

Guidelines for the control of gastrointestinal outbreaks

Early Childhood Centres

April 2019

Public Health Unit

(07) 838 2569/021 999 521

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Outbreak flow chart

Phase 1 – Reducing the risk

By implementing everyday health and good hygiene practices, Early Childhood Centres (ECE) can reduce the risk of an outbreak occurring.

Phase 2 – Getting ready

Preparing for an outbreak will help ensure that an ECE is able to respond appropriately when one occurs.

Phase 3 – Responding to an outbreak

An outbreak should be suspected if **two or more children or staff** at an ECE become ill (with diarrhoea and/or vomiting) within a few days of each other.

As soon as an outbreak is suspected, centre management should:

- **Let the Public Health Unit know**

Call the Public Health Unit on (07) 838 2569 or 021 999 521 and ask for the duty Health Protection Officer.

Alternatively, email health.protection@waikatodhb.health.nz

- **Arrange samples**

A Health Protection Officer will assist centre management in the collection of faecal samples from two or three sick people to help determine the cause of the outbreak.

- **Implement control measures**

The following outbreak control measures need to be put in place as soon as possible:

- **Isolation and exclusion** of sick children and staff
- **Increased focus on hand hygiene**
- **Wearing appropriate personal protective equipment**
- **Increased cleaning** of the centre
- **Notification** to staff, parents, care givers, and visitors
- **Operational restrictions**

Phase 4 – Recovering from an outbreak

By following an outbreak recovery process, ECE's will be able to recover from an outbreak as quickly as possible.

Please read the **Guidelines for the control of gastrointestinal outbreaks** for more information about the four phases outlined above.

Introduction

ECE's play an essential role in the education, health, and lives of pre-school children. Unfortunately, they may also present health risks to children, staff and other people who spend time there.

Disease transmission within ECE's can also have wider health implications, particularly for the family, caregivers and friends of children who attend the centre.

The aim of these guidelines is to assist centre management and staff to reduce the risk of outbreaks and effectively manage outbreaks of gastrointestinal illness if they occur - by limiting the spread of illness, both within a centre, and the wider community.

Following these guidelines will help to:

- **Detect outbreaks as early as possible and act appropriately**
- **Reduce illness and absences for children and staff who attend the centre**
- **Reduce the risk of spreading disease to other centre users and the wider community**

These guidelines focus on the four phases of outbreak management; reducing the risk of an outbreak occurring, making sure the centre is ready for an outbreak, responding appropriately, and recovering properly once an outbreak is over.

Following the recommendations made in these guidelines will also demonstrate compliance with the Education (Early Childhood Services) Regulations 2008 by promoting the good health and safety of children, preventing the spread of infection, and ensuring that the premises are maintained regularly, used safely, and kept free from hazards.

Frequently asked questions

What is an outbreak?

An outbreak of gastrointestinal illness is defined as **two or more people** with symptoms including vomiting and/or diarrhoea that are linked by time, place or person. If two or more staff or children at an Early Childhood Centre become ill (with diarrhoea and/or vomiting) within a few days of each other, an outbreak should be suspected.

What is the Public Health Unit?

The Public Health Unit is a service provided by the Waikato District Health Board that focuses on health protection, health promotion, and health improvement. One of the responsibilities of the Public Health Unit is to provide assistance to Early Childhood Centres when outbreaks of gastrointestinal illness occur.

How can the Public Health Unit help?

A Health Protection Officer will be available to offer support and provide public health advice. Health Protection Officers can also assist centres by; verifying that an outbreak is taking place, providing advice on prevention and control measures, co-ordinating stool specimens and helping to identify the cause of the outbreak. The officer will be in regular contact during the outbreak and may visit the centre.

When should I contact the Public Health Unit?

Centre management should contact the Public Health Unit as soon as an outbreak is suspected. That way, we can assist with implementing the appropriate control measures as soon as possible. Informing us early will help to reduce the spread of the illness within the centre and the wider community.

The Public Health Unit will also welcome contact from centres regarding other childhood illnesses and health improvement opportunities e.g. milk and water only policies.

How do we contact the Public Health Unit?

The person in charge should call the Public Health Unit on **(07) 838 2569** or **021 999 521** and ask for the duty Health Protection Officer. Alternatively, centre management can email the Public Health Unit (health.protection@waikatodhb.health.nz) when an outbreak is suspected.

How are the illnesses that cause these outbreaks spread?

Gastrointestinal outbreaks can be caused by many different viruses and bacteria, and are usually spread by person-to-person transmission. This can occur through contact with faecal matter or by direct contact with a sick person and their body fluids. Gastrointestinal illness can also be spread through contact with contaminated objects and surfaces within the centre, such as; toilets, sinks, door handles, and toys.

Why are ECE's 'high risk' environments?

Centres are high risk environments for the spread of illnesses that lead to outbreaks for reasons including; the close contact between children, food and toy sharing, the 'mouthing behaviours' of young children, and the activities that take place (such as nappy changing). Young children are also at particular risk due to their developing personal hygiene habits and immune systems.

When should faecal samples be taken?

The Health Protection Officer can guide on this. It is best to aim for two to three stool samples from different ill children/staff.

Ideally, faecal samples should be taken while people are still ill, and as soon as possible after an outbreak is identified. Excretion of microorganisms does persist for some days. As a result, sampling can be considered from people for up to 10 days after the onset on diarrhoea and/or vomiting. Please discuss this with the Health Protection Officer.

What are centre management, staff and users responsible for?

Centre management and staff have a responsibility to protect children and other centre users in the event of an outbreak. It is the responsibility of the person in charge to assess the health of anyone coming into the centre and to take necessary action. Centre users should be encouraged to inform management if they are suffering from symptoms of vomiting and/or diarrhoea. Further information is available in the [Education Act 1989](#).

When is an outbreak over?

The Health Protection Officer that supported the centre through the outbreak control will let the manager know when the outbreak can be declared over. Outbreaks are usually declared over eight days after the onset of symptoms for the last person with diarrhoea and/or vomiting. Control measures should be kept in place for the duration of the outbreak.

Phase 1: Reducing the risk

There are a number of everyday practices that can help limit in the spread of illness within ECE's. These practices are important factors in reducing the risk of children and staff becoming unwell.

Incorporating the following practices into normal centre routines will help to reduce the risk of an outbreak taking place within an ECE.

Outbreak risk reduction/Business as usual:

- **Encourage proper hand hygiene**
- **Hold regular training sessions to review the hygiene practices of children and staff**
- **Encourage the use of an alcohol based hand sanitiser when people arrive at or leave the centre**
- **Clean the centre at least once a day using a bleach solution.**
- **Isolate children who become ill while at the centre**
- **Exclude sick children and staff until they have been symptom free for a minimum of 48 hours**
- **Encourage children and staff to use an appropriate cough/sneeze technique**
- **Wear appropriate personal protective equipment when required**
- **Encourage timely immunisation of staff and children who attend the centre**
- **Review centre lay-out, policies, and practices**
- **Encourage staff, children and visitors to inform centre management if they are feeling unwell**
- **Ensure that centre staff understand and observe centre policies**

Please contact the Public Health Unit for more information about outbreak risk reduction practices.

Phase 2: Getting ready

Being prepared for an outbreak is an important part of being able to respond appropriately when one takes place. As part of this preparation, effective policies and schedules need to be developed before an outbreak occurs.

Policies, schedules and outbreak response practices should include specific advice for centre management, staff, children, and visitors to the centre. A Health Protection Officer can provide guidance around developing these documents.

We hope all centre managers and staff are aware of centre policies and procedures and be able to refer to them during an outbreak. Please contact us if we can offer support in outbreak preparation.

Outbreak preparation:

- **Have a copy of these guidelines close at hand**
- **Ensure that staff, children and parents are familiar with the centre's infection control policies and procedures**
- **Develop a robust cleaning schedule to implement during outbreaks**
- **Keep a register of the immunisation status of each child that attends the centre**
- **Ensure adequate supplies of personal protective equipment, bleach, cloths and other cleaning materials are on hand**
- **Assemble a spill kit and keep it ready to use**
- **Print off and laminate copies of signs to warn centre users when an outbreak is suspected**
- **Carry out 'practice sessions' on outbreak preparation and response to ensure that the centre is ready for an outbreak**
- **Ensure that staff know to contact the Public Health Unit as soon as an outbreak is suspected**

Please contact the Public Health Unit for more information about preparing for an outbreak.

Phase 3: Responding to an outbreak

Let us know, we want to help

As soon as an outbreak is suspected within a centre, the person in charge should contact the Public Health Unit on **(07) 838 2569** or **021 999 521** and ask for the duty Health Protection Officer.

The **outbreak management checklist** (see page 15) and **illness register** (see page 16) also need to be completed and faxed (07 838 2382) or emailed to the Public Health Unit at the beginning of the outbreak (health.protection@waikatodhb.health.nz).

The **illness register** should be kept up to date and sent to the Public Health Unit every two or three days if more people become sick.

Arrange samples

During an outbreak, collecting two or three faecal samples from people who are sick can help to determine the cause of the illness. The Health Protection Officer who is supporting the centre can provide advice around how to obtain these samples.

An outbreak number will be provided to centre management so that any samples that are collected can be linked to the outbreak. The outbreak number needs to be recorded on the analysis form that accompanies each sample to the laboratory.

This number should then be given to excluded staff and the parents of excluded children for any faecal samples that may be obtained if a doctor is visited.

Implement control measures

The fundamental principle of controlling a gastrointestinal outbreak is to reduce the spread of illness within a centre. As a result, the following control measures should be put in place as soon as an outbreak is suspected at a centre.

- **Isolation and exclusion of sick children and staff**
- **Increased focus on hand hygiene**
- **Wearing appropriate personal protective equipment**
- **Increased cleaning of the centre**
- **Notification to staff, parents, care givers, and visitors that an outbreak is occurring**
- **Operational restrictions**

Control measures

Isolation and exclusion

Isolation

- It is really important that centre users who experience symptoms of diarrhoea and/or vomiting while they are at the centre are sent home immediately
- Children who become ill but cannot be sent home straight away should be isolated until they are collected by their parents/caregivers
- A designated staff member should look after sick children who are in isolation
- Isolation areas should be well-ventilated, warm, and provide sleeping facilities appropriate to the ages of children. They should be separate from all food preparation and sleeping areas.
- Ideally, children in isolation should have access to a dedicated toilet/hand washing facility. These areas should be cleaned each time they are used.

Exclusion

- If a staff member becomes unwell (with vomiting and diarrhoea) outside of work they should advise the centre manager that they are ill and not come in
- Sick staff and children are safe to return to the centre only after they have been well for a minimum of **48 hours**. This allows a safety margin for those that may have a relapse in their symptoms, and to allow clearance of infectivity.
- Some infections require sick children and staff to provide a faecal sample to demonstrate that the illness is no longer present. The Health Protection Officer supporting the centre can guide the people concerned and centre management through this process.
- People who have been excluded can still spread the disease after they have returned to the centre. As a result, there should be increased vigilance on hand hygiene for those returning from exclusion.

Hand hygiene

- Good hand hygiene is vital to stop the spread of illness and should be actively encouraged for staff, children, and visitors. This is especially true during an outbreak.
- Hands should be washed using the **20/20 rule** (see page 22)
- Staff should wash their hands before and after providing care to all children using proper hand washing technique
- All children, staff, and visitors should be asked to use hand sanitiser when they arrive at the centre and just prior to leaving. Management should monitor the use of hand sanitiser to ensure that it is being used appropriately.
- Hand sanitiser is not a substitute for hand washing but does provide a temporary barrier. The sanitiser must contain at least 70% alcohol to be effective and it needs to dry on hands to minimise the spread of germs. Hand sanitiser is not always effective against norovirus
- Hand sanitisers should be used in addition to, but not as a substitute for, proper hand hygiene

Personal protective equipment

- Single use, well-fitting gloves are required when contact with body fluids is anticipated, such as during nappy change/cleaning up vomit or faeces
- Hands should always be washed following the removal of gloves
- Disposable aprons should be worn whenever there is a risk of contaminating clothing with body fluids. Aprons must be stored so that they do not accumulate dust, as this can act as a breeding ground for microorganisms.
- If masks are available, they should be worn, especially when cleaning toilets during an outbreak
- Soiled personal protective equipment should be bagged and discarded appropriately after use in order to prevent the transmission of illness within the centre

Cleaning

- A strict cleaning regime needs to be maintained and an appropriate **outbreak cleaning schedule** (see page 17) should be followed
- The Public Health Unit recommends cleaning surfaces with hot water and detergent followed by **sanitising with bleach** (see page 18)
- Centres should be cleaned at least twice daily during an outbreak and any surfaces that become visibly soiled should be cleaned immediately
- When cleaning, particular emphasis should be placed on high risk surfaces such as nappy change areas, bathrooms and door handles
- If the centre employs a cleaning contractor, they need to be aware of the need for more frequent cleaning at the centre during an outbreak and follow the outbreak cleaning schedule
- Cleaning should be carried out using clean disposable cloths, dedicated mops, and buckets. Disposable gloves, aprons and masks should be worn.
- Hard toys should be washed in a dishwasher that has a sanitising cycle or soaked in a bleach solution for 30 minutes, rinsed, and allowed to air dry (preferably in sunlight). Soft toys should be washed in a washing machine on a hot cycle.
- Carpets and soft furnishings with visible soiling need to be cordoned off, then wiped with detergent and warm soapy water, followed by steam cleaning
- Staff should change their clothing before leaving the centre and either wash their clothing at work or bag the items and take them home. If clothing worn at work is washed at home, items should be washed separately on a hot wash.
- All used mops and reusable cloths need to be soaked in a fresh bleach solution for 30 minutes, then washed on a hot cycle

Notification

- Staff and children who attend the centre have a right to know about any outbreak that they may be exposed to and what they can do to avoid infection
- People should also be given advice on what to do if they develop symptoms
- A **warning sign** (see page 20) should be placed at the entrance to the centre to inform all centre users and visitors that an outbreak of gastrointestinal illness is taking place. This sign should stay in place until the outbreak is over.
- A **letter or notice** (see page 21) should also be sent home to parents/whānau of children who attend the centre, informing them of the outbreak and providing information about limiting its spread in the wider community
- Centre management should also take additional steps to ensure that centre users are aware of the outbreak. These steps include posting it on the centre website, Facebook page, or via other appropriate media.

Operational restrictions

- The risk of spreading a gastrointestinal illness within an ECE can be reduced by limiting the movement of children within the centre
- The wider spread of illness can also be reduced by postponing planned events and excursions from the centre until after the outbreak, these can be discussed with the Health Protection Officer
- Soft and wooden toys should be stowed away during an outbreak, and not used again until the outbreak is declared over
- Restrictions on certain activities such as water play, baking, playing in the sand pit, and using playdough will also help to reduce the risk of spreading the illness between centre users
- Limiting the number of visitors to the centre is an important barrier to the potential spread of the illness to the community
- Any temporary/relief staff brought in to work during an outbreak should wait for three days before working in any other centres. This is to ensure that the temporary staff member has not caught the illness.
- No new children should start attending the centre until the outbreak is over

Phase 4: Recovering from an outbreak

Once an outbreak is declared over, the recovery phase begins. Getting this part of the process right will allow centres to return to business-as-usual as soon as possible.

Steps to recovery

- **A debrief should be conducted by centre management and staff in order to identify what went well and what processes could be improved upon**
- **This debrief should include a review of any recommendations made by the Health Protection Officer that supported the centre through the outbreak**
- **Stock levels of protective clothing, disinfectant, cloths, buckets and other cleaning materials need to be checked after the outbreak**
- **Items that were used should be replenished so that there is an appropriate amount of supplies on hand**
- **Curtains, carpets and floors at the centre should be steam cleaned after the outbreak is over**
- **Centre management and representatives of the Public Health Unit should continue to work together during this phase to ensure that the risk of a subsequent outbreak is sufficiently reduced**

Outbreak management checklist

Centre name: _____

Address: _____

Telephone: _____

Contact person: _____

Date: _____

Number of staff: _____ Number of children: _____

Protective measures	Steps to take	Done
Isolation and exclusion	<ul style="list-style-type: none"> ▪ Children who become sick at the centre are isolated ▪ Sick children and staff are excluded until they have been completely well for 48 hours ▪ The health of staff, children and visitors is checked 	
Hand hygiene	<ul style="list-style-type: none"> ▪ Hand hygiene protocols are in place ▪ Adequate supplies of soap/paper towels available ▪ Hand sanitiser used when people enter and leave ▪ Increased vigilance for those returning from exclusion 	
Personal protective equipment (PPE)	<ul style="list-style-type: none"> ▪ PPE is worn when required ▪ Adequate supplies of gloves, aprons, and masks are available ▪ Systems are in place for the disposal of used PPE 	
Cleaning	<ul style="list-style-type: none"> ▪ The recommended bleach based solution is being used to clean the centre ▪ Outbreak cleaning schedule has been implemented ▪ Visibly soiled surfaces are cleaned immediately ▪ Soiled clothing and linen is handled appropriately ▪ Soft furnishings/carpet steam cleaned 	
Notification	<ul style="list-style-type: none"> ▪ Parents/care givers notified of the outbreak ▪ Warning signs have been put up ▪ Notification of outbreak on centre website/social media 	
Operational restrictions	<ul style="list-style-type: none"> ▪ Restrictions on visitors and enrolments in place ▪ Sand pit and/or paddling pool off limits ▪ Events/excursions postponed ▪ Soft toys and play dough put away 	

Illness register

Centre name: _____

Name	Child/Staff	Room	Age	M/F	Symptoms	Date of first symptoms	Symptom duration	Action (Excluded, sample taken etc)

Outbreak cleaning schedule

Bathrooms

Item	Frequency	Method
Toilets Sinks/taps Floor Door handles	At least twice a day (immediately if soiled)	Use bleach solution Bleach 'wipes' should also be used on surfaces at regular intervals
Nappy change area Shower Toilet for children in isolation Potties	After every use At least twice a day minimum	Use bleach solution Bleach 'wipes' can be used if required 10 minute contact time is not possible

Sleep areas

Item	Frequency	Method
Cot railings	At least twice a day	Bleach based 'wipes'
Isolation area	At least twice a day	Use bleach solution
Linen Mattress covers	Daily (immediately if soiled)	Cleaned according to centre policies Hot machine wash for linen

General areas

Item	Frequency	Method
Carpets Soft furnishings Curtains	If soiled	Clean affected area using hot soapy water. Steam clean.
Floors Door handles	At least twice a day (immediately if soiled)	Use bleach solution Bleach 'wipes' should also be used on door handles at regular intervals
Highchairs Kitchen handles Bin lids Food surfaces	After each use At least twice a day minimum	Use bleach solution Bleach 'wipes' can be used if required 10 minute contact time is not possible
Switches Handles Keyboards	At least twice a day	Bleach based 'wipes'
Hard toys	At least once a day	Soak in bleach solution for 30 minutes
Dress up clothes	Daily (immediately if soiled)	Hot machine wash

Play areas

Item	Frequency	Method
Sand pits	Do not use during an outbreak	Rake and expose to sunlight Remove faeces and/or vomit and dump affected sand
Paddling pool	Do not use during an outbreak	Empty and clean using bleach solution

Sanitising with bleach

It is important to use a bleach solution when cleaning, particularly during an outbreak. The Public Health Unit recommends using a bleach solution with a concentration of 0.1% sodium hypochlorite. **A fresh bleach solution needs to be made up each day.**

In order to work properly, a bleach solution needs:

- **Enough time to kill – at least 10 minutes contact time is required**
- **Sufficient strength or concentration**
- **A surface free of organic material, dirt and dust**

Bleach solutions provide a cost-effective way to sanitise areas potentially contaminated by micro-organisms. Bleach also kills viruses such as norovirus, which can withstand heat, freezing and many cleaning solutions – including hand alcohol wash.

Plain, unscented, household bleaches are suitable and cheap disinfectants that can be used to make up bleach solutions. Bleaches are sold in different concentrations (usually 2-5 % sodium hypochlorite), so a different dilution might be required depending on the brand of bleach used.

Supermarket bleach usually has a concentration of approximately 4% (42 g/L). Ensure that this is checked prior to making up a bleach solution.

Making up a 0.1% bleach solution:

Strength of bleach (%)	Volume of bleach (ml)	Volume of water (ml)	Total Volume (ml)
1	100	900	1000
2	50	950	1000
3	33	967	1000
4	25	975	1000
5	20	980	1000

If the solution is made up in a 10 litre bucket, simply multiply the volumes of bleach and water by a factor of ten.

The bleach solution is appropriate for use on non-porous surfaces including, nappy change tables, counter tops, door handles, toilets, taps, and sinks.

It should also be used to soak hard toys and used cleaning products such as mops heads and cloths.

Preparation tips

- Prepare a fresh bleach solution each day in a well ventilated area, away from children
- Use cold water and a funnel to pour the bleach
- Always wear gloves and eye protection
- Spray bottles can be easily marked to make refilling with bleach easier
- Keep the bleach solution protected from sunlight and heat, and out of the reach of children

Using the bleach solution

- Always wear appropriate personal protective equipment when sanitising with a bleach solution
- Clean the surface with warm water and detergent before using the bleach solution, then wipe dry
- Apply the bleach solution to the entire area that needs to be sanitised
- Spray bottles are an effective way to use the bleach solution
- Once an item or surface has been sprayed, allow it to air dry for at least 10 minutes
- Clean less heavily contaminated areas first and change cleaning solutions, cleaning cloths and mop heads frequently
- Disposable cloths are preferred when cleaning surfaces. If reusable cloths are used, soak in bleach solution and allow to air dry
- All gloves and masks worn during cleaning should be removed and discarded
- People carrying out cleaning should avoid touching their faces/mouths with gloved or unwashed hands
- Practice thorough hand hygiene immediately after gloves are removed
- Used mops and reusable cloths should be soaked in a fresh 0.1% bleach solution for at least thirty minutes

Safety tips

- Always follow the manufacturer's safety instructions when using and storing chemicals
- Never mix chemicals
- Bleach can irritate the nose, lungs, and skin
- Store detergents and disinfectants away from children and food
- Check the expiry dates on any chemicals stored at the centre



We currently have a number of children and staff ill with diarrhoea and vomiting.

We ask that you do not bring your child to the centre if they are unwell.

Please wash your hands and/or use hand sanitiser when you first arrive and just before you leave.

Appropriate precautions have been taken at the centre to reduce any further spread of the illness.

We appreciate your support and cooperation.

For further information, please speak with staff.

Notice to parents/whānau

Date

Dear parents/whānau

Outbreak of gastrointestinal illness

The centre name has a number of children and staff off with diarrhoea and vomiting at the moment. As a result, we have implemented an appropriate outbreak response.

We have consulted Public Health for advice on outbreak management, and are collecting some samples in order to try and confirm a diagnosis.

In the meantime, it is important that we isolate and exclude children or staff members who are unwell in order to prevent further spread of the illness within the centre.

Please do not bring your child to the centre if they are feeling unwell.

Children who report symptoms of gastrointestinal illness will be sent home, and we ask that they do not return to the centre until they have been well for a minimum of 48 hours.

To prevent the spread of illness within your family, please ensure you and your whānau use good hand hygiene practices. For more information, please click on the following link:

<https://www.health.govt.nz/your-health/healthy-living/good-hygiene/hand-washing>

All of the required control measures have been put into place at the centre, so please adhere to these if you visit the centre while the outbreak is ongoing.

We appreciate your support and cooperation.

Kind regards

Centre Management



Wash your Hands

for
20
seconds

use soap and
running water

and

Dry your Hands

for **20**
seconds

