



Government of **Western Australia**  
Department of **Health**  
**Public and Aboriginal Health Division**

## Communicable Disease Control Directorate Guidelines

# Management of Infant Feeding Equipment in Western Australian Healthcare Facilities

Guideline 0007 / March 2022

*These guidelines have been released by the Communicable Disease Control Directorate, Public and Aboriginal Health Division, Western Australian Department of Health, to provide consistent and evidence informed advice to agencies involved in the prevention of infections and management of communicable diseases in Western Australia.*


## **ACKNOWLEDGEMENT OF COUNTRY AND PEOPLE**

The Communicable Disease Control Directorate at the Department of Health acknowledge the Aboriginal people of the many traditional lands and language groups of Western Australia. We acknowledge the wisdom of Aboriginal Elders both past and present and pay respect to Aboriginal communities of today.

## Contents

1. Definitions / Acronyms	3
2. Purpose	3
3. Introduction / Background	3
4. Requirements	4
4.1 General responsibilities	4
4.2 Reprocessing requirements for reusable equipment	4
4.3 Reprocessing procedures for reusable equipment	4
4.4 Storage of equipment	5
4.5 Cleaning of Single Patient Use (Personal Use) Equipment	5
4.6 Infant Formula	6
4.7 Patient Information	6
5. Relevant Legislation	6
6. Additional Resources	6
7. Guideline Contact	7
8. Document Control	7
9. Approval	7
10. References	7

## 1. Definitions / Acronyms

Term	Definition
<b>Breast milk</b>	is classified as both a body fluid and a food.
<b>Infant feeding equipment</b>	all equipment used for the purpose of expressing and storing breast milk and feeding babies either expressed breast milk or infant formula e.g. breast pumps, breast shields, membranes, valves, teats, bottles and any storage containers.
<b>Reusable equipment</b>	a device that is approved for use by the Therapeutic Goods Administration (TGA) for more than one episode of use and for reuse on multiple patients.
<b>Semi-critical item</b>	an item according to the Spaulding Classification that has contact with intact non-sterile mucosa or non-intact skin.
<b>Single patient use</b>	a device that has been approved for use by the TGA for more than one episode of use on the one patient only. Unless the manufacturer specifies otherwise, devices labelled 'single patient use' can be reprocessed between uses for the same patient.
<b>Single use</b>	means a device that has been approved for use by the TGA for only one episode of use on one patient only and is to be disposed of immediately after that use. These items must not be reused and are marked with the internationally recognised symbol 

## 2. Purpose

The purpose of this Guideline is to ensure equipment used for infant feeding in healthcare facilities (HCFs) is safe and provides no risk to the mother and infant and has relevancy to all HCFs in WA. The Guideline provides the minimum reprocessing standards required when reusable equipment is used for multiple infants and or mothers. In addition, recommendations are included for the management of equipment that is reused by the same mother or infant while in the HCF.

## 3. Introduction / Background

Equipment that is used for feeding infants and expressing breast milk must be managed in a manner to prevent contamination of equipment and transmission of infection. Milk is an excellent medium for the growth of bacteria, and poorly cleaned feeding equipment can be a source of infection. In addition, blood borne viruses have been detected in breast milk and, therefore, inadequately cleaned and disinfected shared equipment can pose a risk for disease transmission.<sup>1-5</sup>

The Spaulding Classification system was designed to address reprocessing of items that are reused for multiple patients.<sup>6</sup> Infant feeding equipment that has contact with non-intact skin or intact mucous membrane and is reused for multiple mothers and infant in a hospital environment is classified as a semi-critical item under this system and therefore requires reprocessing after each use in accordance with Australian Standard *AS/NZS 4187-2014*

*and amendment A2-2019 Cleaning and disinfecting and sterilising reusable medical and surgical instruments and equipment and maintenance of associated environments.*<sup>7</sup>

There is scant evidence on the efficacy of cleaning and disinfection processes for infant feeding equipment used by the same mother/infant. The importance of removing residual milk is essential, followed by thorough rinsing to effectively remove pathogens.<sup>1-4</sup>

Staff are to ensure that the appropriate infection prevention and control principles are applied when mothers utilise equipment for infant feeding or to express breast milk. This is an opportune time to promote the importance of hand hygiene to mothers in preventing the transmission of infection.

## **4. Requirements**

### **4.1 General responsibilities**

HCFs need to ensure that their staff are provided with clear direction on the type of equipment utilised in their service i.e. single use, single patient use, or reusable and the correct means of reprocessing.

Where possible, the use of single use items is preferred, however consideration must be given to the cost of reprocessing against the use of single use items.

HCFs need to ensure all semi-critical and non-critical infant feeding equipment is managed appropriately, staff are trained and educated in correct handling and reprocessing methods and practice standard precautions at all times.

HCFs should ensure that any equipment labelled 'single use' is not reused and is discarded immediately after use.

Equipment labelled 'single patient use' can only be reused, in accordance with manufacturers' instructions, for the same patient and discarded when no longer required by that patient. When single patient use equipment is used, appropriate cleaning and reprocessing must occur between uses on the same patient.

HCFs need to ensure that all reusable equipment utilised for infant feeding is cleaned and adequately reprocessed after each use.

### **4.2 Reprocessing requirements for reusable equipment**

The Therapeutic Goods Administration Australia (TGA) does not consider infant feeding equipment to be medical devices.

Semi-critical infant feeding equipment requires reprocessing by steam sterilisation or thermal disinfection prior to reuse.<sup>2</sup> Chemical disinfectants and commercial home sterilisers, including boiling and microwave methods, are not suitable for use.

Automated equipment, such as washer/disinfectors, are recommended for use for thermal disinfection processes. HCFs undergoing construction or refurbishment should source and appropriately site this equipment and related accessories for decontaminating infant feeding equipment.

### **4.3 Reprocessing procedures for reusable equipment**

Following the use of all semi-critical reusable infant feeding equipment, HCWs shall ensure the equipment is:

- disassembled and rinsed in cold water, ensuring all milk residue is removed
- manually washed in a neutral detergent and warm water

- rinsed in hot water
- then either thermally disinfected or steam sterilised – whichever is the approved method for the components by the manufacturer
- items that can be wrapped and sterilised offer more protection for the mother and infant as it minimises the risk of contamination from the environment or staff handling.

Automated washer/disinfectors that have a dedicated detergent wash cycle may be used to replace manual cleaning processes. The need to use reverse osmosis (RO) water in these machines for thermal disinfection of this equipment is not required, however, HCFs need to ensure an assessment of their water supply is undertaken to ensure water quality will not adversely affect the function of these machines.

HCFs utilising washer / disinfectors should ensure the equipment:

- includes appropriate accessories to reprocess infant feeding equipment
- is suitable for the hospital setting
- is maintained and monitored according to the manufacturer's instructions.

The following temperature-time parameters are recommended to achieve thermal disinfection:

- |                       |                       |
|-----------------------|-----------------------|
| • 90°C for 1 minute   | 80°C for 10 minutes   |
| • 75°C for 30 minutes | 70°C for 100 minutes. |

#### 4.4 Storage of equipment

Reusable infant feeding equipment that is not being used immediately after sterilisation or thermal disinfection should be stored dry in a clean container in a cupboard or refrigerator to protect from environmental contamination. Unwrapped equipment should be reprocessed every 24 hours if not used.

#### 4.5 Cleaning of Single Patient Use (Personal Use) Equipment

Appropriate cleaning of single patient use equipment is essential after each use. Mothers should be instructed to wash their personal use equipment in an appropriate area e.g. formula preparation area, kitchen/pantry area, or at a minimum, utilise a dedicated utensil cleaning bowl and bottle brush in their room. Equipment is not to be washed in hand basins or infant baths in the patient's room.

Mothers should be instructed on the following cleaning procedure:

- the used equipment should be separated and rinsed thoroughly in cold water to remove any milk residue
- the equipment should then be washed in neutral detergent and warm water and then rinsed in hot water\*
- all equipment should be air dried and stored in a clean container in the mother's room or in designated place in the nursery if the mother is not an inpatient
- all items must be clearly labelled with the mother's/infant's name

(\*alternatively, following initial cold-water rinse, the equipment can be mechanically washed in a washer / disinfecter, if the equipment can be processed and remain clearly identifiable to the individual mother/infant i.e. some HCFs utilise baskets for each mother / infant that can be labelled.

## 4.6 Infant Formula

All HCFs should support breast feeding and promote its benefits as per the *Baby Friendly Health Initiative* and the National Health and Medical Research Council (2012) *Infant Feeding Guidelines*. However, in instances where formula feeding is required, HCFs need to ensure the safe provision and handling of infant formula to prevent the risk of contamination and infection.

Where available commercially prepared, sterile ready-to-feed (RTF) liquid formula should be used for infants. Sterile RTF formula does not contain pathogenic microorganisms and so does not pose a risk of infection. These products are designated single use and the bottle and teat, and any remaining formula is to be discarded after each use. Decanting of liquid formula from a single use bottle to be used for a later feed should not occur.

Powered infant formula (PIF) is not a sterile product and may be intrinsically contaminated with pathogens that can cause serious illness in infants. Inappropriate preparation and handling of reconstituted PIF may provide conditions for these pathogens to multiply, which increases the risk of infection. HCFs need to ensure PIF is prepared in an area designated for formula preparation only and that staff are trained in preparing feeds safely.

## 4.7 Patient Information

HCFs need to ensure appropriate information is provided to parents, if required, on the options for using formula feed and for the cleaning and reprocessing of infant feeding equipment. This should occur during their antenatal education to enable them to make an informed decision regarding their choice of product and reprocessing methods.

Parents should be supported to commence the formula of their choice from birth and instructed on how to safely prepare PIF to minimise the risk of contaminating feeds. Parents wishing to utilise disinfection methods such as ‘steam sterilising’ with electric or microwave steam units should be supported with educational opportunities (literature and practical instruction) to enable them to manage this process safely both within the hospital setting and subsequently at home.

## 5. Relevant Legislation

Nil applicable

## 6. Additional Resources

- [Baby Friendly Health Initiative Australia](#)
- [Promoting baby-friendly hospitals World Health Organization](#)
- [Infant Feeding Guidelines – Information for health workers National Health and Medical Research Council](#)
- [APSIC Guideline for Disinfection and Sterilization in Healthcare Facilities](#)
- International Standard ISO 15883 – 1 (2006). Washer disinfectors – Part 1.
- International Standard ISO 15883 – 2 (2006). Washer disinfectors – Part 2.
- International Standard ISO 15883-5: 2021. Washer-Disinfectors – Part 5.

## 7. Guideline Contact

Enquiries relating to this Guideline may be directed to:

Infection Prevention Policy and Surveillance Unit (IPPSU)

Communicable Disease Control Directorate

[email: hiswa@health.wa.gov.au](mailto:hiswa@health.wa.gov.au)

## 8. Document Control

Guideline number	Version	Published	Review Date	Amendments
0007	V.1.	29/03/2022	29/03/2024	Original version

## 9. Approval

<b>Approved by</b>	Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health
<b>Approval date</b>	29/3/2022

## 10. References

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6. NHMRC (2019) Australian Guidelines for the Prevention and Control of Infection in Healthcare. Commonwealth of Australia.
7. Australian Standard AS/NZS 4187 – 2014 and Amendment 2:2019. Cleaning and disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities. Standards Australia.



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