



# Safe Patient Care "Keeping our Residents Safe"



2016  
Use Standard Precautions for ALL Residents at ALL times #safepatientcare

## Cleaning:

What, how and when in residential care

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### Objectives:

- Why clean?
- What does clean mean?
- What should we clean?
- When?
- How should we clean? (products/equipment)

Cleaning: important role in reducing infection risk

**Overall Aim: protect clients- protect yourself**

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## Non acute health care facilities include:

Primary care: all health/social care services outside a hospital – GP, clinics, dental, mental health, disability

Long term care (LTCF)- Residential

- Nursing homes
  - Community hospitals
  - Clients homes – assisted living with services
- Variety of services to meet medical/non medical needs – chronic illness, disability

Differs from acute setting – active short-term treatment for acute illness, surgery, illness

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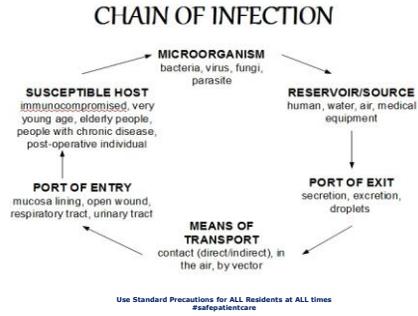
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**Role of cleaning in breaking the chain of infection**



**Why clean? – what causes infection?**

Micro-organism type	Examples and infections caused	Transmission route/precautions
Bacteria	MRSA – wounds Clostridium difficile – (CDAD) Meningitis TB	Contact – poor hand hygiene, inadequately cleaned equipment and environment Droplet/contact – within 3 foot Airborne
Virus	Influenza  Norovirus <b>Outbreak potential</b> Chickenpox/Shingles	Droplet and contact – within 3 foot, hands, equipment and environment Droplet, contact, ingestion  Airborne, contact, droplet (fluid dispersal)
Fungus	Aspergillus - Aspergillosis	Airborne – building renovation work causes release of fungal spores

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**Residential care – what is the risk?**

*Long term care facilities – different level of risk to acute setting*

**Infection risk due to:**

- Sharing of equipment between patients – risk depends on purpose/use
- Exposure of non intact skin or mucous membranes to equipment/environment
- Inadequate cleaning of equipment
- Poor compliance with hand hygiene
- Residents – elderly, underlying chronic conditions, immuno-compromised – medications, over exposure to antibiotics
- Outbreaks occur in LTCF – flu/Norovirus

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### What is the expected standard in LTCF?

- Environment: Clean, tidy, comfortable, safe (uncluttered), free from offensive odours, adequately ventilated
- Equipment – easy to clean, well maintained furniture, fixtures and fittings
- Environment/Equipment: visibly clean, free from dust, dirt, debris, rust, blood/body fluids and other spillages
- Condition monitor – discard when no longer possible to clean effectively
- Maintenance – compliments cleaning

Acceptable to residents, clients, visitors and staff

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### What does "clean" mean?

- Clean: free from dirt or contaminants
- Contaminants: Blood, body fluids, micro – organisms – infection risk potential

#### • Cleaning –

Physical removal of foreign material using water, detergent and mechanical action

Cleaning prevents /reduces risk of transmission of contaminants and micro-organisms from reusable equipment or the environment to patients and staff

**Must** precede disinfection - Removes organic matter which can inactivate disinfectant

#### **Each healthcare worker (HCW) responsible:**

- ✓ clean equipment is used for patient care
- ✓ it is decontaminated after use

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### Common terms used

- Decontamination: processes to prevent micro-organisms reaching susceptible host in sufficient numbers to cause infection

#### 3 levels:

Cleaning

Cleaning followed by disinfection

Cleaning followed by sterilisation

- Disinfection (chemical or heat): only needed where infection risk suspected/exposure to blood/body fluids – reduces viable microorganisms but may not inactivate some bacterial spores – e.g. C diff spores

- Sterilisation: process renders items free from all M/organisms, virus and spores

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## Cleaning methods

Dry: \_\_\_Dust control mop  
 Vacuum cleaner – bacterial filters – change bags when 3/4 full away from patient care areas  
**No sweeping brushes or dry dusting – spread dust**

Wet: \_\_\_Scrubbing  
 Mopping  
 Damp dusting – use of detergent and hot water

Steam clean: pressurised/heated steam – cleans and disinfects  
**Use correct colour coding for cloths and mop heads**

Make up fresh solutions of cleaning agents as required – rapid inactivation if left to stand

Change water frequently – dirty water ineffective and contaminates

Use disposable cloths / mop-heads or launder at correct temperatures

Mops – launder daily – or manual wash, rinse, store dry – free hanging

Buckets – empty, wash, store dry

**Always discard water into sluice – not hand wash sinks**

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## Types of cleaning

- Routine – e.g. Daily/weekly – as per written schedule
- Isolation room cleans – daily and terminal
- Terminal clean – discharge patient
- Outbreak cleaning – as per IPC advice/policy
- Environmental cleaning
- Equipment cleaning
- Catering facilities – food preparation, storage areas
- Laundry

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## What to clean?

- The environment – horizontal and vertical surfaces – floors, walls, ledges, windows, blinds, frequently touched surfaces, door handles, switches, sanitary ware, sinks, showers, baths
- Equipment – non-invasive, reusable communal patient care equipment
- Catering – food preparation, storage areas
- Laundry
- Cleaning staff should ideally be separate to those handling and preparing food
- Staff may be multi task – training, hygiene/precautions and order of works

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### Minimising environmental risks – general guidelines

- Walls: smooth, hard, impervious, unbroken, clean, dry
- Floors: impermeable to fluids, sealed joints
- Carpets: not in clinical areas
- Sinks: sealed to walls, elbow operated taps!
- Furniture: intact, impervious finish – easy to clean – no soft furnishings in clinical areas
- Mattresses/pillows: intact, impervious – suitable for laundering
- Curtains: washable/disposable option
- Blinds: wipe-able, fluid resistant smooth surface

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### Frequency of cleaning

- Cleaning policies should be in place wherever health care delivered
- Frequency -determined according to risk level – risk assessment (type of activity, use of item)
- (A- Z) Equipment list/schedule –must state frequency, cleaning method required and who responsible
- Cleaning checklists – signed and dated and kept for inspections
- Method statements for each task –e.g. NHO cleaning manual
- Audits – measuring what is being done

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### Environment – cleaning frequency

**Note: some micro-organisms can survive on surfaces for weeks, e.g. C diff and VRE**

Detergent and water for routine environmental cleaning

Routine disinfection not needed

Disinfection only post infected patient or blood/body fluid spillage

Frequency of cleaning – categorised according to high, medium and low risk area - activity e.g.

Daily: toilets, sinks, near patient use/touch sites, frequently touched surfaces, kitchen surfaces

Weekly – office spaces etc

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### Facility manager

Ensure:

- Appropriate IPC policies/procedures exist
- Are accessible and understood by all staff
- Are implemented and monitored –audits
- Ensure records are kept

Work with cleaning service/IPC to ensure:

- Written environmental and A-Z equipment list cleaning schedule
- Frequency of cleaning stated
- Order of works
- Who is responsible for cleaning
- Methods/ products for item/area cleaned

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### Equipment - When to clean?

Generally:

- ✓ Between each patient use
- ✓ When visibly dirty, dusty
- ✓ After soiling with blood/bodily fluids
- ✓ As part of equipment/environmental cleaning routine/roster schedule
- ✓ Always clean before disinfection
- ✓ Always clean before sending for service, repair of disposal (reduce risk to handlers)
- ✓ Always follow Manufacturer’s instructions

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### Categories of equipment

- Single use – needles, syringes, suction catheter
  - Single patient use – oxygen masks,
  - Reusable non invasive communal equipment – blood pressure cuff, commodes, bed pans
  - RIMD – reusable invasive medical device – endoscopes
- A risk assessment – determines method of decontamination required

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**Single use /Single patient use equipment**

**Single use:** once opened – no longer sterile – use and discard – do no reprocess



**Single patient use:** can reprocess and reuse for same patient only

Follow manufacturer’s instructions for cleaning, number of uses, time period, storage between uses

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**Equipment**

Equipment classified for decontamination according to infection risk associated with it's use

**Always clean before disinfection/sterilisation**

Risk	Equipment use	Method
<b>Low</b>	No patient contact In contact with healthy skin	Cleaning
<b>Intermediate</b>	Contact – mucous membranes transmissible organism	Clean + Disinfect or sterilise
<b>High</b>	Close contact broken skin/ mucous membrane Introduction to sterile body site (RIMD)	Clean+ Sterilise

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**Who does the cleaning?**

**General points for cleaning staff**

Determined locally- should be clearly defined- HCA, Household, Nursing staff, cleaners – Multitask attendants

Own staff or Contract cleaning staff  
Must have relevant training

Appropriate equipment and products must be available including PPE

Dedicated cleaning equipment storage area

Well ventilated area when using detergents, chemicals

Care when using/cleaning electrical equipment

Equipment log – condition monitor – dispose of when effective cleaning no longer possible – infection risk

Clean equipment should be stored away from dirty equipment – tagged dated and signed

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### Training for cleaning staff

**At induction and at regular intervals – local decision:**

- Hand hygiene – why, when and how – 5 Moments for hand hygiene/4 Moments in LTCF
- Patient zone – see next slide
- Use of standard precautions – handling BBF, exposure to broken skin, mucous membranes
- Transmission based precautions – infectious patients – know how the infection can be spread- guides precautions to take
- Risk assessment – what do you need to protect you?
- PPE – choice and correct use
- Use of disposables/single use, laundering or reprocessing
- Colour codes
- Spillages of blood and body fluids
- Correct waste disposal
- Correct use of chemicals/detergents/cleaning equipment
- Follow/read local policies

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### The patient zone and the moments for hand hygiene

**In health care setting:**

- Immediate space around a patient
- All surfaces/equipment dedicated for use for that patient
- May be touched by patient or staff caring for patient
- May be contaminated by patients own flora
- Single room = patient zone
- Multi-bed room – **area inside curtains**

**In LTCF – shared living spaces:**

- Residents may move about freely – no distinct difference between patient and healthcare zone (wider HC area) – use 4 Moments for hand hygiene
- Patient zone – only applies where patients mainly cared for in dedicated space using dedicated equipment – use 5 Moments for hand hygiene

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### General cleaning Procedure

- Always get instructions from area/ward manager – any infectious patients? – clean last
- Wash hands and apply PPE
- Use chemicals in well ventilated space
- Products used – use as per manufacturer - store safely (locked cupboard)
- Clean from top down
- Leave equipment to dry or dry with paper towels
- Store equipment dry in designated clean area
- Date and tag where relevant
- Clean and store cleaning equipment

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## Personal protective equipment - PPE

### Risk assess

**What do you need to protect yourself?- Ask**

Must be suitable for the task – e.g. handling chemicals, contact with blood/body fluids, infectious patients, heat

- Gloves – disposable latex free (nitrile) for contact with blood/body fluids, cleaning for infectious patients. Household gloves for general cleaning

**Gloves are never a substitute for hand hygiene – clean hands before and after glove use**

- Aprons – protect uniform
- Gowns if required – more coverage- infectious patients
- Masks – e.g. surgical for Flu, Norovirus, meningitis
- TB – FFP2 or FFP3 – ensure correct fit
- Goggles – if splash risk

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## Colour coding

Purpose: to prevent cross contamination from one area to another during cleaning

May include: cloths, mops, gloves, buckets

LTCF/as per local policy:

**Blue:** cleaning rooms, corridors, general areas

**Red:** cleaning bathroom, sluice, toilet

**Green:** cleaning in kitchens – stored separately from toilet cleaning equipment

In acute Facilities:

**Yellow:** Hand wash sinks

**White:** Isolation rooms and operating theatres

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## Products used

Product	How to use	Use
Neutral ph detergent	Dilute according to manufacturer's instructions	Routine environmental cleaning of hard surfaces and equipment, furniture
Cream cleanser, e.g. Cif	Use as instructions	Sinks
Disposable detergent wipes	Wipes impregnated with neutral ph detergent	Multi surface use e.g examination couch. Not to replace routine cleaning methods
Chlorine releasing hypochlorite, e.g. Milton 1%	Make up <b>using cold water</b> - Manufacturer's instructions for dilution – 1000ppm available chlorine	Clean first – Use after blood, body fluid, infectious patient to disinfect, correct contact time, rinse if indicated
NaDCC granules/tablets e.g. Precept, Klorsept	Make up following dilution instructions or place granules on spill – 10,000 ppm available chlorine	Blood or body fluid spillages
Combined detergent/disinfectant e.g. Actichlor Plus	Follow dilution instructions to get required concentration – chlorine based	One step process for cleaning/disinfection – not for routine cleaning. Ensure correct contact time – rinse on stated surfaces - corrosive
Alcohol wipes 70%	Only on clean surfaces compatible with alcohol	Trolley cleaning

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### General points

- Disinfectants – use with caution – hazardous potential
- Not for routine cleaning
- Always clean first before use
- Always make up disinfectants using cold water
- Never mix disinfectants with other products
- Always follow manufacturer’s instructions for correct dilution, use, contact time, rinsing and disposal
- Skin disinfectants (antiseptics) should never be used for environment/equipment disinfection
- Environmental disinfectants should never be used on skin
- Material safety data sheets (MSDS) to be available for reference

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### Outbreaks

- Know who to contact for IPC advice
- Early action limits spread
- Isolate/cohort patients with similar symptoms/exposures
- Clean up spillages promptly
- Extra cleaning/disinfection may be needed during outbreaks
- Use disposables, limit items taken into rooms
- Know how infection is transmitted –informs precautions to take and PPE to use
- Terminal cleaning – all disposables to be thrown out
- Strip linen, curtains – alginate bags - launder
- Clean and disinfect all reusable equipment and environment using chlorine based disinfectant

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### Blood and body fluid spillages General advice

- Deal with immediately – infection/safety risk
- Spill kit if available – blood spills
- Safety signage -Well ventilated – open window
- Cover cuts/grazes – PPE +/- goggles
- Remove spill before cleaning/disinfecting
- Paper towels – contain and soak - Risk waste bag
- Depending on the nature of the spill:
- NaDCC granules – Presept – absorb/disinfect  
    **or**
- Detergent followed by Disinfectant agent  
    **or**
- Combined detergent/disinfectant (Actichlor Plus)
- Mattress, stainless steel, plastics – rinse area with plain water after contact time

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**Procedure**  
 follow Manufacturer's instructions for products used  
**Never use chlorine directly on urine**

Blood spillage	Other body fluid
PPE Cover spill with chlorine releasing granules or solution 1:10000 ppm available chlorine Allow 2-3 minutes contact time Scoop or wipe up and discard Wash area with neutral detergent Disinfect area with 1:1000 ppm available chlorine, rinse and dry Or use combined detergent/disinfectant (Actichlor +) Remove PPE, discard , hand hygiene	PPE Cover spillage with paper towels Remove and dispose of sodden material – risk waste Clean area with detergent and water Disinfect with 1 in 1000 ppm chlorine releasing solution, rinse and dry Or use combined detergent/disinfectant (Actichlor +) Remove PPE ,correct disposal, hand hygiene

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**Laundry**

Handle with care – minimise transmission of infection due to:

- Dust
- Skin scales
- Contact with blood/body fluid soiling
- Ensure laundry is free from sharps, foreign objects or patient property
- No manual sluicing of linen

Soiled infected linen – place in alginate/ water soluble bag – linen bags if taken off site  
 All processed linen should be visibly clean, not damaged and not discoloured

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**Laundry**

- Laundry facilities should be separate from kitchen facilities
- Clothing and bed linen should be laundered separately from kitchen cloths, items etc
- Use PPE when handling soiled linen
- Dirty linen stored separately from clean
- Hand washing facilities in laundry room

Laundry disinfection temperatures:

65° - 10 minutes

71° - 3 minutes

80° - 1 minute

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### Catering

- HACCP – food safety training, safe food storage
- Kitchen cleaning – catering and cleaning staff
- Documented cleaning schedule clearly displayed and followed
- Correct colour cloth and neutral detergents
- Crockery and cutlery – dishwasher if possible
- Staff – hand hygiene, respiratory etiquette, if diarrhoea/vomiting should not handle food (at least 48 hour symptom free – seek IPC advice)
- Cover cuts and grazes
- Kitchens should have separate wash hand basins

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### Audits, inspections, records

- Cleaning and reducing infection risk is everyone's business
- Cleaning staff must be fully trained in all cleaning and decontamination techniques required in their facility
- Maintenance and cleaning required
- Routine cleaning should take place at a time that causes least disruption to patients/clients
- Cleaning must be documented, recorded and audited

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### Further information:

- HIQA Standards - PCHCAI (2009) and Hygiene (2008) [www.hiqa.ie](http://www.hiqa.ie)
- Guidelines on Infection Prevention and Control 2012 – HSE South (Cork and Kerry) [www.hse.ie/Who/Infectcont/Sth](http://www.hse.ie/Who/Infectcont/Sth)
- Safety, Health and Welfare at work Act 2005
- COSHH – Control of substances hazardous to health regulations 2002,
- MSDS (Material safety data sheets)for each product
- Infection Prevention and Control for Primary Care in Ireland – A Guide for General practice. 2013 [www.hpsc.ie/A-Z/Primarycare](http://www.hpsc.ie/A-Z/Primarycare)
- Occupational Health – allergy management /exposure incidents (blood and body fluids), injuries, vaccinations
- NHO Cleaning manual 2006 – useful guide, [www.hse.ie](http://www.hse.ie)
- Procurement policy for equipment and cleaning products – easy to clean, hard wearing, able to stand up to detergent/disinfectant in use

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