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Llywodraeth Cynulliad Cymru  
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# Infection Prevention Model Policy/Procedure 1

Control of the Environment/ Environmental  
Cleanliness Policy and Procedure

(an element of Standard Infection Control Precautions)

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## **1.0 Executive Summary/Key Points.**

1. Control of the environment is one of the nine elements of standard infection control precautions (SICPs) which should be applied in all health care settings
2. All staff have a responsibility for the control of the environment in the prevention and management of infection
3. All staff must receive training in the principles of controlling the environment
4. To support effective environmental management there is a need to maintain a tidy, well organised, 'clutter free' environment
5. Equipment in the environment and purchased for use must be fit for purpose, able to withstand cleaning and disinfection, and be maintained in a good state of repair
6. Non intact items within the environment, e.g. chairs, mattresses, work surfaces must be removed, repaired or replaced.
7. Liaison with estates/maintenance staff is important for the control of the environment
8. Areas/items found to be unclean should be reported and timely action taken
9. Cleaning schedules must be available for all areas and should be based on the principles of the National Standards for Cleanliness in NHS Trusts in Wales
10. Cleaning equipment must be clean, fit for purpose and maintained in a good state of repair
11. Cleaning solutions used must be standardised within an organisation, must be suitable for their intended purpose and must be agreed by relevant managers/groups
12. Control of Substances Hazardous to health regulations and manufacturer instructions must be followed when using cleaning solutions
13. Detergent solutions should be diluted in hand hot water at the time of use
14. Hypochlorite solutions when used must be diluted in cold water and to the correct strength and be used within 24 hours
15. Monitoring of cleanliness must be undertaken with timely action being taken where unacceptable standards are identified

## 2.0 Introduction

Health and social care settings contain a diverse population of microorganisms. Areas/items shared by different patients/residents/clients (e.g. toilets and commodes) can become contaminated with blood, other body fluids, secretions and excretions during the delivery of care and, therefore, must be managed appropriately. Measures are required in order to limit such areas/items from becoming potential reservoirs for harmful microorganisms which, in turn, could lead to the potential contamination/infection of staff, patients/residents/clients and visitors. Control of the environment is one of the nine elements of Standard Infection Control Precautions (SICPs)

Health care environments must be well maintained and be kept at acceptable national levels of cleanliness. The environment must minimise the risk of healthcare associated infection to patients/clients staff and visitors and must emphasis high standards of hygiene reflecting best practice initiatives.

In all healthcare environments there should be a designated person who takes responsibility for the management of the environment.

For the purposes of this policy, the term 'environment' refers to:

- any general horizontal surfaces in the patient's/client's environment (low and high level must be considered)
- any frequently touched surfaces in the environment, this also includes rooms such as sluice rooms, treatment rooms, store rooms, mobile treatment areas, dental/doctor surgeries, physiotherapy gyms, patient changing areas and any other area where consultation, assessment or treatment takes place.
- beds and trolleys, chairs, other furniture in the environment, bedside items such as lockers/tables, bedside telephones and televisions.
- toilets and commodes
- sinks, basins, baths, showers and the items surrounding these, including, e.g. hand hygiene solution containers
- floors
- doors, door handles, cot sides, bed tables particularly those in the immediate environment frequently touched by patients/residents/clients/care workers

- other paint work and surroundings, e.g. skirting, walls, partitions (particularly focusing on those frequently touched)
- curtains/screens, window blinds
- light fittings and light switches
- servery/kitchen areas in care settings (specific guidance for main kitchens/food hygiene is not contained within this policy)

This list is not exhaustive and judgments should be made in each specific setting as to how to control the environment. Different healthcare environments will need to comply with guidelines and memoranda specific to their own areas and needs. Local risk assessments should be undertaken and are important in ensuring the environment is monitored to a high standard at all times when providing care. Liaison with estates and maintenance staff is an important aspect of environmental control. Those caring for people in their own homes may not be able to adopt all elements of this policy but should apply the principles.

This policy focuses on the general environment. When particular infections/microorganisms are present, further advice should be sought from guidance documents, local policies or where appropriate Infection Prevention and Control staff. Those environments where particularly susceptible patients/clients (e.g. immunocompromised) are cared for may add additional, specific direction, e.g. increased frequency of cleaning. Similarly in other specialised areas, e.g. laboratories and pharmacies, specific regimes may be required, however, the principles contained within the policy can apply to all.

Everyone has an important part to play in improving patient/client safety. Undertaking SICPs are crucial elements in ensuring everyone's safety.

The management of specific patient/client care equipment is detailed in the Care of Equipment Policy and Procedure. Care of reusable medical devices is not included in this policy as specific decontamination guidance for this area is available from other sources.

### **3.0 Controlling the environment**

The healthcare setting, in particular, contains a diverse population of microorganisms and this must be considered when caring for those who are susceptible to infection. Although potentially pathogenic microorganisms can be detected in air, water and on surfaces, determining their role in infection can be difficult. It must be considered that contamination of all patient/resident/client environments will occur and must, therefore, be controlled.

The transfer of microorganisms from environmental surfaces to patients/clients is largely considered to be via direct (hand) contact with these surfaces. As a consequence, hand hygiene is paramount in reducing infection spread via this route as well as the appropriate control of the environment

The state of repair of the environment, and items contained within it, is also important in ensuring that microorganisms do not persist. In particular, surfaces that are not smooth and intact can harbour bacteria.

A tidy, 'clutter free' environment is also important to ensure cleaning can be undertaken. To support effective environmental management there is a need to maintain a tidy, well organised, 'clutter free' environment. This could involve minimising and effectively organising storage of equipment, reviewing cleaning processes, minimising waste and making effective use of time.

Equipment used for cleaning the environment must be clean, fit for purpose and in a good state of repair. Cleaning equipment should be stored in a dedicated area (not in clinical rooms, bathrooms etc).

Equipment purchased/used for storage, e.g. shelves, units, lockers should have easy-to-clean, smooth impervious surfaces and be water-resistant and tolerate disinfection with hypochlorite solutions 1000ppm for example. Items, such as supplies, must always be stored off the floor to facilitate effective cleaning.

Items which are not intact, for example chairs, should be removed, reupholstered with suitable impervious flame retardant material, (which can withstand cleaning with detergent and disinfection with hypochlorite 1000ppm), where appropriate or replaced. Where there is a concern about risk of infection due to damaged equipment, the defect should be reported using the incident reporting system used locally.

Liaison with estates/maintenance staff is important for control of the environment

## **4.0 Responsibilities**

### **4.1 Managers must:**

Ensure that all staff have had instruction/education on the principles of controlling the environment and standard infection control precautions (SICPs).

Ensure that adequate resources are in place to allow for the recommended infection prevention and control measures such as controlling the environment to be implemented

Undertake a risk assessment to optimise patient/client and staff safety, consulting expert infection prevention and control guidance if/as required

Support staff in any corrective action or interventions if an incident occurs that may have resulted in cross infection

Ensure any staff with health concerns, or who have become ill due to occupational exposure to cleaning products or disinfectants or infection are referred to the relevant agency e.g., General Practitioner or Occupational Health who may seek advice from Infection prevention and Control or Health Protection Nurses.

Ensure that cleaning schedules/standards are defined, monitored, documented and are available in line with national cleaning standards.

Ensure that cleaning staff are advised of any additional infection control precautions required, including the use of disinfectants for specific infections.

**4.2 All staff – (who provide direct care or have a responsibility for the environment in a health or social care setting) must:**

Attend induction and update training in line with local training policies.

Apply the principles of SICPs and ensure all other staff/agencies apply the principles of SICPs

Ensure that cleaning schedules are clearly defined, monitored, documented and available as appropriate to their role

Report to line managers any deficits in relation to their knowledge of controlling the environment/SICPs/facilities/equipment or incidents that may have resulted in cross contamination

Report any illness as a result of Occupational Exposure to the line manager

Not attend for clinical duty with known or suspected infections. If in any doubt consult with your General Practitioner, Occupational Health Department or Manager.

Advise the patient/client, carers or visitors of any infection prevention and control requirements such as hand hygiene and cough etiquette

#### **4.3 Infection Prevention and Control Staff must:**

(The source of Infection Prevention and Control advice and support should be identified by all healthcare providers).

Provide support for and where appropriate, education for staff and management on this policy

Act as a resource for guidance and support when advice on controlling the environment is required

Provide advice on individual risk assessments for controlling the environment decisions

#### **4.4 Visitors should be advised:**

If they are unsure of the infectious status of the person they are visiting within a hospital or care home setting then they should contact the person in charge before visiting

Of appropriate hand hygiene procedures to be carried out before and after visiting

Of the requirement to avoid visiting if they are suffering from an infection such as diarrhoea and vomiting or flu like symptoms

#### **4.5 Incident Reporting**

Areas/Items which are found to be consistently unclean, particularly following times when cleaning routines should have been performed, and items which are in a poor state of repair should all be reported. Where there is concern about risk of infection, the concern should be reported using the incident reporting system used locally.

Damage to equipment should be reported to the line manager. Any issues arising in relation to the use of cleaning solutions, e.g. skin reactions, should similarly be reported to the Occupational Health Department or General Practitioner.

#### **5.0 Cleaning procedures to control the environment**

A routine cleaning schedule should be available in the local area. This schedule should be based on the National Standards of Cleanliness for NHS Trusts in Wales in Hospitals and on the principles contained within this document in other healthcare

settings. Generally this will involve cleaning on a daily/twice daily basis, or based on a risk assessment. Procedures detailed in these schedules should include cleaning, vacuuming and laundering of items and the times these should be performed.

Cleaning must also be undertaken when:

- the environment is visibly dirty, e.g. contamination with dust, soilage
- immediately when spillages occur
- In relevant care settings, whenever a patient/resident/client is discharged from their care environment. Specific guidance may be in place locally to guide staff as to the steps to take upon patient discharge to ensure the environment is safe to receive the next patient. These environments can include rooms, wards, (mobile) treatment areas in all settings

### **5.1 Cleaning procedures**

The use of Personal Protective Equipment (PPE) to protect those caring for the environment is important, as is the disposal of PPE immediately following use. Hand hygiene is also essential, even if gloves are worn during the procedure

Gather all relevant equipment for use and ensure all equipment/receptacles used to clean the environment are clean before use. Utilise single use items, such as disposable cloths and mop heads, as far as possible in health and social care settings

The choice of cleaning agent that best meets overall needs is important

General purpose neutral detergent is suitable for routine environmental cleaning (antimicrobial agents are not routinely recommended).

Do not use chlorhexidine, e.g. Hibiscrub and other hand antiseptic agents, for cleaning of the environment

Alcohol and detergent wipes should not be used for routine cleaning of the environment as detergent wipes are not suitable for large surface cleaning

Follow guidance (e.g. manufacturers' instructions and recommendations) provided on cleaning agents, regarding amount used, dilution and contact time and ensure solutions are made up freshly. Solutions made up and stored within a receptacle must be labeled, e.g. solution name, date and time made up. Solutions must not be stored for longer than 12 hours. Containers used to dilute cleaning solutions should be rinsed inverted and stored dry. Control of Substances Hazardous to Health (COSHH) sheets and product data sheets should be referred to in order to ensure solutions used to clean the environment are used and stored safely.

## 5.2 Procedures:

Use warm (hand hot) water with general purpose neutral detergent applied with disposable cloths.

Use cold water to dilute hypochlorite solutions, apply with disposable cloths

Use dust control mops (anti-static type) for collecting dust and grit. Cotton or mixed fiber mops should be used to collect dirt and soil. Brushing should be avoided as it can disperse more dust into the air. 'Damp dusting' is the recommended method for cleaning the environment

Ensure all areas are thoroughly cleaned and free from dust and grime, paying particular attention to harder to reach areas, e.g. corners, edges, underneath of beds, etc. The mechanical action of cleaning is important in order to physically remove dirt, debris bacteria etc.

Ensure sinks, basins and baths are free from soap build-up and mineral deposits. Attention should be paid to fixtures, shower curtains, wall tiles and hand-rails

Toilet seats, seat raisers and commodes should be cleaned with a frequency appropriate to use, the undersides must be checked and be included in the cleaning process.

Air-drying following washing is generally acceptable; however, if areas are particularly wet these should be dried with clean, preferably disposable, cloths

Soft furnishings, such as carpets, should be vacuumed and can also be wet-vacuumed when necessary. When wet-vacuumed, items must be allowed to dry fully before reuse.

Furniture should be free of dust and staining

In the healthcare setting vacuums should be fitted with a HEPA filter which should be changed following manufacturers guidance

Items should be checked while cleaning for any splits, or damage. Any items which are not intact, for example chairs, should be removed, reupholstered with suitable impervious flame retardant material, (which can withstand cleaning with detergent and disinfection with hypochlorite 1000ppm), where appropriate or replaced as appropriate

The use of bed/theatre cart washers, e.g. in sterilising departments, may be beneficial in the cleaning of large items, e.g. bed frames, if these facilities are available

Where vents/filters are present in the environment (e.g. air flow systems) these should be considered during cleaning procedures (liaison with estates/maintenance staff is important, as is following local procedures on this)

Utilise laundry facilities for items such as curtains and reusable mop heads. Reusable mop heads should be laundered daily.

Clean mop heads and other equipment should always be stored in a clean, dry area. Cleaning schedules should be available locally, clearly stating frequency of dealing with these items.

When not in use mops should be inverted to allow air drying.

Any additional information on cleaning/disinfecting agents to be used at specific times should be discussed with Infection Prevention and Control/Health Protection staff.

Steam Cleaning is a very effective method especially for specific equipment cleaning and can be used on most soft furnishings. Check with furniture manufactures prior to use. It is not recommended for regular daily use due to health and safety issues. It is not suitable for replacement of current regular cleaning regimes but may be useful for specific periodic cleaning.

## **6.0 Monitoring of Cleanliness**

There is a need to demonstrate that cleanliness in health care settings is being maintained to consistent standards that meet the expectations of the users, staff, public/ visitors and monitoring bodies. National Standards of Cleanliness for NHS Trusts in Wales are available and these standards can also be used to guide cleaning specifications and monitoring processes within other health care settings. Timely action must be taken and documented when monitoring identifies cleanliness standards which are below that required.

Monitoring of the standards of cleanliness can be undertaken by domestic service staff, relevant managers and infection prevention and control teams where appropriate.

## **7.0 References/Literature Review**

This policy/procedure is supported by a full review of literature with references.

**This work is based on the Model Infection Control Policies developed by Health Protection Scotland with thanks**