

# Body Fluids

## HANDLING BODY FLUIDS IN SCHOOL

The body fluids of all persons should be considered to contain potentially infectious agents (germs). The table below provides examples of particular germs that may occur in body fluids and the respective transmission concerns. It must be emphasized that with the exception of blood, which is normally sterile, the body fluids with which one may come in contact usually contain many organisms, some of which may cause disease. Individuals may be at various stages of infection: incubating disease, mildly infected without symptoms, or chronic carriers of certain infectious agents including the HIV and hepatitis viruses. In fact, transmission of communicable diseases is more likely to occur from contact with infected body fluids of unrecognized carriers than from contact with fluids from recognized individuals because simple precautions are not always used.

## TRANSMISSION CONCERNS IN THE SCHOOL SETTING:

### BODY FLUID SOURCE IN INFECTIOUS AGENTS

#### BODY FLUID SOURCE

#### ORGANISM OF CONCERN

#### TRANSMISSION CONCERN

Blood - cuts/abrasions

- nosebleeds
- menses
- contaminated needle

Hepatitis B virus

HIV virus

Cytomegalovirus

Blood stream inoculation through cuts and abrasions on hands. Direct blood stream inoculation.

\*Feces - incontinence

Salmonella bacteria

Shigella bacteria

Rotavirus

Hepatitis A virus

Oral inoculation from contaminated hands.

\*Urine - incontinence

Cytomegalovirus

Bloodstream and oral (?) inoculation from contaminated hands.

Respiratory Secretions

- saliva

- nasal discharge

Mononucleosis virus

Common cold virus

Influenza virus

Oral inoculation from contaminated hands.

Hepatitis B virus

Inoculation through cuts and abrasions on hands; bites.

\*Vomitus

Gastrointestinal virus, (e.g., Norwalk Agent Rotavirus)

Oral inoculation from contaminated hands.

Semen

Hepatitis B

Sexual contact.

## Vaginal Fluids

## HIV

## Sexually transmitted diseases

\*Possible transmission of AIDS and Hepatitis B is of little concern from these sources.

### What Should be Done to Avoid Contact with Body Fluids?

When possible, direct skin contact with body fluids should be avoided. Disposable gloves should be available in every classroom. Gloves are recommended when direct hand contact with body fluids is anticipated (e.g., treating bloody noses, handling clothes soiled by incontinence, cleaning small spills by hand). Hands should be washed after gloves are removed and gloves are discarded in a plastic bag or lined trash can, secured, and disposed of daily.

### What Should be Done if Direct Skin Contact Occurs?

In many instances, unanticipated skin contact with body fluids may occur in situations where gloves may be immediately unavailable (e.g., when wiping a runny nose, applying pressure to a bleeding injury outside the classroom, helping a child in the bathroom). In these instances, hands and other affected skin areas of all exposed persons should be routinely washed with soap and water after direct contact has ceased. Clothing and other non-disposable items (e.g., towels used to wipe up body fluid) that are soaked through with body fluids should be rinsed and placed in plastic bags. If presoaking is required to remove stains (e.g., blood, feces) use gloves to rinse or soak item in cold water prior to bagging to be sent home. Disposable items (e.g., tissues, paper towels, diapers) should be handled as with disposable gloves.

### How Should Spilled Body Fluids be Removed from the Environment?

Local school districts should stock absorbent agents specifically intended for cleaning body fluid spills. Disposable gloves should be worn when using these agents. The dry material is applied to the area, left for a few minutes to absorb the fluid, and then vacuumed or swept up. The vacuum bag or sweeping should be disposed of in a plastic bag. Broom and dustpan should be rinsed in a disinfectant. No special handling is required for vacuuming equipment.

## Hand washing Procedures

Proper hand washing requires the use of soap and water and vigorous washing under a stream of running water from 10 seconds to a full minute. Soap suspends easily removable soil and microorganisms allowing them to be washed off. Running water is necessary to carry away dirt and debris. Rinse under running water. Use paper towel to thoroughly dry hands.

## Disinfectant

An intermediate level detergent disinfectant or Chlorox solution (1/4 cup Chlorox to 1 gallon of water) should be used to clean surfaces contaminated with body fluids. Custodial assistance should be requested for this process. Such disinfectants will kill vegetative bacteria, fungi, tubercle bacillus and viruses.

PLEASE NOTE that when making up a chlorine-based disinfectant solution, it is recommended that such solutions be made up on a daily basis before use, as 1:10 levels of chlorine does not remain stable at room temperature.

## Disinfection of Hand Surfaces and Care of Equipment

After removing the soil, a disinfectant is applied. Mops should be soaked in the disinfectant after use and rinsed thoroughly or washed in a hot water cycle before rinse. Disposable cleaning equipment and water should be placed in a toilet or plastic bag as appropriate. Non-disposable cleaning equipment (dustpans, buckets) should be thoroughly rinsed in the disinfectant. The disinfectant solution should be promptly disposed down a drain pipe. Remove gloves and discard in appropriate receptacles. Custodians are instructed by Plant Operations on procedures of disinfection and are available to assist with cleanup procedures.

## Disinfection of Rugs (Request assistance from custodian.)

Apply sanitary absorbent agent, let dry and vacuum. If necessary, mechanically remove with dustpan and broom, then apply rug shampoo (a germicidal detergent) with a brush and re-vacuum. Rinse dustpan and broom in disinfectant. If necessary, wash brush with soap and water. Dispose of non-reusable cleaning equipment as noted above.

## Laundry Instructions for Clothing Soiled with Body Fluids

The most important factor in laundering clothing contaminated in the school setting is elimination of potentially infectious agents by soap and water. Addition of bleach will further reduce the number of potentially infectious agents. Clothing soaked with body fluids should be washed separately from other items. Pre-soaking may be required for heavily soiled clothing. Otherwise, wash and dry as usual. If the material is not colorfast, add 1/2 cup non-Chlorox bleach (e.g., Clorox II, Borateem) to the wash cycle.

These recommendations are adapted from “Guidelines for Handling Body Fluids,” prepared by Elaine Brainard, M.A., R.N., State Department of Education in consultation with James Handler, M.D., MPH Chief, Epidemiology Section, and Patricia Checko, MPH, Epidemiology Program, Connecticut State Department of Health Services. December 1984.

NOTE: This sample plan is provided only as a guide to assist in complying with 29 CFR 1910.1030, OSHA's Bloodborne Pathogens standard. It is not intended to supersede the requirements detailed in the standard. Employers should review the standard for particular requirements which are applicable to their specific situation.

## BLOOD BORNE PATHOGENS EXPOSURE CONTROL PLAN (SAMPLE)

School Name:

Date of Preparation:

In accordance with the OSHA Blood borne Pathogens standard, 29 CFR 1910.1030, the following exposure control plan has been developed:

### Exposure Determination

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment.) This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. At this facility the following job classifications are in this category:

In addition, OSHA requires a list of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks for procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications are associated tasks for these categories are as follows:

## Implementation Schedule and Methodology

OSHA also requires that this plan also include a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

### Compliance Methods

Universal precautions will be observed at this school in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized. At this facility the following engineering controls will be utilized: (list controls, such as sharps containers, etc.)

The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows: (list schedule such as daily once/week, etc. as well as list who has the responsibility to review the effectiveness of the individual controls, such as the school nurse.)

Hand washing facilities are also available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure. At this facility hand washing facilities are located:

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.

If employees incur exposure to their skin or mucous membranes then those areas shall be washed or flushed with water as appropriate as soon as feasible following contact.

## Needles

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

## Containers for Reusable Sharps

Contaminated sharps that are reusable are to be placed immediately, or as soon as possible, after use into appropriate sharps containers. At this school the sharps containers are puncture resistant, labeled with a biohazard label, and are leak proof. (Employees should list here where sharps containers are located as well as who has responsibility for removing sharps from containers and how often the containers will be checked to remove the sharps).

## Personal Protective Equipment

All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

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. Gloves will be available from (state location and/or person who will be responsible for distribution of gloves). Gloves will be used for the following procedures:

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.

Masks in combination with eye protection devices, such as goggles or glasses with solid side shield, or chin length face shields, are required to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated. Situations at the school which would require such protection are as follows:

This school will be cleaned and decontaminated according to the following schedule:

(list area and schedule).

Decontamination will be accomplished by utilizing the following materials: (list the materials which will be utilized, such as bleach solutions or EPA registered germicides).

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, as well as the end of the work shift if the surface may have become contaminated since the last cleaning. (Employers should add in any information concerning the usage of protective coverings, such as plastic wrap which they may be using to assist in keeping surfaces free of contamination.)

All bins, pails, cans, and similar receptacles shall be inspected and decontaminated on a regularly scheduled basis (list frequency and by whom).

Any broken glassware which may be contaminated will not be picked up directly with the hands. The following procedures will be used:

#### Regulated Waste Disposal

All contaminated sharps shall be discarded as soon as feasible in sharps containers which are located in the school. Sharps containers are located in (specify locations of sharps containers).

Regulated waste containers are located in (specify locations of containers).

#### Hepatitis B Vaccine

All employees who have been identified as having exposure to blood or other potentially infectious materials 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 other potentially infectious materials unless the employee has previously had the vaccine or who wishes to submit to antibody testing which shows the employee to have sufficient immunity.

Employees who decline the Hepatitis B vaccine will sign a waiver which uses the wording in Appendix A of the OSHA standard.

Employees who initially declined the vaccine but who later wish to have it may then have the vaccine provided at no cost. (Employers should list here who has responsibility for assuring that the vaccine is offered, the waivers are signed, etc. Also the employer should list who will administer the vaccine.)

## Post-Exposure Evaluation and Follow-Up

Exposure incident means a specific eye, mouth, other mucous membrane, non intact skin, or parental contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

When the employee incurs an exposure incident, it should be reported to (list who has responsibility to maintain records of exposure incidents):

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard.

This follow-up will include the following:

Documentation of the route of exposure and the circumstances related to the incident.

If possible, the identification of the source individual and, if possible, the status of the source individual. The blood of the source individual will be tested (after consent is obtained) for HIV/HBV infectivity.

The employee will be offered the option of having their blood collected for testing of the employee's HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted then the appropriate action can be taken and the blood sample discarded.

The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service.

The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

The following person(s) has been designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy.

### Interaction with Health Care Professionals

A written opinion shall be obtained from the health care professional who evaluates employees of this school. Written opinions will be obtained in the following instances:

When the employee is sent to obtain the Hepatitis B vaccine.

Whenever the employee is sent to a health care professional following an exposure

incident.

Health care professionals shall be instructed to limit their opinions to:

Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident.

That the employee has been informed of the results of the evaluation, and

That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. (Note that the written opinion. to the employer is not to reference any personal medical information.)

### Training

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

Training for employees will include the following with an explanation of:

The OSHA standard for Blood borne Pathogens

Epidemiology and symptomatology of blood borne diseases

Modes of transmission of blood borne pathogens

This Exposure Control Plan, i.e. points of the plan, lines of responsibility, how the plan will be implemented, etc.

Procedures which might cause exposure to blood of other potentially infectious materials at this school.

Control methods which will be used at the school to control exposure to blood or other potentially infectious materials.

Personal protective equipment available at this school and who should be contacted concerning

Post Exposure evaluation and follow-up

Signs and labels used at the school

Hepatitis B vaccine program at the school

## Record Keeping

All records required by the OSHA standard will be maintained by (insert name or department responsible for maintaining records):

## Dates

All provisions required by the standard will be implemented by: (insert date for implementation of the provisions of the standard).

(Employers should list here if training will be conducted using videotapes, written materials, etc. Also the employer should indicate who is responsible for conducting the training.)

All employees will receive annual refresher training. (Note that this training is to be conducted within one year of the employee's previous training.)

The outline for the training materials is located (list where the training materials are located).