

Cleaning and sanitising

Guidelines for Early Childhood Education (ECE) services

Health New Zealand | Te Whatu Ora works with ECE services to ensure safe environments and good health practices to support the health and wellbeing of children. Maintaining good hygiene and cleaning standards is essential to prevent the spread of illness and the occurrence of disease outbreaks.

These guidelines set out best practice cleaning and sanitising processes, including:

- How to clean and sanitise
- Using sodium hypochlorite to sanitise
- Cleaning advice for different areas or items
- Cleaning faeces and vomit
- Responding to a disease outbreak
- Using cleaning schedules
- Cleaning tips
- Cleaning schedule template.



How to clean and sanitise

A two-part process is required.

▾ **Cleaning**

Cleaning is the removal of visible debris using detergent and water and is an important first step in removing micro-organisms (germs) from the environment. This step should be done prior to sanitising.

If surfaces are not clean, accumulated dirt and organic matter can protect germs and may make further sanitising processes ineffective. Germs also cannot multiply on clean, dry surfaces.

▾ **Sanitising (sometimes called disinfecting)**

Sanitising is the inactivation of germs left on surfaces using heat or chemicals (such as bleach).

In order to kill the germs the bleach solution needs to be left on a clean surface for 10–30 minutes and be of sufficient strength or concentration.

Process to clean and sanitise:

1. Pre clean	Remove dirt and debris by sweeping, scraping, wiping or rinsing with water.
2. Clean	Use warm water and detergent. Soak if necessary.
3. Rinse	Rinse off detergent and any remaining dirt.
4. Sanitise	Sanitise to reduce germs to safe levels: <ul style="list-style-type: none">• Dilute bleach with water to make a 0.1% sodium hypochlorite solution• Saturate the area to be disinfected with the bleach solution• Leave the solution on the area for at least 10 minutes and preferably 30 minutes.
5. Rinse	Wash off the bleach solution thoroughly with water, so that children and staff are not exposed to any residual (use a hose if outdoors).
6. Dry	Air dry or use a designated single-use cloth (used for this purpose only) or disposable paper towels.



Using sodium hypochlorite to sanitise

Why we recommend using a sodium hypochlorite (diluted bleach) solution to sanitise

Illness and outbreaks in ECE services are caused by a range of micro-organisms (germs) such as giardia and cryptosporidium (protozoa), salmonella (bacteria) and norovirus-like viruses. Many of these germs (especially protozoal cysts and viruses) are resistant to most sanitisers but can be killed by diluted bleach solutions when used correctly.

We also recommend bleach solutions as they are cost effective. We recommend only sanitisers containing sodium hypochlorite are used at your ECE service.

Making up a sodium hypochlorite (diluted bleach) solution

- Make a fresh diluted bleach solution for each strength (0.1% and 0.5%) every day. Keep it out of direct sunlight. Bleach solutions lose strength over time and in UV light making it ineffective in killing germs.
- Use plain, unscented, household bleach. Bleach from the supermarket is sold in different strengths of sodium hypochlorite (usually 2%–5%). This is written on the label. Check the bleach is not past its use by date.

- Clean the container daily before making up the solution. Make up the bleach solution in a spray bottle, using a measuring cup to measure the correct quantity of bleach and water, according to the instructions in the table below.
- Label the spray bottle as bleach and with the strength (0.1% or 0.5%). Include the date and store out of children’s reach and direct sunlight.

Sodium hypochlorite (diluted bleach) solution strengths and their use

0.1% sodium hypochlorite	Should be used for nappy change areas and areas that children contact a lot This solution should be used on nappy change areas and frequently touched surfaces. After each nappy change, sanitise and then wash off with water to avoid skin irritation. Identify high-risk areas where children play and clean these more often, focusing on surfaces at child height like chair backs and tabletops.
0.5% sodium hypochlorite	Should be used for general sanitation of the bathroom and toilet surfaces. At the end of each day this concentration should be used on all nappy changing surfaces.

How to make a 0.1% and 0.5% sodium hypochlorite (diluted bleach) solution for disinfection

0.1% sodium hypochlorite solution

Strength of bleach		Quantity of bleach	Quantity of water	Total volume of diluted solution
% hypochlorite	g/100ml hypochlorite			
0.5%	0.5g/100ml	100ml	400ml	500ml
2%	2g/100ml	25ml	475ml	500ml
3%	3g/100ml	10ml	290ml	300ml
4%	4g/100ml	10ml	390ml	400ml
5%	5g/100ml	10ml	490ml	500ml

To increase the amount of solution made, double (or triple) the amount of bleach and water added.

0.5% sodium hypochlorite solution

Strength of bleach		Quantity of bleach	Quantity of water	Total volume of diluted solution
% hypochlorite	g/100ml hypochlorite			
0.5%	0.5g/100ml	Use undiluted	Nil	Use undiluted
2%	2g/100ml	100ml	300ml	400ml
3%	3g/100ml	50ml	250ml	300ml
4%	4g/100ml	50ml	350ml	400ml
5%	5g/100ml	50ml	450ml	500ml

To increase the amount of solution made, double (or triple) the amount of bleach and water added.

Safety tips

- Always follow the manufacturer's instructions on the product.
- Always use chemicals in a well-ventilated area.
- Always wear gloves when handling cleaning materials, especially undiluted chemicals. A face mask and long sleeves will also help protect against irritation.
- Always label bottles of diluted chemical solutions with the name, strength and date.
- Never mix cleaning chemicals together as they react and produce toxic gases.
- Never store chemicals or cleaning solutions in unmarked containers.
- Ensure bleach/diluted bleach is kept out of the reach (cannot be accessed) from children.

Alternatives

If you wish to use an alternative sanitiser, you must have scientific evidence (from the supplier) of the effectiveness of the product against a very wide range of micro-organisms including bacteria, viruses and protozoal cysts. Contact a Health Protection Officer in your region to discuss.



Cleaning advice for different areas or items



Nappy changing areas

Clean and sanitise nappy changing areas with a 0.1% hypochlorite solution after every nappy change and with a 0.5% hypochlorite solution at the end of every day.

Nappy changing areas must be smooth, impervious and washable, and in good condition.

Place disposable towels or single-use cloths under the child during nappy changing to reduce the contamination of the changing pad.



Food preparation areas

Sanitise surfaces before and after food preparation. Only use food grade disinfectants on surfaces used for preparation and serving of food items.

The Ministry for Primary Industries [National Programme 2](#) requires all food preparation and handling areas and equipment to be listed in a cleaning schedule, and surfaces must be cleaned using a food grade sanitiser (Food Regulations 2015). Food grade sanitisers are generally different to cleaning products used elsewhere in your ECE service.



Sinks, toilets and other hard bathroom surfaces

Wash and sanitise bathroom surfaces such as tap handles, wash hand basins, toilet flush handles, toilet seats and bowls, nappy bins, paper towel and soap dispensers at least once a day or more often if visibly soiled.



Floors

Clean and sanitise daily or more often if required.



Cots and stretchers

Wipe down cots with diluted bleach (0.1% hypochlorite solution) daily where children hold or bite. Wipe down stretcher beds and cot mattresses at least weekly or if there has been a spill.



Carpets and soft furnishings

If soiled, clean affected area with hot soapy water, then steam clean.



Toys, dress up clothes, comforters

At the end of each day, clean toys and materials that children handle or put in their mouth. Use hot soapy water and disinfectant or put in the washing machine or dishwasher depending on the toy.

After a toy has been mouthed it should be removed and placed in a designated container for cleaning and sanitising.

Send all comforters (dummies, sleep toys, blankets) home to be washed. Dress-up clothes must be laundered weekly or whenever soiled.

Rotate toys on a roster so there are always clean toys available to use. This is especially important for under two-year-olds.



Sand and sand pits

Sandpits can be contaminated by animal droppings, vomit or human faeces and made unsafe by hazardous items such as broken glass.

To prevent sandpits being contaminated or made unsafe the following advice is recommended.

- Protect with a tight-fitting cover to prevent animals from entering.
- Rake at least daily (and preferably before and after each use) to ensure hazards such as glass or animals droppings are removed.

Sand cannot be sanitised. Discard sand and replace it if it is unsafe or contaminated. Throw sand away using your usual waste disposal procedures.



Linen

Launder linen between use by different children or at least weekly if used by one child. Use a 60°C hot wash.

Dry outdoors on the washing line if possible. If not possible use a tumble drier.



Activities

Clean and sanitise outdoor play equipment regularly. Some artificial grass surfaces can be disinfected with bleach (check with the supplier).

Change playdough daily.

Empty, clean, sanitise and dry water tables after use. Fill water tables with water that is safe to drink immediately before use.



Cleaning faeces and vomit

If a vomiting or faecal accident occurs, immediately close the area off from children and clean it. It is recommended that you have a spill kit made up and ready to go. A spill kit contains all the items required to clean a child and protect staff. It should be held in a location that is easy to access and regularly checked to ensure items are replaced and not expired.

Key items to have in your spill kit

Protective equipment



Disposable gloves



Disposable aprons



N95 Masks



Hand sanitiser

Cleaning equipment



Bucket



Detergent and bleach



Paper towels



Spray bottle



Plastic bags



Cleaning equipment



Steam cleaner

Equipment to clean child



Single-use towels



Wet wipes

When a faecal accident has occurred

- Clean all surrounding surfaces with hot water and detergent, then saturate with a 0.1% bleach solution. Leave the bleach on surfaces for at least 30 minutes, then rinse with a cloth saturated in cold water and allow to dry or wipe dry.

Where vomiting has occurred

- Remove everyone from the room for at least one hour afterwards. This is because norovirus can be breathed in after someone has been sick. Any uncovered food in the same area as someone who vomited must be thrown away.

- Scrape linen soiled with faeces, blood or other body fluids to remove excess material, soak in appropriate sanitising solution and washed separately in a hot water wash.
- Open all windows and doors to ventilate the area.
- Clean all surrounding surfaces with hot water and detergent, then saturate with a 0.1% bleach solution. Leave the bleach on surfaces for at least 30 minutes, then rinse with a cloth saturated in cold water and allow to dry or wipe dry.

When cleaning vomit or faeces

- Wear personal protective equipment (PPE) such as disposable gloves and apron. A particulate respirator (N95) mask should be worn if cleaning up vomit. It is important that PPE is put on and removed correctly to prevent cross contamination – see the images in this guide.
- Place PPE in a sealed bag for disposal after use.
- Use disposable brushes, mops and cloths and discard after use.
- Remove any soiled clothing and place in a leakproof, sealed bag for laundering at home. Advise whānau/parents/caregivers of the need to treat soiled clothing carefully and to soak in an approved sanitiser such as Napisan diluted as per manufacturer's instructions, before laundering them separately using a hot water wash.
- Open windows and doors if possible.
- If vomit or faecal matter has occurred on carpet or soft furnishings, some disinfectants may not be effective or appropriate on this surface (e.g. bleach solutions may damage or discolour the carpet). The contaminated area should be cleaned with detergent and hot water and then an appropriate disinfectant can be applied or the area steam cleaned (ideally using commercial cleaning equipment).

Putting on PPE

Wash hands well first, then put on PPE in the following order:



Fully cover your torso from neck to knees. Fasten ties behind neck and waist.



Loop bands over ears or tie/pull behind head. Pinch metal band over nose. Adjust so fit is snug.



Pull on gloves. Extend to cover wrists and cuffs of sleeves.

Taking off PPE

Remove your PPE in the following order. After removing, place everything in a plastic bag, seal and dispose into rubbish bin. Wash and dry hands thoroughly.



Pinch cuff of one glove with opposite hand and peel off, turning it inside out as you go. Hold removed glove in one hand. Remove the next glove by slipping finger of bare hand inside cuff of glove and pulling off, turning it inside out as you go over the other glove.



Rip neck and waist ties. Hold away from body and clothing and roll inside out into a bundle.



Grasp ties and pull over head/ears or untie head ties. Avoid touching the front of the mask as it is contaminated.

Wash your hands after removing all PPE.



Responding to a disease outbreak

Increased cleaning and sanitising will be required during a disease outbreak. A commercial deep clean of your premises may be required.

The following activities should be stopped during an outbreak.

- Paddling pools. Empty and sanitise using a diluted bleach solution.
- Playdough, clay, painting and water play.
- Baking or food preparation with children.
- Playing with soft toys, as they cannot be easily sanitised.
- Playing in sand pits.
- Comforters should not be brought to your ECE service during times of illness.



Using cleaning schedules

Cleaning schedules help ensure cleaning and sanitising is done as and when required. They should be used for your ECE service even if you use a contracted cleaning company. When developing a cleaning schedule, walk through your ECE service and list the areas and items that are to be cleaned and sanitised.

A good cleaning schedule clearly identifies:

- **Who** is in charge of each area (initial the schedule when the task is completed)
- **What** areas/equipment/utensils/surfaces should be cleaned
- **What** method of cleaning and sanitising is required and what products (both cleaning and sanitising agents) to use
- **When** and how often the job should be carried out.



Cleaning tips

- Use fresh clean cloths each day and put in the washing machine at the end of cleaning.
- Use different coloured cloths to clean each area such as toilets, sinks, food areas and play areas.
- Soak cleaning cloths in sanitiser after use, followed by a hot water laundry wash, then dry.
- Clean food areas before play areas. Clean bathroom areas last.
- Wash mops when cleaning is complete. Pour boiling water over mops and dry (preferably in the sun).
- Use different mops in the toilet area and in the kitchen/activity areas.
- Never leave mops soaking in water or disinfectant.
- Wash hands after cleaning.
- Keep a logbook for communicating requests to cleaners if they are working after hours.



Example of cleaning schedule

Items and areas to be cleaned	Frequency of cleaning				Precautions (e.g. use PPE, use wet floor sign)	Method of cleaning (including dilution of any chemicals)	Recording of cleaning (sheet signed by person responsible)				
	After use	Daily	Weekly	Monthly			Mon	Tues	Wed	Thur	Fri
Food equipment	✓					Scrape and rinse to remove food, wash in dishwasher, put away	C. leamer	C. leamer	C. leamer	C. leamer	C. leamer
Food preparation areas	✓	✓				Use green cloth + hot soapy water + sanitiser Clean at start and end of each day and immediately after use	C. leamer	C. leamer	C. leamer	C. leamer	C. leamer
Dining tables	✓	✓				Use green cloth + hot soapy water + sanitiser	C. leamer	C. leamer	C. leamer	C. leamer	C. leamer
Tea towels and cloths		✓				Put on hot wash, dry in dryer	C. leamer	C. leamer	C. leamer	C. leamer	C. leamer
Highchairs	✓					Use green cloth + hot soapy water + sanitiser	C. leamer	C. leamer	C. leamer	C. leamer	C. leamer
Rubbish bin			✓			Use orange cloth + hot soapy water + sanitiser					C. leamer
Floors		✓			Use wet floor sign	Use green mop + hot soapy water + floor cleaner	C. leamer	C. leamer	C. leamer	C. leamer	C. leamer
Microwave				✓		Use green cloth + hot soapy water	C. leamer				
Oven				✓	Wear gloves	Use green cloth + oven cleaner	C. leamer				
Refrigerator				✓		Use green cloth + hot soapy water	C. leamer				
Walls	3 monthly					Use yellow cloth + hot soapy water	C. leamer				
Ceiling	Yearly					Use vacuum to remove dust then clean with hot soapy water	C. leamer				