GOVERNMENT OF BERMUDA
Ministry of Health, Seniors and Environment

Guidance on Infection Control, Exclusion and Reporting of Health Events in Schools & Other Child Care Settings

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Guidance on Infection Control, Exclusion and Reporting of Health Events in Schools & Other Child Care Settings

Introduction

Nurseries, pre-school facilities, schools, and other childcare settings aim to provide children with a safe environment for growth, development and learning. Good infection control measures are therefore essential to protect both children and staff.

This document provides information on the prevention and control of infection in the child-care setting. While this document is unable to provide a single authoritative text on all infectious diseases due the vast array of infections that can be encountered, it provides guidance and information about the common and more important infections encountered in school and other childcare settings. Whenever there is any doubt about the management of a particular illness, advice should be sought from one of the contacts listed below:

Department of Health

Telephone: 278-4900

Child Health Clinic

(67 Victoria Street, Hamilton)
Telephone: 278-6460

Epidemiology and Surveillance Unit

Telephone: 278-6503 (Nurse Epidemiologist)

The assistance of everyone involved in the care of children is invaluable in highlighting possible problems so the spread of infection can be prevented or controlled.

General information

Children who are unwell should not attend school or other childcare settings.

A child with an infectious disease may show general signs of illness. This can include fever, shivering, vomiting, diarrhoea, etc. In these circumstances, parents/guardians should be contacted so that they can collect the child. In the meantime the child should be kept comfortable away from the other children. Once they are better they should return unless they pose a risk of infection to others. They should not return to school or nursery until the risk has passed. The following table outlines the recommendations for exclusion for specific diseases.

Rashes and Skin Infections	Recommended period to be kept away from school and other childcare settings	Additional Information
Athlete's Foot	None	Treatment is recommended.
Chickenpox (Varicella)	Exclude for five days from the onset of rash	Preventable by immunization. *SEE: Vulnerable Children, Pregnancy*
Cold Sores	None	Avoid kissing and contact with sores.
German measles (Rubella)	Exclude for six days from onset of rash	Preventable by immunization. *SEE: Pregnancy*
Hand, foot and mouth (Coxsackie virus)	Exclude until blisters are crusted and dried and there are no ulcers in the mouth	Contact the Epidemiology and Surveillance Unit if a large number of children are affected.
Impetigo	Exclude until lesions are crusted and healed, or 24 hours after commencing antibiotic treatment	Antibiotic treatment speeds healing and reduces the infectious period.
Measles	Exclude for four days from onset of rash	Preventable by immunization. *SEE: Vulnerable Children, Pregnancy*
Molluscum contagiosum	None	
Ringworm - skin/scalp	Exclusion not usually required	Treatment is required.
Roseola (infantum)	Exclude until fever-free for 24 hours without the use of fever-reducing medications	
Scabies	Exclude until first treatment completed	Household and close contacts require treatment
Scarlet fever	Exclude for 24 hours after commencing appropriate antibiotic treatment, provided he/she has no fever.	
Slapped cheek/fifth disease Parvovirous B19	Exclude until fever-free for 24 hours without the use of fever-reducing medications	*SEE: Vulnerable Children, Pregnancy*
Shingles	Exclude only if rash is weeping and cannot be covered	Can cause chicken pox in those who are not immune. It is spread by very close contact and touch. *SEE: Vulnerable Children, Pregnancy*
Warts and verrucae	None	Verrucae should be covered, especially in swimming pools, gymnasiums and changing rooms

Diarrhoea and Vomiting Illness (including food-borne illness/food poisoning)	Recommended period to be kept away from school and other childcare settings	Additional Information
(i.e. *salmonella, shigella*, *campylobacter*, norovirus, rotavirus, *Giardia*, etc.)	Exclude for 48 hours from last episode of diarrhoea or vomiting	Further exclusion may be required for young children under five and those who have difficulty in adhering to hygiene practices.

Respiratory Infections	Recommended period to be kept away from school and other childcare settings	Additional Information
Flu (influenza)	Until recovered	Immunization recommended annually for all children from 6 months of age. *SEE: Vulnerable Children*
Whooping cough (pertussis)	Exclude for five days after commencing antibiotic treatment, or 21 days from onset of illness if no antibiotic treatment	Preventable by immunization. After treatment, non-infectious coughing may continue for many weeks. The Epidemiology and Surveillance Unit will organise any contact tracing necessary.
Strep Throat	Exclude for 24 hours after commencing appropriate antibiotic treatment, provided he/she has no fever.	

Other Infections	Recommended period to be kept away from school and other childcare settings	Additional Information
Conjunctivitis	Exclude until prescribed treatment has been given for 24-48 hours or condition improves.	If an outbreak/cluster occurs, consult the Epidemiology and Surveillance Unit.
Diphtheria	Exclusion is essential until cleared by a physician.	Preventable by immunization. Family contacts must be excluded until cleared to return by a physician. The Epidemiology and Surveillance Unit must be notified and will organise any contact tracing necessary.
Mononucleosis	Exclude until fever-free for 24 hours without the use of fever-reducing medications	

Other Infections	Recommended period to be kept away from school and other childcare settings	Additional Information
Head lice	Exclude children with live lice until appropriate treatment has begun	Students diagnosed with live head lice do not need to be sent home early from school; they can go home at the end of the day, be treated, and return to class after appropriate treatment has begun.
Hepatitis A	Exclude until seven days after onset of jaundice (or seven days after symptom onset if no jaundice)	In an outbreak of hepatitis A, The Epidemiology and Surveillance Unit will advise on control measures.
Hepatitis B, C, HIV/AIDS	None	Hepatitis B and C and HIV are blood-borne viruses that are not infectious through casual contact. For cleaning of blood and body fluid spills *SEE: Good Hygiene Practice.*
Meningitis (bacterial)/septicemia	Exclude child has received appropriate antibiotic treatment and is fever-free for 24 hours without the use of fever-reducing medications	Preventable by immunization. There is no reason to exclude siblings or other close contacts of a case. The Epidemiology and Surveillance Unit will advise on any action needed.
Meningitis (viral)	Exclude until fever-free for 24 hours without the use of fever-reducing medications	Milder illness. There is no reason to exclude siblings and other close contacts of a case.
MRSA	None, unless directed by a physician or wound is draining and cannot be covered	Good hygiene, in particular hand-washing and environmental cleaning, are important to minimise any danger of spread. If further information is required, contact the Epidemiology and Surveillance Unit.
Mumps	Exclude until nine days after onset of swelling	Preventable by immunization. The Epidemiology and Surveillance Unit will organise any contact tracing necessary.
Pinworms/Thread worms	None	In some cases, treatment is recommended for the child and household contacts.
Tonsillitis	Exclude until fever-free for 24 hours without the use of fever-reducing medications	There are many causes, but most cases are due to viruses and do not need an antibiotic.

For all fevers (temperature above 37.5 °C or 100.4 °F), regardless of cause, the child should be excluded until fever-free for 24 hours without the use of fever-reducing medications.

Outbreaks

Outbreaks of infectious disease may occur from time to time in schools and other child-care settings. An outbreak in a child-care setting can be defined as: *two or more linked cases of the same illness* ***or*** *when the number of cases of the same illness exceeds the expected number*. The importance of any outbreak depends on several factors including, but not limited to, the severity of the disease, the number of children affected, the mode of transmission, and whether any specific action is required to prevent further cases.

If a school, nursery or child-minder suspects an outbreak of an infectious disease, the Department of Health / Epidemiology and Surveillance Unit should be notified immediately.

Nurseries, pre-schools, schools and other child-care establishments may become aware of an outbreak if several children are ill with the same illness or there is a sudden increase in the number of absentees. In these instances it is important that the Nurse Epidemiologist is informed and an initial assessment of the situation is conducted. This initial assessment includes finding out how many children and staff are ill, what the symptoms are and when the symptoms began for each case. When necessary, the Nurse Epidemiologist, School Nurse, and/or Environmental Health Officer will visit the child-care establishment or school to investigate the source, prevent further spread, and provide additional information. The investigators must abide by strict confidentiality guidelines and will only release information to the extent required to protect public health.

Action Checklist for Schools/Childcare Facilities during an Outbreak

Action	Y/N	Comments
Inform Department of Health/Epidemiology and Surveillance Unit		
Inform parents/guardians about outbreak and advise regarding symptoms and exclusion criteria (refer to guidance and sample letter)		
Follow recommended exclusion for ill children and staff		
Monitor that staff and children are washing hands effectively		
Liquid soap and paper towels available		
Twice daily cleaning of all surfaces with warm water and detergent followed by disinfection with chlorine-based disinfectant (1000 ppm) especially hard contact areas		
Suspend use of soft toys, water and sand play, and play dough/cookery activities		
Clean hard toys daily and then disinfect with chlorine-based disinfectant or wash in dishwasher at 60°C or 140°F if possible		
Suspend introduction of new children		
Restrict visitors to facility		
Display guidelines on disease prevention		
Restrict food handling		
Thorough cleaning at end of outbreak to include cleaning with detergent and water followed by disinfection with a chlorine-based disinfectant (1000 ppm)		

Good hygiene practice

Hand-washing is one of the most important ways of controlling the spread of infections, especially those that cause diarrhoea and vomiting, and respiratory disease. The recommended method is the use of liquid soap, warm water, and paper towels. Always wash hands after using the toilet, before eating or handling food, and after handling animals. When possible, cuts and abrasions should be covered with waterproof dressings.

Alcohol-based hand sanitizers are not cleansing agents and should not replace the need for hand-washing. While alcohol-based hand sanitizers offer a practical and acceptable alternative to hand-washing when hands are not visibly dirty, hands that are visibly soiled should be washed using soap and water.

Coughing and sneezing easily spread infections. Children and adults should be encouraged to cover their mouth and nose with a tissue. Wash hands after using or disposing of tissues. Spitting should be discouraged.

If skin is broken due to bite or injury, encourage the wound to bleed. Wash affected area thoroughly using soap and water. Seek medical attention immediately if there is excessive bleeding.

Appropriate personal protective equipment (PPE) should be available. Disposable non-powdered vinyl or latex-free gloves and disposable plastic aprons must be worn where there is a risk of splashing or contamination with blood/body fluids. Goggles should also be available for use if there is a risk of splashing to the face. Sufficient PPE should be available to allow for changing of PPE between contacts. When removing PPE, gloves should be removed first, followed by gown and goggles.

PPE should be used when handling cleaning chemicals. Cleaning of the environment, including toys and equipment, should be frequent and thorough. Monitor cleaning contracts and ensure cleaners are appropriately trained and have access to PPE.

All spillages of blood, faeces, saliva, vomit, nasal and eye discharges should be cleaned up immediately (always wear PPE). When spillages occur, clean using a product that combines both a detergent and a disinfectant. Use as per manufacturer's instructions and ensure it is effective against bacteria and viruses and suitable for use on the affected surface. Never use mops for cleaning up blood and body fluid spillages – use disposable paper towels and discard clinical waste as described below. A spillage kit should be available for blood spills.

Soiled linen should be washed separately at the hottest wash the fabric will tolerate. Wear PPE when handling soiled linen. Children's soiled clothing should be bagged to go home, never rinsed by hand.

Wash hands with soap and water immediately after removal of PPE. Alcohol-based hand sanitizer may be used if soap and water is unavailable. Removed PPE and any contaminated items should be collected and kept in plastic bags until they can be disposed of properly. If contaminated items are not dry, they should be placed in a leak-proof bag and double-bagged. Preferably these items should be disposed of using foot-operated bins.

Animals

As animals may carry infections it is important that hands are washed after handling of any animals.

Animals in school (permanent or visiting).

Ensure animals' living quarters are kept clean and away from food areas. Waste should be disposed of regularly, and litter boxes not accessible to children. Children should not play with animals unsupervised. Veterinary advice should be sought on animal welfare and animal health issues and the suitability of the animal as a pet. In addition, it is preferable to avoid pets in the classroom to ensure a favourable school environment for students with asthma.

Precautions for School Visits to Zoos and Farms

Check that the farm is well-managed and that the grounds are as clean as possible. Note that manure and sick animals present a particular risk of infection and animals must be prohibited from any outdoor picnic areas. Check that the zoo / farm has washing facilities adequate and accessible for the age of the children visiting with running water, soap (preferably liquid) and disposable towels or hot air dryers. Any drinking water fountains should be appropriately designated in a suitable area. Explain to children that they cannot be allowed to eat or drink anything, including chips, sweets, chewing gum, etc., while touring the zoo / farm, or put their fingers in the mouth, because of the risk of infection. If children are in contact with or feeding animals, warn them not to place their faces against the animals or taste the animal feed.

Ensure all children wash and dry their hands thoroughly after contact with animals and particularly before eating and drinking. Meal-breaks or snacks should be taken well away from areas where animals are kept, and children warned not to eat anything which may have fallen to the ground. Any crops produced on the farm should be thoroughly washed in drinking water before consumption. Ensure children do not consume unpasteurised produce, for example milk or cheese. Ensure all children wash their hands thoroughly before departure and ensure that footwear is as free as possible from faecal material.

Vulnerable children

Unimmunized children as well as children with some medical conditions are vulnerable to infections that would rarely be serious in most children. These include those being treated for leukaemia or other cancers, those on high doses of steroids and those with conditions that seriously reduce immunity. School and nursery administrators and childminders will normally have been made aware of such children. It is advisable for these children to be immunized in accordance with the Bermuda Childhood Immunization Schedule in consultation with their physician. Additionally, these children are particularly vulnerable to chickenpox or measles and, if exposed to either of these, the parent/carer should be informed promptly and further medical advice sought.

Pregnancy

If a pregnant woman develops a rash or is in direct contact with someone with a potentially infectious rash, this should be investigated by a doctor. The greatest risk to pregnant women from such infections comes from their own child/children, rather than the workplace.

Chickenpox can affect the pregnancy if a woman had not already had the infection. The exposure should be reported to the GP and/or OB-GYN at any stage of exposure. The GP or OB-GYN will arrange a blood test to check for immunity.

Additionally, as shingles is caused by the same virus as chickenpox, anyone who has not had chickenpox is potentially vulnerable to the infection if they have close contact with a case of shingles.

If a pregnant woman comes into contact with German measles she should inform her GP and/or OB-GYN immediately to ensure investigation. The infection may affect the developing baby if the woman is not immune and is exposed in early pregnancy.

Slapped cheek disease (parvovirus B19) can occasionally affect an unborn child. If exposed early in pregnancy (before 20 weeks), inform GP and/or OB-GYN as this must be investigated promptly.

Measles during pregnancy can result in early delivery or even loss of the baby. If a pregnant woman is exposed she should immediately inform OB-GYN to ensure investigation.

Immunizations

Parents/Guardians should be encouraged to have their child immunised and to have any missed immunizations or further catch-up doses organised through the child's physician or the Department of Health.

Recommended Immunization Schedule for Healthy Infants Children and Adolescents (Bermuda, 2014)

Age	Disease Protection	Immunization
2 months	Diphtheria, Tetanus, Pertussis	DTaP
	Haemophilus influenzae B	Hib
	Polio	IPV
	Pneumococcal	PCV
4 months	Diphtheria, Tetanus, Pertussis	DTaP
	Haemophilus influenzae B	Hib
	Polio	IPV
	Pneumococcal	PCV
6 months	Diphtheria, Tetanus, Pertussis	DTaP
	Haemophilus influenzae B	Hib
	Polio	IPV
	Pneumococcal	PCV
7 months	Hepatitis B	HBV
8 months	Hepatitis B	HBV
12 months	Hepatitis B	HBV
15 months	Measles, Mumps, Rubella	MMR
15-18 months	Diphtheria, Tetanus, Pertussis	DTaP
	Haemophilus influenzae B	Hib
	Pneumococcal	PCV
24 months	Chickenpox	Varicella
4-6 years	Diphtheria, Tetanus, Pertussis	DTaP
	Polio	IPV
	Measles, Mumps, Rubella	MMR
11-18 years	Tetanus, Diphtheria	Td
Vaccine availability is dependent on worldwide production and supply.		

Immunization for influenza is recommended annually for all children from 6 months of age.

Children who present with certain risk factors may require additional immunizations.

Staff immunizations. All staff should be up to date with immunizations, especially those which protect against rubella, pertussis and influenza.

Appendix: Sample Letters to Parents and Notification Forms

Sample letter to parents (General Information)

Date:

Dear Parent or Guardian:

When a child becomes sick, a determination must be made whether the child should be kept home from school. Staying home when sick is an important way to help prevent the spread of germs that cause illnesses.

It is recommended that your child be kept home if he/she is not able to take part in normal school activities, the illness causes an unsafe or unhealthy place for others at school, or when the child requires care that cannot be managed at school.

Keep your child home if he/she has:

- A fever (Temperature over 100.4°F, especially if accompanied with behavior changes or other signs and symptoms of illness such as sore throat, rash, vomiting, diarrhea, earache, or irritability)
- Vomiting (2 or more times within 24 hours)
- Diarrhea (3 or more watery stools within 24 hours)
- An open or oozing sore (Unless it is properly covered with a bandage that will not leak any wound drainage)

There are many other infectious diseases that require a child to remain home from school for a period of time such as strep throat, pink eye, chickenpox, mumps and whooping cough (pertussis). Please check with the school first before your child returns to school if he/she has had any of these conditions or any other less common infectious disease.

Many diseases are preventable by vaccination including influenza (flu). For immunization information, contact the Department of Health at 278-6460.

Sincerely,

_____

School Administrator / Childcare Provider

Sample letter to parents (unwell child)

Date:

Dear Parent or Guardian:

Your son/daughter was unwell at _____ (school/ childcare facility) today.

When children are unwell, it is important to keep them out of contact with other children and staff. Following advice from the Department of Health, any child or staff member should remain out of _____ (school/childcare facility) for _____ (relevant exclusion period) to prevent the spread of the illness.

We kindly request that you adhere to the above exclusion period as having children who may have an infection around other children puts the other children at risk. In addition, we all have a responsibility to safeguard the health and well being of our children.

We hope your son/daughter is feeling better soon.

Sincerely,

_____

School Administrator / Childcare Provider

Sample letter to parents (potential outbreak)

Date:

Dear Parents and Guardians,

Recently we have experienced a high number of absences due to illness. Because of this, we are sending this informational letter to all families with children at _____ (school/ childcare facility).

Illnesses in schools and other childcare facilities are generally spread from person to person. Therefore, the key message of this letter is to continue to reinforce good hygiene and hand-washing. Good hand-washing should consist of using good scrubbing or friction for 20 seconds. Hands should be dried completely after washing. If using a hand towel for drying, the towel should be changed at least every day. If possible, paper towels may be best, especially during this time of increased illness. Additionally, noses and mouths should be covered whenever someone coughs or sneezes. This should be followed by hand-washing. If tissues are used, the used tissue should be immediately placed in the garbage.

We will be taking measures at _____ (school/ childcare facility) as well and redoubling our efforts to promote hand-washing and covering of coughs and sneezes.

If your child has become ill and you have not already alerted the school, please contact the school at _____ (phone) and provide as much information as possible regarding the illness.

Thank you for your help in controlling this sudden onset of illness.

Sincerely,

_____

School Administrator / Childcare Provider

Sample letter to parents (scabies)

Dear Parent/Guardian,

Your child may have been exposed to scabies. Scabies is a disease of the skin caused by burrowing of the scabies mite. The mite is transmitted through direct skin-to-skin contact or through sharing of an infested person's personal items such as clothing or bedding.

Please observe your child for intense itching (especially at night) and rash. Rash on the head, face, neck, palms and soles of the feet are often seen in infants and young children. Young children and infants may also develop blister-like lesions on the scalp, neck, palms and soles of the feet.

Symptoms usually appear within **two** to **six** weeks after coming in contact with a person who has scabies. Persons who have had scabies before may have symptoms appear within one to four days.

Treatment Recommendations

If you are concerned that your child or anyone else in your family may have scabies, please see your family doctor. If necessary, your doctor will be able to prescribe medications that can kill the scabies mite. Usually one application of a prescription scabicide is adequate to treat scabies. It is recommended that if your child has scabies, the entire family should be treated. Please discuss this with your doctor.

Cleaning & Disinfecting

Scabies mites do not survive more than 2-3 days away from human skin. Items such as bedding, clothing, and towels used by a person with scabies can be decontaminated by machine-washing in hot water and drying using the hot cycle or by dry-cleaning. Items that cannot be washed or dry-cleaned can be decontaminated by removing from any body contact for at least 72 hours. If possible, such items should be placed in plastic bags and tied securely for at least 4 days.

Fumigating rooms and using insecticidal sprays on furniture, infant carriers, child car seats and carpets are not recommended for cases of common scabies. Thorough cleaning and vacuuming of these items and surfaces is sufficient.

Exclusion

Children who have scabies should be excluded from school and/or extracurricular activities until the first treatment has been completed.

Sincerely,

_____

School Administrator / Childcare Provider