Infection Prevention and Control: Guidelines - Portable Human Waste (Excreta) Disposal Methods (Alternative to Toilets)

Version date: April 2025

Purpose

This document provides guidance on recommended infection prevention and control practices related to the use of portable human waste (excreta) disposal systems (alternative to toilets) in Long-term care, Hospice and Mental Health and substance use facilities in Fraser Health.

Procedure

Portable human waste disposal methods are used when residents cannot use bathrooms (e.g., due to their clinical or functional status or preference) or bathroom is not available (e.g., dedicated to another resident in the room). These methods can be grouped into two categories: enclosed and open.

Enclosed Human Waste Disposal Methods

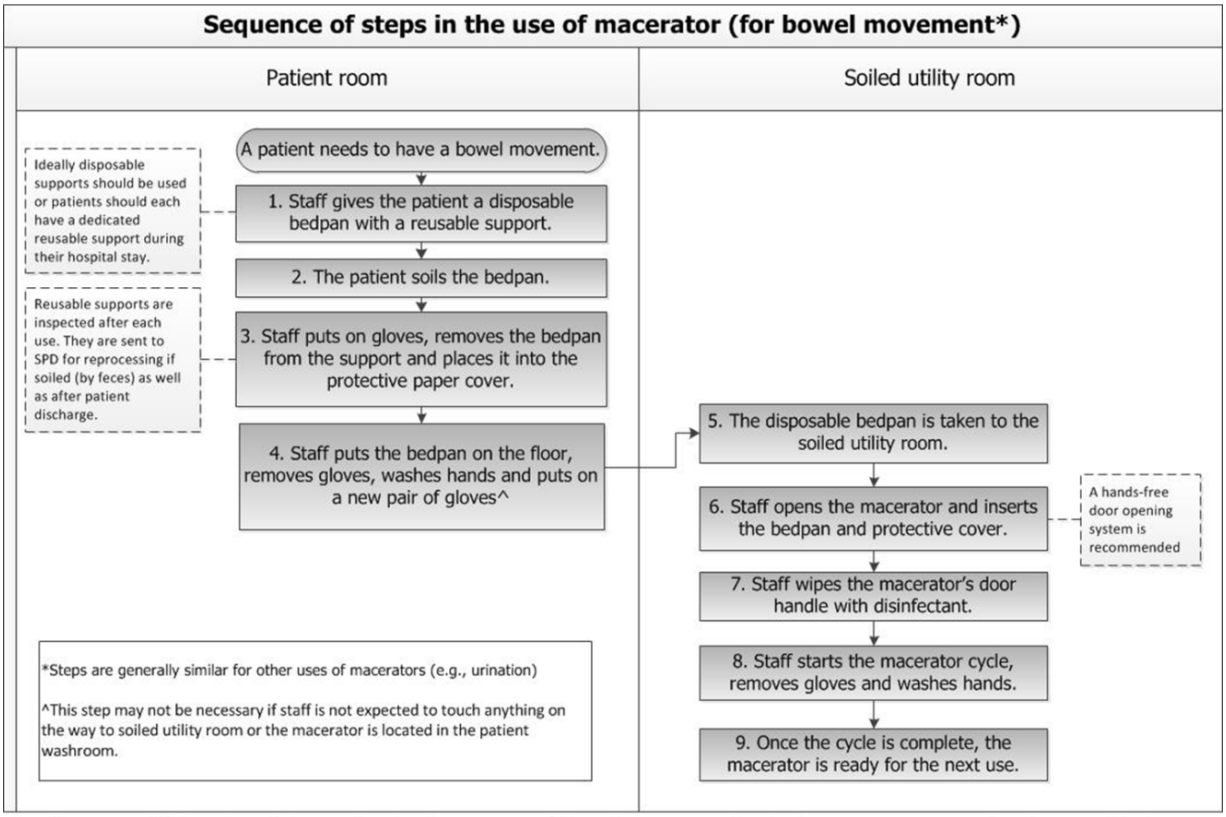
At present, there are three types of enclosed human excreta (urine and feces) disposal systems used in Fraser Health sites: macerators, washer- disinfectors and hygienic bags (see Table 1).

Table 1: Enclosed human waste disposal methods

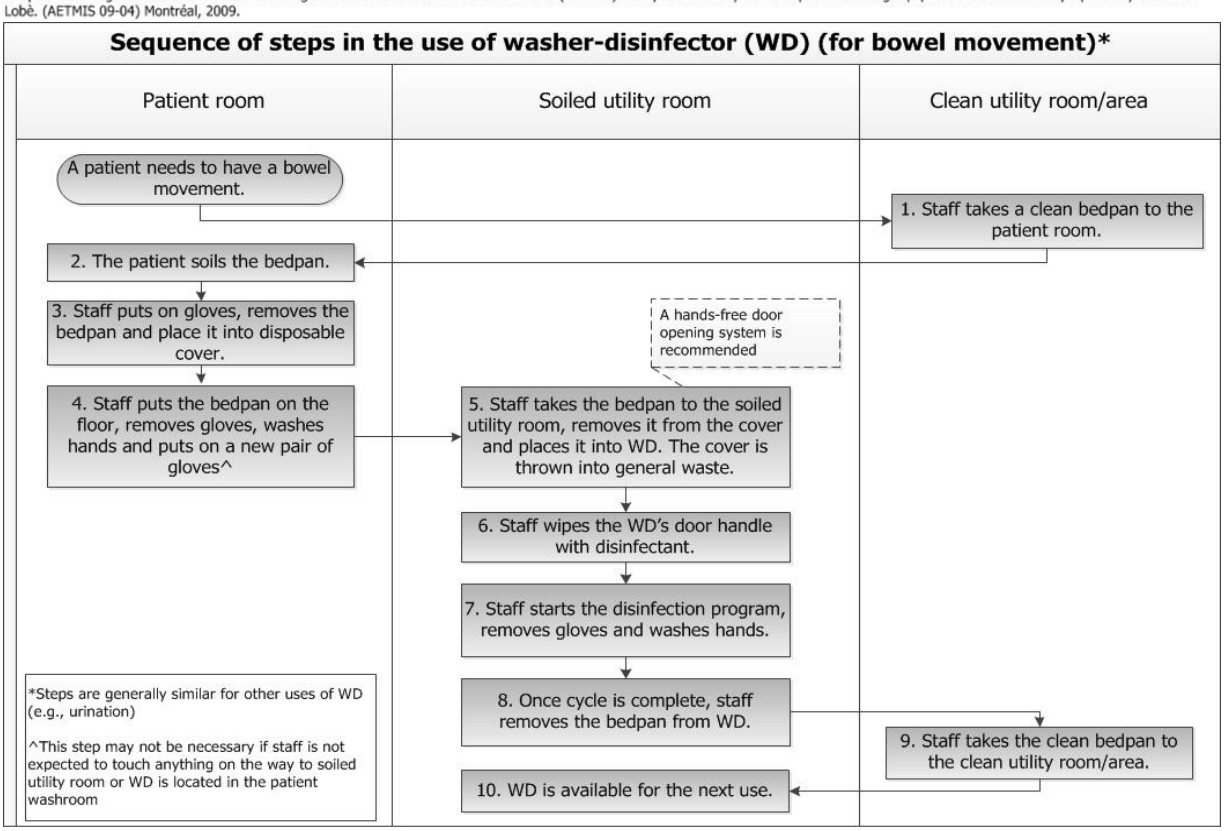
Method	Description	Advantages	Disadvantages	Comments
Macerators e.g., VernaCare	Used to macerate disposable bedpans or urinals. Disposable equipment made of biodegradable recycled pulp paper.	Disposes of the bedpan or urinal with the human waste and requires only the cleaning and disinfection of a non-disposable support or holder. Multiple equipment can be macerated at the same time Prevents accumulation of soiled bedpans waiting to be cleaned. Eliminates risks from aerosolization or splash-back of contents. Saves time by having faster cycles.	Plumbing systems may not meet requirements for macerator installation in older buildings. Increased particulate matter in municipal sewage may lead to additional charges. Adequate clean storage areas for disposable items required. Operating costs more expensive for supplies.	Accessories such as lids are available to help prevent spills during transport to a soiled utility room. Macerator-degradable support or holder is available. For infection prevention, residents should each have a dedicated or disposable support or holder for use.

		Installation costs less expensive than other systems.		
Washer-disinfectors (e.g., Meiko)	Designed to empty, clean and disinfect reusable bedpans and urinals.	Disposes of the human waste – soiled items are to be dumped directly into machine. Eliminates risks from aerosolization or splash-back of contents. Eradication of most microorganisms found on bedpans, except for spores. Longer washing cycles can physically remove spores and effectively reduce their count to negligible levels. Operating costs less expensive for supplies.	Requires correct loading following requirements in manufacturer's instructions, otherwise can result in residual soiling. Requires regular monitoring of supplies (disinfectant, detergent) although systems with alarms mitigate the need to regularly review. Installation costs more expensive than other systems.	Should be programmed to single default setting to eliminate cycle selection errors. Residents should ideally have a dedicated bedpan during their stay, which should be reprocessed through Medical Device Reprocessing (MDR)* or discarded after resident discharge.
Hygienic bags (e.g., Hygie bags)	Single-use bags with absorbent pads, which are used to line bedpans and commode pans. The soiled bags are discarded into the wastebasket because they are not considered biomedical waste.	Limited handling of soiled bags (disposable system). No transport of waste material outside of patient's room. No equipment and maintenance required. Minimum space for storage required.	Increase in volume of general waste (single-use plastic hygienic bags).	Recyclable support devices are available for single resident use. Plastic bags are biodegradable.

The steps for the use of the three methods of enclosed human waste disposal systems are provided in the charts below.



Adopted from: Agence d'évaluation des technologies et des modes d'intervention en santé (AETMIS). Comparative Analysis of Bedpan Processing Equipment. Technical note prepared by Christine Lobè. (AETMIS 09-04) Montréal, 2009.



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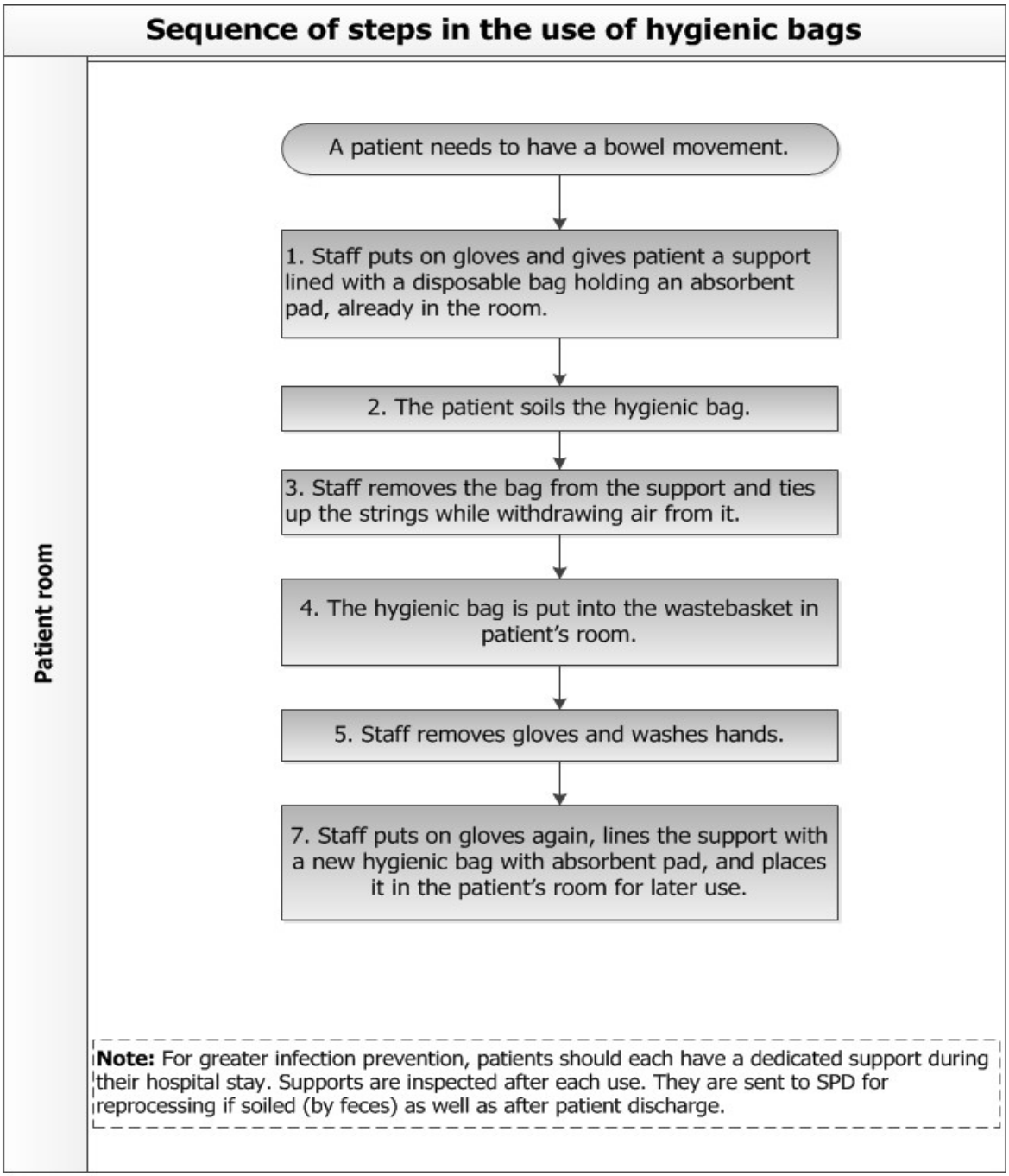

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Open Human Waste Disposal Systems

Table 2 below describes the open human waste disposal methods and their drawbacks.

Method	Description	Disadvantages
Centralized hopper	These are large open "hoppers" that are deep sink or toilet units allowing waste to be dumped and then flushed.	• Risk of staff contamination from aerosols and splash-back produced during emptying and flushing of bedpans • Risk of contaminating resident's environment (bedside table, toilet bowl and sink, room) • Risk of staff and environment contamination during bedpan transport to the soiled utility room
Resident bathroom	This is a variety of methods where the bedpans or urinals are dumped in the resident's toilet and then the bedpan or urinal cleaned in the bathroom using brushes or sprays.	• Risk of staff contamination from aerosols and splash- back produced during emptyingand flushing of bedpans • Risk of contaminating resident's environment (bedside table, toilet bowl and sink, room).

- Due to a substantial risk of staff and environment contamination and associated risk of infection transmission, open methods are not recommended and should be replaced by enclosed human waste disposal methods

Infection Prevention and Control Recommendations for Selection and Use of Portable Human Waste Disposal Methods

The selection of the enclosed methods depends on bedpan use requirements, risk of infection and outbreaks, staff availability, possibility of infrastructure redesign, municipal sewage regulations in the geographic area and budgets.

Regardless of the method(s) selected, the following infection prevention and control recommendations should be followed:

- Do not empty bedpans or urinals into sinks or toilets
- Do not use spray wands to clean bedpans or urinals
  - Spray wands should be replaced by closed human waste disposal systems
- Washer-disinfectors and macerators must be installed in soiled utility rooms that meet CSA Z8000 design standards. Soiled utility rooms must be large enough to house the reprocessing equipment
  - The area provided for dirty supplies must be physically separate from that for clean supplies
- Soiled bedpans or urinals must always be covered during transport to the soiled utility room
- Clean utility rooms/designated clean storage areas must be large enough to accommodate storage of clean supplies
- Reusable bedpans or urinals must be disinfected in washer-disinfectors after each use

    - Leaving soiled bedpans or urinals to pile up on counters in the soiled utility room must be avoided by making sure that each care area has enough reprocessing equipment
- A minimum low-level disinfection is required for cleaning and disinfection of reusable bedpans or urinals between uses by different residents
- For residents with *C. difficile* infection, the following are options for enclosed human waste disposal method in the order of preference if a dedicated washroom is not available:
    - Hygienic bags over reusable bedpans or urinals or dedicated commode:
        - Staff is required to clean commodes after each use, including both sides of commodes and any armrests, using a hospital-approved sporicidal disinfectant. Housekeeping staff are required to clean commodes twice daily using sporicidal product (e.g. >5000ppm bleach)
    - Macerator products with disposable supports or reusable supports enclosed in protective covering:
        - Reusable supports must be discarded or reprocessed using appropriate method of reprocessing i.e., sent to MDR if applicable
    - The washer-disinfector with preset parameters that allow appropriate disinfection

- *After resident discharge, disposable bedpan supports must be discarded. Some units may have a prearrangement with MDR for sending these devices for reprocessing. Those units are to follow their usual process of reprocessing.
- Back-up plans must be in place in case of failure of washer-disinfectors or macerators. It would be ideal if units had more than one machine to have back-up in case one of the machines fails. If it is not possible, the alternative options are:
    - Hygienic bags
    - Sending bedpans or urinals to MDR* after emptying and rinsing in the unit. This process requires prior consultation with MDR to ensure they have the capacity to reprocess additional equipment. Please note this is only applicable to some Fraser Health owned and operated sites.
- Staff must be properly trained and must consistently comply with procedures for human waste management, bedpan or urinals reprocessing and equipment operation
- The use of hygienic bags for all residents using shared washrooms should be considered in a *C. difficile* and Norovirus outbreak

Documentation

LTC:
The use of Bowel Movement Record – Long-term Care - Form with Bristol Stool Chart is recommended for recording bowel movement in all residents.

MHSU:
The use of Bowel Movement Record-Acute Care-Form with Bristol Stool Chart is recommended for recording bowel movement in all patients

fraserhealth

BOWEL MOVEMENT RECORD - MONTHLY

Long-Term Care

Form ID: NUGR106236E Rev: June 21/18 Printshop # 263300 Page: 1 of 1

Month and Year	**Amount:**	**Interventions:**
Last BM from Previous Month	S= Less than 120ml M= 121ml - 240ml	B= bisaCODYL Suppository G=Glycerin Suppository
Regular Bowel Pattern **BM every _____ days**	L = 241ml - 480ml XL= Over 480ml	ML=Sodium Citrate (Microlax) F=SODIUM Phosphate (Fleet)

Bristol Stool Chart

Type 1: Separate hard lumps, like nuts (hard to pass)	Type 4: Like a sausage or snake, smooth and soft
Type 2: Sausage-shaped but lumpy	Type 5: Soft blobs with clear-cut edges (passed easily)
Type 3: Like a sausage but with cracks on its surface	Type 6: Fluffy pieces with ragged edges, a mushy stool
	Type 7: Water, no solid pieces. **Entirely Liquid**

1	2	3	4	5	6	7
D	D	D	D	D	D	D
E	E	E	E	E	E	E
N	N	N	N	N	N	N
8	**9**	**10**	**11**	**12**	**13**	**14**
D	D	D	D	D	D	D
E	E	E	E	E	E	E
N	N	N	N	N	N	N
15	**16**	**17**	**18**	**19**	**20**	**21**
D	D	D	D	D	D	D
E	E	E	E	E	E	E
N	N	N	N	N	N	N
22	**23**	**24**	**25**	**26**	**27**	**28**
D	D	D	D	D	D	D
E	E	E	E	E	E	E
N	N	N	N	N	N	N
29	**30**	**31**				
D	D	D				
E	E	E				
N	N	N				

*To differentiate the interventions from the BM, you can document them in the top space beside the date or circle them if recording them on the D/E/N line

*N shift please record BM on the date you start your shift

Report result of any interventions to the nurse

BOWEL MOVEMENT RECORD - MONTHLY
Long-Term Care

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NURSING INSTRUCTIONS

Month and Year October 2018	
Last BM from Previous Month Sept 30	
Regular Bowel Pattern BM every daily days	

Amount:	Interventions:
S= Less than 120ml	B= bisaCODYL Suppository
M= 121ml-240ml	G=Glycerin Suppository
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		Type 7	Water, no solid pieces. **Entirely Liquid**

1			2			3			4			5			6			7		
D	L4	PS	D	Ø	PS	D	Ø	JR	D	Ø	JR	D	M4, S4	JR	D			D		
E	M5, M6	RS	E	Ø	RS	E	Ø	GM	E	Ø	GM	E	M5	GM	E			E		
N	Ø	BG	N	Ø	BG	N	Ø	MR	N	Ø	MR	N	Ø	MR	N			N		
8			9			10			11			12			13			14		
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29			30			31														
D			D			D														
E			E			E														
N			N			N														

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