



## Mandatory Training Workbook 2015

### Infection Prevention Level 1

### Non-Clinical Staff

My



## Definition of Levels:

**Level 1 – Non clinical Staff**

**Level 2 – Clinical Staff**

### **Checklist**

- *Read through this section of the workbook.*
- *Complete the on-line assessment on [My PACT](#)*
- *If further information is required please contact the Infection Prevention Team on 1326/1057*

## **Level 1 Learning Outcomes – mapped against Core Skills Framework**

All Staff should be able to:

- Understand the general principles of Infection Prevention and Control
- Appreciate the nature of Healthcare Associated Infections (HCAI's)
- Recognise factors that may increase an individual's susceptibility to infection
- Be aware of how individuals can contribute to Infection Prevention & Control
- Know where to find information about Infection Prevention and Control, including relevant national legislation or guidance and local policies.
- Describe the role of hand hygiene in the prevention of transmission of infection.
- Describe the basic local infrastructure, initiatives and reporting procedures for Infection Prevention & Control.

### **Background**

The management of infection prevention and control is now a statutory requirement (Health and Social Care Act 2008). The introduction of this Act resulted in the development of a Code of Practice that details standards the Trust is required to meet or exceed.

The Code specifies that effective prevention and control of infection must be a part of everyday practice and must be applied consistently by everyone.

### **Healthcare Associated Infections (HCAI's)**

Health Care Associated Infections (HCAI) are those caused by any infectious agent acquired as a consequence of a person's treatment in a healthcare institution or acquired by a health care worker in the course of their duties. Although not all HCAI can be avoided, many can be by adherence to good infection prevention & control practices.

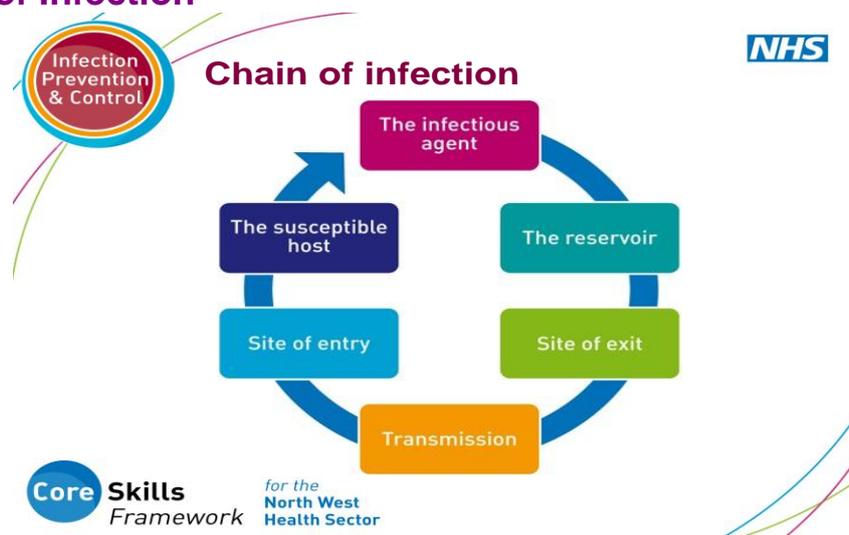
Figures suggest approximately 8-9% of patients will acquire a HCAI and this is estimated to cost the NHS about £1 billion per year.

All NHS organisations have a duty to ensure that patients are cared for in a clean environment, where the risk of HCAI is kept as low as possible. All staff working within the Trust have a responsibility to ensure that maintain a clean and tidy environment, that they adhere to good practices and act to promote infection prevention, in order to safeguard the health and safety of patients, visitors and other staff.

The prevention and control of HCAI is important to:

- Ensure patients receive safe and effective care
- Ensure the health and safety of staff
- Reduce financial burdens in terms of additional costs associated with the treatment of HCAI and avoidance of financial penalties associated with breaching targets.
- Preserve or enhance the reputation of the Trust

## Chain of Infection



### The Infectious Agent

- A micro-organism with the ability to cause disease, including bacteria, viruses, fungi, parasites
- The possibility of infection will be related to how easily it is transmitted and its virulence (ability to produce disease)

### The Reservoir

- Where micro-organisms reside and multiply:  
e.g. People, equipment, water, food,

### Site of Exit

- The place of exit providing a way for a micro-organism to leave the body  
e.g. Break in skin, via bodily substance,

## Transmission

Routes of transmission include:

- Contact
  - Direct Contact – human-to-human contact
  - Indirect Contact – via another object
- Airborne particles or respiratory droplets
- Ingestion of contaminated food or water

## Site of Entry

e.g. Break in the skin, respiratory tract, an invasive device, digestive tract

## The Susceptible host

Some people are potentially more susceptible to infection if they are:

- Immunosuppressed
- Very young or very old
- Malnourished
- Have an underlying disease

## Hand Hygiene

The transmission of micro-organisms via contaminated hands is recognised as a major cause of HCAI and so good hand hygiene is an essential part of any infection prevention & control strategy. Hands can be decontaminated using either alcohol rub or using soap and water.

Studies have shown that some areas tend to be missed when performing hand hygiene. The diagram below demonstrates which areas these are:

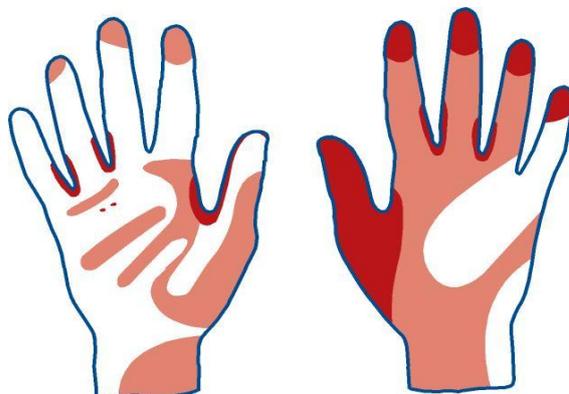
The white areas are those least frequently missed

The darker areas are those less frequently missed

The darkest area is those most frequently missed

Front

Back



Therefore it is important to ensure all areas are covered when cleaning hands (see diagram)

## (1) Alcohol Rub

Alcohol rubs are more convenient to use than washing with soap and water at a sink, and for the majority of staff who have to perform frequent hand decontamination, are less prone to cause skin irritation.

Alcohol hand rubs will destroy micro-organisms but will not remove physical soiling or dirt and should be used when hands are socially clean.

Also when caring for patients with *Clostridium difficile* and in some outbreak situations alcohol gel will not be suitable and the infection prevention team will specifically advocate the use of hand washing.

### Application

- Apply 1 dose of alcohol rub to hands
- Rub into skin, ensuring all surfaces are covered, including fingertips, thumbs and the area between fingers until the solution has evaporated and hands are dry

## (2) Soap and Water Hand wash

Hand washing at a sink with liquid soap and water is the preferred method for hand decontamination if the hands are visibly soiled or potentially contaminated with dirt, body fluids or other material:

- **W**et the hands with tepid running water
- **A**pply one dose of liquid soap from the pump dispenser into a cupped hand;
- **R**ub firmly and thoroughly all surfaces of the hands and fingers paying particular attention to the tips of fingers, the thumbs and the areas between fingers (for 10-15 seconds) before rinsing the hands thoroughly under tepid running water;
- **D**RY the hands thoroughly by blotting/gentle rubbing with a disposable paper towel, paying particular attention to the skin between the fingers.

### Skin care

- Cover all cuts or broken skin on hands or forearms with a waterproof dressing while you are at work
- Use a high quality hand cream as frequently as is necessary to maintain the skin in good condition.
- Report any skin problems that interfere with regular hand decontamination either to your line manager, or to Occupational Health, or directly to the Infection Prevention Team.

As well as before preparing or eating food or visiting the toilet the World Health Organisation has recommended 5 moments for hand hygiene.



### Standard Precautions

Standard precautions should be practiced at all times for all patients within the hospital setting.

### Personal Protective Equipment (PPE)

Appropriate personal protective equipment should be available and worn in all clinical areas.



These include:

- Gloves
- Aprons/Gowns
- Face/eye protection

### Waste disposal

All waste should be segregated and disposed of correctly. Household waste e.g. paper, packaging etc. should be disposed of in a black plastic bag.

Clinical waste e.g. anything that has been in contact with blood or body fluid should be disposed of in an orange plastic bag. Sharps should be placed directly into a designated sharps box/container.

All bags should never be overfilled, should be securely tied and labelled prior to placing in a designated area/container prior to disposal.

## Management of Sharps



The LHCH operates a strict policy on the management of sharps. The term 'sharp' is the general term used to describe anything with the potential to cause penetrating injury to somebody and includes disposable and non-disposable sharps.

Examples include needles and bladed devices such as scalpels, razors etc.

All sharps **must** be disposed of by placing them into a correctly assembled container that conforms to the British Safety Standard.

If;

- you find a sharp which has not been correctly disposed of,
- you notice a sharps bin is overfilled or there are protruding sharps

It is your duty to inform the person in charge of that area immediately, to prevent the risk of injury. An incident form should be completed even if no injury occurred.

## Inoculation Incidents

An inoculation incident is defined as an exposure to blood and body fluids. Significant occupational exposures carry a possible risk of infection with blood borne viruses.

A **significant** occupational exposure is defined as:

- Penetrating injury from a sharp object or instrument which is contaminated with blood/body fluids
- Exposure of mucous membranes (eyes, mouth etc.) to blood/body fluids from an individual.
- Exposure of non-intact skin (cuts, abrasions, eczema etc.) to blood/body fluids from an individual.
- A human bite that breaks the skin

**Non-significant** exposure is defined as:

- Contamination of intact skin
- Exposure to urine or saliva which is not blood stained
- Injury from a sterile or uncontaminated sharp object

All significant exposures must be reported as below.

## Management and reporting of a Sharps or Inoculation Incident

If you sustain an injury from a sharp or splash of blood/body fluid to the eyes, you must:

1. Encourage bleeding of the affected area.
2. Wash the affected area with soap and water
3. DO NOT suck the wound
4. In the event of an eye-splash with blood or body fluids, remove contact lenses and irrigate the eye immediately with water or eyewash
5. Inform the person in charge of your area
6. **Report to the Occupational Health Department at Aintree University Hospital if the incident occurs between 8.30 and 16.30 (phone number 0151 529 3803).**

**Outside of these hours you must attend the A&E department at Aintree**

7. Complete a Trust Incident form

## Isolation



Some patients admitted to the LHCH will require isolation due to their medical condition. These patients will usually (except in exceptional circumstances) be nursed in a single side room and not on the main ward. There will be a notice on the door to the side room stating either 'Contact Isolation' or 'Respiratory Isolation'. You must contact the nurse in charge of the ward before entering a side room and you are expected to comply with the infection prevention precautions as instructed by the nurse in charge.

Patients who have MRSA will be isolated while they are in the Trust; these patients will be identified on the patient information system with a -# - symbol in red after their name and address so when their admission is planned they can be allocated to an appropriate area.

## Occupational Health

The Occupational Health department will assess your health before you start working for the Trust, and continue to care for you for the duration of your employment. As part of your initial assessment you will be asked to complete a health questionnaire. It is important that you answer as fully as possible to prevent delays in your appointment and to allow the Occupational Health department to assess if you require supportive health protection measures to aid you in your work environment. You will be asked about your vaccination

history, and dependent upon your intended role within the Trust may be offered additional vaccine protection e.g. for Hepatitis B. If you are offered a course of vaccines it is your responsibility to comply with occupational health advice and to ensure this is completed.

**The Occupational Health service is provided by Aintree University Hospital (phone number 0151 529 3803).**

## Reporting

The Trust has to report to the Health Protection Agency if any outbreaks occur and also has to report specific infections. Targets are set by the Strategic Health Authority and Monitor every year to ensure the Trust maintains low levels of infections such as Clostridium difficile and MRSA bloodstream infections

## Policies

Policies related to infection prevention can be found on the Trust intranet, if you cannot access them or if you want any other information please contact the infection prevention team.

## References and Further Information

Health and Social Care Act 2008: *Code of practice for health and adult social care on the prevention and control of infections and related guidance.* (Department of Health)

### **ACTIVITY: Infection Prevention and Control**

Do not forget to complete the on-line assessment on [My PACT](#)

For additional advice and information please contact the Infection Prevention Team on Ext: 1326/1057



Please note:

- If you achieve 80% or more you have been successful
- If you do not achieve 80% you will not be deemed as compliant with your essential mandatory training and will need to repeat the test.