Chapter 2: Outbreaks

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Awareness and identification

Early awareness and action are crucial to identifying an outbreak at your child care centre:

- Keep a daily logbook to track any increase in illness at the centre
- Early identification of an outbreak will help prevent further spread of illness in your centre. Call public health when an increase of symptomatic children presenting with similar symptoms on the same day or successive days. For more information on determining an outbreak:
  - See managing a respiratory outbreak
  - See managing a gastroenteritis outbreak
  - See managing a non-reportable outbreak (i.e. hand, foot and mouth disease)
- Refer to your centre's written infection prevention and control (IPAC) policies and procedures:
  - Management and exclusion of symptomatic children and staff
- Identification and reporting of outbreaks. Follow proper infection prevention and control measures for symptomatic children and staff (see managing illness).
- Active screening is not required unless specified in your centre's policy. Children and staff should self-screen each day before attending the child-care centre and promptly communicate symptoms to the centre's supervisor or designate.

If a disease of public health significance is identified, report to Niagara Region Public Health to determine if there could be an outbreak by calling 905-688-8248 or 1-888-505-6074, ext. 7590.

Roles and responsibilities

Public Health

- Determine and declare outbreaks for diseases of public health significance
- Recommend measures for outbreak infection prevention and control
- Conduct on-site inspections when an outbreak is declared
- Inform staff about the specific illness or disease of public health significance
- Help to identify children and staff considered susceptible to infection, such as those unimmunized for certain diseases
- Provide information for parents or caregivers
- Provide information on medications and immunization for contacts when appropriate

Child Care Centre

- Monitor children daily for signs and symptoms of infection
- Have written policies and procedures on how to report and manage outbreaks
- Follow recommendations provided by Public Health for outbreaks
- Report changes or provide updated information about the outbreak daily, such as the line list
- Provide information to families of children attending the centre
- Self-declare and manage non-reportable outbreaks

Parents / Guardians of Children

- Communicate with the child-care centre when children have signs or symptoms of infection
- Follow the child-care centre's policies for exclusion and return to child care
- Review communication sent from child-care centre or public health and follow recommendations
- Seek a health care provider for assessment of a symptomatic child when necessary

Gastroenteritis outbreaks



Declaring the outbreak: Gastroenteritis outbreaks are common in child-care centres and are most often caused by viruses such as norovirus or rotavirus. Viral gastroenteritis spreads quickly in centres through the fecal-oral route, often by contaminated objects such as toys, symptomatic food providers, improper diaper or toileting practices or contaminated food. Occasionally, outbreaks have been caused by bacteria (such as E. coli) or parasites (such as Giardia). Gastroenteritis outbreaks of all causes are reportable, managed, and declared over by public health.

An outbreak may be declared when **two** or more children or staff have at least two bouts of vomiting and or diarrhea, or one bout each of vomiting and diarrhea, within a 48 hours and within the same area of the child-care centre (such as two cases within the toddler room).

Typical symptoms of gastroenteritis:

- Diarrhea
- Bloody diarrhea (advise to seek medical assessment promptly)
- Vomiting
- Nausea
- Stomach cramps
- Fever (above 37.8 C)
- General irritability
- Headache

Steps to managing a gastroenteritis outbreak:

Step 1: Call Public Health at 905-688-8248 or 1-888-505-6074 ext. 7590 to speak with a Public Health nurse to determine if you have an outbreak.

Ensure you have the following information available when you call:

- Number of children symptomatic
- Number of staff symptomatic
- The area(s) affected in your facility
- Dates of onset of symptoms for each case
- The last date the symptomatic child / staff was in the centre
- Symptoms for each case including the number of bouts of diarrhea and / or vomiting
- If any children or staff are hospitalized or seeking medical assessment (if known)

Or complete a LINE LIST with the information to send to the Public Health Nurse to review.



Step 2: A Public Health nurse will review general outbreak infection prevention and control measures and work with you to develop a case definition. A case definition identifies who is added to the line list. Public Health will assign an outbreak number.

Step 3. Create a line list. A line list identifies the number of new cases each day, including children and staff.

- List all symptomatic children on one tab and staff on another tab who meet the case definition chronologically in order of when the illness started
- Complete all information required on the line list. You may have to contact the parents or caregivers to obtain accurate information.
- Record those that may have been part of the outbreak and are not present at the centre and those that are admitted to hospital
- Do not record the same ill person more than once
- Update the line list daily and report new information to Public Health
- Do not remove names of resolved cases from the line list; add each new case to the existing line list
- Email an updated line list daily to Public Health at outbreak@niagararegion.ca

Step 4: Review and implement outbreak infection prevention and control measures in your facility

- Post outbreak signs at entrances and in the affected area. Public Health provides signs.
- Provide communication to parents or caregivers, such as email, letters and a communication board, alerting to the outbreak, the signs or symptoms to monitor for, the outbreak measures in place and exclusion reminders
- Inform outside agencies that use the child care centre of the outbreak
- Separate ill children from well children and arrange for prompt pick up. See managing illness chapter for more information.
- Minimize the movement of children and staff between age groups and rooms where possible, including before and after school programs
- Provide more frequent reminders of hand hygiene with staff and children

- Review the importance of proper glove use when toileting and diapering children with staff. Glove use should not be used as a substitute for proper handwashing.
- Initiate enhanced environmental cleaning and disinfection. Public Health will review procedures during the site visit:
    - All toys and high contact surfaces should be cleaned and disinfected daily
    - Use of a broad-spectrum virucide is recommended for the disinfection of toys, change tables and high-contact surfaces
        - Examples of high contact surfaces include counters, doorknobs, light switches, toilet handles, sink tap handles, handrails, electronics (cell phones, tablets, iPads, head sets, gaming devices, remotes), tables, chairs, etc. For frequency of cleaning, see routine cleaning and disinfecting schedule.
    - Inform outside cleaning companies about the outbreak and review cleaning, and disinfecting products and practices
    - Soiled diapers and clothing must not be rinsed or washed at the centre. Soiled diapers and clothing should be emptied into the toilet, placed in a securely tied plastic bag and sent home with parents or caregivers.
- Exclude symptomatic children and staff until they are symptom-free for 48 hours (exclusion period may vary based on cause of illness); this includes being fever-free without the use of fever-reducing medicine for 24 hours before returning to child care.
- Suspension of activities:
    - Activities between children should be limited to the same age group or room (i.e. cohorting)
    - Visitation from outside people or groups should not be permitted
    - Discontinue group outings, including field trips and group events held at the centre (i.e. open house, parent night)
    - Suspend sensory and soft play, such as wet and dry sensory tables, sand boxes, play dough, and items that require laundering to be cleaned or cannot be disinfected between uses (i.e. stuffies, dramatic play clothes)
- Inform parent(s) or caregiver(s) with new child enrolments of the outbreak and postpone tours
- Staff should only work at the outbreak centre, not other child care centres. If asymptomatic and they choose to work at another centre, they must wait 48 hours after working at the outbreak child care centre and inform the non-outbreak child care centre supervisor.



Step 5: A Public Health inspector will visit your facility for an inspection.

Step 6: Collect specimen(s)

- When food or water is the suspected source of a gastrointestinal outbreak, it may be recommended to collect specimens; your Public Health Nurse and Public Health Inspector will speak with you about this if recommended
- Encourage parents to speak with their child's doctor about collecting stool specimens and provide the outbreak number to parent to provide to their health care provider. Children with bloody diarrhea should always be assessed by a health care provider promptly, as this may be a sign of a bacterial infection (i.e. E. coli).

Food samples

- Food samples should be held and collected for the duration of the outbreak. If there's a suspected link between the outbreak and the food, food samples will be collected and submitted to the Public Health laboratory for analysis by a Public Health Inspector.

Declaring a gastroenteritis outbreak over

Public Health shall declare whether an outbreak is over in consultation with the child care centre. The Medical Officer of Health retains the final authority to determine if an outbreak is over.

The outbreak may be declared over when certain criteria are met. The end of an outbreak is determined on a case-by-case basis and varies by the cause or suspected cause of the outbreak. For example, most outbreaks in child care centres are due to viral gastroenteritis (i.e. Norovirus), and Public Health may recommend that the outbreak can be declared over five days from the last symptomatic child or staff (from the affected area) attending the child care centre. Less commonly, gastroenteritis outbreaks can be declared over 48 hours after the last symptomatic child or staff (from the affected area) last attended the child care centre.

Respiratory outbreaks



Declaring the outbreak: Respiratory outbreaks are common in child care centres in the fall and winter months and are most frequently caused by viruses (i.e. influenza or COVID-19). Respiratory viruses spread quickly in centres through contact with bodily fluids from coughing, sneezing, nasal discharge and by contact with contaminated objects (i.e. toys, crayons, playdough) and surfaces. Respiratory outbreaks of all causes are reportable and will be declared by Public Health. A Public Health Nurse will provide your centre with recommendations to stop the spread of illness and a Public Health Inspector will visit. The management and declaring of the outbreak will be the child care's responsibility.

Respiratory Outbreak Definition: three or more children and or staff with two or more new or worsening respiratory signs and symptoms, within a 48-hour period and within the same area of the child care centre (such as three cases within the toddler room).

Typical symptoms of respiratory illness are:

- Fever (above 37.8 C)
- Cough
- Shortness of breath
- Runny nose
- Sore throat
- Congestion (nasal and or chest)
- Generally unwell / fatigue
- Gastrointestinal symptoms (nausea, vomiting, diarrhea, abdominal pain)
- Headache
- Pink eye
- Decreased or lack of appetite
- Decreased sense of smell or taste
- Joint or muscle pain

Steps to managing a respiratory outbreak:

Step 1: Call Public Health at 905-688-8248 or 1-888-505-6074 ext. 7590 to speak with a Public Health nurse to determine if you have an outbreak.

Ensure you have the following information available when you call:

- Number of children symptomatic
- Number of staff symptomatic
- The area(s) affected in your facility
- Dates of onset of symptoms for each case
- The last date the symptomatic child / staff was in the centre
- Symptoms for each case
- If any children or staff are hospitalized or seeking medical assessment (if known)

Or complete a LINE LIST with the information to send to the Public Health Nurse to review.

Step 2: Create a line list. A line list identifies the number of new cases each day, including children and staff.

- List all symptomatic children on one tab and staff on another tab who meet the case definition chronologically in order of when the illness started
- Complete all information required on the line list. You may have to contact the parent(s) / caregiver(s) to obtain accurate information.
- Record those that may have been part of the outbreak and are not present at the centre and those that are admitted to hospital
- Do not record the same ill person more than once
- Update the line list daily and report new information to Public Health
- Do not remove names of resolved cases from the line list; add each new case to the existing line list
- Keep line list accessible for staff responsible for reviewing cases

Step 3: A Public Health Nurse will review general outbreak infection prevention and control measures and will follow up with an email summarizing the recommendations.

Step 4. A Public Health inspector will visit your facility for an inspection.

Step 5: Review and implement outbreak infection prevention and control measures in your facility.

- Post outbreak signs at entrances and affected area. Public Health provides signs.
- Provide communication to parents or caregivers, such as email, letters and a communication board alerting to the outbreak, the signs and symptoms to monitor for, the outbreak measures in place and exclusion reminders
- Inform outside agencies that use the child care centre of the outbreak
- Separate ill children from well children and arrange for prompt pick up. See Preventing and Managing Illness for more information.
- Minimize the movement of children and staff between age groups and rooms where possible
- Encourage respiratory etiquette, such as covering coughs and sneezes, and using tissue
- Reinforce the importance of hand hygiene with staff and children



- Initiate enhanced environmental cleaning and disinfection. A Public Health inspector will review procedures during the site visit:
  - All toys and high contact surfaces should be cleaned and disinfected daily
  - Use of a broad spectrum virucide is recommended for the disinfection of toys, change tables and high-contact surfaces. Examples of high contact surfaces include counters, doorknobs, light switches, toilet handles, sink tap handles, handrails, electronics (cell phones, tablets, iPads, head-sets, gaming devices, remotes), tables, chairs, etc. For frequency of cleaning, see Routine cleaning and disinfecting schedule
  - Inform outside cleaning companies about the outbreak and review cleaning and disinfecting products and practices
- Exclude symptomatic children and staff until:
  - They have no fever (without the use of fever reducing medications) for 24 hours before returning to the child care facility **and**
  - Their other symptoms (i.e., cough, runny or stuffy nose, sore throat) are improving for 24 hours and no new symptoms
  - Some respiratory viruses can present with gastrointestinal symptoms as well as respiratory (i.e. influenza, COVID-19). If diarrhea or vomiting are symptoms, symptomatic children and staff with diarrhea or vomiting should be symptom free for at least 48 hours before returning, in addition to the criteria above.

- Suspension of activities:
  - Activities between children should be limited to the same age group or room (i.e. cohorting)
  - Visitation from outside people or groups should not be permitted
  - Discontinue group outings, including field trips and group events held at the centre (i.e. open house, parent night)
  - Suspend sensory play, such as wet or dry sensory tables, sand boxes, play dough and items that require laundering to be cleaned or cannot be disinfected between uses (i.e. stuffies, dramatic play clothes)
  - Inform parents or caregivers with new child enrolments of the outbreak and postpone tours
- Staff should only work at the outbreak centre, not other child care centres. If asymptomatic and they choose to work at another centre, they should wait three days after working at the outbreak child care centre and inform the non-outbreak child care centre supervisor.

Step 6: Public Health will not be actively managing the outbreak but is still available for support. If there are any questions about the outbreak, call Environmental Health at 905-688-8248 or 1-888-505-6074 ext. 7590 or connect with your area Public Health nurse or Public Health inspector.



Declaring respiratory outbreak over:

The child care centre is responsible for declaring the respiratory outbreak over. The outbreak may be declared over after five days from the last day a symptomatic child or staff (from the same area of the child care centre attended the centre.

Managing non-reportable illness outbreaks

This section outlines the infection prevention and control (IPAC) approach to managing non-reportable common childhood illnesses in child care settings. Although these illnesses do not require formal reporting to public health, they remain an important part of everyday disease prevention and outbreak management, as they can affect the health of children and staff, disrupt attendance, and contribute to the spread of infection within the program.

Common non-reportable childhood illnesses that commonly spread in child-care centres can include:

- Hand, foot and mouth disease
- Fifth disease (parvovirus B19)
- Pink eye
- Pinworms
- Lice
- Scabies
- Impetigo
- Ringworm
- Molluscum contagiosum

More information on common childhood diseases can be found in the Preventing and Managing Illness chapter.



Step 1: Determine if this meets outbreak definition. A non-reportable outbreak may be identified when two or more children are experiencing similar symptoms (i.e., a new rash) or a physician diagnosis of the same disease in the same classroom on the same day or successive days.

- If able, check with parents if there could be an exposure to these children outside of the home (i.e. symptomatic household member)
- Consider when the child was last in the child care centre
- Consider starting a line list to track the cases
- Determine case definition based on the symptoms of the affected children / staff (i.e. fever, rash)
- Determine what area of the facility is affected by the outbreak. We recommend extending the outbreak to the entire facility if two or more areas (i.e. Classrooms or floors) are affected.
- You can consult with a public health nurse by calling the duty officer Monday to Friday between 8:30 a.m. and 4:30 p.m. at (905) 688-8248, extension 7590.



Step 2: Review and implement outbreak infection prevention and control measures in your facility.

- Continue to monitor children and staff in the affected outbreak area and non-affected outbreak areas. If cases are identified in unaffected areas, consider extending the outbreak to the whole facility.
- Provide communication to parent(s) or caregiver(s), such as email, letters, and communication board alerting to the outbreak, the signs and symptoms to monitor for, the outbreak measures in place and exclusion reminders
- Inform outside agencies that use the child care centre of the outbreak
- Separate ill children from well children and arrange for prompt pick up. See Preventing and Managing Illness chapter for more information.
- Minimize the movement of children and staff between age groups and rooms where possible
- Encourage respiratory etiquette, such as covering coughs and sneezes, and using tissues
- Provide more frequent reminders for hand hygiene with staff and children
- Initiate enhanced environmental cleaning and disinfection:
    - Clean and disinfect all toys and high contact surfaces daily
    - Use a broad-spectrum virucide to disinfection toys, change tables and high-contact surfaces. Examples of high-contact surfaces include counters, doorknobs, light switches, toilet handles, sink tap handles, handrails, electronics (cell phones, tablets, iPads, headsets, gaming devices, remotes), tables, chairs, etc. For frequency of cleaning see routine cleaning and disinfecting schedule.
    - Inform outside cleaning companies about the outbreak and review cleaning / disinfecting products and practices

- Exclusion of children is based on the cause of the outbreak. In general:
  - Follow usual exclusion criteria based on presenting symptoms such as fever, diarrhea, vomiting and respiratory symptoms
  - If the child has an undiagnosed rash, recommend the child see a health care provider to determine if contagious and exclusion recommendations
  - Treatment may be recommended for an infected child or staff to return (i.e. scabies, lice, impetigo)
  - See Managing Illness section for more information on specific common childhood diseases and their exclusion periods
- Suspension of activities:
  - Activities between children should be limited to the same age group or room (i.e. cohorting)
  - Visitation from outside people or groups should not be permitted
  - Discontinue group outings, including field trips and group events held at the centre (i.e. open house, parent night)
  - Suspend sensory and soft play, such as wet or dry sensory tables, sand boxes, play dough and items that require laundering to be cleaned or cannot be disinfected between uses (i.e. stuffies, dramatic play clothes)
- Inform parent(s) / caregiver(s) with new child enrolments of the outbreak and postpone tours
- Staff should only work at the outbreak centre, not other child care centres. If asymptomatic and they choose to work at another centre, they should inform the supervisor before shift for directions.

Step 3: Public Health will not be actively managing the outbreak but is still available for support. If there are any questions about the outbreak, call Environmental Health at 905-688-8248 or 1-888-505-6074 ext. 7590 or connect with your area Public Health nurse and Public Health inspector.



Step 4. Declaring outbreak over. The child care centre is responsible for declaring the outbreak over when the centre is back to its normal baseline (usual number of children who are symptomatic for the centre).