



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

# Guidelines on Infection Prevention and Control for Cork Kerry Community Healthcare

## 09: Laundry

This guidance document has been adopted as the policy document by:

Organisation:.....

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*Guidelines on Infection Prevention and Control  
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## SECTION 9

### LAUNDRY

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<b>Developed by</b>	Niamh Mc Donnell, Patricia Coughlan, Liz Forde, Helena Sheahan Infection Prevention & Control Nurse.		
<b>In conjunction with</b>	-----		
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# 1. Guidelines for Managing Laundry and Linen in Healthcare Facilities

## Introduction

The risk of infection from used linen is minimal provided that it is handled, transported and decontaminated in a safe manner. The high temperature of the water, the laundry detergent and the laundering process physically removes and destroys most micro-organisms. Any organism remaining is likely to be destroyed by further processes of tumble drying and ironing.

Principles of Standard Precautions which apply to the management of laundry and linen are:

- **Hand hygiene**- carried out following the handling of used laundry and linen and prior to handling clean linen.
- **Personal protective equipment**- worn when anticipated contact with laundry and linen soiled with blood or body fluids occurs
- **Maintaining a clean, safe environment**- by handling, transporting and processing used and soiled linen in a manner that prevents contact with skin and mucous membranes, staff clothing and avoids transfer of micro-organisms to other residents/clients and the environment.
- **Prevention of exposures to staff with body fluids**- by ensuring that manually sluice soiled laundry or linen is not carried out and items soiled with blood or body fluids are placed in an alginate or water soluble bag and laundered as per the guidelines below.

### 1.1 Handling Used Laundry and Linen

- Remove from the bed with care, avoiding the creation of dust, do not shake or place on the floor or on any clean surface.
- Place in the appropriate bag/container at the bedside or point of care.
- Wear appropriate protective clothing when handling laundry soiled with body fluids.
- Do not manually sluice or hand wash items soiled with blood or body fluids i.e. do not rinse or spray soiled items under running water.
- Place items soiled with blood or body fluids in an alginate or water soluble bag at the point of care. Do not fill the alginate bag or water soluble bag more than 2/3 full. Close/tie the bag. Place alginate or water soluble bags into the appropriate colour coded linen bag prior to being sent to the laundry.
- In the laundry the alginate or water soluble bag is placed directly into the washing machine.
  - The alginate bag opens during the washing process as the seams/stitching dissolves. When the item/s have been laundered it is safe to remove the item/s and the bag from the washing machine. Dispose of the alginate bag in non-healthcare risk waste.

- The water soluble bag dissolves completely during the wash cycle.
- Carry out hand hygiene after handling used linen and laundry.
- Ensure that sharps and other items i.e. incontinence wear are not inadvertently discarded into laundry bags.
- Ensure that laundry containers/skips are included in routine cleaning schedule.
- Do not store laundry containers/skips in clean areas such as clean linen rooms and residents living accommodation.

## 1.2. Segregation and Laundering

Category	Description	Laundering requirements
<b>Used linen (bedding, towels, hoists slings etc.)</b>	Linen that is used but not contaminated with urine, faeces, blood, vomit, sputum or any other bodily fluid.	<ul style="list-style-type: none"> <li>• Launder at 65°C for at least 10 minutes, or 71°C for 3 minutes.</li> <li>• A sluice cycle is not required.</li> </ul>
<b>Contaminated or infected linen and clothing</b>	Linen that is contaminated with urine, faeces, blood, vomit, sputum or any other body fluid or from a person with a known infectious condition i.e. <i>Clostridium difficile</i> infection	<ul style="list-style-type: none"> <li>• Do not manually sluice.</li> <li>• Place into an alginate bag/water soluble bag wearing gloves and apron.</li> <li>• Use appropriate sluice cycles.</li> <li>• Launder at 65°C for at least 10 minutes, or 71°C for 3 minutes.</li> </ul>
<b>Heat labile fabrics</b>	Linen that is used and cannot be washed at high temperatures.	<ul style="list-style-type: none"> <li>• Dry cleaning may be suitable for some items.</li> <li>• Fabric requiring lower washing temperatures (40-50°C) should be washed separately.</li> <li>• Please refer to laundering instructions. *</li> </ul>
<b>Microfibre cloths and microfibre flat mop heads</b>	Microfibre cloths and flat mops utilised for environmental cleaning.	<ul style="list-style-type: none"> <li>• Seek manufacturer's instructions.</li> </ul>

\* Washing and rinsing at lower temperature (40 -50°C) and will remove organisms and should be sufficient in most circumstances. If clothing can only be laundered using a low temperature, a hypochlorite may be added to the penultimate rinse. Disinfection for soiled items which cannot be laundered at high temperatures can be achieved by introducing chlorine releasing agent at 150 parts per million into the penultimate rinse and allow at least 5 minutes disinfection time. Hypochlorite's should not be used on fabrics treated for fire resistance. If disinfection is required seek manufacturer's instructions.

### **1.3 Transporting Used Linen**

- Do not over fill laundry bags, as this may prevent closure, increase the risk of rupture of the bags in transit and thus increase the risk of injury to handlers.
- Securely close all bags before being sent to the laundry.
- At ward/unit level, store bags of laundry in a designated, secure location, which is cool and dry.
- Transport laundry bags in a trolley or container that will minimize the potential for contamination to the person transporting the laundry.
- Store laundry in a designated safe area, away from food preparation areas and those parts of the facility frequented by residents and their visitors.
- Laundry must not be carried through the kitchen, dining room or food storage areas.
- If laundry is being sent to an off-site laundry:
  - segregation of laundry and colour coding guidelines must be followed by both the contractor and the healthcare facility,
  - store in a designated secure location prior to collection,
  - where holding receptacles are used, they should be stored in an area which has good access routes for uplift by the contractor. The receptacles should be washable and free from interference from pests.

### **1.4 Storage of Clean Linen**

- Store in a manner that protects it from contamination i.e. in a designated clean dry location on shelving raised at least six inches above the floor level.
- Shelving units in the linen storage area should be suitable for cleaning and included in a cleaning schedule.
- Where a trolley is used to store clean linen it should be designated for this purpose. The trolley should be impervious to fluids, capable of being closed and easily cleaned.
- Do not store clean linen in bathrooms/dirty utilities.
- Clean linen should be transported within resident care areas on a clean trolley and handled with clean hands.

### **1.5 Requirements for Laundry Facilities**

Seek Infection Prevention and Control advice:

- Where an on-site laundry is being developed or refurbished,
- When developing a contract for linen going to an off-site laundry.

Where an onsite laundry is in place as a minimum the laundry:

- Must be specifically designated as a laundry and no other activities must be carried out there i.e. eating.
- Must not be located in a site which is directly accessible to the kitchen. Laundry must not be carried through the kitchen, dining room or food storage areas.
- Must be designed to facilitate the creation of dirty and clean areas. The workflow must be from dirty to clean areas without crossover when laundry is clean. An area for ironing and folding must be allowed for, adjacent to the clean area.
- Should be designed in a manner that makes it easy to clean. The walls and floor should be impervious and properly sealed.
- Should have an industrial drier and washing machine with a sluice and disinfection cycle. The tumble drier should be vented externally. The washing machine and drier must be used and maintained according to manufacturer's instructions. The Matron /Director of Service should ensure that they are part of a maintenance programme with records retained.
- Must have separate hand hygiene sink for staff with wall mounted dispensers for soap and paper towels. Appropriate protective clothing must be provided including plastic fluid repellent aprons and household gloves.

## **1.6 Protection of Laundry Workers and Staff Handling Laundry**

To minimise the risk of infection to staff handling laundry it is important to ensure staff:

- Are offered hepatitis B immunisation.
- Are trained to carry out the necessary procedures involved in handling laundry.
- Cover any skin lesions with a waterproof dressing.
- Have access to conveniently located hand hygiene facilities.
- Have access to and wear appropriate personal protective equipment as necessary.
- Are aware that eating is not permitted in the laundry setting.
- Have access to showers in the event of a spillage, accident or contamination.

## 2. Guidelines for Managing Laundry in Community Homes

The risk of infection from laundry is minimal provided it is handled, transported, washed and dried correctly. The risk of infection is considered greater when laundering

- items likely to be soiled with body fluids,
- clothing of a person with a known infection e.g. infectious gastroenteritis.

Where a person is particularly vulnerable to infection e.g. undergoing chemotherapy, there may be a risk of infection to the person from items inadequately laundered.

The following good practice points are recommended to reduce the risk of infection from laundry. All eventualities cannot be addressed and infection prevention and control advice should be sought as required.

### How should laundry be handled?

- Care should be taken when handling all laundry.
- Use a laundry basket to transport laundry.
- Do not shake used linen, place on the floor or on any clean surface.
- Wear disposable gloves and a plastic apron when handling laundry soiled with blood or body fluids and handle in a way that prevents contact with skin or clothing, and that avoids transfer of germs to the environment.
- Hands must be washed after handling all laundry.

### How should laundry be washed?

- Thorough washing and rinsing at temperatures of 40°C with laundry detergent followed by drying will remove most germs and is sufficient where there is no increased risk. Check the laundry instructions on the care label.
- Do not overload the washing machine as this may compromise the washing process.
- Avoid using eco or quick wash cycles.
- Used and soiled laundry should be washed separately.
- Cloths and towels used in the kitchen and during food preparation should be washed in a hot wash separately from clothes and linen.
- Where there is an increased risk of infection wash items at or above 60°C using laundry detergent.
- Dry laundry as soon as possible after washing. Do not leave laundry in the washing machine overnight.
- Use and maintain the washing machine and drier according to manufacturer's instructions.
- It is recommended that the washing machine is not located in the kitchen. Ideally the laundry area should not be located in a site, which is accessed through the kitchen.

## How should laundry soiled with body fluids be handled and washed?

- Do not manually sluice or hand wash items soiled with blood or body fluids i.e. do not rinse or spray soiled items under running water.
- A domestic style machine is not recommended for processing laundry soiled with blood, vomit, faeces etc. as the temperatures required to disinfect may not be reached and the machine will not have a sluice cycle.
- Where there is a requirement to launder linen and clothing soiled with blood, vomit, faeces etc. a washing machine with a sluice cycle and capability of a disinfectant cycle i.e. attain and hold temperatures of 71°C for 3mins or 65°C for 10mins is recommended.
- Water soluble or alginate bags are recommended for use where laundry is soiled with body fluids, the purpose of which is to reduce the risk to staff handling soiled laundry.
  - Items soiled with blood or body fluids are placed in an alginate or water soluble bag at the bedside/in the bathroom. Do not fill the alginate or water soluble bag more than 2/3 full. Close/tie the bag and place the bag into the machine.
  - The alginate bag opens during the washing process as the seams/stitching dissolves, when the item/s have been laundered remove and dispose of the alginate bag.
  - Water soluble bag dissolves completely during the wash cycle.
- Where, on an infrequent basis, it may be necessary to launder an item soiled with body fluids in a domestic machine this should be dealt with in a controlled manner by:
  - using disposable gloves and paper tissue, remove any solid matter (faeces, vomit), and flush into the toilet,
  - then place the item directly into the machine or use an alginate bag and place the bag directly into the machine (water soluble bags which dissolve completely are not suitable for a domestic washing machine),
  - wash separately using a cold pre-wash cycle followed by a hot wash cycle suitable for the fabric using laundry detergent.
- If clothes/ or linen are heavily soiled disposal of the item should be considered following discussion with the client and /or family.

## Laundry Detergents

Laundry detergents which contain activated oxygen bleach (AOB) are suitable for laundry where there is a higher risk of infection i.e. clothes that are soiled. Their primary function is to clean and whiten; they also destroy some germs. As a rule biological powders and tablets contain this ingredient, liquids and products used for coloured items do not. Therefore biological powders and tablets should be considered where there is a higher risk of infection and in particular where higher temperatures are not feasible.

Products with fabric softeners are not suitable for certain fabrics i.e. microfibre.



### **3 Guidelines for Managing Laundry in the Home Setting.**

#### **Introduction**

The International Scientific Forum on Home Hygiene (2013) considers that clothing and linen can be a source of cross infection in the domestic setting. To reduce the risk of infection the following points should be adhered to by staff (home helps or personnel assistants) working in a client's home.

#### **How Should You Handle Laundry in a Clients' Home?**

- Handle any laundry soiled with blood or body fluids wearing gloves (disposable gloves or your bathroom rubber gloves) and avoid touching it to your clothes or skin.
- Bring the laundry basket to the bedside to reduce handling – laundry should not be shaken or placed on the floor or on any clean surface.
- Laundry soiled with, for example, faeces should be dealt with
  - by removing any solid faeces whilst wearing gloves using toilet tissue and
  - placing this into a commode or flushing it down the toilet.
- Any body fluids such as blood, faeces or vomit should not be removed by spraying/rinsing under running water.
- If clothes/ or linen are heavily soiled e.g. with blood, consider disposal of the item but please discuss this with the client.
- Always wash your rubber gloves and your hands after handling used/soiled laundry.

#### **Good Practices for Laundering in a Clients Home.**

- Do not overload the washing machine as this will not wash the clothes as well.
- In a client's home, washing machines and driers are often in the kitchen. In this situation, be conscious of the tasks being undertaken i.e. sorting laundry and preparing food should not be carried out at the same time. Ensure that hands are always washed after handling laundry and before preparing food.
- Clean the area around the washing machine such as the door of the machine and work tops.
- Check the washing instructions on the labels on the clothing carefully.
- Used laundry and soiled laundry should not be washed together.
- If laundry is soiled with body fluids, remove as outlined above and place directly into the washing machine. Rinse using a cold pre-rinse cycle and then wash with detergent using the hottest wash tolerated for that clothing.
- Dry laundry as soon as possible after washing. Do not leave laundry soaking in water or in the washing machine overnight.
- Tumble drying or hanging the clothing or linen on a clothes line are suitable methods of drying.
- It is best practice to wash clothing brought from a hospital setting separately.
- Laundry should never be taken by healthcare staff to their own home for washing or drying.

Taken from 'Infection Prevention and Control: An information booklet for Home Helps and Personal Assistants.' HSE South (Cork & Kerry) 2011.

## References

Centre for Disease Control and prevention (2003) Guidelines for Environmental Infection Control in Health-Care Facilities Recommendations of Centre for Disease Control and the Healthcare Infection Control Practices Advisory Committee

[http://www.cdc.gov/ncidod/hip/enviro/Enviro\\_guide\\_03.pdf](http://www.cdc.gov/ncidod/hip/enviro/Enviro_guide_03.pdf).

Department of Health (2016) Health Technical Memorandum 01-04: Decontamination of linen for health and social care. Engineering, equipment and validation.

Fijan S & Sostar Turk S, (2012) Hospital Textiles, Are They a Possible Vehicle for Healthcare-Associated Infections? Int J of Environ Resd Public Health Sep; 9(9): 3330–3343.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3499872/>

Health Protection Scotland (2016) Standard Infection Control Precautions Literature Review. Safe management of linen. NHS National Service Scotland

<http://www.nipcm.hps.scot.nhs.uk/documents/sicp-safe-management-of-linen-in-the-hospital-setting/>

Health Service Executive (2011) Infection Prevention and Control: An information booklet for home helps and personal assistants.

[http://www.hse.ie/eng/about/Who/healthwellbeing/Infectcont/Sth/gl/IPCC\\_Guidelines\\_Section\\_4.pdf](http://www.hse.ie/eng/about/Who/healthwellbeing/Infectcont/Sth/gl/IPCC_Guidelines_Section_4.pdf)

International Scientific Forum on Home Hygiene (2013) Effectiveness of laundering processes used in the domestic (home) settings.

<https://www.ifh-homehygiene.org/review/effectiveness-laundering-processes-used-domestic-home-settings-2013>