Resource for the Control of Infectious Diseases in Schools

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infectioncontrol@bchu.org

BRANT COUNTY HEALTH UNIT

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Reportable Diseases of Public Health Significance

The following list of diseases of public health significance must be reported to the local Medical Officer of Health, as stated in Ontario Regulation 559/91 and Ontario Regulation 135/18 under the Health Protection and Promotion Act.

Acquired Immunodeficiency Syndrome (AIDS)	Legionellosis
Acute Flaccid Paralysis (AFP)	Leprosy
Amebiasis	Listeriosis
Anthrax	Lyme Disease
Blastomycosis	Measles
Botulism	Meningitis, acute, including: bacterial, viral and other
Brucellosis	Meningococcal disease, invasive
Campylobacter enteritis	Mumps
Carbapenemase-producing Enterobacteriaceae (CPE) infection or colonization	Ophthalmia neonatorum
Chancroid	Paralytic Shellfish Poisoning (PSP)
Chickenpox (Varicella)	Paratyphoid fever
Chlamydia trachomatis infections	Pertussis (Whooping Cough)
Cholera	Plague
Clostridium difficile associated infection (CDI) outbreaks in public hospitals	Pneumococcal disease, invasive
Creutzfeldt-Jakob Diseases, all types	Poliomyelitis, acute
Cryptosporidiosis	Psittacosis/Ornithosis
Cyclosporiasis	Q Fever
Diphtheria	Rabies
Echinococcus multilocularis infection	Respiratory infection outbreaks in institutions and public hospitals
Encephalitis, primary, viral	Rubella
Encephalitis, post-infectious, vaccine-related, subacute sclerosing panencephalitis, unspecified	Rubella, congenital syndrome
Food poisoning; all causes	Salmonellosis
Gastroenteritis, outbreaks in institutions and public hospitals	Severe Acute Respiratory Syndrome (SARS)
Giardiasis, except asymptomatic cases	Shigellosis
Gonorrhoea	Smallpox
Group A Streptococcal disease, invasive	Syphilis
Group B Streptococcal disease, neonatal	Tetanus
Haemophilus influenzae disease, all types, invasive	Trichinosis
Hantavirus pulmonary syndrome	Tuberculosis
Hemorrhagic fevers, including: Ebola virus disease, Marburg virus disease and other viral causes	Tularemia
Hepatitis A, viral	Typhoid Fever
Hepatitis B, viral	Verotoxin-producing E. coli infection, including Haemolytic Uraemic Syndrome (HUS)
Hepatitis C, viral	West Nile Virus Illness
Influenza	Yersiniosis

Exclusion Criteria

Infectious Disease	Exclusion Period
*Chickenpox	No exclusion – may return to school if feeling well enough to take part in activities
Diarrhea	Until 24 hours since last diarrhea bowel movement
Fifth Disease	No exclusion – may return to school if feeling well enough to take part in activities
Hand, Foot & Mouth Disease	No exclusion – may return to school if feeling well enough to take part in activities
Head Lice	No exclusion – but refer to your school board policy
Impetigo	Until 24 hours after starting antibiotics
*Influenza	Until 5 days after symptoms begin or until feeling better
*Measles	Until 4 days after the appearance of rash
*Mumps	Until 5 days after the onset of the swollen glands
*Pertussis (whooping cough)	Until 5 days after starting antibiotics
Pink Eye	If bacterial, child can return after 24 hours of appropriate antibiotic treatment. If viral, no need to exclude unless there is an outbreak.
Pinworms	Until treatment has been started
Pneumonia	Until seen by a physician and permitted to return
Ringworm	Until treatment has been started. Avoid direct contact sports until treatment has been completed.
*Rubella	Until 7 days after the appearance of rash
Scabies	Until 1 application of treatment is complete
Scarlet Fever	Until 24 hours after starting antibiotics
Strep Throat	Until 24 hours after starting antibiotics
Vomiting	Until 24 hours since last episode of vomiting

*These diseases are reportable to the health unit under the Health Protection and Promotion Act

Reporting a Disease of Public Health Significance

Legal requirements

Student Illness

Principals are legally required to notify public health if a student is suspected to have or is diagnosed with a disease of public health significance (see Reportable Diseases of Public Health Significance List). The Health Protection and Promotion Act R.S.O. 1990, c. H.7, Section 28 states:

> "The principal of a school who is of the opinion that a pupil in the school has or may have a communicable disease shall, as soon as possible after forming the opinion, report thereon to the medical office of health of the health department in which the school is located."

The school may become aware of a student diagnosed with a disease of public health significance in two ways:

1) From the parent (For example, when the parent phones the school to notify the child is off sick)
   - The health unit will follow-up with the student's family to discuss the student's illness
   - The health unit will contact the school if further public health interventions are required
   - The school does not need to confirm the diagnosis with a physician before reporting to the health unit
2) From the health unit (For example, during our investigation the school is named and the disease of public health significance in question requires notification and follow up with the school).

Staff Illness

The Health Protection and Promotion Act does not require that principals report illness of staff members to public health.

To report a disease of public health significance you can:

- Email: infectioncontrol@bchu.org OR
- Phone the Infectious Disease Program: 519-753-4937 ext. 454
- Please provide the following information:
  - Name of infectious disease
  - Student name, address, date of birth, sex, grade
  - Parent/guardian name and contact information

Chickenpox Reporting

The diagnosis of chickenpox does not need to be confirmed by a physician and the health unit does not need to speak with the parent. Report the following information for chickenpox only:

- Name
- Date of birth

Once chickenpox is identified in your school, we may recommend:

- Advising the school community (teachers, parents) of the incidence of chickenpox in the school
- Sending our chickenpox fact sheet and notification letter out to the school community

Infections and Pregnancy

This page is specific to women that work in school community settings. It focuses primarily on questions we routinely get from women working in schools. The information below is intended to help you prevent and manage infections that can be a concern during pregnancy.

What you need to know:

Infections are a normal part of life and a school community is the perfect setting for infections to spread: lots of people, of all ages, sharing a common space and items, five days a week, for ten months of the year! The other challenge is that it is common for the "infectious period" to begin well before symptoms do. This means staff and students are exposed to infectious diseases before there is any knowledge that the illness is occurring.

Unfortunately during pregnancy, women may find it harder to fight off infections and some infections can cause pregnancy complications. The other concern is the risk of spreading an infectious disease to an infant if the mother is sick or becomes sick at the time of delivery or thereafter. Infants are at higher risk of complications related to infectious diseases because their immune systems have not matured yet.

What you need to do ideally before you get pregnant:

1. **Make sure your vaccines are up to date.** Some vaccine-preventable diseases can cause complications during pregnancy or to a newborn baby. Discuss with your healthcare provider which some vaccines are safe to get during pregnancy.

   Ensure you are immune to these infections by having a blood test for:
   - Measles, mumps, rubella
   - Chickenpox (varicella)
     If you are not immune, get vaccinated before you become pregnant

   Ensure you are up to date with recommended booster vaccines for:
   - Pertussis (whooping cough)
   - Influenza
   - Tetanus

2. **Have a blood test to check if you are immune to fifth disease (parvovirus B19).** Fifth disease is a common childhood infection that circulates in schools and daycares. It is usually a mild illness and children are not required to be excluded from school. By adulthood, 50 to 80% of people have been exposed and are immune.

   If a pregnant woman becomes infected in the first 20 weeks of her pregnancy, there is a small chance that she could pass on the virus to a developing baby and the baby may develop anemia. This occurs in less than 5% of all pregnant women who are infected and occurs more often in the first half of the pregnancy. Fifth disease has not been known to cause any physical or mental birth defects.

What you need to do if you are already pregnant and there is a workplace exposure:

1. **Consult with your doctor or midwife** if you become ill or are exposed to an infectious disease during your pregnancy to determine any risks given your specific situation, especially if you know that you are not immune to the infectious disease in question.

2. **Consult with your employer and school board policies.** If there is a workplace exposure to an infectious disease that you know you are not immune to, e.g. fifth disease, discuss whether or not you have any on-going risks by remaining in your current work assignment. Exclusion from work is not necessarily required or recommended when there is a known viral outbreak occurring. The decision to stay away from the workplace is a personal decision for a woman to make after discussion with her doctor and employer.

Resources:

For more information about infections and pregnancy refer to the following fact sheets available at www.bchu.org:

- Infections in Pregnancy
- Chickenpox & Pregnancy
- Fifth Disease & Pregnancy
- Rubella & Pregnancy

Infection Prevention and Control

Infection Prevention and Control (IPAC) are principles and practices that reduce or prevent the spread of germs. Schools should be incorporating IPAC practices as part of their everyday routines so that children and staff are less likely to get sick. Examples of IPAC practices are handwashing, cleaning and disinfecting and immunization.

Hand Hygiene

Handwashing is the single most effective and important infection control measure that staff and children can use to prevent illness. Hands can be washed with either soap and warm water or an alcohol-based hand rub (ABHR) of at least 70% alcohol. ABHR can be used when hands are not visibly soiled and soap and warm water must be used when hands are visibly dirty.

Cleaning and Disinfection

Cleaning and disinfection of surfaces, equipment, shared objects etc., is very important in preventing transmission of germs to children and staff. Cleaning is the physical removal of dirt and grime from surfaces, including toys and equipment. Cleaning uses soap, warm water and scrubbing to remove dirt where germs can hide. Cleaning must be done before disinfection. Disinfection kills disease-causing microorganisms. Disinfection is the use of chemicals or heat to kill germs left behind after cleaning.

There are many disinfectants on the market and it is important to choose the right product. All disinfectants must have a drug identification number (DIN), with the exception of household bleach. A DIN is the number found on the label and indicates that the product does what the label claims and is approved by Health Canada for use.

Not all disinfectants are the same it is important to know what germs the disinfectant is able to kill and this information can be found on the label. For example, most disinfectants routinely used in schools are not able to kill Norovirus, a common virus that causes gastrointestinal illness, therefore when norovirus is suspected it is important to change to a higher level of disinfectant.

The Health Unit recommends that primary classrooms are cleaned and disinfected daily, including tables, play/activity centres and toys.

Increased Absenteeism in Schools

Occasionally, schools may notice an increase in absenteeism due to illness. Traditionally schools report when absenteeism due to illness reaches 10% of the student population, however if a significant number of students are ill in only one class this should still be reported. For example, if a primary classroom has 3-4 children off with similar symptoms within a day or two, this would be significant and should be reported.

Reporting absenteeism to public health serves three purposes:

1. Public health can provide recommendations to prevent further spread of infection to the staff and students
2. If illness is related to a special event or field trip, allows for outbreak investigation to prevent another incident from occurring again
3. Provides public health surveillance on infectious disease activity within our community

When reporting increased absenteeism in your school please provide:

- Symptoms
- Grades/classes affected
- How many staff and children are off ill
- Total student enrollment
- If symptoms include diarrhea/vomiting was there a school event/field trip in the 3 days prior in those affected classrooms?

If your school is experiencing increased absenteeism related to illness, follow these general recommendations. Start as soon as you notice the illness.

- ☐ Ensure sick children/staff stay home (see Exclusion Criteria)
- ☐ Encourage good handwashing, especially before meal times
- ☐ Ensure washrooms are supplied with liquid hand soap and paper towels and cleaned throughout the day
- ☐ Increase the cleaning and disinfecting within the school, paying particular attention to the affected classrooms, washrooms, water fountains and common meeting areas, at a minimum done daily
- ☐ Refer to the enhanced cleaning guidelines as outlined by your school board to ensure the correct disinfectant is being used, ideally a high level disinfectant is being used
- ☐ Clean and disinfect the large play centers in the primary classrooms
- ☐ Close sensory stations if the illness is happening in a kindergarten classroom
- ☐ Remove plush toys/items and play clothes from the classrooms, launder is possible
- ☐ Clean and disinfect toys there in the classroom at the start of the outbreak

To report increased absentee rates in your school or to consult with a public health nurse or public health inspector, email or phone the Infectious Disease program:

- infectioncontrol@bchu.org
- 519-753-4937 ext. 454

BCHU Fact Sheets

The Health Unit has developed disease specific fact sheets.

The following factsheets can be found online at www.bchu.org. Click on Services>Infectious Disease>Fact Sheets

Amebiasis	Invasive Meningococcal Disease
Bed Bugs	Listeriosis
Botulism	Lyme Disease
Campylobacter	Measles
Chickenpox and Pregnancy	Mononucleosis
Chickenpox	MRSA in the Community
Chlamydia	Mumps
Clostridium Difficile	Noroviruses
Cryptosporidiosis	Pertussis – Whooping Cough
Cytomegalovirus	Pink Eye – Conjunctivitis
Diarrhea	Pneumococcal Disease, Invasive
Diphtheria	Polio
E Coli	Recovery From Food Poisoning
Fifth Disease and Pregnancy	Respiratory Syncytial Virus
Fifth Disease	Ringworm
Food Borne Disease – Food Poisoning	Rotavirus
Genital Herpes	Rubella and Pregnancy
Giardia	Rubella
Gonorrhea	Salmonella
Hand Foot Mouth Disease	Scabies
Head Lice	Scarlet Fever
Hepatitis A	Shigellosis
Hepatitis B	Shingles
Hepatitis C	STI and Pregnancy
HIV	Strep Throat
Household Cleaning	Syphilis
Human Papillomavirus – HPV	Tetanus
Impetigo	Toxoplasmosis and Pregnancy
Infections in Pregnancy	Toxoplasmosis
Influenza	Vancomycin Resistant Enterococci
Invasive Group A Streptococcal Infection	West Nile Virus

Other Resources:

www.caringforkids.cps.ca