.

Student/Athlete Exposure Follow-up:

Since there is potential for students to experience exposure to blood (i.e. another person's blood on a student /athlete's open sore), the school should have a written policy regarding the reporting of a student's exposure to blood. The policy may include, but not be limited to, reporting and notification of the parent with a request that the parent notify the family physician of the exposure so that adequate medical follow-up can occur.

Indiana State Department of Health. 1993. "Universal Precaution Rule." 410 IAC 1-4.

Indiana State Department of Health. 1989. "Indiana Infectious Waste Rule." 410 IAC 1-3.

Kansas State High School Activities Association: 1993. "Guidelines for the Prevention of Serious Infectious Diseases in High School Athletics."

Mast, E. E., R. A. Goodman, W. W. Bond, M. S. Favero and D. P. Drotman. 1995, "Transmission of Bloodborne Pathogens During Sports: Risk and Prevention." *Annals of Internal Medicine* 122(4): 283285.

Occupational Safety and Health Administration. 1991. "Occupational Exposure to Bloodborne Pathogens," Final Rule. *Federal Register* 56:64005182.

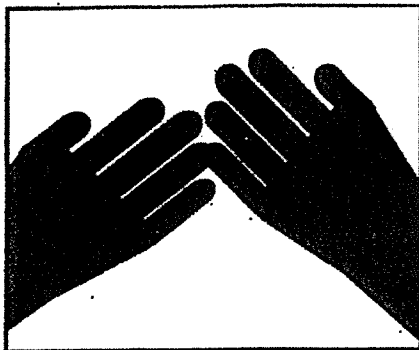
Indiana State Department of Health
Communicable Disease Division
2 North Meridian Street
Indianapolis, IN 46204

Indiana Department of Education
HIV/AIDS Education Program
Office of Student Services Room 220, State House
Indianapolis, IN 46204-2798
317/232-6975

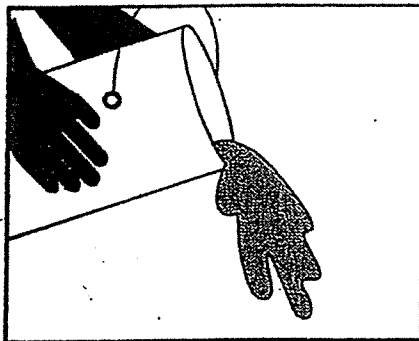
Approved, ISMA Commission on Sports Medicine
Reviewed by the Indiana High School Athletic Association

Universal Precautions

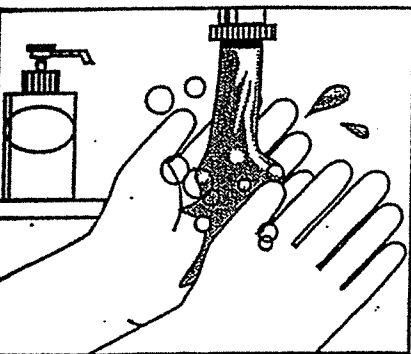
Procedure For Handling Blood and Other Potentially Infectious Material



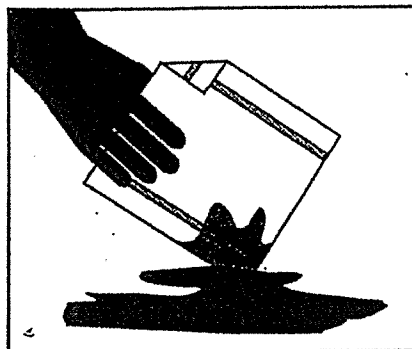
1. Put on disposable or utility gloves (check for tears or cracks).



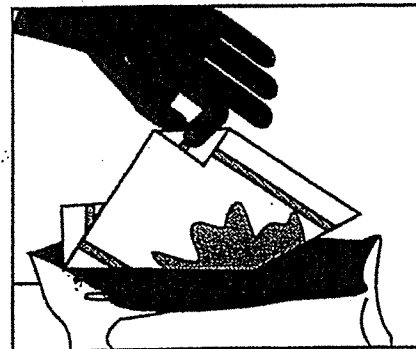
4. Clean spill area with either a freshly-prepared bleach solution** (less than 24 hours old), or a hospital grade, EPA-approved tuberculocidal disinfectant.



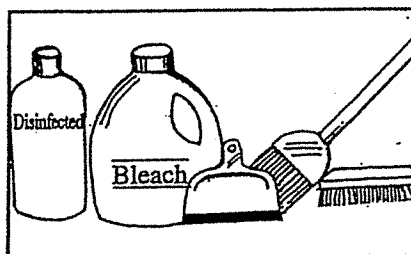
7. Immediately wash hands with soap and running water for 10 seconds or more.



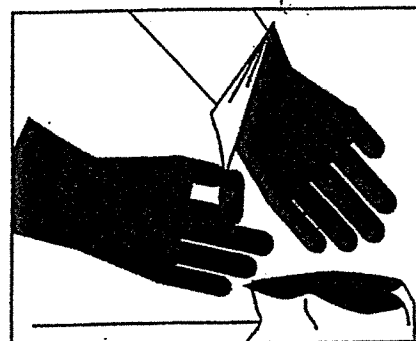
2. Use paper towels or other absorbent materials to soak up spill. Equipment such as a broom, sweeper, brushes, etc. should be used if broken glass is involved.



3. Place used paper towels/absorbant material in an appropriate leak-resistant bag.*



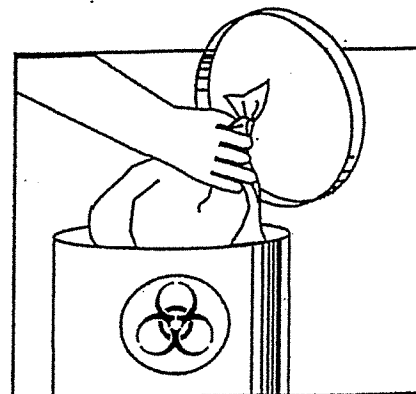
5. Mop up area with towels, then discard towels. Disinfect contaminated equipment, such as broom, sweeper, brush, etc.



6. Remove soiled disposable gloves by turning inside out. If wearing utility gloves, remove and then disinfect appropriately.

**Use bags with biohazard symbol when blood (liquid or dried) can be released from the paper towel or other materials when handled. These bags must be disposed of according to the Indiana Infectious Waste Rule.*

***Bleach Solution=1 part household bleach to 9 parts water.*



8. Place closed bag in appropriate waste container.



Indiana State
Department of Health

Communicable Diseases
For Further Information,
Call 1-800-433-0746

Rochester Community Schools Exposure Control Plan

The following guidelines provide for the Corporation's compliance with Federal regulations for protecting staff members against exposure to blood pathogens and other infectious materials which can cause Hepatitis B and/or HIV viruses.

A. Exposure Determination

Staff members in the following job classifications have responsibility for which they could reasonably anticipate exposure to blood and other potentially infectious materials:

- school nurses
- custodians
- special education teachers and aides who work with students who are prone to biting, scratching, and other such actions that can cause bleeding or exposure to other body fluids
- teachers in vocational/technical education whose students work with equipment that can cause cuts or other injuries that produce bleeding
- members of a school staff who have been designated to provide first aid when and if necessary
- coaches

B. Inoculation

Each of the staff members in the above-named categories shall be offered free vaccination with the Hepatitis B vaccine after training and within ten (10) days after reporting for duty at the start of the school year or when employed.

The School Health Services shall give the vaccinations. S/He shall:

1. arrange a schedule for vaccinations which makes it possible for the staff members to be vaccinated during their work time;

2. obtain the necessary information concerning the efficacy, safety, administration, and benefits of the vaccine so that each staff member can be properly informed prior to making a decision as to whether or not s/he wishes to be vaccinated;
3. ensure that the results of post-vaccination testing are properly recorded and kept confidential.

If the staff member declines, s/he shall complete a declination form which shall be placed in the staff member's confidential file. Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost.

If the staff member chooses to be vaccinated, s/he shall sign a consent form and report to the School Health Services in accordance with the schedule.

C. Precautions

A plan has been developed to identify the likely situations where staff members could be exposed, to describe how such situations can be minimized, the ways in which exposure will be managed, and a set of procedures for the proper handling of bodily fluids. Each of the staff members in the "at-risk" categories identified above are to be trained in these procedures when employed and at the beginning of each school year. The instructor is to be someone knowledgeable about blood-borne pathogens and other potentially-infectious materials, how they may be transmitted in a school setting, vaccinations, and the precautionary procedures. At the completion of the training, each staff member is to sign a form confirming the date and content of the training and that s/he understands the content.

D. Post-Exposure Evaluation and Follow-up

Whenever a staff member has contact with blood or other potentially-infectious material, s/he shall immediately contact School Health Services and his/her supervisor and complete the form. The Corporation shall offer the staff member a confidential medical evaluation by their health care professional.

The parents of the student who caused the exposure are to be contacted promptly to obtain permission for the testing of the student's blood for Hepatitis B and HIV viruses with their physician.

The exposed staff member is to be informed of the test results, if available, with the parents consent and of the Federal and State laws concerning confidentiality.

The staff member's blood should then be tested with his/her consent. The staff member shall also receive post-exposure treatment, if so indicated by their physician.

The health care professional conducting the medical evaluation is to be provided:

1. a copy of the Federal regulations concerning the Exposure Control Plan;
2. a copy of the training record;
3. a copy of the staff member's job responsibilities warning of the exposure;
4. the results of the student's blood test, if available;
5. a copy of the staff member's medical records.

The health care professional shall, within five (5) days after the evaluation, provide the Corporation with a written opinion containing:

1. a possible recommendation for Hepatitis B vaccination, if the staff member has not already been vaccinated;
2. confirmation that the staff member has been adequately informed of the evaluation results and any further evaluation or treatment deemed necessary.

The staff member is to be given a copy of the written opinion within fifteen (15) days after receipt by the Corporation. The original opinion is to be filed in the staff member's confidential medical file.

E. Medical and Training Records

Medical records of the staff members must identify them by name and social security number and include any and all results of the status to Hepatitis B, examinations, testing, follow-up care, and written opinions. All such information shall be kept in the staff member's confidential files and retained for the period of their employment plus thirty years.

Procedures

A. GENERAL

1. Wear disposable gloves before making contact with body fluids during care, treatment, and all cleaning procedures.
2. Disposable gloves used at this facility 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. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.
3. Wash hands after handling fluids and contaminated articles, whether or not gloves are worn.
4. Discard disposable items including tampons, used bandages, and dressings in plastic-lined trash container with lid. Close bags and dispose of daily.
5. Do not reuse plastic bags.
6. Use disposable items to handle body fluids whenever possible.
7. Use paper towels to pick up and dispose of any solid waste materials such as vomitus or feces.

B. HANDWASHING

1. Use soap and warm running water. Soap suspends easily removable soil and micro-organisms allowing them to be washed off.
2. Rub hands together for approximately 10 seconds to work up a lather.
3. Scrub between fingers, knuckles, backs of hands, and nails.
4. Rinse hands under warm running water. Running water is necessary to carry away debris and dirt.

5. Use paper towels to thoroughly dry hands.
6. Dispose of paper towels.

C. FOR WASHABLE SURFACES

1. For tables, desks, etc.:

- a. Use Lysol*, Beaucoup* 1:128, or household bleach solution of one (1) part bleach to ten (10) parts water, mixed fresh each 24 hours.
- b. Rinse with water if so directed on disinfectant.
- c. Allow to air dry.
- d. When bleach solution is used, handle carefully.
 - 1) Gloves should be worn since the solution is irritating to skin.
 - 2) Avoid applying on metal since it will corrode most metals.

2. For floors

- a. One of the most readily available and effective disinfectants is the bleach solution (1-1/2 cups bleach to one (1) gallon water) mixed fresh each 24 hours.
- b. Use the two (2) bucket system - one bucket to wash the soiled surface and one (1) bucket to rinse as follows:
 - 1) In bucket #1, dip, wring, mop up vomitus, blood. Chloro Sorb* may be used.
 - 2) Dip, wring, and mop once more.
 - 3) Dip, wring out mop in bucket #1.
 - 4) Put mop into bucket #2 (rinse bucket) that has clean disinfectant (such as Lysol*, bleach solution).
 - 5) Mop or rinse area.
 - 6) Return mop to bucket #1 to wring out. This keeps the rinse bucket clean for second spill in the area.

7) After all spills are cleaned up, proceed with "c".

- c. Soak mop in the disinfectant after use.
- d. Disposable cleaning equipment and water should be placed in a toilet or plastic bag as appropriate.
- e. Rinse non-disposable cleaning equipment (dustpans, buckets) in disinfectant.
- f. Dispose disinfectant solution down a drain pipe.
- g. Remove gloves, if worn, and discard in appropriate receptacle.
- h. Wash hands as described above under HANDWASHING.

D. FOR NONWASHABLE SURFACES (rugs, upholstery)

1. Apply sanitary absorbing agent, let dry, vacuum.
2. If necessary, use broom and dustpan to remove solid materials.
3. Apply rug or upholstery shampoo as directed. Revacuum according to directions on shampoo.
4. If using a water extraction cleaner, follow the directions on the label.
5. Clean dustpan and broom, if used. Rinse in disinfectant solution.
6. Air dry.
7. Wash hands as described above under HANDWASHING.

E. FOR SOILED WASHABLE MATERIALS (clothing, towels, etc.)

1. All employees who handle contaminated laundry will utilize personal protective equipment to prevent contact with blood or other potentially-infectious materials. Laundry contaminated with blood or other potentially-infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked bags at the location where it was used. Such laundry will not be sorted, washed, or rinsed at school.

Place item in plastic bag and seal until item is washed. Plastic bags containing soiled, washable material must be clearly identified if outside laundry service is used.

Wash hands as described above under HANDWASHING.

Wipe sink with paper towels, dispose of towels.

All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially-infectious materials.

Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken.

This facility will be cleaned and decontaminated according to A 45-day schedule.

Sharps containers and hazard waste containers will be checked for leaking and fullness each week by the Health Service nurses.

Work Area Restrictions

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. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially-infectious materials are present.

Failure to Comply

Failure or refusal to follow the provisions of this policy may result in disciplinary action. Disciplinary rules which provide for progressive penalties to include, but not necessarily limited to:

1. reprimand
2. suspension
3. job termination

Recordkeeping

All records required by the OSHA standard will be maintained by Health Services in the Administrative Office.