

AVON MAITLAND DISTRICT SCHOOL BOARD

ADMINISTRATIVE PROCEDURE

NO. 413

SUBJECT: INFECTION CONTROL

Legal References: *Education Act: Section 283 Chief Executive Officer: Maintain an Effective Organization; Ontario Occupational Health and Safety Act, Health Protection and Promotion Act; Regulation 559/91 Specification of Reportable Diseases*

Related References: *Administrative Procedure 175 Accidents, Incidents and Occupational Illnesses; AP 226 Special Education Personalized Equipment; AP 314 Medically At Risk Students; AP 357 Violence-Free Schools*

1. Protection from Infectious Agents

- 1.1 This administrative procedure is provided to protect staff members from being exposed to infectious agents in the workplace. The principle used is called Routine Practices and Additional Precautions, which assume that blood and all other body fluids, inclusive of urine, feces and saliva are potentially infectious.
- 1.2 An individual may be exposed to infectious agents through droplet or airborne spread, puncture into skin from contaminated glass or other sharp object; touching a contaminated object with breaks in the skin such as cuts, scrapes, dermatitis, acne, splashes of contaminated substance into eyes, mouth or nose; contact with improperly disposed contaminated material; and assisting an injured person without wearing protective equipment.

2. Responsibilities

- 2.1 The principal/supervisor is required to communicate information about infectious agents to all staff members. An annual review of this procedure in September by principals or supervisors is expected. Principals/supervisors will in-service new staff members upon arrival at the school at other times. It is strongly recommended that this procedure be posted in higher risk areas of the school (e.g., changing areas).
- 2.2 The principal/supervisor will ensure that personal protective equipment and alternative products are provided. Protective equipment will include, but not be limited to, safety goggles, vinyl gloves and vinyl aprons.
- 2.3 The staff member must follow safe work practices outlined in this procedure, participate in training and periodic reviews of this procedure and wear personal protective equipment required by this procedure.
- 2.4 The environmental health and safety officer is responsible for reviewing and updating this procedure, as necessary.

3. Routine Practices Procedure

- 3.1 Blood and all body fluids, inclusive of urine, feces and saliva shall always be handled as if they could be infectious and every person shall be handled in a way that minimizes the exposure of staff members to blood and body fluids.
- 3.2 Disposable waterproof gloves (vinyl) shall be worn when in contact with blood, blood products, vomit, diarrhea, saliva, open wounds or sores and items soiled with blood or other body fluids.
- 3.3 The following procedures are important safety measures:
 - 3.3.1 Wash hands with soap and running water prior to wearing gloves and after removing gloves. Inspect gloves prior to use and use new gloves for each new individual.
 - 3.3.2 If splashing of blood or body fluids into eyes, mouth or onto broken skin and rashes is a concern, wear goggles, safety glasses with side shields or a face shield to prevent exposure. Cover any breaks in your skin with protective clothing and/or waterproof covering before coming into contact with the individual.
 - 3.3.3 DO NOT touch your mouth, nose or eyes or skin breaks or abrasions while handling blood or body fluids.
 - 3.3.4 Spills of contaminated or potentially contaminated material shall be immediately cleaned up with detergent and water, using disposable gloves. Cleaning should be immediately followed by disinfection.
 - 3.3.5 Disinfect all contaminated or potentially contaminated surfaces, such as floors, walls, etc. with Board and Health Unit recognized products.
 - 3.3.6 Place materials soiled with blood or body fluids in leak-proof waste bags/containers. Use a broom and dustpan to clean up broken glass.
 - 3.3.7 Change linen and clothing, which have been soiled with blood or body fluids. These items may be washed with the regular laundry. Wash and then disinfect vinyl aprons.
 - 3.3.8 Remove one glove by pulling it over the hand using the other gloved hand, being careful not to touch bare skin. While holding the removed glove in the gloved hand, slip two fingers of the ungloved hand under the cuff of the second glove, being careful not to touch the outer surface of the glove. Peel the glove off and around the first glove. Discard both gloves, being careful not to touch the outside surfaces of the gloves.
 - 3.3.9 Wash hands after removing gloves. Use plain soap and vigorously rub together all surfaces of lathered hands for at least 10 seconds. Rinse under a stream of water. Dry hands thoroughly. Use paper towel to turn off taps (avoid the use of abrasive soaps and brushes). Hand lotion can be used to prevent drying of the skin.
- 3.4 If a worker is exposed to contaminated or potentially contaminated blood or body fluids, the following measures should be taken:
 - 3.4.1 Report the incident to the principal/supervisor.
 - 3.4.2 If splashes occur to the lips, mouth, eyes or nose, flush with water as soon as possible.
 - 3.4.3 If hands and other body surfaces are exposed, wash with soap and running water as soon as practical.
 - 3.4.4 Allow the wound to bleed freely, then cleanse with soap and running water.
 - 3.4.5 Apply sterile dressing to the wound.
 - 3.4.6 Seek medical attention if the individual receives a puncture into the skin, contact through a break in the skin, or splashes into eyes, mouth or nose.

3.4.7 Follow required reporting procedures as set out in the administrative procedures listed under “Related References” under the title to this procedure.

4. Special Precautions

- 4.1 Staff members who have open wounds or weeping dermatitis should refrain from contact with blood or other body fluids.
- 4.2 Staff members who are pregnant should be completely familiar with and particularly careful to observe all precautions, to minimize the risk of transmission of any infectious agents.
- 4.3 Staff members who work directly with students who:
 - a) Are developmentally delayed
 - b) Are physically challenged
 - c) Exhibit aggressive behaviours (e.g., biting); and/or
 - d) Require specific interventions which may include but not be limited to catheterization, suctioning or administration of medication, may need to take special precautions in order to best protect themselves and the students they work with from infectious agents
- 4.4 Risk of transmission is more likely to occur where diapers are changed, objects are mouthed or children bite each other or the people handling them (e.g., children with special needs). Such children may lack control of their body secretions or may exhibit aggressive behaviour.
- 4.5 Staff members who may be at risk including academic staff, custodians and first aid attendants should get a hepatitis B vaccination series.
- 4.6 See Appendix A—Infection Control.

5. Fifth Disease (Parvovirus B-19)

- 5.1 Fifth Disease is a mild viral infection common among elementary school children. It is spread from person to person through contact with respiratory secretions of an infected person and has an incubation period of 4 – 14 days. Fifth Disease is not a reportable disease. See Appendix B—Fifth Disease Fact Sheet.
- 5.2 There is no vaccine or medicine that prevents Parvovirus B19 infection. Frequent hand washing is recommended as a practical and probably effective method to reduce the spread of parvovirus. Excluding persons with Fifth Disease from work, child care centres, schools, or other settings is not likely to prevent the spread of Parvovirus B19, since ill persons are contagious before they develop the characteristic rash.
- 5.3 The disease is most often not diagnosed until a rash appears on the child’s face. The child is considered to be contagious up to the time that the facial rash develops but by the time the rash appears, the child is usually no longer contagious.

- 5.4 The affected child is not required to stay home from school. However the disease can be harmful to pregnant women who do not have immunity to the disease. **Therefore, once the disease is diagnosed, this information must be posted on the front door of the building, as soon as the information is relayed.** (Distribute the attached Fifth Disease Fact Sheet found in Appendix B).
- 5.5 **Staff members are strongly encouraged to consult with their doctor about testing for immunity if they are in their childbearing years or if they are contemplating having a family. This pre-planning will leave staff members better prepared in the event there is a case of Fifth Disease within the school.**

6. Pregnant Staff Members (Fifth Disease and Rubella)

- 6.1 If a pregnant teacher is advised by her physician not to attend the workplace where there is a known case of Fifth Disease or Rubella, the teacher shall be reassigned to an alternate site with pay and with no loss of sick leave. If the teacher chooses not to accept such reassignment she may stay at home using sick leave.
- 6.2 See Appendix B: Fifth Disease Fact Sheet (Centers for Disease Control and Prevention, CDC).
- 6.3 See Appendix C: Communicable Disease Isolation Guidelines (Perth District Health Unit)
- 6.4 See Appendix D: Reportable Diseases (Health Protection and Promotion Act, O. Reg. 559/91).

Infection Control

- **Do** follow safe work practices.
- **Do** handle all blood and body fluids, including urine, feces, and saliva, as if they are infectious.
- **Do** wear personal protective equipment provided, i.e.
 - 1) Vinyl aprons—disinfect after use.
 - 2) Goggles/safety glasses with side shields or face shields.
 - 3) Disposable waterproof gloves (vinyl).
- **Do** follow proper hand washing procedures before wearing gloves and after removing gloves.
- **Do** use new gloves for each new individual or new contact with blood or body fluids.
- **Do** inspect all protective equipment, especially gloves, prior to use.
- **Do** refrain from touching mouth, nose, or eyes while handling blood/body fluids.
- **Do** report any exposure to contaminated or potentially contaminated blood or body fluids to your principal or supervisor.

Parvovirus B19 (Fifth Disease) Fact Sheet

What is "fifth disease?"

Fifth disease is a mild rash illness that occurs most commonly in children. The ill child typically has a "slapped-cheek" rash on the face and a lacy red rash on the trunk and limbs. Occasionally, the rash may itch. An ill child may have a low-grade fever, malaise, or a "cold" a few days before the rash breaks out. The child is usually not very ill, and the rash resolves in 7 to 10 days.

What causes fifth disease?

Fifth disease is caused by infection with human parvovirus B19. This virus infects only humans. Pet dogs or cats may be immunized against "parvovirus," but these are animal parvoviruses that do not infect humans. Therefore, a child cannot "catch" parvovirus from a pet dog or cat, and a pet cat or dog cannot catch human parvovirus B19 from an ill child.

Can adults get fifth disease?

Yes, they can. An adult who is not immune can be infected with parvovirus B19 and either have no symptoms or develop the typical rash of fifth disease, joint pain or swelling, or both. Usually, joints on both sides of the body are affected. The joints most frequently affected are the hands, wrists, and knees. The joint pain and swelling usually resolve in a week or two, but they may last several months. About 50% of adults, however, have been previously infected with parvovirus B19, have developed immunity to the virus, and cannot get fifth disease.

Is fifth disease contagious?

Yes. A person infected with parvovirus B19 is contagious during the early part of the illness, before the rash appears. By the time a child has the characteristic "slapped cheek" rash of fifth disease, for example, he or she is probably no longer contagious and may return to school or childcare centre. This contagious period is different than that for many other rash illnesses, such as measles, for which the child is contagious while he or she has the rash.

How does someone get infected with parvovirus B19?

Parvovirus B19 has been found in the respiratory secretions (e.g., saliva, sputum, or nasal mucus) of infected persons before the onset of rash, when they appear to "just have a cold." The virus is probably spread from person to person by direct contact with those secretions, such as sharing drinking cups or utensils. In a household, as many as 50% of susceptible persons exposed to a family member who has fifth disease may become infected. During school outbreaks, 10% to 60% of students may get fifth disease.

How soon after infection with parvovirus B19 does a person become ill?

A susceptible person usually becomes ill 4 to 14 days after being infected with the virus, but may become ill for as long as 20 days after infection.

Does everyone who is infected with parvovirus B19 become ill?

No. During outbreaks of fifth disease, about 20% of adults and children who are infected with parvovirus B19 do not develop any symptoms. Furthermore, other persons infected with the virus will have a non-specific illness that is not characteristic of fifth disease. Persons infected with the virus, however, do develop lasting immunity that protects them against infection in the future.

How is fifth disease diagnosed?

A physician can often diagnose fifth disease by seeing the typical rash during a physical examination. In cases in which it is important to confirm the diagnosis, a blood test may be done to look for antibodies to parvovirus. Antibodies are proteins produced by the immune system in response to parvovirus B19 and other germs. If immunoglobulin M (IgM) antibody to parvovirus B19 is detected, the test result suggests that the person has had a recent infection.

Is fifth disease serious?

Fifth disease is usually a mild illness that resolves on its own among children and adults who are otherwise healthy. Joint pain and swelling in adults usually resolve without long-term disability.

Parvovirus B19 infection may cause a serious illness in persons with sickle-cell disease or similar types of chronic anemia. In such persons, parvovirus B19 can cause an acute, severe anemia. The ill person may be pale, weak, and tired, and should see his or her physician for treatment. (The typical rash of fifth disease is rarely seen in these persons.) Once the infection is controlled, the anemia resolves. Furthermore, persons who have problems with their immune systems may also develop a chronic anemia with parvovirus B19 infection that requires medical treatment. People who have leukemia or cancer, who are born with immune deficiencies, who have received an organ transplant, or who have human immunodeficiency virus (HIV) infection are at risk for serious illness due to parvovirus B19 infection.

Occasionally, serious complications may develop from parvovirus B19 infection during pregnancy. For details, please see the CDC information sheet entitled, "Parvovirus B19 Infection and Pregnancy."

How are parvovirus B19 infections treated?

Treatment of symptoms such as fever, pain, or itching is usually all that is needed for fifth disease. Adults with joint pain and swelling may need to rest, restrict their activities, and take medicines such as aspirin or ibuprofen to relieve symptoms. The few people who have severe anemia caused by parvovirus B19 infection may need to be hospitalized and receive blood transfusions. Persons with immune problems may need special medical care, including treatment with immune globulin (antibodies), to help their bodies get rid of the infection.

Can parvovirus B19 infection be prevented?

There is no vaccine or medicine that prevents parvovirus B19 infection. Frequent hand washing is recommended as a practical and probably effective method to decrease the chance of becoming infected. Excluding persons with fifth disease from work, child care centers, or schools is not likely to prevent the spread of the virus, since people are contagious before they develop the rash.

Parvovirus B19 Infection and Pregnancy

I've recently been exposed to a child with fifth disease. How will this affect my pregnancy?

Usually, there is no serious complication for a pregnant woman or her baby because of exposure to a person with fifth disease. About 50% of women are already immune to parvovirus B19, and these women and their babies are protected from infection and illness. Even if a woman is susceptible and gets infected with parvovirus B19, she usually experiences only a mild illness. Likewise, her unborn baby usually does not have any problems attributable to parvovirus B19 infection.

Sometimes, however, parvovirus B19 infection will cause the unborn baby to have severe anemia and the woman may have a miscarriage. This occurs in less than 5% of all pregnant women who are infected with parvovirus B19 and occurs more commonly during the first half of pregnancy. There is no evidence that parvovirus B19 infection causes birth defects or mental retardation.

If I've been exposed to someone with fifth disease, what should I do?

If you have been in contact with someone who has fifth disease, or if you have an illness that might be caused by parvovirus B19, you may wish to discuss your situation with your personal physician. Your physician may wish to perform a blood test to see if you have become infected with parvovirus B19.

I have had a blood test for parvovirus B19. What do the results of the blood test mean?

A blood test for parvovirus B19 may show 1) that you are immune to parvovirus B19 and have no sign of recent infection, 2) that you are not immune and have not yet been infected, or 3) that you have had a recent infection. If you are immune, then you have nothing further to be concerned about. If you are not immune and not yet infected, then you may wish to avoid further exposure during your pregnancy. If you have had a recent infection, you should discuss with your physician what to do to monitor your pregnancy.

If I'm infected, what do I need to do about my pregnancy?

There is no universally recommended approach to monitor a pregnant woman who has a documented parvovirus B19 infection. Some physicians treat a parvovirus B19 infection in a pregnant woman as a low-risk condition and continue to provide routine prenatal care. Other physicians may increase the frequency of doctor visits and perform blood tests and ultrasound examinations to monitor the health of the unborn baby. The benefit of these tests in this situation, however, is not clear. If the unborn baby appears to be ill, there are special diagnostic and treatment options available, and your obstetrician will discuss these options with you and their potential benefits and risks.

Is there a way I can keep from being infected with parvovirus B19 during my pregnancy?

There is no vaccine or medicine that prevents parvovirus B19 infection. Frequent hand washing is recommended as a practical and probably effective method to reduce the spread of parvovirus. Excluding persons with fifth disease from work, child care centers, schools, or other settings is not likely to prevent the spread of parvovirus B19, since ill persons are contagious before they develop the characteristic rash.

CDC does not recommend that pregnant women should routinely be excluded from a workplace where a fifth disease outbreak is occurring, because of the problems noted above. Rather, CDC considers that the decision to stay away from a workplace where there are cases of fifth disease is a personal decision for a woman to make, after discussions with her family, physician, and employer. For further information contact your local Health Unit (Perth Health Unit at 271-7600 or the Huron Health Unit at 482-3416). Resource –Centres for Disease Control and Prevention (CDC) http://www.cdc.gov/ncidod/dvrd/revb/respiratory/parvo_b19.htm



COMMUNICABLE DISEASE EXCLUSION GUIDELINES FOR SCHOOLS AND DAY CARES

These diseases are considered reportable diseases under the Health Protection and Promotion Act, and **must be reported** to the local public health unit. The Medical Officer of Health has the authority under this Act to order isolation for any person who has or may have a communicable disease.

Disease	Exclusion Period
Chicken Pox	Return to school/day care when well enough to participate in all activities
German Measles (Rubella)	7 days from onset of rash
Influenza	Exclude until well enough to participate (usually 5-7 days)
Measles	4 days from onset of rash
Meningitis	Until fully recovered
Mumps	5 days from onset of swelling
Whooping Cough (Pertussis)	21 days from onset of cough, <u>or</u> 5 days after start of antibiotic treatment

These diseases are not considered reportable diseases and the exclusions listed are not required by public health. These guidelines are based on scientific research and consider the method of transmission and how easily the disease spreads.

Disease	Exclusion Period
Head Lice (Pediculosis)	No public health exclusion. Manage as per agency policy.
Impetigo	24 hours from start of antibiotic treatment
Pink - Eye (Conjunctivitis).....	Most often viral and self-limited. If child is well enough to attend school and is able to comply with hand hygiene and respiratory etiquette, then no exclusion is required. Refer to healthcare provider if child has facial blisters, is unwell, or if symptoms do not improve in a few days.
Rash with Fever	Until rash and fever are gone, <u>or</u> a physician determines it is non-communicable
Ringworm	Until treatment started
Scabies	24 hours from start of treatment
Scarlet Fever/ Strep throat	24 hours from start of antibiotic treatment
Shingles	If rash cannot be covered exclude until vesicles become dry; if the rash can be covered, no exclusion is necessary
Vomiting and Diarrhea	Until 24 hours after last episode of vomiting or diarrhea
Colds Fifth Disease Hand, Foot and Mouth Disease Mononucleosis	} No exclusion unless child is not feeling well enough to participate in all activities

For disease information or to report one of the reportable diseases, please call the Health Unit in your county:

Huron County Health Unit
519-482-3416 or toll free 1-877-837-6143
256Press 6

Perth District Health Unit
519-271-7600 Information: ext 267 Reporting: ext
Listowel area residents call toll free 1-877-271-7348

**Reportable Diseases (Health Protection and Promotion Act, Regulation 559/91-
Specification of Reportable Diseases, 2013**

When a person has or is suspected to have a specified communicable disease, the Medical Officer of Health must be notified immediately. Here is a current list of all reportable diseases:

Acquired Immunodeficiency Syndrome (AIDS)	Leprosy
Acute Flaccid Paralysis	Listeriosis
Amebiasis	Lyme disease
Anthrax	Malaria
Botulism	Measles
Brucellosis	Meningitis, acute
Campylobacter enteritis	i Bacterial
Chancroid	ii Viral
Chickenpox (Varicella)	iii Other
Chlamydia trachomatis infections	Meningococcal disease, invasive
Cholera	Mumps
Clostridium difficile, hospital outbreaks	Ophthalmia neonatorum
Creutzfeldt-Jakob Disease, all types	Paralytic Shellfish Poisoning
Cryptosporidiosis	Paratyphoid fever
Cyclosporiasis	Pertussis (whooping cough)
Diphtheria	Plague
Encephalitis, including	Pneumococcal disease, invasive
i. Primary, viral	Poliomyelitis, acute
ii. Post-infectious	Psittacosis/Ornithosis
iii. Vaccine-related	Q Fever
iv. Subacute sclerosing panencephalitis	Rabies
v. Unspecified	Respiratory infection outbreaks in institutions
Food poisoning, all causes	Rubella and Congenital Rubella Syndrome
Gastroenteritis, institutional outbreaks	Salmonellosis
Giardiasis, except asymptomatic cases	Severe Acute Respiratory Syndrome (SARS)
Gonorrhea	Shigellosis
Group A Streptococcal disease, invasive	Smallpox
Group B Streptococcal disease, neonatal	Syphilis
Haemophilus influenza b disease, invasive	Tetanus
Hantavirus pulmonary syndrome	Trichinosis
Hemorrhagic fevers, including	Tuberculosis
i. Ebola virus disease	Tularemia
ii. Marburg virus disease	Typhoid fever
iii. Other viral causes	Verotoxin-producing E. Coli indicator conditions, including Haemolytic Uraemic Syndrome (HUS)
Hepatitis, A, B, C	West Nile Virus (WNV) Illness,
Herpes, neonatal	Yellow Fever
Influenza	Yersiniosis
Lassa fever	
Legionellosis	