

INFECTION CONTROL DISTANCE LEARNING MODULE

HCAI refers to a Health Care Associated Infection which is defined as:

'An infection occurring in any healthcare setting or environment.'

Three common HCAI are:-

MRSA
Clostridium Difficile
Norovirus

HAI refers to a Hospital Acquired Infection which is defined as:

'An infection that was not present or incubating at the time of hospital admission.'

Chain of Infection

Portal of Exit

Portal of Exit - this is a method for a microorganism to leave the reservoir

Nose - sneeze
Mouth - cough/vomit
Skin - contact
Bowel - faeces
Bladder - urine

Means of Transmission –

Means of Transmission - this is a method by which the organism leaves, or is carried, from one place to another on the hands of the healthcare worker or unclean equipment

Hand hygiene - 5 moments / Patient zones / Personal Protective Equipment

Susceptible Person

Susceptible Person - a person who cannot resist a micro-organism invading the body, multiplying and resulting in an infection

Susceptible to the disease / Lacking immunity or physical resistance to overcome the invasion by the pathogenic micro organisms

Infectious Agent Portal of entry

Infectious Agent - this is a microbial organism with the ability to cause disease

Bacteria / Virus / Fungi / Parasites

Standard Precautions

Below are standard precautions for Infection Control and Prevention.

These are basic measures and are not optional

- Personal fitness to be at work e.g. dermatitis awareness, diarrhoea and vomiting, medical conditions
- Hand hygiene
- Use of Personal Protective Equipment (PPE)
- Safe handling waste and segregation
- Body fluid spillages
- Decontamination
- Dress code
- Safe manual handling
- Food safety
- Reporting / documentation.

Hand-washing technique 12 point picture



Hand mediated transmission of organisms is a major contributing factor in current infection threats to hospital in-patients.

1. Wet hands with water
2. Apply enough soap to cover all hand surfaces
3. Rub hands palm to palm
4. Rub back of each hand with palm of other hand with fingers interlaced
5. Rub palm to palm with fingers interlaced
6. Rub with back of fingers to opposing palms with fingers interlocked
7. Rub each thumb clasped in opposite hand using a rotational movement
8. Rub tops of fingers in opposite palm in a circular motion
9. Rub each wrist with opposite hand
10. Rinse hands with water
11. Use elbow to turn off tap
12. Dry thoroughly with a single-use towel

Hand Hygiene Important Points

- **always** wet hands first
- **one** squeeze of soap is enough!
- **thoroughly clean** all surfaces; palms, webs, tips, thumbs and wrists
- **rinse** completely (drying as above)
- **dry** thoroughly – one towel is not enough
- **moisturise** with Hand Medic to protect your hands before, during and after finishing duty.

Patient Zone

The **Patient Zone** is defined as:

'The area in the immediate vicinity of the patient where care is provided.'

The patient zone is an important concept in infection transmission dynamics. It is an area which is likely to be heavily colonised with the flora of a specific patient.

The patient zone has the highest risk of infection transmission within the clinical environment.

The **Patient Zone** exists:

- only when a patient is assigned to an area
- only when that area is used for care provision
- even when the patient is present there



- it includes objects and furniture allocated, even temporarily, to the zone
The patient zone **ceases** to exist when the area is clean and vacant between patients.

Personal Protective Equipment

Personal Protective Equipment (PPE) should be selected based upon:

- the risk assessment of the procedure
- potential for transmission of micro-organisms to the patient
- risk of contamination from volunteer clothing and skin by the patient's blood, body fluids, secretions and excretions.

Plastic Aprons

A clean tabard or green disposable plastic aprons **must** be used when serving refreshments

Uniform

Volunteers are expected to wear a clean tabard daily, to take good care of their uniform and to observe correct care procedures.

The tabard **must** be:

- washed at 60 - 65 °C
- washed separately to other clothing
- ironed with a hot iron
- transported from hospital in a clean plastic bag
- transported to hospital in a **separate** clean plastic bag

Cleaning - Risk Assessment

Cleaning is risk assessed into 3 categories; low, medium and high risk.

- **Low Risk** - low risk requires cleaning using a Sanicloth active wipes Volunteers usually use this category to clean trays, trolleys, telephones, bedside tables, table tops etc.
- **Medium Risk** - medium risk requires the disinfection of infectious areas using a chlorine releasing agent 1,000 PPM, Chlorclean solution requires 1 tablet to be placed into 1 litre of cold water. Sanicloth chlor +1000 can be used in place of solution.
- **High Risk** - high risk requires sterilisation

Waste Disposal

Correct waste disposal procedures **must** be adhered to at all times.

Clinical Waste - **Orange** or **Yellow** bags

- incinerated or alternative treatment
- blood / body fluids / contaminated material
- anything used on **confirmed or suspected** to be from infectious patients.

Waste - Black bags

- general household items such as food wrappers, banana skins, containers or similar items.

Safe Water

As part of our patient safety assurance the Trust is required to monitor safe water by measuring the counts of Legionella and pseudomonas which may be present in water outlets which are not in frequent use.

Housekeeping Department are responsible for:

- identifying unused or infrequently used taps, showers and toilets
- **run taps and flush toilets twice weekly**
- provide weekly reports to inform the Estates Department.

All staff and volunteers are responsible for identifying any unused or infrequently used taps, showers and toilets. Any identified areas should then be reported to your line manager.

Housekeeping staff are responsible for the flushing of these identified water outlets.

Sharps

Nurses should always dispose of needles after the procedure is completed and on return to the treatment room or sluice room.