BIOHAZARD CONTROL PROGRAM, BLOOD-BORNE PATHOGENS AND POTENTIALLY INFECTIOUS MATERIALS

Background

The District recognizes its responsibility to provide as safe an environment as reasonably possible for students and employees, as well as its obligations to deal with each student and employee with equity and due regard for privacy and to protect students and employees from harmful contact with pathogenic organisms.

Procedures

1. General

Actions taken in the District to deal with communicable diseases and disease causing organisms shall be governed by the following considerations:

- 1.1 Students diagnosed with serious infectious illnesses continue to have the right to an education program and to receive the program in the least restrictive environment possible.
- 1.2 Infected employees have the right to continue their employment as long as they are able to fulfill duties without risk to themselves or others.
- 1.3 Since serious infectious illness is primarily a medical problem, the guidance of the Medical Health Officer is to be sought when planning an education program for an infected student or when determining whether it is safe, for self and others, for an infected employee to continue in his/her current duties.
- 1.4 Infected students and employees, as with any other illness, are to be provided the maximum degree of confidentiality that is compatible with the safety of other persons.
- 1.5 Specific procedures shall be communicated to all "at risk" employees concerning practices to prevent harmful contact with all blood, body fluids, secretions and excretions. Standard precautions shall be used in all situations dealing with any potentially infectious materials (See Appendix A).
- 2. Students Infected with Blood-Borne Pathogens [such as Hepatitis B, Hepatitis C, and Human Immuno-Deficiency Virus (HIV)]
 - 2.1 The Superintendent or designate shall make a decision concerning the educational plan for the infected child in consultation with the Medical Health Officer, the student's parents or guardians, and the physicians involved in the case.
 - 2.2 A more restrictive environment may be considered for infected students who have, for whatever reason, open sores or lesions, or engage in biting. This will be done on the recommendation of the Medical Health Officer.

- 2.3 Each student's educational and medical situation is to be re-evaluated by the appropriate authorities whenever necessary.
- 2.4 The District shall make every reasonable effort to ensure that the identity of a student infected with blood-borne pathogens shall be confidential. The Medical Health Officer and the Superintendent or designate shall decide who has a "need-to-know" in each case.
- 3. School Personnel infected with Blood-Borne Pathogens [such as Hepatitis B, Hepatitis C, and Human Immuno-Deficiency Virus (HIV)]
 - 3.1 The District may, on the advice of the Medical Health Officer, require the employee to receive a medical examination under the School Act.
 - 3.2 The Superintendent and Medical Health Officer, will consult with the infected employee regarding any work restrictions or accommodations that may be required as a result of his/her condition.
 - 3.3 The employee may choose to take medical leave or long-term disability leave, or any other benefits to which s/he may be legally entitled.
 - 3.4 The District shall make every reasonable effort to ensure that information concerning the health as well as the identity of any infected employee shall be kept confidential. The Medical Health Officer and Superintendent or designate shall decide who has a "need-to-know" in each case.
- 4. Public Information
 - 4.1 In the event that concern arises within the community about an infected student or staff member, the Principal, without confirming whether or not there is an infected person within the school, shall provide information and support to parents utilizing the professional health advice available from the Medical Health Officer and the District.
 - 4.2 The Zone Superintendent shall also be notified.
- 5. Managing Potential Exposure
 - 5.1 Where there is reasonably anticipated risk of harmful contact with Potentially Infected Materials (PIM), the District must develop and implement an exposure control plan meeting the requirements of the Workers' Compensation Board Regulation.
 - 5.2 Where exposure to a blood-borne pathogen is anticipated, the District will evaluate the prevalence of the anticipated exposure.
 - 5.2.1 Where all workers in a classification (e.g. custodians or teaching assistants) have occupational exposure, it is not necessary to list work tasks.
 - 5.2.2 Where only some workers in a classification (e.g. teachers) have occupational exposure, the specific tasks and procedures causing an expected exposure must be listed.
 - 5.2.3 Risk to an unprotected worker must be assessed.

- 5.3 The job classifications with occupational exposure are: Custodians, First Aid Attendants, Principals and Teaching Assistants in Inclusive Learning.
- 5.4 Procedures that involve occupational exposure, including response to incidents where clean up of blood or body fluids or substances, may be the responsibility of a designated respondent. While respondents could be members of any worker group or classification, designated respondents have occupational exposure.
- 5.5 Control procedures include engineering controls and work practice controls personal protective equipment; Standard Precautions; and decontamination and disposal procedures.
- 5.6 Engineering controls refer to heating, ventilating and air-conditioning (HVAC) equipment as well as exhaust or fume hoods in shops or laboratories.
 - 5.6.1 Control of biohazards through HVAC controls is normally an 'indoor air quality' (IAQ) concern and is dealt with in the IAQ procedures.
 - 5.6.2 Sharps containers and tongs are also engineering controls.
- 5.7 Work practice controls include but are not limited to:
 - 5.7.1 Ensuring only trained persons respond to biohazardous incidents;
 - 5.7.2 Ensuring others are kept away from infectious materials;
 - 5.7.3 Ensuring placement of barriers, cones or signs;
 - 5.7.4 Donning Personal Protective Equipment (PPE) before responding or entering a potentially infectious area; and ensuring that clean-up and disposal procedures are followed.
- 5.8 Personal Protective Equipment (PPE)

When establishing the PPE procedures, the following must be considered:

- 5.8.1 Does the PPE prevent blood or other potentially biohazardous material from passing through a worker's clothes, street clothes, undergarments or reaching an employee's skin, eyes, nose, mouth or other mucous membranes?
- 5.8.2 Has the PPE been selected and used in accordance with the manufacturer's instructions and recognized standards?
- 5.8.3 Does the PPE in itself create a hazard to the wearer?
- 5.8.4 Does the PPE cause allergenic or other adverse health effects?

Refer to Administrative Procedure 161 – Appendix A for detailed procedures regarding Transmission Prevention and the use of PPE.

5.9 The District shall provide vaccination against the Hepatitis B Virus as required by the OHS Regulation in accordance with established protocols.

- 6. Training
 - 6.1 The OHS Regulation requires the District to inform workers about the contents of the exposure control plan and to provide them with adequate education and training to work safely with and in proximity to potentially biohazardous material.
 - 6.2 Education and training shall be provided before a worker begins work with or in proximity to potentially biohazardous material.
 - 6.3 The District shall review the exposure control plan at least annually and update it as necessary.
 - 6.4 Refresher training may be provided annually or whenever the exposure control plan is updated.
- 7. Response to Exposure Incident
 - 7.1 Every person contacting a PIM in an exposure incident must be advised to seek medical evaluation at a hospital emergency department. Immediate first aid, reporting and documentation of the incident must be undertaken.
 - 7.2 For direct unanticipated exposure to biohazardous or other potentially infectious material, the individual is to immediately thoroughly wash all exposed areas and report the incident to the employee supervisor.
 - 7.3 Emergency medical attention is to be sought within two (2) hours so that the individual can be assessed by a physician to determine what risk of infection exists.
 - 7.4 The medical evaluation will be based on an assessment of the risks associated with the incident, and subsequent post-exposure health management must be provided as necessary.
- 8. Record Keeping
 - 8.1 The District will retain records of all workers who are exposed in an exposure incident to biohazardous or other potentially infectious material as well as of worker education and training sessions on biohazardous materials as required by the OHS Regulation.
 - 8.2 Training records are to include date(s) of training, content or a summary of the training sessions, type of education and training (for example classroom, video, interactive, or on-the-job), names and qualification of those conducting the training, and names, job titles and work locations (departments) of workers attending the sessions.
- Reference: Sections 17, 20, 22, 65, 85 School Act Health Act Safety Standards Act Workers' Compensation Act Communicable Diseases Regulation Occupational Health and Safety Regulation

Revised: September 2018

STANDARD PRECAUTIONS

Refer to Administrative Procedure 161 – Section 7 for Response to Exposure Incidents.

Definitions

<u>Biohazardous materials</u> are pathogenic organisms that may cause disease in humans. They include organisms that are present in human blood or other body fluids, secretions and excretions that would be classified in risk group II, III or IV as specified by the Medical Research Council of Canada (MRCC) – see Administrative Procedure 161 Appendix B.

<u>Blood-Borne Pathogens</u> are disease causing organisms that are present in human blood or human blood components.

<u>Decontamination</u> is the use of physical or chemical means to remove viable microorganisms from surfaces or materials. Three methods are available: sanitization, disinfection and sterilization. Sterilization cannot be achieved in the school setting.

<u>Disinfection</u> is cleaning and disinfecting, with appropriate products and procedures, surfaces such as floors, woodwork and countertops which have become soiled. Environmental surfaces (normally contacted only by intact skin) should be disinfected to a level that destroys most bacteria, some viruses, some fungi, but not Mycobacterium tuberculosis or bacterial spores. This level of disinfection is appropriate for the sanitization or decontamination of school surfaces.

<u>Exposure Incident</u> is any actual contact of potentially infectious material with unprotected skin or mucous membranes.

<u>Occupational exposure</u> is the reasonably anticipated risk of harmful contact with blood or other potentially infectious material as a result of the performance of an assigned or regular job duty. Harmful contact through occupational exposure is reasonably anticipated for all First Aid Attendants, but does not include, for example; a worker (other than a first aid attendant) who might help a co-worker or student with a sudden nosebleed.

<u>Organisms that cause disease</u> or are reasonably believed to cause disease in persons are considered 'biohazardous infectious materials' under the WHMIS regulation (Division 3 of Class D).

Pathogens are organisms that cause, or are believed to cause, disease in humans.

<u>Personal Protective Equipment (PPE)</u> refers to items worn or used by persons to prevent the harmful contact of Potentially Infectious Materials. PPE for standard precautions includes: gloves, aprons, masks and eye protection.

<u>Potentially Infectious Materials (PIM's)</u> include vomit, urine, feces, saliva, semen, vaginal secretions, cerebrospinal fluid, pleural fluid, pericardial fluid, peritoneal fluid and amniotic fluid.

<u>Sanitization</u> refers to the reduction of microbial contamination to levels judged safe by public health authorities.

<u>Sharps Container</u> is a rigid walled container used for the collection and disposal of needles and other sharp items that may have been exposed to PIM's.

<u>Standard Precautions</u> refers to a system of precautions designed to protect persons from harmful exposure to Potentially Infectious Materials. It is an expansion of universal precautions and body substance isolation procedures and assumes all body fluids and byproducts (other than sweat) to be infectious.

Standard Precautions represents a system of barrier precautions to be used by all personnel to prevent harmful contact with blood, all body fluids, secretions, excretions, non intact skin, and mucous membranes of **all** persons, regardless of their health or diagnosis. These precautions are the "standard of care."

Standard Precautions focuses on reducing the risk of transmission of pathogenic microorganisms. The use of barriers is determined by the level of potential contact with body substances and shall be governed by the following considerations:

- The purpose is to reduce the transmission of infectious agents within the District.
- All staff with 'occupational exposure' will incorporate Standard Precautions into operating procedures.
- Training concerning Standard Precautions principles will be given to newly hired employees at risk of contacting infectious materials. Documentation of training will be maintained by the individual departments.
- Standard Precautions will be followed by all personnel and will be based on the degree of anticipated exposure to body substances. It is the responsibility of the individual to comply with Standard Precautions by following written work procedures and instructions.

<u>Virox</u> refers to a freshly made solution of Virox Technologies "Accelerated hydrogen Peroxide 5" DIN 02239828 at a 1:16 dilution ratio as directed on the product label.

Transmission Prevention

- 1. Hand Washing
 - 1.1 Because infections are most frequently spread by contact and the most common form of contact is hand contact, hand washing is the most important and most effective means of preventing transmission of organisms.

- 1.2 To minimize the body's response to abrasion, detergent contact or heat, a mild soap and cool or tepid water are recommended for all hand washing.
- 1.3 Indications for hand washing and hand antisepsis include:
 - 1.3.1 Before having direct contact with potentially infectious material.
 - 1.3.2 Before donning gloves and performing first aid or any clean up.
 - 1.3.3 After removing gloves and other personal protective equipment.
 - 1.3.4 After contact with body substances or articles/surfaces contaminated with body substances.
 - 1.3.5 After contact with patient's intact skin (i.e. examining any person who reports for first aid).
- 1.4 Hand Washing Procedure with Liquid or Foam Soap:
 - 1.4.1 Wet hands first with cool or tepid water.
 - 1.4.2 Apply soap sufficient for lather to cover all surfaces of hands and wrists.
 - 1.4.3 Rub hands together covering all surfaces of the hands and fingers with special attention to areas around nails and between fingers for a minimum of fifteen (15) seconds.
 - 1.4.4 Rinse well with running water.
 - 1.4.5 Dry thoroughly with paper towel.
 - 1.4.6 Use paper towel to turn off faucet.
 - 1.4.7 Avoid using hot water as repeated exposure to hot water may increase risk of dermatitis.
- 2. Personal Protective Equipment (PPE)
 - 2.1 Gloves

Gloves used to prevent transmission of pathogens must be disposable (single use) gloves and shall be readily available in medical and/or First Aid rooms. Vinyl or latex gloves are used for all activities requiring protection during routine First Aid and custodial tasks where contact with blood and body fluid is likely. Vinyl and latex gloves are equally effective in preventing skin contact with microorganisms.

- 2.1.1 Gloves must be worn for:
 - 2.1.1.1 Anticipated contact with moist body substances, mucous membranes, tissue and non-intact skin of all patients.
 - 2.1.1.2 Contact with surfaces and articles visibly soiled/contaminated by body substances.
- 2.1.2 Gloves are to be donned immediately prior to task.
- 2.1.3 Torn, punctured or otherwise damaged gloves are to be replaced immediately.

- 2.1.4 Gloves are to be removed and discarded after each individual task involving body substance contact and before leaving the work area.
- 2.1.5 Hand-washing is to occur as soon as possible after glove removal, or removal of other protective equipment.
- 2.1.6 Gloves are not to be washed or decontaminated for reuse except utility gloves for custodians.
- 2.1.7 Gloves do not provide protection for puncture wounds caused by sharp objects. Use extreme caution when handling sharp objects or when providing First Aid to a person with a puncture wound.
- 2.2 Masks, Eye Protection and Face Shields
 - 2.2.1 Masks are to be worn in combination with eye protection devices; face shields, goggles or glasses with side shields during First Aid procedures that are likely to generate droplets, spray, or splash of body substances to prevent exposure to mucous membranes of the mouth, nose and eyes.
- 2.3 Protective Aprons

Protective aprons prevent contamination of clothing by blood/body fluid exposure and are:

- 2.3.1 To be worn during First Aid and/or cleaning procedures that are likely to soil clothing with body substances; and
- 2.3.2 Removed before leaving the immediate work area.
- 3. Environment
 - 3.1 Waste Disposal
 - 3.1.1 All potentially infectious waste material shall be placed into double bags, securely tied and discarded into the general waste.
 - 3.2 Spill Management
 - 3.2.1 Spills of body substances are to be cleaned up promptly. Workers are to wear gloves, apron and mask and use other protective equipment if there is risk of splash.
 - 3.2.2 Encapsulator products may be used to solidify or pick up liquid waste. Excess materials are to be removed with disposable absorbent towels, and then soaked with Virox solution (1:16) for thirty (30) seconds. Wipe dry and repeat application of Virox solution (1:16) and allow to remain wet for five (5) minutes.
 - 3.2.3 Schools without custodians must initiate clean up procedures by site personnel. All contaminated surfaces shall be cleaned and decontaminated with Virox solution as in 3.2.2.
 - 3.2.4 Workers removing potentially infectious materials from school grounds must follow protocols for hand hygiene, glove use and disposal.

- 3.2.5 Workers removing PIM's that are sharp (used needles, broken glass contaminated with blood) must also use tongs or other devices to pick up materials and transfer them directly into a puncture resistant container enclosed on all sides or equipped with a lid.
- 3.3 Handling and Disposal of Sharps
 - 3.3.1 Sharp disposal is the responsibility of the user/handler of the sharp.
 - 3.3.2 Puncture-resistant sharps containers are readily available in all medical or first aid rooms.
 - 3.3.3 Do not place sharps in the regular trash.
 - 3.3.4 Take the Sharps Container to the location of the sharp; dispose of at point of use or collection.
 - 3.3.5 Do not overfill Sharp Containers.
 - 3.3.6 Look closely at the sharps container before placing a used sharp inside to assure that nothing is protruding from the container or that the container is not overfilled.
 - 3.3.7 When Sharps Container is two-thirds (2/3) full (to "full" line), close securely and contact Custodial Services at 604-946-5088 for disposal. Request replacement sharps container if one is not already available.
 - 3.3.8 In order to ensure Sharps Container safety, Sharp Containers are to be kept only in the medical room.
 - 3.3.9 Broken glass contaminated by blood will not be directly handled with gloved or bare hand. It will be handled by mechanical means (tongs, dust pan and broom). Contaminated broken glass will be placed in a puncture-resistant container and disposed of in regular waste.
- 3.4 Cleaning Vomit and Body Waste

Individuals who clean up vomit or feces must minimize the risk of infection to themselves and others by:

- 3.4.1 Wearing disposable gloves and plastic disposable apron or waterresistant gown and mask.
- 3.4.2 Using paper towels to soak up excess liquid. Transfer these and any solid matter directly into a plastic garbage bag.
- 3.4.3 Cleaning the soiled area with detergent and water, using a "singleuse" cloth.
- 3.4.4 Disinfecting the contaminated area with freshly made Virox solution.
- 3.4.5 Disposing of gloves and depositing apron/cloths into a garbage bag.
- 3.4.6 Washing hands thoroughly using soap and warm running water for at least thirty (30) seconds.

If cleaning up vomit in food preparation areas:

3.4.7 Disinfecting the area (including vertical surfaces) with freshly prepared Virox solution.

- 3.4.8 Disposing of any exposed food (food that has been handled by an infected person or food that may have been exposed to the virus by someone vomiting in close proximity).
- 3.4.9 Washing all dishes, utensils and trays in a commercial dishwasher with hot water rinse of at least 60°C (140°F), being careful not to cross-contaminate dirty to clean dishes.

Reference: Sections 17, 20, 22, 65, 85 School Act Health Act Safety Standards Act Workers' Compensation Act Communicable Diseases Regulation Occupational Health and Safety Regulation

Administrative Procedure 161 – Appendix B

LIST OF COMMUNICABLE DISEASES

Acquired Immunodeficiency Syndrome (AIDS) Amebiasis Anthrax Arboviral Infections (including Dengue) **Botulism Brucellosis** Campylobacter **Cerebrospinal Fluid Isolates** Chickenpox Cholera Congenital Infections (includes Cytomegalovirus, Hepatitis B, Herpes Simplex, Rubella, Toxoplasmosis, Varicella-Zoster) Dengue Diphtheria Encephalitis (specified or unspecified) *Enteric Pathogens *Foodborne Illness *Gastroenteritis, epidemic Giardiasis Hemophilus Influenza Infections (invasive) Hemolytic Uremic Syndrome Hepatitis A, B, Non-A, Non-B Kawasaki Disease Lassa Fever Legionella Infections Leprosy Leptospirosis Malaria Measles Meningitis (all causes) Meningococcal Infections Mumps Neonatal Herpes Nosocomial Infections Ophthalmia Neonatorum (all causes) Paratyphoid Pertussis Plague Poliomyelitis Psittacosis

Reference: Sections 17, 20, 22, 65, 85 School Act Health Act Safety Standards Act Workers' Compensation Act Communicable Diseases Regulation Occupational Health and Safety Regulation

Q-Fever Rabies **Rve Syndrome Rickettsial Infections** Rocky Mountain Spotted Fever Rubella (including Congenital Rubella) Rubeola Salmonella Infections Shigella Infections *Stool Pathogens, all types Tetanus **Toxic Shock Syndrome** Tuberculosis Tularemia Typhoid Typhus Varicella Viral Hemorrhagic Fevers (including Marburg, Ebola, Lassa, Argentinean, African Hemorrhagic Fevers) *Waterborne Illness (all causes) Yellow Fever

 Enteric Pathogens, Foodborne Illness, Gastroenteritis, epidemic and Waterborne Illness include the following and any other identified or unidentified cause: Aeromonas; Bacillus cereus; Campylobacter; Clostridium botulinum and; perfringens; Salmonella; Shigella; Staphylococcus; Viruses such as Norwalk and Rotavirus; Yersinia