

Infection Control



NAME:



DATE:

Infection Prevention & Control Workbook for staff involved in provision of healthcare



Please note successful completion of this workbook equates to an update in infection prevention and control and will count as a training session if the reply slip is appropriately signed and returned. You should also tick to indicate that you have visited web sites where you see the following symbol...



Within the Trust, the Infection Prevention & Control Team can be contacted during office hours on 01386 502552. Out of hours, urgent infection prevention and control advice is available from the on call medical microbiologist via switchboard at either Worcestershire Royal Hospital or the Alexandra Hospital, Redditch.



You may find the Infection Control Policies and Procedures binder a useful reference when completing this workbook. Please also note the websites listed on page 10 which will also help.



Infection Prevention and Control Training is part of your mandatory training requirements. Contact either the Learning and Development Unit or the Infection Prevention and Control Team for details of other training opportunities.



If you wish to discuss any aspect of this workbook please contact Carole.Clive@nhs.net








INTRODUCTION

Infection Prevention and Control is of prime importance within all healthcare settings. It is however recognised that not all infections or healthcare associated infections (HCAIs) are avoidable but in relation to HCAIs evidence suggests that a significant number of infections can be prevented.

The Department of Health 2015 update of The Health and Social Care Act (2008): *Guidance on the Prevention and Control of Healthcare Associated Infections and Related guidance* (often referred to as the '**Hygiene Code**') states that effective prevention and control of HCAIs or indeed any infection has to be embedded into everyday practice and applied consistently by everyone all of the time. This document lists the criteria used to judge whether an NHS trust is compliant with the government regulations regarding infection prevention and control and attainment of these is the absolute minimum. These criteria are designed to ensure that patients are cared for in a clean environment, where the risks of HCAIs are kept as low as possible. Infection prevention and control is a key requirement of the Care Quality Commission hygiene and cleanliness assessments (CQC 2008) and is also recognised as an essential component of clean, safe care, clinical governance and clinical risk structures within the Trust.

The Trust is committed to helping healthcare workers further reduce infection rates and continue to enhance the provision of clean safe care by promoting better application of existing knowledge and adherence to best practice to improve patient safety and minimise the risk of infection.

Ensuring staff know what to do to minimise the risks of infection and actually do this every time are both crucial components in the delivery of safe, clean care. The aim of this work book is to:

-  update/enhance your Infection Prevention and Control knowledge
-  enable you to disseminate the information to your colleagues/team
-  remind you that Infection Prevention and Control practices must be at the forefront of your mind 100% of the time.

OVERVIEW

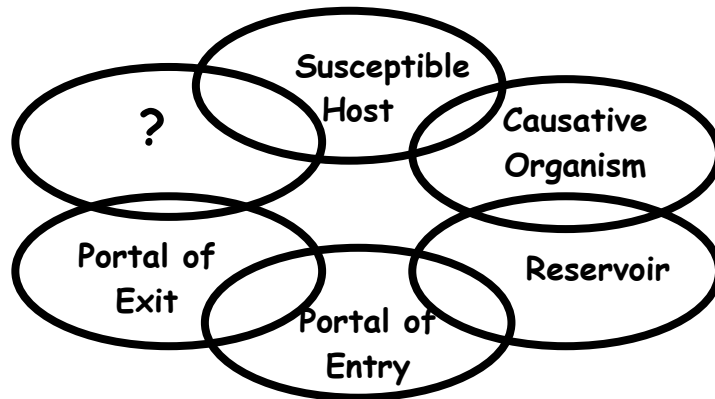
Every Trust has a director who is responsible for Infection Prevention and Control—who is this within your Trust?

The Department of Health 2015 update of The Health and Social Care Act (2008): Guidance on the Prevention and Control of Healthcare Associated Infections and Related guidance is also termed what?

Visit the Department of Health on www.dh.gov.uk find the document & tick the symbol.



To have an infection, there is a chain of events which occur, name the missing link in the chain of infection below.



Practices that you must use at all times regardless of the presence of infection are known as safe working practices, name five of these?

.....

.....

What do you think are the most common causes of a Healthcare Associated Infection. These will also be the areas that you would look to improve practice on in any clinical setting.

1.
2.
3.

Michelle Clarke is the Director with Responsibility for Infection Prevention and Control. This can also be termed the "Hygiene Code". See page 1. It is recommended that you have an understanding of this document and view it. The missing link is that of mode of spread. Safe working practices include: Hand Hygiene, Use of Personal Protective Equipment, Decontamination of Equipment, Environmental Cleaning, Disposal of Waste, Disposal of Sharps, Handling of Linen/Laundry. The top three common causes of Healthcare Associated Infection include: Contaminated hands of healthcare staff, Contaminated medical devices/equipment, Failure of staff to comply with local policies and guidance. Other areas for consideration include: Incorrect use of antimicrobials and poor levels of hospital hygiene.

HAND HYGIENE

👉 Micro-organisms on the hands are either _____ or _____ flora. Hand Hygiene is the single most important factor in _____ infections.

👉 Name 3 areas commonly missed during a routine hand wash.

1 2 3.....

👉 Name the 5 basic steps of hand washing.

1..... 2..... 3.....

4..... 5.....

👉 Bare below the Elbows sets out to enable effective hand hygiene, what does this mean for staff who are required to undertake hand hygiene as part of their role?.....

.....

👉 Do you know how to access supplies of liquid soap/gel for use in your area. Please detail (Healthcare staff must be able to access personal issue alcohol hand gel to use during care provision to comply with the 5 moments below)

.....

.....

👉 Indicate when it is not appropriate to use alcohol hand gel alone?

.....

.....

👉 The NPSA cleanyourhands campaign relates to the 5 moments of hand hygiene as detailed in the adjacent picture.

Visit www.npsa.nhs.uk/cleanyourhands, go to the resource area and try the WI-FIVE game.



ANSWERS

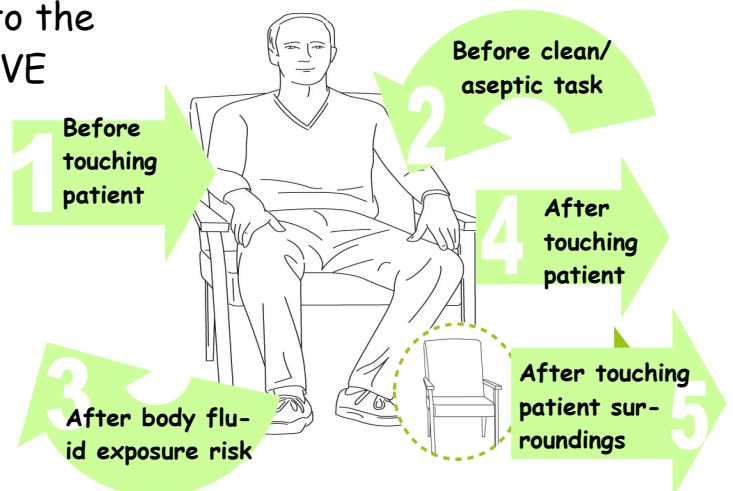
RESIDENT or TRANSIENT flora PREVENTING infection

Tops of fingers, Between each finger, Thumbs, Wrist

1 Wet, 2 Soap, 3 Wash, 4 Rinse, 5. Dry

Bare Below the elbows includes recommendations relating to wearing of short sleeves, no wrist or hand jewellery with the exception of a plain band wedding ring, no wrist watches, no nail varnish, presence of nail art or false nails.

Alcohol gel alone should not be used if hands are actually soiled or if caring for someone with *Clostridium difficile*. If possible, wash your hands after caring for someone with diarrhoea and then use the gel.



PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE (Protective clothing) is worn to reduce the potential of cross infection/contamination. It should be available to all staff giving direct care or likely to come into contact with blood, body fluids or substances listed under COSHH. It must be changed between each patient and between dirty and clean tasks with the same patient.

👉 Name at least 4 items of PPE that could be used in healthcare practice.

.....

.....

👉 Why should you wear PPE when undertaking certain tasks?

.....

.....

👉 Name at least three types of gloves which may be available to you.

.....

👉 Name 2 situations where you would should wear face/eye protection.

.....

.....

👉 When wearing Personal Protective Equipment, to ensure its efficacy, it is important to put on/remove in the most appropriate order, what do you consider this to be:

PUTTING ON...

1.
2.
3.
4.



TAKING OFF...

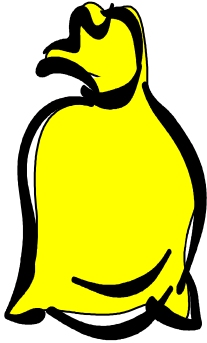
1.
2.
3.
4.

Single Use Disposable Plastic Aprons, Eye Protection, Gloves, Masks/Visors
 To protect you from contamination from blood, body fluids or substances hazardous to health, to prevent contamination of patients/service users from clothing/workwear and to provide a physical barrier which must be changed between tasks, care activities, patients/service users.
 Latex, Vinyl, Polymer Coated, Nitrile, (Plastic disposable gloves are not recommended for use in healthcare)
 If splashing to the eye/face is a potential risk eg looking after someone with pandemic influenza who is coughing, carrying out a cough inducing procedure, undertaking cleaning procedures where splashing is anticipated.
 Put on: Apron, Mask, Eye Protection, Gloves. Remove Gloves, Apron, Eye Protection, Mask, always undertake hand hygiene following the removal of PPE.

WASTE

Detail below the name for each waste stream, provide examples of items you would dispose of in these. State how each bag is disposed of eg landfill, deep landfill or incineration.

YELLOW BAG



WASTE

.....

Dispose of by:

BLACK/CLEAR BAG



WASTE

.....

Dispose of by:

YELLOW BAG WITH BLACK STRIPES



WASTE

.....

Dispose of by:

ORANGE BAG



Infectious Waste that is not contaminated with pharmaceutical products or suspected prion protein illness can be disposed of into an orange bag. This waste is sent for treatment prior to disposal. Following a review of waste generated this waste stream has not been adopted. But staff should be aware of its existence.

At most, how full should a waste bag be prior to disposal?

.....

What colour bag would be used to dispose of an apple core from a patient with MRSA?

.....

Name three characteristics of the ideal waste bin for use in a clinical area.

.....

.....

ANSWERS

- Yellow Bag—Hazardous Waste includes items contaminated with blood or body fluids from someone with a known or suspected infection or waste that is contaminated with reagents or antimicrobial agents or waste that is obviously medical eg dressings from infected wounds. IV bags, enteral syringes Dispose of by Incineration
- Black/Clear Bag—Household Waste any uncontaminated general household type waste, dead flowers, paper hand towels, aprons used for food service etc Dispose of by Landfill.
- Yellow/Black Strip/Tiger Bag—Offensive Waste includes items contaminated with blood/body fluids from someone with no known or suspected infection eg incontinence pads, urinary catheter bags, gloves, aprons used for patient care, dressings that are not antimicrobial. Dispose of by Deep Landfill
- 2/3's full
- Black Bag
- Solid Walled, Rigid, Lidded, Foot operated, Labelled to indicate contents, Easy to clean

FOOD HYGIENE



✎ If food is to be stored in a fridge, what temperature should the fridge be running at?

.....

✎ If food is to be stored in a freezer, what temperature should it be?

.....

✎ List 2 types of germ or bacteria that can cause food poisoning.

.....

.....

✎ Name two practices which increase the risk of food poisoning.

.....

.....

✎ Which of the following foods should you never store together?

- A) Liver pate and cheese
- B) Fried bacon and salami
- C) Ham and uncooked minced beef
- D) Raw chicken and uncooked sausages

✎ What are three of the most important personal hygiene rules when dealing with food?

1.....

2.....

3.....

✎ All dried products such as cereals, sugar, biscuits once opened should be stored in pest proof containers. What information should be noted on the container.



.....

- ANSWERS
- ✎ Fridges should run between 0-5°C
 - ✎ Freezers should be below -18°C
 - ✎ Bacteria that can cause food poisoning include: Salmonella, Campylobacter, E coli, Shigella, Listeria.
 - ✎ The risk of food poisoning increases if there is poor temperature control, inadequate reheating, food being left uncovered, contamination of cooked food with raw food, inappropriate storage, poor hand hygiene.
 - ✎ Ham and uncooked minced beef as one is prepared and the other raw so the raw product can potentially contaminate the ready to eat one.
 - ✎ Hand Hygiene, Good standards of personal hygiene eg hair tied back, appropriate clothing, Segregation of raw and cooked, Good standards of cleanliness, Appropriate storage of dried products in pest proof containers
 - ✎ Name of product and expiry date. For items such as jam it may be necessary to note date of opening if there is a specified shelf life detailed from opening.

SHARPS HANDLING AND MANAGEMENT

Remember never re-sheath used needles unless using a re-sheathing device, needles and syringes should be disposed of as a single unit.

Match the type of bin to the description of the items for disposal:



Yellow topped

Waste/Sharps contaminated with cytotoxic/cytostatic products



Purple topped

Disposal of all sharps including those contaminated with blood, body fluids or medicinal products and partly discharged syringes



Blue bin

Disposal of pharmaceutical products

The temporary closure device on sharps bins should be used when

Where and how should sharps bins be stored:

a) when in clinical areas but not in use

b) when awaiting disposal

When a sharps bin is assembled what information would you put on the label?

Number the correct sequence of events following a needlestick injury:

<input type="radio"/> Attend Occupational Health/MIU/A & E	<input type="radio"/> Do not suck the wound
<input type="radio"/> Fill in an accident form/Inform your Manager	<input type="radio"/> Encourage the wound to bleed
<input type="radio"/> Wash thoroughly with soap and water	<input type="radio"/> Cover with an impermeable dressing

REMEMBER – SPLASHES TO EYES OR MOUTH REQUIRE RINSING THOROUGHLY WITH RUNNING WATER THEN REPORT IN SAME MANNER AS FOR AN INOCULATION INJURY.

6. MIU/A&E, Occupational Health. This should be undertaken as soon as possible.
 1. Encourage the wound to bleed, 2. Do not suck the wound, 3. Wash with soap and water, 4. Cover with dressing, 5. Accident form/manager, the public.
 Date, area bin is to be used for eg ward, team and who has assembled the bin—this is for traceability purposes
 When in clinical areas sharps bins should be out of reach of the public/children, and stored in a secure manner (use of brackets) with the temporary closure in use. When awaiting disposal, the bin should be locked (permanently closed) and stored in a locked area, inaccessible to sites. The permanent closure must be used until the bin is needed eg when bin on side in clinic room, on drug trolley, during transportation between Temporary Closure should be used until the bin is needed eg when bin on side in clinic room, on drug trolley, during transportation between sites. The permanent closure must be used prior to disposal.
 Yellow Topped is for disposal of all sharps including those contaminated with blood/body fluids and general pharmaceutical products
 Purple Topped is for disposal of Waste/Sharps contaminated with cytotoxic/cytostatic products
 Green Bin/Blue Topped disposal of pharmaceutical products in their original packaging
 Temporary Closure should be used until the bin is needed eg when bin on side in clinic room, on drug trolley, during transportation between sites. The permanent closure must be used until the bin is needed eg when bin on side in clinic room, on drug trolley, during transportation between sites. The permanent closure must be used prior to disposal.

DECONTAMINATION

It is imperative that there are appropriate cleaning schedules in place for the environment and also all items of clinical equipment. These must be known and adhered to by all staff to minimise the risk of infection.

Match the process to the definition.

To reduce the number of micro-organisms but not bacterial spores.

CLEANING

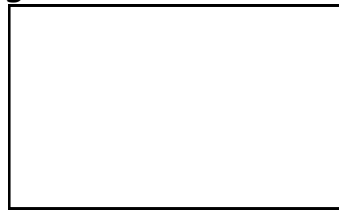
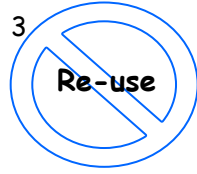
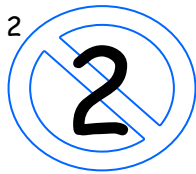
Give a preliminary reduction in the number of micro-organisms and remove dirt, grease and organic matter which might protect the organisms from heat or chemicals.

DISINFECTION

Complete destruction or removal of micro-organisms, including bacterial spores.

STERILISATION

Copy the sign into the box which denotes a single use item.



When should a decontamination certificate be used and where will you find one?

.....

.....

What are the two types of wipes that should be available in clinical settings for decontamination of equipment/surfaces?
 (for cleaning) (for disinfection)

.....

Investigate the cleaning schedules in place in your area, choose one

ITEM	WHO IS RESPONSIBLE FOR CLEANING	FREQUENCY OF CLEANING	PRODUCT	HOW IT IS CLEANED

ANSWERS

Cleaning Gives a preliminary reduction in the number of micro-organisms, it removes dirt, grease and organic matter which might protect the organisms from heat or chemicals. Disinfection To reduce the number of micro-organisms, including bacterial spores. Complete destruction or removal of micro-organisms, including bacterial spores.

Symbol number 2 should be drawn in the box. These items should be used once and then disposed of.

Prior to sending equipment for service, repair or maintenance a decontamination certificate should be completed—find these in section C of the infection control policies and procedures binder or Trust Medical Devices Policy.

Multi-surface detergent wipes should be available for cleaning items such as mattresses, couches and items that are visibly soiled or require cleaning. 70% Alcohol hard surface disinfectant wipes can be used to disinfect hard surfaces such as trolleys, syringe drivers, stethoscopes etc which have either already been cleaned or are visibly clean.

Choose your item, refer to manufacturers recommendations, discuss with colleagues whether this happens and who is responsible, start to consider all equipment within your area.

GENERAL QUESTIONS



THINK— If you were the patient would you want to see the healthcare professional cleanse their hands prior to treating you or would you be happy to assume they had done this prior to seeing you? State your preference and why and consider your own practice.

.....

.....



List the steps you would take to deal with a blood/body fluid spillage.

.....

.....



If a colleague is suffering from viral gastro-enteritis how long would you advise them to stay away from work once they are symptom free?.....



If you work in a clinical role, ascertain how during a flu pandemic you would access masks for seeing those with symptomatic influenza?



What do the initials MRSA stand for?

M.....R.....S.....A.....



If screening someone for MRSA what sites would you routinely swab?

.....



If working within a clinical area and suspecting a new case of *Clostridium difficile* associated diarrhoea what antibiotic should the affected individual be given if it is a new case?

.....



If working in a clinical area, think how you would access antimicrobial prescribing guidance for your area, read about treatment of *Clostridium difficile* and note treatment options.



Always discuss suspected cases of *Clostridium difficile* with infection prevention and control team

Seeing is believing, the assurance provided to a patient if they actually see you cleanse your hands will be far greater than an assumption.
Personal protective clothing must be worn, spillages of blood or vaccine can be covered with a Naloc powder or 1% bleach solution leave for a few minutes and mop up excess with paper towels, dispose of all waste appropriately. Clean the area with general purpose detergent. Spillages of urine/faeces or vomit should be mopped up with paper towels and the area cleaned thoroughly, a bleach solution can be used following normal clean. Dispose of waste appropriately. Refer to section C of the infection control policies and procedures binder for more information
48 hours
Metillin Resistant *Staphylococcus aureus*
Nose, groin, any wounds and any invasive devices including a catheter specimen of urine if catheterised and sputum sample if productive
Metronidazole 400mg Three times a day for 14 days. Always refer to antimicrobial prescribing guidance which can be accessed on www.worcestershirehealth.nhs.uk

WEBSITES

www.worcestershirehealth.nhs.uk A local website for shared services to display information.

www.gov.uk Where you can find information from Public Health England who play a critical role in protecting people from infectious diseases and promoting health & well being. Department of Health publications & guidance relating to clean, safe care, minimisation of healthcare associated infections and decontamination issues can also be accessed on this site.

www.nric.org.uk The National Resource for Infection Control (NRIC) is a project developed by healthcare professionals, aimed at being a single-access point to existing resources within infection control for both Infection Control and all other healthcare staff.

REFERENCES

DEPARTMENT OF HEALTH. 1998. *Guidance for Healthcare Workers: Protection against Infection with Blood-borne viruses. Recommendations of the Expert Advisory Group on Hepatitis.* HMSO. London.

DEPARTMENT OF HEALTH/INFECTION CONTROL NURSES ASSOCIATION. 2004. *Audit Tools for Monitoring Infection Control Standards.*

DEPARTMENT OF HEALTH. 2007. *Saving Lives: reducing infection, delivering clean and safe care, including High Impact Interventions.* London.

DEPARTMENT OF HEALTH. 2007. *Essential Steps to Safe Clean Care: reducing healthcare-associated infections.* London.

DEPARTMENT OF HEALTH. 2015. *Updated Health and Social Care Act (2008): Guidance on the Prevention and Control of Healthcare Associated Infections and Related guidance.*

(EPIC 2) PRATT RJ; PELLOWE CM; WILSON JA; LOVEDAY HP; HARPER P; JONES SRLJ; MCDUGALL C; WILCOX MH. (2007). *Epic 2: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England.*

HOSPITAL INFECTION SOCIETY/INFECTION CONTROL NURSE ASSOCIATION. 2007. *The 3rd Prevalence Study Of HCAI in Acute Hospitals 2006.*

To enable the recording of your completion of this book in relation to the mandatory training requirement it is imperative that you **sign and date the slip below which then needs to be signed by your manager to ensure that the workbook has been fully completed.**

✂ - - - - -

I **have completed the Infection Prevention and Control Work Book for Clinical Staff.**

Job Title **Base**.....

Signature **Date**.....

Workbook seen to be appropriately and fully completed by manager

Name of Manager.....

Signature **Date**.....

Please return this completed slip to Carole Clive, Infection Control, Evesham Community Hospital. On receipt of slip, training records will be updated and a certificate forwarded to the member of staff using details stated above.

REFLECTIVE PRACTICE

On completion of any educational resource, it's important to stand back and take an objective view of learning. You need to be clear in your own mind about what you've learned and how quickly you can put this new knowledge into practice. You should question whether any gaps remain in your understanding and be able to identify any other training needs you may have. This form has been designed to enable you to document your assessment of the value of the work book you have just completed.

This should provide a structural format for documenting and reviewing your reflections on your practice. Professional development such as study days, conferences, workbooks and workshops should be included in your portfolio. This provides evidence of learning and a vehicle for reflection if you try to summarise each session in your own words.

What have I learned from this event/activity that maintains or develops my professional knowledge and competence? (This may relate to the overall aims of this event.)

What do I know or can do now that I couldn't do before this workbook?





What can I apply immediately to my practice and care provision?

Is there anything I didn't understand or need to explore further, or read more about in order to clarify my learning?

What else do I need to do/know to extend my professional development in this area?

It might be helpful to convert these needs into short term, medium term and long term goals in an action plan. This can then be included in your overall action plan in your professional portfolio.

REVALIDATION is a continuous process that nurses and midwives will engage with to demonstrate that they practice safely and effectively - requiring them to evidence learning and good practice throughout their career. For more information visit <http://www.nmc.org.uk/>. Completing this workbook will provide outcomes and evidence for revalidation such as:

-  A record of your up to date practice and professional development.
-  A record of completing the self-directed learning workbook.
-  A record of evidence of reflective practice of new or refreshed knowledge and skills, recording the reflective practice evidence to demonstrate how you have applied the learning in daily clinical practice.
-  Opportunities for practice related feedback or written reflection to demonstrate what you learnt, how you changed or improved your work as a result and how it is relevant to the Code.