

Recommendations for Cleaning and Sanitising in Early Childhood Centres

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A high level of hygiene should be maintained in early childhood centres at all times to prevent the spread of micro-organisms such as bacteria, viruses and protozoa. Ensure all staff, including cleaners are aware of the increase in illness and following the correct process.

Identify areas that children play in a lot, these areas are high risk areas and should be cleaned first. Look at cleaning from a child height not an adult height, for example backs and sides of chairs where little hands go, taps, and door handles.

A two-part process is required:

1. Cleaning

Cleaning is the removal of visible debris using detergent and water, and is an important first step in removing germs from the environment. This step should be done prior to disinfecting.

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.

2. Sanitising/ Disinfecting

There are a number of items and surfaces that should receive this additional step after cleaning. Sanitising is the inactivation of organisms left on surfaces using heat or chemicals (such as bleach).

In order to work properly, a bleach solution needs enough time to kill (at least 10 minutes), sufficient strength or concentration, and a surface free of organic material, dirt and dust.

How 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 / Disinfect	Sanitise to reduce micro-organisms to safe levels: <ul style="list-style-type: none"> • Dilute the household 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 as long as possible, preferably 30 minutes. • Leave the solution on the area for at least 10 minutes
5.	Rinse	Wash off the solution thoroughly with lots of water, so that children and staff are not exposed to residual bleach solution (use a hose if outdoors).
6.	Dry	Air dry or use a single-use towel/cloth (used for this purpose only) or disposable paper towels.

If a vomiting or faecal accident occurs, the area should be instantly quarantined and cleaned firstly with a detergent solution and secondly with a cleaning solution containing sodium hypochlorite. Spread of air-borne virus from vomitus should be minimised by closing the door and opening the windows for a minimum of 30 minutes to ventilate the room.

Why we recommend using a diluted bleach solution

Outbreaks in early childhood education centres are caused by a range of micro-organisms (germs) such as giardia and cryptosporidium (protozoa), salmonella (bacteria) and Norwalk – like viruses. As many of these micro – organisms (especially protozoal cysts and viruses) are resistant to most disinfectants, diluted bleach solutions are recommended because they provide a cost-effective means of inactivating a broad range of these potentially harmful organisms. We recommend only disinfectants containing chemical hypochlorite are used and stored on the premises.

The active ingredient in bleach (hypochlorite) is recognised as having outstanding disinfection properties and is widely available, cost-effective and commonly used in homes, schools, hospitals, swimming pools and in drinking water supplies.

Alternatives

Bleach is unpleasant to work with and centres are often keen to find alternatives. If you wish to use an alternative disinfectant, you must have scientific evidence (from the supplier) of the effectiveness of the disinfectant against a very wide range of micro- organisms including bacteria, viruses and protozoal cysts.

Hypochlorite Strengths

0.1% hypochlorite	Should be accessible and used after each nappy change and the washed off with a water spray after use (as the sanitiser may cause irritation to the skin)
0.5% hypochlorite	Should be used for general sanitation of the bathroom and toilet surfaces. At the end of the day this concentration should be used on all nappy changing surfaces.

Making up a diluted bleach solution

- Diluted bleach solutions **must be made up fresh each day**, labelled appropriately, and kept out of direct sunlight.
- Plain, unscented, household bleaches should be used. These are sold in different strengths of sodium hypochlorite (usually 2 - 5%) which is written on the label.
- Supermarket bleach usually has a concentration of approximately 4% (40 g/L). Ensure that this is checked prior to making up a bleach solution. Also check that the bottle is not past its use-by date.
- Use a measuring cup to make up the recommended bleach solution, following the instructions in the table below. Please label the container and store appropriately.

How to make a 0.1% and 0.5% hypochlorite solution for disinfection**0.5% hypochlorite**

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

0.1 % hypochlorite

Strength of bleach		Quantity of bleach	Quantity of water	Total volume of diluted solution
% hypochlorite	g/100ml hypochlorite			
0.5% ¹	0.5 g/100ml	50ml	450 ml	500 ml
2%	2 g/100ml	25 ml	475 ml	500 ml
3%	3 g/100ml	10 ml	290 ml	300 ml
4%	4 g/100ml	10 ml	390 ml	400 ml
5%	5 g/100ml	10 ml	490 ml	500 ml

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

When to clean and sanitise

Area/Event	Type and Frequency
Nappy changing areas	<p>Nappy changing areas should be cleaned and disinfected after every nappy change with a 0.1% hypochlorite solution and water and again at the end of every day with a 0.5% hypochlorite solution.</p> <p>Placing disposable towels or single-use cloths under the child during nappy changing will reduce the contamination of the changing pad.</p> <p>Please make sure that a safe and hygienic process is in place for the storage of soiled clothing such as a bucket with a lid in the laundry area.</p>
Food preparation areas	Surfaces should be sanitised before and after food preparation.
Floors, sinks, toilets and other hard surfaces	<p>Must be cleaned and sanitised at least daily. Any soiled surfaces should be cleaned immediately.</p> <p>Wipe down cots with diluted bleach, especially where children hold or bite.</p>

Area/Event	Type and Frequency
Carpets and soft furnishings	If soiled, the affected area should be cleaned using hot soapy water, then steam cleaned.
Soft toys and dress up clothes	Soft toys should be put away for the duration of the outbreak. Dress-up clothes must be laundered weekly or whenever soiled. Rotate toys on a roster so not all toys are out at once and clean toys can be used. Especially important for under twos as they put toys in their mouth.
Hard Toys and Comforters	It is recommended to clean all toys with hot soapy water and then a bleach solution at least daily. If practicable, the dishwasher and washing machine can be used for washing toys. Send all comforters (dummies, sleep toys, blankets) home to be washed. Children should not bring comforters to the centre during the time of illness.
Linen	Must be laundered (using a hot wash) between use by different children. Increase washing of sleeping linen (sheets and pillow cases). If this is normally once a week it will need to be increased to twice a week or as required. Dry on the washing line if you can as the sunlight kills germs (if this is not possible use a tumble drier). Each child's bedclothes, clothes and belongings must be kept separated.
Activities	Outdoor play equipment should be cleaned and disinfected regularly. Some artificial grass surfaces can be disinfected with bleach (check with your supplier). Do not use sand pits during an outbreak. There is no effective means of disinfecting sand. Rake and expose to sunlight, then cover when not in use. Paddling pools should not be used during an outbreak. Empty and sanitise using the recommended diluted bleach solution. Remove play dough, painting and water play until the outbreak has stopped. Cease any baking with children.

Cleaning Schedules

Cleaning schedules are a measure to ensure cleaning and disinfecting is done as and when required. A good cleaning schedule clearly identifies:

- The person that does the job (who initials when the task is completed)
- What areas/equipment/utensils should be cleaned
- The method of cleaning, and what product (both cleaning and disinfecting agents) is used
- How often the job should be carried out

The following areas should be included:

Kitchen/ Laundry/ Nappy changing area and surfaces/ Toilet areas/ Toy and play equipment

Storage and safety Tips

- A fresh batch of each solution should be made up daily to avoid losing its strength
- Never mix chemicals as toxic gases can be produced
- The bleach solution and the undiluted bleach must be kept out of reach of children and away from light and heat (which can reduce its effectiveness).
- Discard all remaining bleach solution at the end of the day.
- Wear gloves and appropriate PPE when handling bleach. Bleach may irritate the nose, lungs and skin, or damage clothing.

Cleaning template

A suggested template for a cleaning schedule is shown below:

Cleaning Schedule					Date: __/__/__
Item/area to be cleaned	Cleaning time/frequency	Cleaning product	Cleaning method	Person responsible	Initials