

Infection Prevention and Control Policy

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Responsible committee:	Infection Control Committee
Ratified by:	Quality and Safety Committee
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Purpose of the Policy:	To inform staff in all matters relating to infection prevention and control.
If developed in partnership with another agency, ratification details of the relevant agency	
Policy in-line with national guidelines:	The Health and Social Care Act – the Hygiene Code 2008 (amended 2015) National infection prevention and control manual (NIPCM) for England 2022 NICE guideline NHS England Care Quality Commission.



Signed on behalf of the Trust:
Scott Haldane, Interim Chief Executive

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Version Control Page

Version	Date	Author	Comments
1.0	November 2008	Aileen Wilson, Modern Matron ~ Infection Prevention and Control.	
2.0	November 2010	Nicola Sharp, Modern Matron ~ Infection Prevention and Control.	Policy updated and re-issued
2.1	July 2012	Nicola Sharp ~ Matron Infection Prevention and Control	Details changed on P 5 and 6, MRSA screening policy amended to reflect current screening reporting.
2.2	February 2014	Nicola Sharp, Matron Infection Prevention and Control	Whole manual reviewed. References updated Change of names/job titles and committee's as appropriate Waste section updated with change of bag type Pet section added Sharps section amended to incorporate EU regulations Outbreaks section amended to include Periods of Increased Incidence. MRSA screening section made more robust Rotavirus vaccination added.
2.3	August 2016	Nicola Sharp, Head of Infection Prevention and Control.	Whole manual reviewed, Change of names/job titles and committee's as appropriate. Adapted to ensure correct information for all areas including mental health, learning disabilities and physical health Isolation chart expanded to cover all areas Removal of cold chain and medicine fridge information and referral to Medicines Page 4 of 159 Management policy to replace this Section on CPE added Section on ESBLs added Whole document re-checked in relation to national guidance

2.4	November 2017	Nicola Sharp. Head of IPC	Minor changes regarding Team and contact details only.
2.5	May 2019	Nicola Sharp	Review of whole manual <ul style="list-style-type: none"> - Removal of pets policy - Aligning policy to CCS policy (for joint work in Children's' services)
2.6	August 2020	Mojisola Adeyemi	Editing of version 2.5 Document changed from manual to policy Isolation protocol included Additional standard infection control precautions added Covid '19 Infection management Outbreak management.
2.7	July 2024	Mojisola Adeyemi	Overall review of content. Policy aligned with National IPC manual. Reference to Patient Safety Incident Response Framework (PSIRF).

Policy Circulation Information

Notification of policy release:	All recipients; With access to Trust intranet Staff and website.
Key words to be used in DtGP search.	
CQC Standards	Care Quality Commission Outcome 8, Regulation 12, Cleanliness, and Infection Control.
Other Quality Standards	The Health and Social Care Act 2008 (2015 revision) NICE NHS England

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1 Introduction

Cambridgeshire and Peterborough NHS Foundation Trust is committed to providing a high standard of infection prevention and control throughout the Trust. Infection Prevention and Control is everybody's responsibility, and its key principles should be embedded in everyday practice.

1.1 Background

All health care provider organisations in United Kingdom are expected to comply with the Health and Social Care Act – The Hygiene Code (2008) 2015 revision, Compliance is a requirement of the Care Quality Commission Outcome 8, Regulation 12, Cleanliness, and Infection Control.

Patients who have a Health care Associated Infection (HCAI) are likely to stay in hospital 2.5 times as long as an uninfected patient, an average of 11 days. Patients with a HCAI incur increased healthcare costs for the healthcare provider. People in the community who access health care services are also at an increased risk of infection, with related risks of mortality and morbidity. The death rate is higher for patients who have a HCAI during an in-patient period.

Although not all HCAs are life threatening, the symptoms may cause pain, discomfort and distress and treatment may involve a long course of antibiotic treatment. Any of these can reduce quality of life. This policy provides information that all CPFT staff need for effective Infection Prevention and Control within the Trust and serves as a basis for best practice.

2 Purpose and Scope

This policy sets out the infrastructure and processes in place within the Trust that direct and support activities to assist staff, carers, patients and visitors to prevent and control infection. **Infection Prevention and Control is the responsibility of ALL STAFF, and everyone engaging with the services provided by CPFT has a part to play.**

This policy is relevant to all staff working within the Trust. It refers to the external bodies that are available to advise and support infection control activities. It should be read in conjunction with National Infection Control policy for wider interpretation and application [NHS England » National infection prevention and control manual \(NIPCM\) for England](#). Both CPFT and NIPCM must be adhered to by all staff within the Trust and both are accessible on the Trust Intranet policy /procedure document page and on the infection control intranet page.

3 Definitions

List of abbreviations

A&E – Accident and emergency
AIDS – Acquired immuno-deficiency syndrome
ANTT – Aseptic non touch technique
C.diff – *Clostridium/Clostridioides difficile*
CCDC – Consultant in Communicable Diseases
ICB / S – Integrated Care Board / System
CDAD – *Clostridium difficile* associated diarrhoea
CDI – *Clostridium difficile* infection
CJD – Creutzfeldt-Jakob disease
COSHH – Control of Substances Hazardous to Health
CPE – Carbapenemase-Producing *Enterobacteriaceae*
CPFT – Cambridgeshire and Peterborough NHS Foundation Trust
CQC – Care Quality Commission
DIPC – Director of Infection Prevention and Control
DoH – Department of Health
EPP – Exposure prone procedure
ESBL – Extended spectrum beta-lactamase
HBIG – Hepatitis B Immunoglobulin
HBsAG – Hepatitis B surface antigen
HBV – Hepatitis B virus
HCAI – Health Care Associated Infection
HCV – Hepatitis C virus
Hib – *Haemophilus influenzae* type b
HIV – Human immunodeficiency virus
ICC – Infection Prevention and Control Committee
ICD – Infection Control Doctor
ILI – Influenza like illness
IPC - Infection Prevention and Control
MDRTB – Multidrug resistant TB
MHRA – Medical and Healthcare Products Regulatory Authority
MRSA - Meticillin Resistant *Staphylococcus aureus*
MSSA – Meticillin Sensitive *Staphylococcus aureus*
NICE- National Institute for Health and Care Excellence
PALS – Patient Advice and Liaison Service
PCR – Polymerase chain reaction
PII-Period of increased incidences
PIR – Post infection review
PPE- personal protective equipment
RNA – ribonucleic acid
SRSV – small round structured virus
SSD – Sterile Services Department
TB – Tuberculosis
TSS – Temporary Staffing Services
vCJD- variant Creutzfeldt-Jakob disease
UKHSA – United Kingdom Health Security Agency
WHO – World Health Organisation

4 Duties

4.1 Chief Executive Officer (CEO)

The Chief Executive Officer is the Trust responsible officer for quality and safety. The CEO is responsible for ensuring that effective arrangements for Infection Prevention and Control are in place within the Trust (Criteria 1, Code of Practice).

The Chief Executive is ultimately responsible for maintaining staff, visitor, and patient infection safety, supported by all members of the Board of Directors, Trust Managers and a Non - Executive Director tasked with the role of "Infection Control and patient safety lead".

4.2 Trust Board

The Trust Board are responsible for providing resources necessary for the delivery of Infection Prevention and Control.

The Board is responsible for providing assurance that systems and processes are in place for services to meet compliance with the standards set out in the Health and Social Care Act 2008 (2015 revision) and Outcome 8 of the CQC Essential Standards of Quality and Safety.

4.3 Director of Infection Prevention and Control (DIPC)

The DIPC is the overall executive lead for the management of Infection Prevention and Control within the Trust. The DIPC reports directly to the Chief Executive. The DIPC is also the Director of Nursing who ensures the trust has a workforce that is competent in infection prevention and control practice; (Criteria 6, Health and Social Care Act Code of Practice).

4.4 The Infection Prevention and Control Committee (ICC)

The Infection Prevention and Control Committee meets quarterly and reports to the Quality and Safety sub-committee. The ICC are responsible for overseeing governance compliance with the Health and Social Care Act 2008 (2015 revised) – code of practice in the Trust. They are also responsible for:

- Advising the Trust Board via the Health and Safety Committee on all aspects of Infection Prevention and Control and make recommendations on measures to ensure effective infection prevention and control.
- Endorsing the bi- annual Infection Prevention and Control Programme.
- Advising on the most effective use of resources available for the implementation of the programme and for contingency measures.
- Advising on and approval of Infection Prevention and Control policies and procedures and review its implementation through reports tables at ICC meeting.
- Taking responsibility for major decisions regarding Infection Prevention and Control, and discuss problems identified by the Infection Prevention and Control team.
- Providing an annual report to the Trust Board.
- Making recommendations to other Trust committees or departments on Infection Prevention and Control matters.

4.5 The Infection Prevention and Control team.

The IPC Team is responsible for engaging with staff to develop systems and processes that lead to sustainable and reliable improvements in applying infection prevention and control practices. The IPC team leads on the practical aspects of Infection Prevention and Control in the trust, takes ownership of monthly and quarterly IPC reports which are discussed at the ICC.

The team can be contacted by telephone or email during normal working hours. The microbiology service includes 24-hour advice, and this can be accessed via the Addenbrookes hospitals' switchboards. The Trust has a service level agreement with UKHSA to provide Infection Control Doctor input and out of hours advice and support and the Consultant Medical Microbiologist for the role is based at Cambridge University Hospitals NHS Foundation Trust

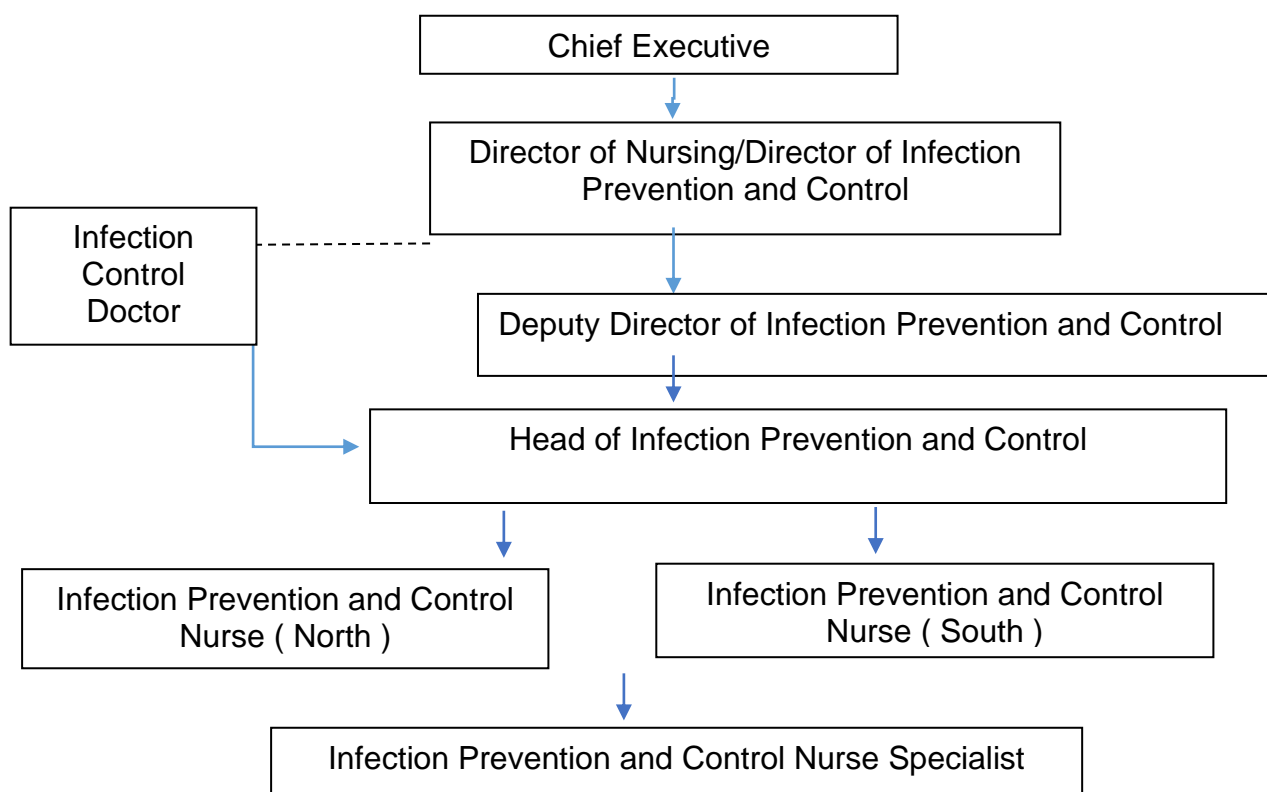
Ensuring effective liaison over Infection Prevention and Control matters with acute Trusts and ICB/ICS Learning Disability Partnerships and all other partner agencies, including relevant private and voluntary sector organisations.

Provision of advice on equipment and facilities to ensure that infection risks are minimised.

Planning and facilitating education, training, and sharing of best practice for all grades of staff on Infection Prevention and Control issues.

Each CPFT service is encouraged to have an Infection Prevention and Control link worker with whom the IPC team liaise. Link workers support implementation of advice on the infection prevention and control guidelines in specific areas and will assist the clinical team in adopting positive infection prevention and control practices in their everyday work in line with the IPC policy.

INFECTION PREVENTION AND CONTROL STRUCTURE CHART



4.6 Head of Infection Prevention and Control

The Head of Infection Prevention and control is responsible for:

- Ensuring the Implementation of the Health and Social Care Act 2008 (2015 revision)
- Implementing the Infection Prevention and Control Annual Programme
- Ensuring that Infection Prevention and Control and related policies and guidance are up to date, evidence based and comply with national and professional guidance.
- Leading on review and update of the Infection Prevention and Control Policies.
- Ensuring the provision of Infection Prevention and Control mandatory and induction trainings.
- Implementing a programme of audit and surveillance in compliance with the IPC policy and code of practice providing Infection Prevention and Control support in line with policy to staff, service users and other stakeholders.

4.7 Infection Prevention and Control Nurse Specialists

- Advise on infection prevention or control issues to staff, service users and others.
- Providing support and assisting with root cause analysis investigations for outbreaks and other incidents where required.
- Help with risk assessments and finding solutions to infection prevention and control problems.
- Support to progress the work identified in the IPaC work programme.
- Providing expertise at ICC.
- Local surveillance on infectious organisms such as MRSA and *Clostridium difficile* incidents.
- Providing support and training for Infection Prevention and Control Link staff.
- Providing specialist Infection control education to CPFT service users/ other as required.

Infection Prevention and Control Team/ Laboratory Contacts

Infection Prevention and Control Team	cpftinfection.controlreporting@cpft.nhs.uk 07535 690587/
Infection Control Doctor	Via Addenbrookes Switchboard – ask for microbiologist on Duty / cover for CPFT
For out of hours IPC advice - please contact the on-call microbiologist via your nearest acute hospital switchboard.	
Addenbrookes Hospital Laboratory	01223 257035/257036
Peterborough and Stamford Hospital	01733 678000 - Ask for microbiology
Queen Elizabeth Hospital, Kings Lynn	01553 613613 - Ask for microbiology
United Kingdom health Security Agency – East of England - 0300 303 8537 Consultants in Communicable Disease Control (CCDC) or Health protection team EastofEnglandHPT@phe.gov.uk or Phe.EoEHPT@nhs.net	

4.8 Professional Lead(s)/Managers

- Managers are responsible for ensuring the implementation of Infection Prevention and Control Guidance, Including the Health and Social Care Act 2008 (2015 revision), within their areas of responsibility.
- Ensuring that the required facilities and equipment are available to enable compliance with the policies.
- Ensure that all staff within their area of responsibility have received training in Infection Prevention and Control
- Monitoring compliance with Infection Prevention and Control policies and practices in their clinical area in accordance with Trust and National guidelines
- Designating an Infection Prevention and Control Link worker for their clinical area/s, resourced to ensure IPC audits are conducted within their clinical areas.

4.9 All Trust Employee

All employees have a responsibility to comply with the Trust Infection Control Policies and Procedures. All employees refers to all staff employed by the Trust including clinical and non-clinical, Staff holding honorary contracts, Executive and Non-Executive Directors, bank and agency staff, locums, volunteers, contractors, trainees, and students. To ensure staff are aware of the importance of infection prevention and control, all Trust job descriptions contain a statement regarding the individual's infection prevention and control responsibilities. In addition, staff must;

- Practice Standard Infection Control Precautions ALL the time, especially Hand Hygiene and correct use of Personal Protective Equipment (PPE).
- Promptly report any accident, incident, omission, or suspected infection, to unit manager and via DATIX.
- Attend infection control training sessions when invited to do so and complete annual update courses.
- Immediately seek medical or occupational health service advice if they think they might have a communicable infection capable of being passed to others (patients or colleagues).

5 Standard Infection prevention and Control Precautions (SICPs)

Standard precautions of infection prevention and control can be defined as a standard of care which should be used routinely to minimise the risk of spread of infection (Wilson, 2006). Standard precautions are applicable in **all** healthcare settings including hospitals, clinics, and patients own homes as it is not always possible to identify all infected individuals due to infection incubation period during which symptoms of infection are yet to appear in individuals, hence everybody should be considered as potentially infected. Standard precautions should be applied by **all** health Care workers to **everyone** irrespective of individual diagnosis or lifestyle factors. The aim of standard precautions is to protect staff, patients, and others from infection.

The principles of standard precautions are underpinned by the health and Safety at Work Act 1974 and the Control of Substances Hazardous to Health (COSHH) 2002 regulations. The core ten Infection control standard precautions, procedures and their principles are detailed in this section, they include: -

- Patient placement and assessment for infection risk
- Hand hygiene

- Respiratory and cough hygiene
- Personal Protective Equipment
- Environmental Cleaning
- Safe management of blood and body fluid spillages
- Safe management of linen
- Safe management of care equipment (decontamination).
- Safe waste management (including sharps)
- Occupational safety and Sharp injury management

5.1 Patient placement and assessment for infection risk

Patients must be promptly assessed for infection risk on arrival at the care area (if possible, prior to accepting a patient from another care area) and should be continuously reviewed throughout their stay. This assessment should influence placement decisions in accordance with clinical/care need(s).

Patients who may present a cross-infection risk include those:

- With diarrhoea, vomiting, an unexplained rash, fever or respiratory symptoms.
- Known to have been previously positive with a Multi-drug Resistant Organism (MDRO) e.g. MRSA, CPE.
- Who have been hospitalised in the last 12 months.

Hands are the principal route of cross infection in health care settings and beyond, therefore good hand hygiene is THE SINGLE most important measure in reducing the spread of infection. Hand hygiene facilities should include instructional posters on appropriate techniques to facilitate good hand washing and clinical hand-wash basins must:

- be used for that purpose only and not used for the disposal of other liquids.
- have mixer taps, no overflow or plug and be in a good state of repair.
- have wall mounted liquid soap and paper towel dispensers.

5.2 Hand Hygiene

The level of hand hygiene will be determined by the activity or area of practice, as shown below:

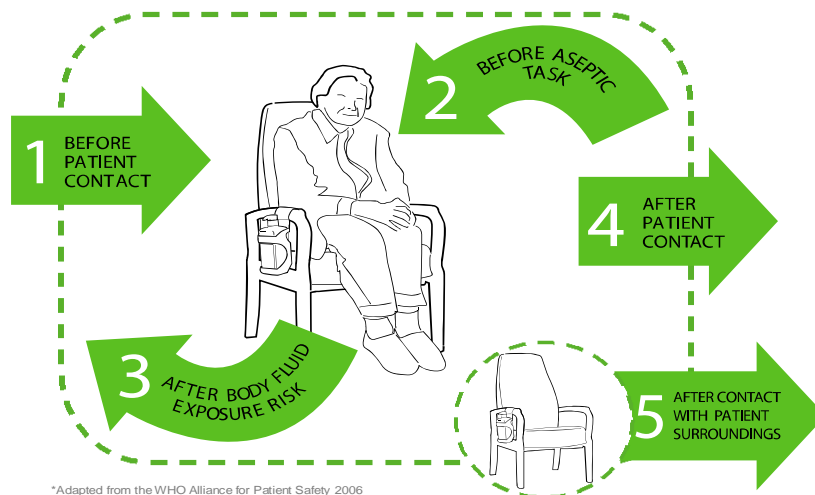
Social hand wash	Using liquid soap and water
Aseptic/hygiene hand wash	Using an antiseptic solution
Surgical hand wash	Using an antiseptic solution More prolonged and thorough hand wash prior to gowning and gloving in ultra clean environments and sterile high-risk clinical procedures.

When to clean hands

The World Health Organisation guidance for health care workers on when to carry out hand hygiene this is called 'your 5 moments for hand hygiene'. You should decontaminate your hands when entering or working within the patient or service user's environment as follows:

- Before patient/service user contact
- Before a clean/aseptic procedure
- After a body fluid exposure risk
- After patient/service user contact
- After contact with the patient/service user's environment.
- **NICE guidelines (2012) have added hand washing 'Immediately after removal of gloves'

Your 5 moments for hand hygiene at the point of care*



*Adapted from the WHO Alliance for Patient Safety 2006

Hand Care for health care staff

- Staff must comply to Trust dress code policy.
- Keep nails clean and short.
- Must not wear artificial or gel nails or nail polish.
- Must not wear jewellery on the hands or wrists (including wrist watches)
- A plain metal band may be worn, but the area under the ring and the ring itself must be washed
- Sleeves should be short or should be rolled up to the elbow when undertaking physical clinical care or in a clinical environment.
- Nail brushes must not be used for routine hand washing, as they damage the skin and encourage shedding of cells.
- Cuts and abrasions must be covered with waterproof dressings
- Use emollient hand cream regularly e.g. during breaks and when off duty; this is to prevent dry hands. Emollients must be single person use or dispensed via a pump dispenser.
- Do not use or provide communal tubs of hand cream in the care settings
- Staff with skin problems should seek advice from Infection control team, occupational health or their GP and depending on the severity, may require additional interventions.

Hand washing procedure:

- In clinical areas only use designated hand washing basin using the correct technique as illustrated in below diagram.
- Wet hands under running water

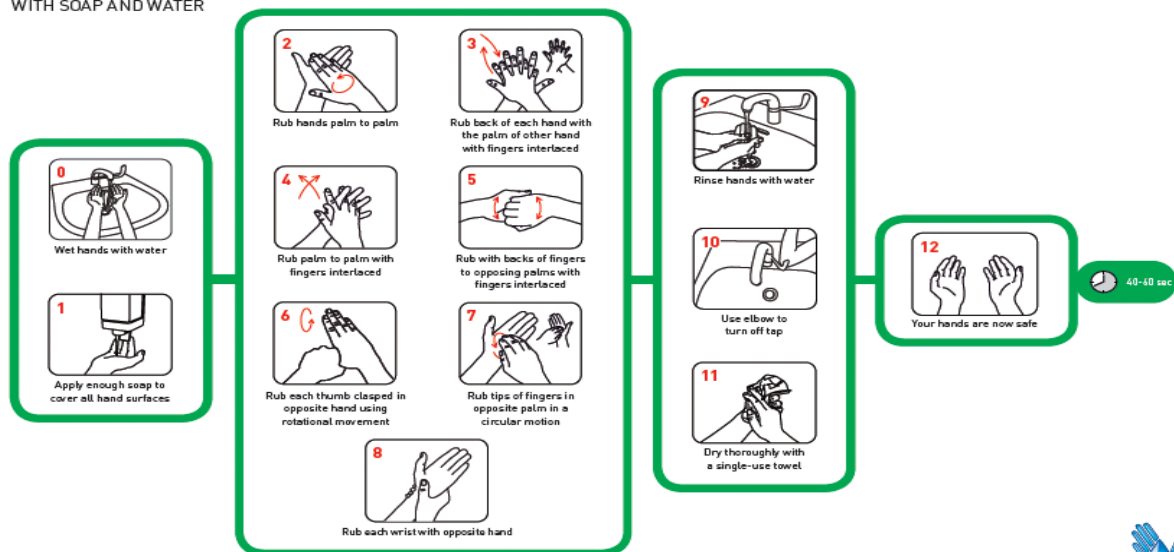
- Dispense one dose of liquid soap into cupped hand
- Hand wash for 10-15 seconds vigorously and thoroughly, covering all areas of hands without adding more water
- Rinse hands thoroughly under running water and dry hands with a disposable paper towel.
- Dispose of the paper towels in a foot operated bin. The bin lid should not be opened by hands.

HAND CLEANING TECHNIQUES

How to handwash?

WITH SOAP AND WATER

NHS
National Patient
Safety Agency



www.npsa.nhs.uk/cleanyourhands

Adapted from World Health Organization *Guidelines on Hand Hygiene in Health Care*
17/09

cleanyourhands
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Hand Sanitisers/Alcohol -based hand Rubs (ABHR) and Gels procedure

Hand Sanitisers/Alcohol Rubs must conform to British Standards, these solutions are an effective decontamination agent but should only be used on visibly clean hands. Build up may occur after consecutive uses, in which case hands must be washed with soap and water:

- Dispense the required amount of solution onto the hands
- Rub vigorously, using hand washing technique, ensure solution covers all hand surfaces until hands are dry
- Do not use if hands are visibly dirty
- Do not use when dealing with blood or body fluids
- Do not use during an outbreak of *C.diff* infection or if a patient/service user has diarrhoea (Alcohol hand gel is not effective against *C.diff* spores)

When visiting service users in their home, it is important to do a risk assessment of hand washing facilities. If these are not adequate, then alcohol gel may be used on visibly clean hands. Disposable detergent-based wipes may be used on soiled hands, followed by hand sanitisers/gel if required. Hands should be washed, if (when) possible, even if the hands are not being contaminated as this best practice

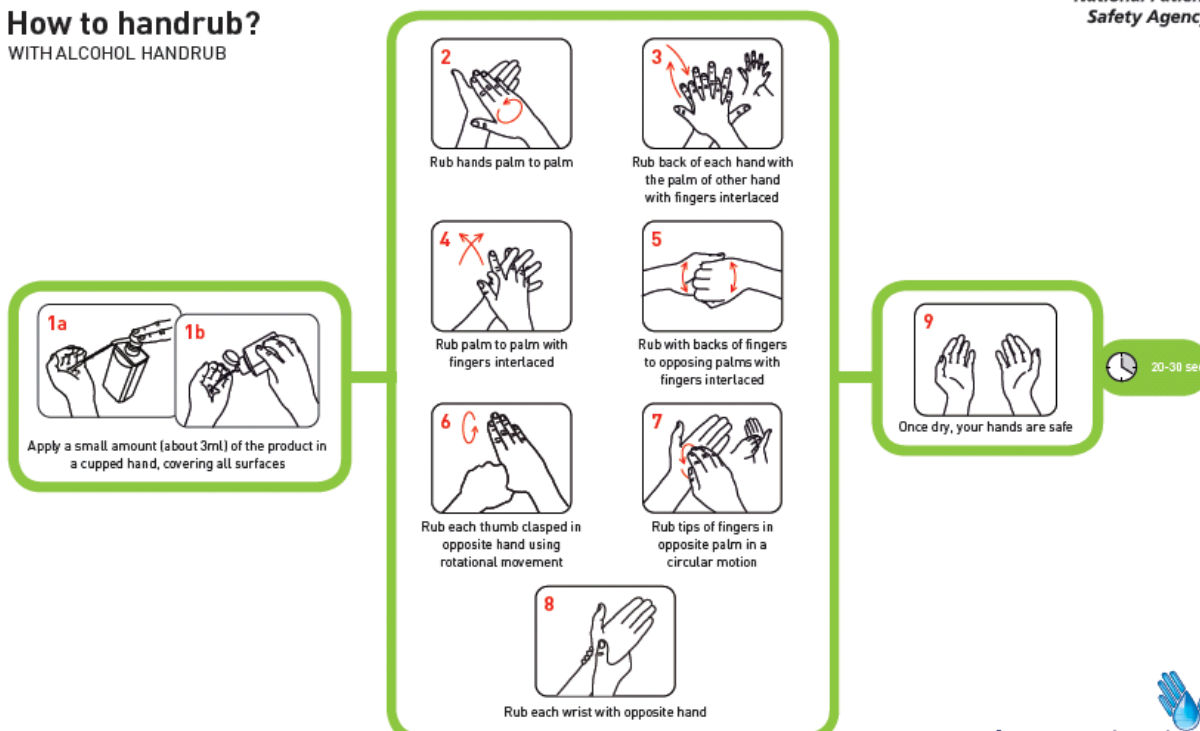
to model.

It is recommended (NICE 2012) that everyone involved in providing healthcare in the community must be trained in hand decontamination. This includes service users, carers, and healthcare personnel. If a particular hand hygiene product causes skin irritation, seek IPC team or occupational health advice.

HAND CLEANING TECHNIQUES

How to handrub?

WITH ALCOHOL HANDRUB



www.npsa.nhs.uk/cleanyourhands

Adapted from World Health Organization *Guidelines on Hand Hygiene in Health Care*

NHS
National Patient
Safety Agency

cleanyourhands®
campaign

Detergent based hand wipes

These may be used by community staff when hand washing is compromised by inadequate facilities. Only clinically approved hand hygiene products can be used in the organisation, check with IPC team if in doubt.

Inpatients should be routinely offered detergent based hand wipes when unable to use the hand wash basin facilities. This is particularly important after using a commode, bedpan, or urinal and before eating a meal or snack.

In the community patients and their relatives should be encouraged to provide hand wipes whenever possible for ease of use where required.

5.3 Respiratory and cough hygiene

Respiratory and cough hygiene is designed to minimise the risk of cross transmission of known or suspected respiratory illness (pathogens):

- cover the nose and mouth with a disposable tissue when sneezing, coughing, wiping and blowing the nose; if unavailable use the crook of the arm

- dispose of all used tissues promptly into a waste bin
- wash hands with non-antimicrobial liquid soap and warm water after coughing, sneezing, using tissues, or after contact with respiratory secretions or objects contaminated by these secretions
- where there is no running water available or hand hygiene facilities are lacking, staff may use hand wipes followed by ABHR and should wash their hands at the first available opportunity.
- keep contaminated hands away from the eyes nose and mouth.
- Health care staff should support those who needs help e.g. elderly, children with practicing respiratory and cough hygiene i.e. helping providing patients with tissues, waste bag for used tissues and hand hygiene facilities as necessary.

5.4 Personal Protective Equipment (PPE)

The risk assessment of what PPE to use for specific task should take account of various factors that include:

- Nature of the task to be undertaken and associated risk of cross contamination
- Requirement for sterile or non-sterile gloves
- Allergy/sensitisation
- Handling chemicals (including cleaning agents) or disinfectants, which could cause skin irritation or are COSHH regulated.

Generally, if the risk is to the patient, then 'sterile' gloves are required. If the risk is to the user, then 'non-sterile' gloves will be sufficient. When handling chemical disinfectants, you may need to wear industrial or household gloves. Do not wear latex gloves for handling chemicals, as they can absorb some chemicals, especially disinfectants.

PPE available for use in all clinical areas must be stored in dispensers close to point of care when and where appropriate to prevent contamination. Stock of PPE items must be kept in a storeroom and not in bathrooms.

PPE for healthcare staff providing care in the community must be transported in a clean receptacle. All PPE is single use only unless specified by the manufacturer and their expiry dates must be adhered to.

Reusable PPE such as goggles/face shields/visors, must be decontaminated after each use according to manufacturer's instruction.

PPE must be changed immediately after each patient and/or after completing a procedure or task and then disposed of after use into the correct waste stream, e.g. domestic waste, offensive (non-infectious) or clinical waste.

Keep hands away from face and PPE being worn. If used correctly PPE can be very effective in preventing the transmission of infection however if used incorrectly it becomes a hazard. Hands must be washed following removal and disposal of personal protective equipment.

Gloves: Fluid resistant surgical mask's (FRSM) ,mostly in use in in clinical areas are single use, disposable items.

- Always select appropriate size to use.

- It must be worn for direct contact with blood, body fluids and non-intact skin or mucous membranes.
- Gloves must be discarded after each procedure, in between procedures as necessary and always changed between patients.
- Once removed, hand decontamination must be performed, the use of gloves is not an alternative to thorough handwashing.

Double gloving is **NOT** recommended for routine clinical care except for some exposure prone procedures or as part of additional precautions for high consequence procedure /infectious disease management.

Gloves are **NOT** required to carry out near patient administrative tasks, e.g. when using the telephone, using a computer or tablet, writing in the patient chart; giving oral medications; distributing or collecting patient dietary trays.

Gowns and aprons

Disposable plastic aprons must be worn whenever contamination of clothing is possible. As with the use of gloves, the choice of plastic aprons or gowns is determined by risk assessment of tasks to be undertaken. The use of disposable long sleeve gowns should be accessed where there is a risk of extensive splash of blood /body fluids, or extensive contamination e.g. in operating theatre, extended personal care of patient with compromised personal hygiene status and in distress.

Face Protection

Protective face wear includes; FRSM, filtering face piece (FFP3) masks/ powered respiratory hood, face visors or and goggles. One or a combination should be worn where a patient is suspected to have respiratory infection or experiencing its symptoms, where there is risk of blood or other bodily fluids splashing onto the face. This includes activities such as clearing up a blood or body fluid spill. FFP3 masks are recommended for care of patients with respiratory infections such as active Tuberculosis and certain viruses where required (confirm with IPaCT if in doubt and for further support on use of respiratory hood). If reusable visors are used, they must be decontaminated between uses.

A patient with respiratory/ related infections can be required to wear face mask however the request for patients to wear a facemask **must never compromise their clinical care**, such as when oxygen therapy is required or where it causes distress, e.g., paediatric/mental health settings.

Respiratory protective equipment (RPE), i.e., FFP3 mask/hood must be considered when a patient is admitted with a known/suspected infectious agent/disease spread wholly or partly by the airborne route and when carrying out aerosol generating procedures (AGPs) on patients with a known/suspected infectious agent spread wholly or partly by the airborne or droplet route.

The decision to wear an FFP3 respirator should be based on clinical risk assessment, e.g., task being undertaken, the presenting symptoms, the infectious state of the patient, risk of acquisition and the availability of treatment for the infectious agent.

All tight-fitting RPE, i.e., FFP3 respirators, must be: single-use (disposable) or reusable, and worn with a full face visor if not classed as fluid-resistant by the manufacturer (EN149)

All healthcare staff who may be required to wear a respirator must be fit tested and trained to fit check (each donning) to ensure an adequate seal/fit according to the manufacturers' guidance.

Inpatients and outpatients with suspected or confirmed respiratory infection should be asked to wear a facemask (FRSM) unless isolated in a single room provided this can be tolerated and is deemed safe for the patient.

Visitors and individuals accompanying patients to inpatient, outpatient appointments are not required to wear a facemask unless this is a personal preference or indicated by clinical risk where staff have advised the visitor / individual.

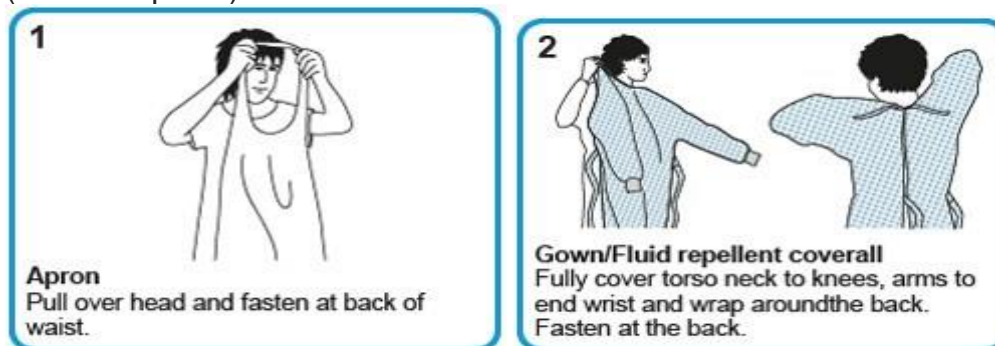
If cluster transmission of a respiratory pathogen is known or suspected, The Infection control Nurse or dept team lead must consider extending the use of FRSM as source control to health and care staff in the affected clinical areas(s), guided by local risk assessment.

Further information regarding fitting and fit checking of respirators can be found on the [Health and Safety Executive website](#).

Headwear and Footwear: Protective headwear and footwear is not routinely required in most clinical areas within CPFT, unless part of theatre attire or to prevent contamination of the environment such as in clean rooms.

For further information on footwear, head wear and uniform care, refer to the Trust uniform policy, National infection prevention and Control manual or other related policies.

Putting on PPE (donning): Always perform hand hygiene before putting on PPE. The order for putting on PPE is Apron or Gown, Surgical Mask, Eye Protection (where required) and Gloves.



3



Surgical mask (or respirator)
Secure ties or elastic bands at middle of head and neck. Fit flexible band to nose bridge. Fit snug to face and below chin. Fit/check respirator if being worn.

4



Eye Protection (Goggles/Face Shield)
Place over face and eyes and adjust to fit.

5




Gloves
Select according to hand size. Extend to cover wrist.

Removing Personal Protective Equipment (PPE)

The order for removing PPE is Gloves, Apron or Gown, Eye Protection, Surgical Mask

6



Outside of gloves are contaminated. Grasp the outside of the glove with the opposite gloved hand; peel off.

7



Hold the removed glove in the gloved hand. Slide the fingers of the ungloved hand under the remained glove at the wrist. Peel the second glove off over the first glove. Discard into an appropriate lined waste bin.

8




Apron
Apron front is contaminated. Unfasten or break ties. Pull apron away from neck and shoulders touching inside only. Fold and roll into a bundle. Discard into an appropriate lined waste bin.

9



Gown/Fluid repellent coverall
Gown/Fluid repellent coverall front and sleeves are contaminated. Unfasten neck, then waist ties.

10




Remove using a peeling motion; pull gown/fluid repellent coverall from each shoulder towards the same hand.

12



Eye Protection (Goggles/face shield)
Outside of goggles or face shield are contaminated. Handle only by the headband or the sides. Discard into a lined waste bin or place into a receptacle for reprocessing/ decontamination.

13



Surgical Mask (or respiratory)
Front of mask/respirator is contaminated - do not touch. Unfasten the ties - first the bottom, then the top. Pull away from the face without touching front of mask/respirator. Discard disposable items into an appropriate lined waste bin. For reusable respirator place in designated receptacle for processing/ decontamination.

Perform hand hygiene immediately on removal. All PPE should be removed before leaving the area and disposed of as healthcare waste.

5.5 Environmental cleaning

All staff are responsible for ensuring their care environment is always clean, well maintained and free of clutter to facilitate effective cleaning. CPFT trust uses the new National NHS Standards of health Care Cleanliness frameworks for its environmental cleaning process, frequency, and monitoring of cleaning services. The outsourced cleaning contracts allow for scheduled, routine and ad-hoc cleaning services, along with exit and outbreak cleans. Where the trust operates from a leased building the cleaning service may be provided by the landlord's preferred supplier.

Always adhere to COSHH risk assessments for product use and processes for decontamination of the care environment.

Use of detergent wipes is acceptable for cleaning surfaces/frequently touched sites within the care area.

Routine disinfection of the environment is not recommended however, 1,000ppm available chlorine should be used routinely on sanitary fittings.

Staff should be aware of their environmental cleaning schedule and protocol for their area, clear on their specific responsibilities. Cleaning schedule, charter and cleanliness rating are usually available in the cleaner's cupboard, display boards on the wards/ department and on the trust intranet estate page.

Staff should encourage service users to keep their rooms tidy so the cleaners can clean. If cleaners are unable to enter a service users' room due to clutter, then the clinical staff are responsible for facilitating cleaning of the area. Clinical staff are responsible for cleaning bodily fluids from surfaces and furnishings.

If staff/service users have any concerns regarding cleaning standards they should speak to the person in charge of the unit/area/team who can liaise with the cleaning supervisor in the first instance. Any cleaning issues that are not resolved locally should be escalated to IPC team and the trust Estates Team.

5.6 Safe management of blood and body fluid Spillages

This should be read in conjunction with the Waste Management Policy.

It is vital that any spillage is attended to as soon as possible under the Control of Substances Hazardous to Health Regulations 1994 (COSHH). Assessment of hazards and associated risks in health care must be undertaken to ensure the health and safety of employees, patients, and other visitors to the healthcare premises.

The availability of appropriate spillage kits helps ensure the correct action in the event of a spillage. Such kits are particularly useful to store in; dirty utility rooms, waste treatment and waste disposal sites, and should be carried on all vehicles carrying healthcare waste. Appropriate equipment for collecting spilled waste should be provided. Sharps must not be picked up by hand. Spilled waste and any absorbent materials need to be placed in the appropriate waste container for disposal.

A spill kit must contain, for example:

- disposable gloves and disposable apron
- an infectious waste bag and sharps bin
- paper towels and plastic scoop.
- disposable cleaning cloths
- disinfectant solution / wipes
- Superabsorbent polymer gel granules for containment of bodily waste or Clinnel spill pack. <https://gamahealthcare.com/products/spill-wipe-range>

Body Fluid Spillage

Body fluid spills are divided in to two categories, those which are visibly contaminated with blood and those which are not:-

Blood Spillage

- Assess the size of the spill and the type of surface it is on to determine the most appropriate decontamination method
- Splashes of blood (or any body fluid) on the skin should be washed off immediately with soap and water
- Ensure the area is made safe, to prevent slip hazards – i.e. use a ‘wet floor’ sign if necessary.
- Use correct Personal Protective Equipment (wearing non-sterile, non-powdered gloves and plastic apron)
- If there is broken glass do not touch, even with gloved hands – use a paper or plastic scoop and dispose in the designated container/sharps box
- Sprinkle chlorine releasing granules (e.g. Presept or Sanichlor) over the spill and leave for two minutes then scoop up with a disposable plastic or paper scoop. Place the waste in the appropriate clinical waste container. Do not use if the area is likely to be damaged by bleach
- Peracetic acid impregnated spill sheets may also be used, this doesn’t damage carpets
- For large blood spill, the chlorine disinfectant concentration used should be equivalent to 10,000 parts per million (ppm) of available chlorine based disinfectant .Please read the manufacturer’s instructions before use:
- Dispose of soiled gloves and apron, follow with hand washing.
- Domestic cleaning using detergent and water should follow

If the area is a carpet it is inappropriate to use bleach, using PPE as above, clean by:

- Mopping up the spillage using paper towels, absorbent granules or pads
- Then clean area using general purpose detergent and water or use
- Peracetic spill wipes and follow the instructions on the pack
- Finish with a carpet cleaner or steam cleaner

An Important COSHH Hazard notice has been attached to Chlorine Releasing Granules; do not use in poorly ventilated areas and not to be used if handler is suffering from a known chest condition or asthma.

Urine Spills Visibly Contaminated with Blood

Chlorine releasing agents should **not** be used for urine spillage even if it contains visible blood. If a chlorine releasing agent is used with urine the resulting fumes are hazardous. The recommended practice for cleaning urine spills is:

- Wear non-sterile, non-powdered gloves and a plastic apron
- Ensure the area is made safe, to prevent slip hazards – i.e. use a 'wet floor' sign if necessary
- Soak up with paper towels
- Use detergent and water on area after soaking up the spill
- if a known infection is present, a chlorine-releasing agent may be used on the area after cleaning
- Discard gloves, waste materials and apron in a clinical waste bag for incineration.
- Wash hands thoroughly

Spillages of Body Fluids not visibly contaminated with Blood

These spillages may include faeces, vomit, urine and sputum.

- Always wear protective clothing, i.e. plastic disposable apron, disposable powder-free, non-sterile gloves
- Ensure the area is made safe, to prevent slip hazards – i.e. use a 'wet floor' sign if necessary
- Use paper towels, non-chlorine realising granules or pads to soak up the spill
- Discard paper towels and any other waste from the spillage into clinical waste bags
- Clean the contaminated area with hot water and detergent
- Discard gloves and apron in a clinical waste bag
- Wash hands thoroughly

5.7 Safe management of linen

There are statutory requirements pertaining to laundering of hospital linen and all linen must be handled in line with this guidance and the standard principles of infection control.

All linen can be categorised into the following three groups:

Clean/Unused Linen: Any linen that has not been used since it was last laundered. All clean linen must be stored off the floor in a clean, closed cupboard, and must be segregated from used / soiled linen. It must not be stored within the sluice or bathroom. Linen cupboard doors must be kept closed to prevent airborne/droplet contamination.

Dirty/Used Linen: All used linen other than that listed above. All linen that falls within this category must be placed within a white plastic laundry bag. Used linen bags must be stored in a secure area, away from public access, whilst awaiting collection.

Soiled/Infected Linen: This is any used linen which is soiled with blood or any other body fluid; and all linen used by a patient with a known infection (whether soiled or not). All soiled/infected linen must be placed in a red soluble alginate bag, inside a red plastic laundry bag.

Storage and handling of clean linen:

- Hand hygiene should be performed prior to handling clean linen.
- Clean linen should be removed from plastic bags before storage to prevent the growth of *Bacillus cereus*.
- Clean linen should be stored above floor level in a designated area, preferably an enclosed cupboard that is clean, dry and cool.
- If clean linen is not stored in a cupboard, then the trolley used for storage must be designated for this purpose and completely covered with an impervious covering/or door that is able to withstand decontamination.
- Clean linen storage areas should be dedicated for the purpose and appropriately designed to prevent damage to linen and to allow for the rotation of stocks.
- Clean linen should be physically separated from used/infectious linen when in storage and during transport.

Storage and handling of used linen:

Staff must wear appropriate PPE when handling used or potentially contaminated linen and or clothing.

All dirty linen must be placed carefully and directly into the appropriate laundry bag on removal from the bed or patient area. They must be handled with care, to minimise transmission of micro-organisms e.g. not placed on floor or sorted or Shaked in air.

Dirty linen must be transported out of care environment using appropriate colour coded linen bag and on wheeled linen skip. The use of a wheeled linen skip will prevent spread of infection by containing the linen, it also protects the bags from damage and keeps them off the floor.

Care must be taken to remove any extraneous items from dirty linen before it is placed in laundry bags. Such items are potentially dangerous to staff handling the laundry and may also damage laundry equipment.

To avoid spillage of dirty linen, linen bags must never be more than two thirds full and must be securely tied with a knot prior to transport to the laundry.

Hands must be washed immediately following the handling of any dirty linen.

On- site (ward or unit) laundry facilities

On CPFT wards with designated laundry room, access to this room should be limited to staff involved in the laundry process or to patients who are performing their own laundry. Only laundry from that unit/ward must be cleaned in this room.

The room should be well lit and well ventilated. The floors, walls, splashbacks and work surfaces must be impervious and easy to clean. Cleaning of the room should take place on a daily basis.

The operation of the laundry should facilitate the creation of clean and dirty areas, i.e. dirty linen can be brought into the laundry, processed and come out as clean linen, without it becoming contaminated by dirty linen. Clean linen must not be stored in this area.

Laundry bins should be cleaned with detergent wipes or hot water and detergent at least weekly. Washing machines should be disinfected weekly by running a hot programme without a load. The On-site laundry rooms must have the following facilities and equipment:

- Washing machine/s (industrial type with a sluice cycle); resting on a plinth
- Tumble drier/s resting on a plinth
- Hand washing sink with lever-operated mixer taps, liquid soap and paper hand towels
- A pedal bin for paper towels.

Staff who undertake laundry duties must be fully trained and fully immunised against hepatitis B. They should be aware of the risk of sharps in laundry and the actions to take in the event of a sharp's injury or other exposure to blood or body fluids.

All washing machines and driers must be subjected to a planned programme of service and maintenance at least annually via the Estates Department.

5.8 Decontamination of equipment

Refer to Medical Devices Policy for further details

Decontamination is a vital element of infection prevention and control as it is used to make an item safe to use and for handling in clinical care setting. Cleaning, disinfection, and sterilisation are processes which remove or destroy micro-organisms. The method of decontamination selected will depend on the infection risk associated with the medical device, the nature of the contamination, time available for processing, the heat, pressure, moisture and chemical tolerance of the item, the availability of processing equipment and risks associated with the decontamination method. Heat sterilization or disinfection is preferred, but if the item is heat sensitive, chemicals may have to be used.

All reprocessing of surgical instruments should be undertaken outside the clinical environment preferably in central reprocessing suites e.g. SSD. Local reprocessing in individual departments should be avoided. Any reusable item received from a SSD must be returned to the SSD, it must not be locally decontaminated in any way.

Reusable medical devices must be decontaminated in accordance with the manufacturer's instructions. All manufacturers of reusable medical devices are obliged by law to provide written instructions for the decontamination of their products.

Items designated as single use must **not** be reused under any circumstances and will be marked by the symbol below:



Medical devices include not only items such as syringe drivers, suction machines, giving sets, needles etc., but also include beds, mattresses, commodes, walking frames, tongue depressors and wheelchairs amongst others.

Cleaning

Physical cleaning removes micro-organisms and the organic material on which they thrive. **It is always the essential prerequisite to disinfection or sterilisation.**

Cleaning does not destroy the organisms but removes them and other contaminants which will adversely affect the performance of further decontamination procedures. If thorough cleaning is not performed, blood or other matter may remain on the item during other processes.

Disinfection

This process aims to inactivate micro-organisms reducing them to a level below that which is associated with infection. This process does not however kill spores.

Disinfection is usually appropriate for those items which are not used for invasive procedures.

Sterilisation

This process kills micro-organisms including spores. It renders reusable medical devices safe for the procedure to be undertaken. It is recommended that all items penetrating or in contact with mucous membranes or body cavities must be sterile at point of use.

Classification of infection risk associated with the decontamination of medical devices (adapted from Wilson, 2006)

Risk	Application	Recommendations
High	Items that penetrate the skin or mucous membrane or are introduced into a sterile body area	Single use disposable/ Central Sterilisation
Intermediate	Items in contact with mucous membranes or items which have been contaminated with body fluids, or microorganisms which can be transmitted easily	Single use disposable / if reusable followed by or high-level disinfection/ Sterilisation.
Low	Items in contact with intact skin or not in contact with patient	Cleaning

Decontamination of equipment chart (a-z)

EQUIPMENT OR SITE	A ROUTINE USE	B INFECTED PATIENT
Airways and Endotracheal Tubes	Single use disposable.	Single use disposable
Ambu masks	Single use disposable	Single use disposable
Auroscope Ear Pieces	Single use disposable	Single use disposable
Baby Scales	Renew paper liner after each baby and clean the scales with a detergent wipe at the end of each session.	Renew paper liner after each baby or immediately after soiling. Wipe with a detergent wipe, followed by a wipe with 0.1% chlorine based solution, rinse and dry.

EQUIPMENT OR SITE	A ROUTINE USE	B INFECTED PATIENT
Baths, Baby Baths and Showers	Clean with detergent and water or engage with appropriate domestic cleaner routine service.	Clean with detergent and water or appropriate domestic cleaner service, then wipe with 0.1% chlorine based solution, rinse and dry.
Babies Changing Mat	Change paper after each baby, clean mat after each session and if contaminated wash with detergent and water, or use a detergent wipe	Clean mat after each baby. If contaminated use detergent and water, or detergent wipe, then wipe with 0.1% chlorine based solution, rinse and dry.
Bedpans: Hospital	Disposable	Disposable
Patient/Service User's own home	Disposable, or wash with detergent and water and air dry.	Disposable, or disinfect with 0.1% chlorine based solution following cleaning with detergent and water. Rinse and dry.
Bedpan Frames	Clean with detergent and water and dry, or use detergent wipe if no visible soiling.	Clean with detergent and water or detergent wipe, then wipe with 0.1% chlorine based solution, rinse and dry.
Bowls (Surgical)	Disposable Return to SSD.	Disposable Return to SSD.
Commodes	Clean ALL surfaces with detergent wipe and dry after every use.	Clean ALL surfaces with detergent wipe, then wipe with 0.1% chlorine based solution, rinse and dry.
Couches (examination)	Clean with detergent wipe. Cover with disposable paper for each use.	Clean with detergent wipe, then wipe with 0.1% chlorine based solution, rinse and dry. Cover with disposable paper for use
Denture Pots:	Single use disposable If reusable patient own, clean daily with detergent and water. Store dry	Single use disposable.
Diaphragms (Trial) and IUCD instruments	Single use disposable	Single use disposable
Duvets	<u>Plastic Type</u> – clean with detergent wipe,	<u>Plastic Type</u> - Clean with detergent wipe, then wipe with 0.1% chlorine based solution, rinse and dry.
Duvet Covers:	Send to central laundry as per policy. On wash on the ward at 60°C (or as hot a wash as the material will allow), tumble dry or iron.	Send to central laundry as per Trust policy.
Earpieces: Stethoscopes	Wipe with detergent or disinfectant wipe.	Clean with detergent wipe then wipe with 0.1% chlorine based solution and dry
ECG Leads and Machines	Wipe with detergent wipe.	Clean with detergent wipe, then wipe with 0.1% chlorine based solution, rinse and dry.
Furniture and Fittings	Damp dust using detergent wipes.	Damp dust using detergent wipe, followed by disinfectant wipes or 0.1% chlorine based solution, rinse and dry.
Hoists	Clean between patients using detergent and water or detergent wipe.	Clean between patients using detergent and water or detergent wipe, then wipe with 0.1% chlorine based wipe / solution, rinse and dry.
Humidifiers	Drain once each day.	Drain once each day.

EQUIPMENT OR SITE	A ROUTINE USE	B INFECTED PATIENT
	Refill with sterile bottled water or follow manufacturer's instructions.	Refill with sterile bottled water.
Instruments (Surgical)	Return to SSD.	Return to SSD.
Linen Trolley	Clean with detergent wipe	Do not take into infected patients room
Mattresses and Pillows	<p>These must be covered with a waterproof cover.</p> <p>Clean covers with detergent wipes. Check the cover to ensure it is intact each time it is cleaned.</p> <p>Cleaning should be carried out if the cover is soiled, after the patient/service user is discharged or monthly for longer term stay.</p> <p>If seepage has occurred, the whole items is contaminated and must be discarded.</p>	<p>These must be covered with a waterproof cover.</p> <p>Clean covers with detergent wipe, 0.1% chlorine based wipe/ solution, rinse and dry. Check the cover to ensure it is intact each time it is cleaned.</p> <p>Cleaning should be carried out if the cover is soiled, after the patient/service user is discharged or monthly for longer term stay.</p> <p>If seepage has occurred, the whole items is contaminated and must be discarded.</p>
Nebulisers Single Patient use	<p>Between uses clean the chamber and mask thoroughly with detergent wipe and dry thoroughly.</p> <p>Replace weekly or if heavily soiled</p>	<p>Between uses clean the chamber and mask thoroughly with detergent wipes and dry thoroughly.</p> <p>Replace weekly or if heavily soiled</p>
Pulse Oximeter	<p>Following each use, clean all parts using detergent wipe</p> <p>Follow manufacturers guidance</p>	Following each use, clean all parts using detergent wipe then wipe with 0.1% chlorine based solution, rinse and dry
Rehabilitation Equipment (Including: sports equipment, games, art equipment and musical instruments)	<p>Please refer to manufacturer's instructions.</p> <p>Conform to planned cleaning schedule.</p> <p>Items should be wiped over after each use with detergent wipe.</p>	<p>Please refer to manufacturer's instructions.</p> <p>Items should be wiped over after each use with a detergent wipe. Then cleaned with 0.1% chlorine based solution, rinse and dry.</p>
Scissors	<p>Single use disposable</p> <p>Use Sterile scissors for wound dressings.</p>	<p>Single use and disposable</p> <p>Use Sterile scissors for wound dressings.</p>
Sphygmomanometer Cuffs	Wipe with detergent wipes before and after each use.	Wipe with detergent wipes followed by a with 0.1% chlorine based wipe /solution, rinse and dry.
Staff Community Cases/bags	Wipe over with detergent wipes, weekly or sooner if soiled, or follow manufacturers' instructions.	
Stethoscopes	Wipe with detergent wipe following each use. Special attention to earpieces and	Wipe with detergent wipe following use. Special attention to earpieces and bell end required.

EQUIPMENT OR SITE	A ROUTINE USE	B INFECTED PATIENT
	bell end required.	Allocate a single stethoscope to an infected patient, repeated clean as above followed by wipe with 0.1% chlorine based wipe / solution, rinse and dry.
Telephone	Clean weekly with a detergent / disinfectant wipe. Follow manufacturers instruction for cleaning.	Clean after use with a detergent or telephone wipe. Use 0.1% Chlorine based solution if visibly contaminated with blood or body fluids.
Toys <u>Soft toys are not recommended.</u>	Wash with detergent and water then dry. If heavily contaminated - dispose of item.	thoroughly clean with disinfectant wipe, followed by a wipe with 0.1% chlorine based solution, rinse and dry. If heavily contaminated - dispose item.
Trolley - Dressing	Clean all surfaces including the frame, with detergent wipe prior to, and following each use and at least weekly.	First clean with detergent wipe and dry,, Then wipe with 0.1% chlorine based wipe or solution, rinse and dry.
Tourniquets	Disposable If reusable – clean with disinfectant wipes	Disposable Allocate a single tourniquet to each infected patient for the duration of stay.
Walking Aids: Community Inpatients	Clean periodically with diluted detergent and water. Clean after each patient use (single patient use) or when grubby with detergent and water or use detergent wipes.	Clean with detergent and water followed by a wipe with 0.1% chlorine based solution if there is visible contamination (check manufacturer’s instructions for compatibility with disinfectants).
Wheelchairs	Clean with water and detergent, and dry or use detergent wipes	Clean with detergent and water, and dry. or clean thoroughly use detergent wipes.

Note: To send any clinical equipment for repair or maintenance, a ‘Certificate of Decontamination of Equipment Prior to Dispatch for Maintenance’ must be completed and attached to the device. Refer to the trust Medical device policy for a copy of the form and further information.

5.9 Safe Management of wastes (including sharps)

This should be read in conjunction with the Waste Management Policy.

Clinical waste means waste from a healthcare activity (including veterinary healthcare) that:



- contains viable micro-organisms or their toxins which are known or reliably believed to cause disease in humans or other living organisms. For example, if a patient is known or suspected to be infected, or colonised, by an infectious agent. Clinical judgement should be applied in the assessment of waste and should consider the infection status of a patient and the item of waste produced.





- contains or is contaminated with a medicine that contains a biologically active pharmaceutical agent, or
- is a sharp, or a body fluid or other biological material (including human and animal tissue) containing or contaminated with a dangerous substance within the meaning of Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, as amended from time to time.



Offensive waste is waste that: is not clinical waste, not infectious nor non-hazardous, but may contain body fluids, secretions or excretions and falls within waste codes 18 01 04 if from healthcare, or 20 01 99 if from municipal sources.

Safe waste disposal principles

- Always dispose of waste immediately, close to the point of use where possible.
- Dispose health care waste into the correct segregated colour coded rigid container or sharps box if a sharp
- Liquid waste, e.g., suction canisters, must be rendered safe by adding a polymer gel or compound to the container prior to placing in an orange lidded leak proof bin or yellow lidded leak proof bin if contaminated by pharmaceuticals.
- Waste bags must be no more than 2/3 full, securely tied using a plastic tie or secure knot using a 'swan neck' to close.
- Store all waste in a designated, safe, lockable area while awaiting collection. Collection schedules must be arranged and monitored to avoid build-up of waste in-patient, clinical, non-clinical and community area including health care waste generated in patient home.
- Waste produced as a result of patients treated at their home by a community nurse, or a member of the NHS profession are considered to be the healthcare professional's waste.
- The Duty of Care placed upon the healthcare worker requires that the waste is managed properly, recovered or disposed of safely and is only transferred to someone who is authorised to keep it. *Refer to trust waste policy for disposal of clinical waste from patient home.*
- Waste generated in health care setting must be segregated into streams for disposal as described below:

Category	Segregation	Treatment/disposal
Offensive (non-infectious) e.g. continence, sanitary wastes, gloves and other PPE and some dressings etc.	Yellow bag with black stripe (tiger bags) 	Energy from waste, landfill or other permitted processes
Clinical waste (infectious only)- waste	UN approved orange bag: 	hazardous" for disposal For alternative treatment

	Dressings, swabs, wipes, drapes, catheter bags, bandages, plasters, gloves, aprons, masks, plaster casts, sanitary products.	
Infectious Healthcare waste	<p>UN approved yellow bag for;</p> <ul style="list-style-type: none"> • Recognisable tissue • Chemicals • Non-hazardous pharmaceuticals 	For incineration or other permitted process
Infectious Healthcare waste contaminated- Sharps	<p>UN approved box or sharps container</p>  <p>Infectious and non-infectious sharps (needles, blades etc.), syringe bodies (including those containing partially discharged medicines); used ampoules and vials, and associated equipment.</p>	For incineration or other permitted process
<p>Waste contaminated with cytotoxic or cytostatic medication (Hazardous)</p> <p>Add an absorbent pad to each new bin to soak up any excess liquid.</p>	<p>UN approved purple bag, UN approved box or sharps container</p> 	For incineration
Non-hazardous pharmaceuticals (no sharps)	<p>Blue box/container</p>  <p>Prepared but not administered medications e.g. dropped, refused, part used doses, unwanted or expired, medicine container inner foil strip, sachet, bottle, pressurized containers e.g. inhalers, sprays</p>	For incineration or other permitted process

	(small quantities). . medicine pots, spoons, syringes	
Anatomical waste/full blood bag and blood preserves	UN approved red lidded container	For incineration only
Domestic e.g. food, dead flowers, cleaning cloths and plastics.	Black/clear bags 	Landfill Energy from waste, recovery, or
Recycling paper, paper towels, cardboard, plastics (not polystyrene) glass, steel cans, aluminium cans Note -NOT All CPFT service buildings are able to recycle paper towels, do check with domestic supervisor /IPC for local arrangement.	Clear, green or other colour bag 	Recycling Note: separate Boxes are available for toner/printer cartridges and batteries.

5.10 Occupational safety and sharps injury management

All employers are required under existing health and safety law to ensure that risks from sharps injuries are adequately assessed, and appropriate control measures are in place.

The primary aim of good infection control practice is to prevent sharps injury and body fluid splash injuries from occurring. However, when they do occur, it is vital to ensure that the injuries are managed appropriately and in a timely fashion. This will reduce the risk to staff or others directly or indirectly affected by sharps injuries. The key principles of management of health are occupational indemnity relationship to infection prevention and control are described below;

- Ensure safe/ secure placement of sharps bin in use; place below shoulder height /above waist and use temporary sharps box closure mechanism when not in use.
- Complete all details on the sharps & Medicine bins bin label following assembly, locking and at disposal
- Safer needle devices must be used when it is reasonably practicable to do so – e.g. hypodermic safety needles, safety needles (including butterflies) for venipuncture, auto shields or other alternative safety device for insulin pens, needleless systems for collection of urine from catheter bags or ports on IV lines etc.

- The sharps bins should be sealed either when no more than $\frac{3}{4}$ full manufacturers' fill line is reached or after 6 months – 1 year if not giving odor nor tangibly soiled with blood / body fluids (whichever is sooner).
- There is a legal requirement to report all sharps injuries and near misses to line managers/employers.
- A significant occupational exposure is: a percutaneous injury e.g. injuries from needles, instruments, bone fragments, or bites which break the skin; exposure of broken skin (abrasions, cuts, eczema, etc); exposure of mucous membranes including the eye from splashing of blood or other high risk body fluids.
- Avoid unnecessary use of sharps and if use of medical sharps cannot be avoided, source and use a 'safer sharp' device; where a safer sharp device is not available then safe procedures for working with and disposal must be in place e.g. sticky mats, sharps bins, safety procedures and training.
- needles must not be re-sheathed/recapped or disassembled after use
- sharps must not be passed directly hand to hand
- used sharps must be discarded at the point of use by the person generating the waste and always dispose of needles and syringes as 1 unit.
- When transporting sharps boxes for community use these must be transported safely with the use of temporary closures.
- When using or coming into contact with sharps, cover existing wounds, skin lesions and all breaks in exposed skin with waterproof dressings. If hands are extensively affected seek advice from Occupational Health
- Sharps bins must be correctly assembled and located safely on worktop/ wall bracket. Do not overfill sharps containers
- Healthcare workers must not wear open footwear in clinical situations where bodily fluids may be spilt, or where sharp instruments or needles are handled
- Clear up spillage of blood promptly using suitable spillage kit and disinfect surfaces wearing appropriate PPE. If there is glass involved in the spillage use suitable equipment to clear it up and do not pick up glass fragments by hand.
- All used sharps items must be discarded into an approved sharps bin, immediately after use.
- No attempt should be made to retrieve items from sharps containers.
- Large pieces of broken glass and china should be placed into an approved glass and aerosol waste container for disposal. Please do not place these items in sharps containers or bins.
- Further information can be obtained from the trust approved staff occupational health provider.

Risks from Inoculation Injury and Blood Contamination; the main concern is the transmission of blood-borne viruses, for example: Hepatitis B (HBV) Hepatitis C (HCV) and Human Immunodeficiency Virus (HIV). The risk of transmission is higher (particularly for HIV) when there is:

- A deep injury, i.e. when the injury is deeper than a superficial scratch drawing blood
- Visible blood on the device that caused the injury (including teeth);
- Injury with a needle that had entered from the source patient's blood stream.

It has been estimated that the risk of acquiring HIV through mucous membrane exposure, (e.g. splashed with contaminated body fluids), is much less, probably 1 per 1000 injuries (0.1%).

Remember if post exposure prophylaxis for HIV is to be given, it should ideally be given as soon as possible, preferably within an hour of injury.

Action in the event of any Inoculation Injury, Medical Sharp injury, Bite or Contamination with Blood or blood-stained body fluids.

- First, encourage bleeding by; squeeze the injured finger/ other exposed skin part under running water as appropriate, do not suck
- Wash the skin thoroughly with soap and water, do not scrub
- Irrigate contaminated mucous membranes, e.g. mouth and eyes with large quantities of water or use splash kits where provided
- Cover the injury with waterproof dressing
- Inform the nurse in charge or the line manager
- Report to Occupational/Staff Health immediately, as soon as possible - out of hours telephone message provides details of actions to take
- Complete incident/adverse event form (Datix)

6 Other Infection Prevention and Control Precautions

6.1 Aseptic non-touch technique (ANTT)

Aseptic technique refers to a standard of practice used to prevent the risk of infection from invasive procedures and invasive medical devices. The practice of ANTT also reduce the healthcare worker's risk of exposure to potentially infectious blood and tissue during clinical procedures.

Aseptic technique is vital in reducing the risk of healthcare associated infection, associated morbidity and mortality. An aseptic technique should be used during any invasive procedure which breaches the body's natural defences, i.e. the skin or mucous membrane, or when handling equipment which will enter a normally sterile body cavity, such as the cannula, urinary catheters etc. The principles of asepsis must be observed when undertaking any invasive clinical procedure. The key principles of asepsis include:

Hand decontamination

Decontaminate hands using water and liquid soap or alcohol hand gel as appropriate. Adequate drying of hands is essential. Hands should be decontaminated prior to preparing the equipment and again prior to starting the procedure.

Skin Preparation for a clinical procedure

Good skin preparation with skin prep agent contacting 70 % alcohol and chlorohexidine such as chloroprep, clinell skin prep wipe, helps to reduce the risk of infection by lowering the chances of bacteria from the patient's skin from entering the sterile body cavity or wound. For blood sampling/ cannulation, the site should be visibly clean, disinfected and allowed to dry thoroughly before introducing the needle.

Protecting the key part and key site: Key-Parts are the critical parts of the procedure equipment that if contaminated are most likely to cause infection. e.g. needles, syringe tips, intravenous line connections, exposed lumens of catheters, tops of ampoules. Key sites are the exposed specific parts of the body prepared for the invasive clinical procedure e.g. skin or wound. Sterile packs should be checked for expiry date, evidence of damage or moisture penetration prior to use.

Creating and Maintaining a Sterile Field

A sterile field is an area created by placing sterile towels or sterile drapes around the procedure site and on the surface/trolley used for sterile instruments and other items needed during the procedure. The sterile field includes the procedure site, all packs and instruments opened for the procedure and any sterile protective clothing such as gloves and gown worn by the person performing the procedure. To maintain sterility you need to wear sterile gloves and ensure that no unsterile items come into contact with the sterile field by;

- Ensure that any items placed on the sterile field are sterile
- Do not touch sterile items with bare skin or non-sterile items when opening dispensing or transferring them
- Do not touch non-sterile items with sterile gloves
- Do not touch sterile items with non-sterile gloves
- Do not place open sterile packs or items near open windows or doors
- At all times, move consciously within or around the sterile field in a way that maintains sterility.
- Keep the exposure of the susceptible site to a minimum
- Use appropriate personal protective equipment
- All waste and disposable items must be disposed of using appropriate waste stream in accordance with the waste policy.

Creating a safe environment

Specific rooms are designated for performing clinical procedures and for processing instruments and other items. Limiting the traffic and activities, in these areas will lower the risk of infection. Allow appropriate time or at least half an hour for dust to settle after cleaning activities for Aerosol Generating Procedures (AGP), dusting, vacuuming or after bed making before carrying out any aseptic procedure. Other environment safety measures include:

- Close doors and windows during procedures to minimise dust and eliminate insects,
- In clinics before, in-between and after each patient consultations clean and disinfect as appropriate- all surfaces that may have been contaminated including examination couches, dressing trolleys and examination/operating lamps
- In patients own home/care home, the patient, their family or care staff should be encouraged not to make the bed/ dust or Hoover for at least one hour before a dressing/catheter change or other procedure requiring aseptic technique.

6.2 Safe Handling of specimens and specimen collection.

A specimen is defined as any bodily substance taken from a person for the purpose of analysis, such as blood, urine or faeces. All specimens should be regarded as potentially infectious, and all members of staff involved in collecting, handling and transporting specimens must be trained and follow infection prevention and control precautions to prevent transmission of infection. To reduce risks, the number of persons handling specimens should be kept to a minimum. Patients and their carers should be given advice on the collection, storage and transportation of specimens, where appropriate and applicable

COSHH regulations require that a risk assessment is made prior to contact with hazardous substances in order to decide the correct level of precautions to be taken. COSHH regulations apply to hazardous microorganisms present in body fluids and tissues as well as chemicals and carcinogens. Staff should assess the risk of contact with blood, body fluids, non-intact skin or mucous membranes and apply the appropriate infection control precautions to ensure safe working practices. The term 'Body Fluids' include: Blood, Cerebrospinal fluid, Peritoneal fluid, Pleural fluid, Pericardial fluid, Synovial fluid, Amniotic fluid Semen, Vaginal secretions, Breast, milk, Urine, Faeces, Vomit Respiratory secretions e.g. sputum and Saliva (in relation to dentistry or human bites)

Principles of Specimen handling and Collection

The clinician or person taking any specimens must ensure that the following principles are followed:

- Performed effective hand washing before and after collection of the specimen in accordance with the Hand Hygiene section of this policy
- Wear appropriate PPE when collecting the specimen e.g. gloves, aprons and, where splashing is possible or expected, goggles or visor
- Measures are taken to prevent contamination of the sample
- The specimen is taken at the correct time and place .
- Collect specimen using the correct specimen container and ensure container is tightly sealed post collection to prevent leakage
- The outside of the container is free from contamination with body fluid
- The sample container is appropriately labelled with patient's name, date of birth, hospital number (if applicable) as well as the date and time that the specimen was obtained
- The appropriate request form is completed with details of the patient's relevant medical history, investigation required, and dates of any antibiotic treatment received. Please ensure that the correct name is on the specimen container and the request slip ; patient's confidentiality must be always maintained.
- The specimen container must be placed in an approved specimen bag and sealed, with the request form in the separate pouch which is attached
- The specimen is stored correctly and transported to the laboratory promptly

- If the specimen requires refrigeration, then a designated specimen fridge must be used

High Risk Specimens

All clinical specimens should be regarded as potentially infectious. Specimens known or suspected to contain high-risk pathogens such as Tuberculosis, Sars Cov2 or blood-borne viruses should be marked using a biohazard sticker on both the specimen container and the request form.

Microbiological Specimens

Microbiology results are crucial for identification of appropriate antibiotic therapy and application of infection prevention and control measures. To ensure that accurate microscopy, culture and sensitivity results are obtained, steps must be taken to avoid contamination of the specimen with the service user's or clinician's own normal flora.

Antibiotic therapy may affect the specimen and inhibit bacterial growth in the laboratory cultures and may produce misleading results. If possible, the sample for microbiological investigation needs to be collected prior to commencing antibiotic therapy. However, if collected during antibiotic therapy, the specimen should ideally be collected immediately before a dose is administered.

Stool specimens should be collected during the first 48 hours of illness. The chance of identifying pathogens diminishes as time after acute illness passes. A spatula must be used to collect a walnut-sized sample of solid stool or approximately 15mls of liquid stool into a specimen bottle. This should be sufficient for microbiological investigation. If viral infection is suspect the specimen bottle should be $\frac{3}{4}$ full.

In a suspected outbreak or period of increased incidence outbreak, two stool specimens should be collected from the affected persons for bacteriology and virology. The sample for bacteriology should be sent for culture and the sample for virology should be sent for electron microscopy. They should ideally reach the laboratory on the day of collection. If necessary, stool specimens can be stored in a designated specimen refrigerator for no longer than 24 hours. Do not freeze faeces.

Urine: A urinary tract infection is defined by a combination of clinical features and the presence of bacteria in the urine. The presence of bacteria alone is not indicative of infection,

Urine should only be sent for microbiological testing if signs of infection are present.

Collect specimens prior to commencing antimicrobial therapy where possible.

Mid-stream urine (MSU) is the recommended routine collection method.

The first part of the voided urine is discarded and, without interrupting the flow approximately 10mls is collected into a urine sample container. Where boric acid is used, fill the container up to the fill mark and mix well.

Clean-catch urine is a reasonable alternative to MSU. Periurethral cleaning is recommended. The whole specimen is collected into a urine sample container.

In order to detect a urinary tract infection in a catheterised patient, it is necessary to collect a sample of urine directly from the bag sample port to ensure that it has been freshly voided. Urine specimens should NEVER be taken from the drainage bag or by disconnecting the drainage bag from the catheter, since the specimen will

undoubtedly be contaminated. The risk of introducing infection is increased each time the drainage bag is disconnected from the catheter. The number of times a specimen of urine can be taken from the sample port will depend on the manufacturer's instructions. Only use drainage bags, which incorporate a 'safe sample port' system, which allows a sample of urine to be withdrawn without the use of a needle. This system reduces the risk of needle stick injuries to both patient and clinical staff during sampling. Refer to trust urinary catheterisation guideline for further information.

Rapid transport, culture, or measures to preserve the sample aid reliable laboratory diagnosis. Delays and storage at room temperature allow organisms to multiply, which generate results that do not reflect the true clinical situation.

Sputum

Sputum samples should ideally be collected in the morning before eating, drinking or cleaning teeth. The patient should be asked to cough up material from deep in the lungs and expectorate without saliva into a specimen container. Saliva or mucous from the back of the nose should not be provided as sputum. The specimen should be delivered to the laboratory as soon as possible, or within 24 hours if refrigerated.

Wound Swabs

Taking a wound swab is only recommended when clinical signs of infection are identified, and the information gained will affect treatment. Routine swabbing of wounds should be avoided (Gould 2001; Parker 2000).

As with all investigations the findings must be reviewed alongside clinical information and treatment should not be based on swab results alone. If pus is present, a sample obtained by aspiration with a syringe will be the most informative. Loose debris on the wound should be removed, as this is likely to contain high levels of bacteria, which are not representative of the infective organism.

If the wound is dry, moisturising the swab with sterile normal saline or the transport medium makes it more absorbent and increases the survival of bacteria prior to culture (Donovan 1998; Gilchrist 1996). The swab must touch all areas by wiping in a zigzag and rolling motion over the surface of the wound. The swab should then be placed directly into a tube and carefully labelled and sent to the laboratory as quickly as possible.

It is important that the specimen is supported with sound clinical information recorded on the microbiology request form. Details relating to the patient's symptoms of infection and treatment history will assist the microbiologist in making an accurate diagnosis and appropriate recommendations for management.

Sensitivities for antibiotic treatment are not always returned with culture results because many isolates reflect bacterial colonisation, rather than infection. It is worthwhile obtaining advice from the laboratory to discuss results and treatment of the case.

Storage of Specimens

For accurate results to be obtained, specimens should be received by the laboratory as soon as possible.

If for microbiological investigation, urine and sputum specimens should ideally be examined in the laboratory within 2 hours of collection, and stool samples within 12 hours. However, where this is not possible, urine and sputum specimens must be stored within a **designated** fridge, but only for a maximum of 24 hours, at 4-8°C. This will help prevent bacteria and contaminants from multiplying and giving misleading results.

If any clinical specimens are to be stored in a refrigerator, it is essential that:

- There is a refrigerator for the purpose of **specimen storage only**. Kitchen and drug fridges **must not** be used for the purpose of storing specimens due to the risk of cross infection
- The temperature in the refrigerator is kept between 4-8°C (minimum and maximum temperature to be checked and recorded daily)
- The specimen refrigerator is not accessible to the public
- The specimen refrigerator is cleaned on a weekly basis, defrosted regularly, cleaned and disinfected after any spillage or leakage.

All specimens must be collected by portering/transport staff in a secure, robust, leak proof container with a biohazard label. These containers must be cleaned and disinfected weekly and after any visible spillage.

All clinical staff transporting specimens from a patient's home to a surgery, clinic or health centre must be provided with a rigid, robust, leak proof container with a tight-fitting lid. This container must be identified with both a biohazard sticker and contact telephone number in case the box is lost. Clinical staff must not transport specimens unless such a container is used.

6.3 Transmission Based Precautions (TBPs)

Standard infection control precautions may be insufficient to prevent cross transmission of specific infectious agents and additional precautions called "transmission based precautions" (TBP) may be required when caring for patients with known / suspected infection or colonisation. BPS are categorised by the route of transmission of infectious agents (some infectious agents can be transmitted by more than one route). Clinical judgement and decisions should be made by staff on what additional precautions are required for a patient and this will be based on:

- suspected/known infectious agent
- severity of the illness caused
- transmission route of the infectious agent
- care setting and procedures undertaken.

The key factors for safe application of transmission based precautions are;

- Ensuring safe patient placement
- Safe management of patient equipment in isolation room; ensuring dedicated equipment are adequately cleaned or disposed where applicable.
- Safe management of the care environment; increased cleanings, adequate ventilation and safe disposal of waste
- Correct use of additional PPE and its management.

6.4 Patient isolation protocol

- Patients who have a known or suspected infection or colonisation must be risk assessed prior to placement in Isolation facilities. Isolation should be prioritised depending on the known/suspected infectious agent.
- All patient placement decisions and assessment of infection risk (including isolation requirements) must be clearly documented in the patient notes and provided in patient handovers with other healthcare/care providers.
- Isolation of infectious patients can be in specialised isolation facilities, single room isolation, cohorting of infectious patients where appropriate, ensuring that they are separated by at least 3 feet (1 metre) with the door closed.
- isolation room doors should remain closed, if this is not possible, e.g., due to mental ill health or physical health needs, this should be documented in patient note and IPC team informed.
- if single rooms are limited, infectious patients who have conditions that could increase the risk of transmission of infection to other patients, such as, excessive cough or an MDRO should be prioritised for placement in a single room.
- signage should be used on doors/areas to communicate isolation requirements and prevent entry of unnecessary visitors, and non-essential staff. Patient confidentiality must be maintained.
- single room prioritisation should be reviewed daily, and the clinical judgement and expertise of the staff involved in a patient's management and the Infection Prevention and Control Team (IPCT) should be sought particularly for the application of TBPs.
- infectious patients should only be transferred to other departments if clinically necessary. If the patient has an infectious agent transmitted by the airborne/droplet route, then if possible/tolerated the patient should wear a surgical face mask in communal areas during transfer. The receiving department/hospital and transporting staff must be aware of the necessary precautions.
- Cohorting of infectious patients can be considered when: single rooms are in short supply and if there are two or more patients (a cohort) with the same confirmed infection. The IPC support must be sought in these instances to ensure safe cohorting .
- Team manager must consider assigning a dedicated team of care staff to care for patients in isolation/cohort rooms/areas as an additional infection control measure during outbreaks/incidents. This can only be implemented if there are sufficient levels of staff available (so as not to have a negative impact on non-affected patients' care).
- Vacated rooms should also be decontaminated following an AGP. Clearance of infectious particles after an AGP is dependent on the ventilation and air change within the room. This is a minimum of 20 minutes in hospital settings where the majority of these procedures occur. In general wards and single rooms there should be a minimum of 6 air changes per hour, in negative-pressure isolation

rooms there should be a minimum of 10 air changes per hour. Advice should be sought from the IPCT.

- Before discontinuing isolation: Individual patient risk factors should be considered (e.g., there may be prolonged shedding of certain microorganisms in immunocompromised patients).
- Once isolation is discontinued or patient transferred out to other facilities, staff must ensure post infection clean of the area and reusable equipment as per IPC policy.

6.5 Infection control isolation poster guidance.

This is a guideline and if you have any queries, please contact the Infection Prevention and Control Team. **Please always inform the IPC Team if you have anyone with any infectious disease on your ward/unit.** If you are unable to isolate a patient where isolation is required, please contact IPaCT for advice.

Source/Contact Isolation – Used to prevent and control infections that spread via direct contact with the patient or indirectly from the patient's immediate care environment (including care equipment). This is the most common route of cross-infection transmission. Use for MRSA colonisation, Ecoli, VRE, ESBL, and other source infections. PPE required, hand decontamination in and out, surface / equipment cleaning with disinfectant/ universal wipes (e.g. green clinell), keep door closed unless discussion with IPaC Team

Enteric Isolation – For *C.diff* infection, diarrhoea and vomiting single room. Use single room, PPE required, hand decontamination in and out, surface / equipment cleaning with sporicidal wipes (red clinell) disinfectant wipes, keep door closed unless discussion with IPaC Team

Respiratory Isolation – For tuberculosis, whooping cough, Sars Cov '19 and other communicable respiratory infections. Use single room, PPE required, FRSM surgical /FFP3 mask, hand decontamination in and out, surface / equipment cleaning with disinfectant/ universal wipes and sporicidal wipes, keep door closed unless discussion with IPaC Team.

Protective Isolation: For Immunocompromised patient. Use single room with mechanical air exchange where available, PPE required, hand decontamination in and out, surface / equipment cleaning with disinfectant/ universal wipes (e.g green clinell), keep waste bin and contaminated items away from room, keep door closed unless discussion with IPaC Team.

Infection control isolation posters are accessible through trust intranet page here : [Infections | Intranet \(cpft.nhs.uk\)](https://cpft.nhs.uk/Infections).

STOP VISITORS:
Please speak to a nurse before entering

ENTERIC ISOLATION PRECAUTIONS

Before entering

Hand hygiene Put on PPE (apron, gloves, mask*)

**If required in line with current IPC guidelines*

Before leaving

Clean surfaces Remove and dispose of PPE Hand hygiene with soap and water

Keep room ventilated
Keep door closed at all times

Infection Prevention and Control Team:
07950 383225 / 07950 383227
Cpftinfection.controlreporting@cpft.nhs.uk

STOP VISITORS:
Please speak to a nurse before entering

CONTACT ISOLATION PRECAUTIONS

Before entering

Hand hygiene Put on PPE (apron, gloves, mask*)

**If required in line with current IPC guidelines*

Before leaving

Clean surfaces Remove and dispose of PPE Hand hygiene

Keep room ventilated
Keep door closed at all times

Infection Prevention and Control Team:
07950 383225 / 07950 383227
Cpftinfection.controlreporting@cpft.nhs.uk

NHS
Cambridgeshire and Peterborough
with Foundation Trust

STOP Visitors:
Please speak to a nurse before entering

PROTECTIVE ISOLATION PRECAUTIONS

Before Entering

Hand Hygiene Put on PPE (Gloves, apron, masks*)

**If required in line with current IPC guidelines*

Before Leaving

Clean surfaces Remove and dispose of PPE Hand Hygiene

Keep room ventilated
Keep door shut at all times
Keep waste bin away from the patient and empty regularly

Infection Prevention and control team:
cpftinfection.controlreporting@cpft.nhs.uk

STOP VISITORS:
Please speak to a nurse before entering

RESPIRATORY/AIRBORNE ISOLATION PRECAUTIONS

Before entering

Hand hygiene Put on fit tested FFP3 Type IIR FRSM* Put on PPE (apron, gloves)

**Refer to IPC guidelines*

Before leaving

Clean surfaces Remove and dispose of PPE Hand hygiene

Keep room ventilated
Keep door closed at all times

Infection Prevention and Control Team:
07950 383225 / 07950 383227
Cpftinfection.controlreporting@cpft.nhs.uk

6.6 Infection agents / diseases relevant to CPFT services and their IPC precautions:

This table is intended to function as a quick reference guide, is not exhaustive, and is not intended to replace appropriate risk assessment and clinical judgement or formal assessments and support from the IPC Team.

DISEASE / INFECTION	CATEGORY OF ISOLATION	STATUTORY NOTIFICATION	ISOLATE INPATIENT MENTAL HEALTH/LEARNING DISABILITIES	ISOLATE INPATIENT PHYSICAL HEALTH	ISOLATE COMMUNITY CARE INPATIENT E.G. CARE HOME	COMMUNITY PATIENT E.G. OWN HOME	COMMENTS / LINK TO FURTHER RESOURCES
Acinetobacter	Contact	No, unless outbreak	No	Yes	No	No	https://www.gov.uk/guidance/acinetobacter-species Inform IPaCT prior to transfer
<i>Beta-haemolytic Streptococcus</i> : Group A	Contact	No, unless invasive disease suspected e.g. scarlet fever	Discuss with IPaCT Until 48 hours post antibiotics	Yes, until at least 48 hours post antibiotics.	No	No	https://www.gov.uk/government/collections/group-a-streptococcal-infections-guidance-and-data https://www.gov.uk/government/publications/infection-control-in-schools-poster
Campylobacter enteritis	Contact - enteric	Yes	Until 48 hours symptom free	Until 48 hours symptom free	Until 48 hours symptom free	No – own toilet if possible	https://www.gov.uk/government/collections/campylobacter-guidance-data-and-analysis https://www.nhs.uk/conditions/food-poisoning/ https://www.gov.uk/government/publications/infection-control-in-schools-poster
Carbapenem-resistant Enterobacteriales (CRE) carbapenemase producing Enterobacteriales (CPE).	Contact	No	Contact IPC Team PRIOR to transfer or ONCE ADMITTED for further support / risk assessment	Yes, if symptomatic / on risk assessment	No	No	https://www.gov.uk/government/collections/carbapenem-resistance-guidance-data-and-analysis Actions to contain carbapenemase-producing Enterobacteriales (publishing.service.gov.uk)

DISEASE / INFECTION	CATEGORY OF ISOLATION	STATUTORY NOTIFICATION	ISOLATE INPATIENT MENTAL HEALTH/LEARNING DISABILITIES	ISOLATE INPATIENT PHYSICAL HEALTH	ISOLATE COMMUNITY CARE INPATIENT E.G. CARE HOME	COMMUNITY PATIENT E.G. OWN HOME	COMMENTS / LINK TO FURTHER RESOURCES
Chickenpox (Varicella Zoster virus)	Respiratory Isolation Airborne /Drople	No	Yes, until rash dry	Yes, until rash dry	Yes, until rash dry	No	https://www.gov.uk/government/collections/chickenpox-public-health-management-and-guidance http://cks.nice.org.uk/chickenpox https://www.gov.uk/government/publications/infection-control-in-schools-poster Any staff that are pregnant, immunocompromised or have not had chickenpox to avoid. Vaccine available
Clostridium / Clostridioides difficile	Contact - enteric	No	Yes, until 48 hours symptom free	Strict isolation	Yes	No – own toilet if possible	Mandatory surveillance https://www.gov.uk/government/collections/clostridium-difficile-guidance-data-and-analysis
Diarrhoea (of unknown origin)	Contact - enteric	Depends on causative organism	Discuss with IPaCT	Strict isolation, discuss with IPaCT	Discuss with IPaCT	Discuss with IPaCT	https://www.gov.uk/government/collections/gastrointestinal-infections-guidance-data-and-analysis
E. coli (Escherichia coli)	Contact (enteric)	Yes	Yes, if enteric, until 48 hours symptom free	Yes, if enteric, until 48 hours symptom free	No	No	https://www.gov.uk/government/publications/infection-control-in-schools-poster
Extended spectrum Beta-lactamases (ESBL)	Contact	No	No, unless indwelling urinary catheter	Yes	No	No	https://www.gov.uk/government/collections/extended-spectrum-beta-lactamases-esbls-guidance-data-analysis
Gastroenteritis – Viral (e.g.	Contact - enteric	No	Yes, if possible. Complete risk assessment if not	Yes, until 48 hours symptom	Yes, until 48 hours symptom free, do not visit	No, own toilet if possible, do not visit if	https://www.gov.uk/government/collections/gastrointestinal-infections-guidance-data-and-analysis

DISEASE / INFECTION	CATEGORY OF ISOLATION	STATUTORY NOTIFICATION	ISOLATE INPATIENT MENTAL HEALTH/LEARNING DISABILITIES	ISOLATE INPATIENT PHYSICAL HEALTH	ISOLATE COMMUNITY CARE INPATIENT E.G. CARE HOME	COMMUNITY PATIENT E.G. OWN HOME	COMMENTS / LINK TO FURTHER RESOURCES
norovirus)				free	if possible	possible	
Head lice	No	No	No	No	No	No	https://www.gov.uk/guidance/head-lice-pediculosis https://www.nhs.uk/conditions/head-lice-and-nits/
Hepatitis A	Contact - enteric	Yes	Yes, up to 7days of signs & symptoms	Yes,	Yes	No, own toilet if available	https://www.gov.uk/government/collections/hepatitis-a-guidance-data-and-analysis Vaccine available
Hepatitis B	No, unless bleeding profusely	Yes	No	No	No	No	https://www.gov.uk/government/collections/hepatitis-b-guidance-data-and-analysis Vaccine available
Hepatitis C	No, unless bleeding profusely	Yes	No	No	No	No	https://www.gov.uk/government/collections/hepatitis-c-guidance-data-and-analysis
Herpes simplex (cold sores)	Contact if extensive	No	No	No	No	No	https://www.nhs.uk/conditions/cold-sores/
Herpes Zoster (shingles)	Contact, airborne if disseminated	No	Yes, if possible until rash dry	Yes, if possible until rash dry	Yes, if possible until rash dry	no	https://www.nhs.uk/conditions/shingles/ Avoid contact if immunocompromised or have not had chickenpox (especially if pregnancy) Vaccine available
HIV	No, unless bleeding profusely	Surveillance data	No	No	No	No	https://www.gov.uk/government/collections/hiv-surveillance-data-and-management https://www.nhs.uk/conditions/hiv-and-aids/
Impetigo	Contact	If invasive	Yes, until 48 hours of appropriate antibiotic	Yes, until 48 hours of	No	No	https://www.gov.uk/government/collections/impetigo-guidance-data-and-

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			therapy	appropriate antibiotic therapy			analysis https://www.nhs.uk/conditions/impetigo/
Influenza (seasonal)	Droplet	Yes	Yes	Yes	If possible	No	https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis Vaccine available
Influenza (pandemic)	Droplet	Yes	As per flu plan	As per flu plan	As per flu plan	As per flu plan	https://www.gov.uk/government/collections/pandemic-flu-public-health-response
Klebsiella	No, unless ESBL producing	No, unless invasive	No	Yes for ESBL	No but take extra precautions for ESBL	No	https://www.gov.uk/guidance/klebsiella-species
Legionnaire's disease	No	Yes	No	No	No	No	https://www.gov.uk/government/collections/legionnaires-disease-guidance-data-and-analysis
Listeriosis	Contact - enteric	Yes	Yes	YES	No	No	https://www.gov.uk/government/collections/listeria-guidance-data-and-analysis https://www.nhs.uk/conditions/listeriosis/
Measles	Droplet / Airborne	Yes	Yes	Yes	Yes	No	https://www.gov.uk/government/collections/measles-guidance-data-and-analysis https://www.nhs.uk/conditions/measles/
Meningococcal meningitis	Droplet	Yes	Would not be in-patient	Would not be in-patient	Would not be in care home	Would not be at home	https://www.gov.uk/government/collections/meningococcal-disease-guidance-data-and-analysis
Meningo-encephalitis	Droplet	Yes	No	No	No	No	https://www.gov.uk/government/collections/meningococcal-disease-

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(acute)							guidance-data-and-analysis
MRSA	Contact	No	No	Yes	No	No	https://www.nhs.uk/conditions/mrsa/
Mumps	Droplet	Yes	Yes	Yes	Yes	No	https://www.gov.uk/government/collections/mumps-guidance-data-and-analysis https://www.nhs.uk/conditions/mumps/
Pneumonia	No	No	No	No	No	No	https://www.nhs.uk/conditions/pneumonia/
Pseudomonas aureginosa – if not ESBL	None	No	No	No	No	No	https://www.gov.uk/government/collections/pseudomonas-aeruginosa-guidance-data-and-analysis
Respiratory syncytial virus (RSV)	Droplet	No	Yes (NIPCM)	Yes (NIPCM)	No	No	https://www.gov.uk/government/collections/respiratory-syncytial-virus-rsv-guidance-data-and-analysis
Rotavirus	Contact - enteric	No	Until 48 hours symptom free	Until 48 hours symptom free	Until 48 hours symptom free	No, own toilet if possible	https://www.gov.uk/government/collections/rotavirus-guidance-data-and-analysis
Salmonella	Contact - enteric	Yes, if food poisoning	Until 48 hours symptom free	Until 48 hours symptom free	Until 48 hours symptom free	No, own toilet if possible	https://www.gov.uk/government/collections/salmonella-guidance-data-and-analysis
SARs Cov-2	Droplet / airborne – r/v latest guidance for RPE.	No	Yes - follow protocol	Yes - follow protocol	Yes - follow protocol	No	Refer to updated guideline on CPFT intranet
Scabies	No	No	No	No	No	No	Refer to specific guidance in policy https://www.nhs.uk/conditions/sca

DISEASE / INFECTION	CATEGORY OF ISOLATION	STATUTORY NOTIFICATION	ISOLATE INPATIENT MENTAL HEALTH/LEARNING DISABILITIES	ISOLATE INPATIENT PHYSICAL HEALTH	ISOLATE COMMUNITY CARE INPATIENT E.G. CARE HOME	COMMUNITY PATIENT E.G. OWN HOME	COMMENTS / LINK TO FURTHER RESOURCES
							bites/
Scarlet fever	Droplet	Yes	Until 48 hours of appropriate antibiotics	Until 48 hours appropriate antibiotics	Until 48 hours appropriate antibiotics	No	https://www.gov.uk/government/collections/scarlet-fever-guidance-and-data https://www.nhs.uk/conditions/scarlet-fever/
Shigella	Contact - enteric	Yes	Yes, until 48 hours symptom free	Yes, until 48 hours symptom free	Yes, until 48 hours symptom free	No, own toilet if possible	https://www.gov.uk/government/collections/shigella-guidance-data-and-analysis
Tuberculosis	Airborne for smear positive cases only	Yes	Yes, for smear positive case only	Yes, for smear positive cases only	Yes, for smear positive cases only	No	https://www.gov.uk/government/collections/tuberculosis-and-other-mycobacterial-diseases-diagnosis-screening-management-and-data
Typhoid	Contact - enteric	Yes	Yes – discuss with IPaCT	Yes, discuss with IPaCT	Yes, discuss with IPaCT	No, own toilet if possible	https://www.gov.uk/government/collections/typhoid-and-paratyphoid-guidance-data-and-analysis https://www.nhs.uk/conditions/typhoid-fever/
VRE (vancomycin resistant enterococci)	Contact – enteric if loose stools	No	Please contact IPaC	Please contact IPaC Probably	No	No	Depends on colonisation vs infection, date and where colonised. Do not place near patients with MRSA, wounds, or invasive devices.
Whooping cough (pertussis)	Droplet	Yes	Yes	Yes	Yes	No	https://www.gov.uk/government/collections/pertussis-guidance-data-and-analysis https://www.nhs.uk/conditions/whooping-cough/

6.7 Infection control Isolation Care Plan

Infection control Isolation Care Plan

Affix Patient ID label Here

Date/time isolated:
Reason:
 Clostridium difficile (C.diff) CPE Diarrhoea ESBL MRSA Open Pulmonary TB VRE Flu
 Covid '19 Other (please specify) **Date IPC Team informed**

Patient management	Please complete daily and initial in space provided										
	Day	1	2	3	4	5	6	7	8	9	10
Date											
Relevant sign on patients door											
Appropriate PPE available (e.g. gloves, Apron, Face Mask& shield)											
Appropriate waste stream in place											
Medical review for: Swab test, patient placement , antibiotics, PPI, aperients e.t.c											
Patient given appropriate advice and equipment e,g face Mask and wipes where applicable.											
Relatives/carers given appropriate advice											
Treatment plan in place											
Dedicated toilet, commode , shower provided facilities clean twice daily .											

Risk assessment for door to be left open completed (after discussion with Infection Prevention and Control)	Rationale:	Date/Time
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Rationale for discontinuation of isolation : 48 hours of formed stool <input type="checkbox"/> X3 negative MRSA screens <input type="checkbox"/> Infection Prevention and Control advice <input type="checkbox"/> Other (please specify) <input type="checkbox"/>	Date/time isolation discontinued:	Post Infection Clean Completed (date/time):
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7 Notifiable Diseases

The United Kingdom Health Security Agency(UKHSA) requires all notifiable infectious diseases to be reported promptly once suspected or diagnosed for strategic management and optimal protection of the public , this is part of the responsibility of all registered medical practitioner .Such notifiable infection should also be promptly escalated the Infection control team who will support the upward reporting and local management of ;

- A notifiable disease
- An infection, which in the view of the registered medical practitioner, presents or could present significant harm to human health

Prompt notification and reporting of disease is essential in order to collect accurate and complete epidemiological information on the disease. Also, to ensure prompt and appropriate control measures to prevent the spread of infection.

List of notifiable diseases: Diseases notifiable to local authority proper officers under the Health Protection (Notification) Regulations 2010

Acute Encephalitis	Malaria
Acute Infectious Hepatitis	Measles
Acute Meningitis	Meningococcal Septicaemia
Acute Poliomyelitis	Mumps
Acute Meningitis	Monkeypox
Anthrax	Plague
Botulism	Rabies
Brucellosis	Rubella
Cholera	Severe Acute Respiratory Syndrome (SARS)
Covid'19	Scarlet Fever
Diphtheria	Smallpox
Enteric Fever (typhoid or paratyphoid fever)	Tetanus
Food Poisoning	Tuberculosis
Haemolytic Uraemic Syndrome (HUS)	Typhus
Infectious Bloody Diarrhoea	Viral Haemorrhagic Fever (VHF)
Invasive group A Streptococcal Disease	Whooping Cough
Legionnaires' Disease	Yellow Fever
Leprosy	

Notifications must be completed by the doctor and must be sent to the Offices of the Proper Officers. In Norfolk, Suffolk and Cambridgeshire, the Proper Officers for this purpose are the Consultants in Communicable Disease Control (C.C.D.C.) or equivalent Medical Officer appointed by the Local Authorities and employed by Public Health England. Health Protection Unit and on the third tier Public Health On Call officer. Further detail and process for notifiable diseases can be accessed on uKHSA website , link here [Notifiable diseases and causative organisms: how to report - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/notifiable-diseases-and-causative-organisms-how-to-report)

8 Control of Legionella – Flushing of rarely used outlets.

To be read in conjunction with the CPFT Water Safety Plan and Policy

Systems or individual water outlets that are not frequently used allow the development of stagnant water conditions, which increase the potential of bacterial growth and proliferation, including the Legionella. In order to remove any stagnation that may have developed or to stop stagnation from occurring in the first place, it is important for all trust building and departments to have "water outlet flushing" programme in place .

The flushing programme must be designed so that it allows for the whole dead-leg to be removed. This is achieved by ensuring that the flushing is carried out at the specified system or outlet and for an appropriate length of time. The length of time of purging water from the system is important because it is vital to ensure that all the stagnant water has been expelled from the pipework and at least until "circulating" or "fresh" water is drawn from the outlet (water at temperatures exhibited throughout the rest of the system).

The flushing programme should follow the procedure outlined below:

- i. Identify areas/low use outlets to be flushed in each of the service area.
- ii. Ensure that the system/outlet can be flushed safely and in a tidy manner into an appropriate drain if not plumbed for drainage.
- iii. Ensure that the purging of water from outlets does not create an unnecessary amount of aerosol at least no more than would be created when outlet is operated normally.
- iv. Ensure that "splash-back" is minimised, where practicable, by placing a sponge or another material capable of absorbing some of the force of the water against the surface of the appliance.
- v. Purge the hot and the cold or the mixed water in turn for a minimum of 2 minutes or for a period necessary to draw water from the outlet at temperatures exhibited throughout the rest of the system. The flushing must be repeated 2-3 times a week as scheduled on the trust's water flushing assessment form.
- vi. If a system or an area consisting of multiple outlets requires flushing, it is important to begin with the nearest outlet to the main distribution pipework, working progressively away from the main distribution pipework.
- vii. Where showers need to be flushed, it is important to ensure that, where practicable, the showerhead is removed in order to reduce the potential of aerosol production. Where the head is fixed, exposure to the aerosol produced must be minimised. One method that can be employed in this situation is the use of a transparent plastic bag, fixed around the shower-head, with one corner pierced to allow partial discharge of water.
- viii. Consider whether the system/outlet can be removed negating further flushing. If so, advise the Estates Team in writing or log as task
- ix. Log all procedures and results on the evaluation of use and flushing form. This form should be retained and filed for future audit processes.

9 Related Communicable Diseases and management guideline

9.1 Hepatitis B

The WHO estimates that there are 257 million people living with HBV infection worldwide. The virus can survive outside of the human body for at least 7 days. The incubation period is 45-180 days. 70% of people are asymptomatic, 30% develop acute hepatitis. Symptoms vary in length of time and severity. They can include jaundice, dark urine, extreme fatigue, nausea, vomiting and abdominal pain.

The severity of Hepatitis B (HBV) disease ranges from mild infections that can only be detected by liver function tests, and/or the presence of serological markers of infection, to fulminating cases of acute hepatic necrosis. Of those cases admitted to hospital, the fatality rate is 1%. The variation in incubation period is related to the mode of transmission as well as to host factors. The prognosis for Hepatitis B carriers who develop progressive liver disease is uncertain; some develop cirrhosis and are at increased risk of developing hepatocellular carcinoma.

After exposure to the virus, most infected adults completely recover from the acute infection. A small proportion will go on to become chronic carriers (i.e. shed HBsAg into the circulation for more than 6 months after acute infection). HBsAg appears 1-10 weeks post exposure prior to symptoms. Hepatitis B infection can be transmitted from infected mothers to their babies at, or around, the time of birth (perinatal transmission). Babies acquiring infection at this time have a high risk of becoming chronic carriers of the virus.

In developed countries Hepatitis B infection is usually acquired during adulthood, predominant routes being sexual and parental. About 2-10% of those infected as adults become chronic carriers with hepatitis surface antigen (HBsAg) persisting longer than 6 months. Persistent HBsAg, and chronic infectious carriage of Hepatitis B, is more frequent in those infected as children and rises to 95% in neonates infected perinatally. Among carriers of the virus those in whom HB e-antigen (HBeAg) is detectable are most infectious. Those with antibody to HBeAg (anti-HBe) are generally, of low infectivity.

The blood of those infected with Hepatitis B has been shown to be infective many weeks before the onset of first symptoms and remains infective through the acute clinical course of the disease and during the chronic carrier state, which may persist for years. Hepatitis B Virus Surface Antigen (HBsAg) may be found in blood and virtually all body fluids of patients with acute hepatitis B and carriers of the virus, but blood, semen and vaginal fluids are mainly implicated in the spread of HBV infection.

Vaccination and Control

The Control of Substance Hazardous to Health (COSHH) (2012) Regulations require all employers to make their own risk assessments and bring into effect measures to protect their employees. Therefore, it is the employer that decides whether there is a risk of infection of hepatitis B within the workplace, and what measures are required, e.g. vaccination education and protective clothing. All CPFT staff with risk of exposure prone procedures are risk assessed at point of employment through occupational health clearance check. Healthcare workers who carry blood borne viruses will be advised regarding their involvement in exposure prone procedures (EPP) by Occupational Health Department.

The primary course of vaccination consists of three injections 1-2-6 months interval. More rapid courses available; useful, for example, when the traveller presents late for vaccination or as prophylaxis following exposure to the virus. Each course consists of three injections either given at monthly intervals with a booster at 12 months, or 0, 7, 21 days, also with a booster at 12 months. Antibodies can be checked 4 weeks after course completion to determine whether there has been a response.

Health care workers who have been successfully immunised should be boosted following accidental exposure, unless they are definitely known to have adequate protective anti-HBs levels. All health care workers who sustain a sharps injury should follow advice from the Occupation Health Department. Specific immunoglobulin can be administered if immediate protection is required. Hepatitis B Immunoglobulin (HBIG) is used, and it is administered at the same time as the hepatitis B vaccination using a different site. HBIG must be given as soon as possible, preferably within 24 hours of the exposure (needle stick injury) or following sexual exposure, it is recommended that it be given within 14 days. If infection has already occurred, severe illness, and the development of carrier status, may be prevented.

Healthcare workers who carry blood borne viruses will be advised regarding their involvement in exposure prone procedures (EPP) by Occupational Health Department.

9.2 Hepatitis C (HCV)

Hepatitis C is the main cause of what was previously known as non A-non B Hepatitis. HCV is most frequently acquired by direct blood to blood contact and the commonest mode of transmission in the UK is the sharing of blood contaminated injecting equipment by injecting drug users. Both sexual and perinatal transmission can occur but, in general, these are less efficient modes of transmission. The incidence of HCV amongst intravenous drug users is believed to be high. The WHO estimates 71 million people have chronic HCV worldwide.

The incubation period is about 20 days to 13 weeks, but antibodies may not appear for a further four to six weeks. Although infection is usually asymptomatic, HCV results in the development of a chronic carrier state in at least 85% of cases. Chronic liver disease, including cirrhosis and hepatocellular carcinoma, develops in approximately 70% of all HCV infected persons.

Routine screening tests for HCV detect antibodies to the virus. If individuals are found to be anti-HCV positive, additional tests are carried out, looking for HCV RNA by polymerase chain reaction (PCR) in order to determine whether they are viraemic i.e. have the virus present in the blood. Treatment with Interferon plus Ribavirin may clear the infection, but a proportion will relapse when treatment is stopped. The involvement of a hepatologist should be considered.

There is no effective vaccine against HCV, therefore, it is recommended that individuals with HCV be vaccinated against Hepatitis A virus and long-term follow up is recommended for HCV as the liver may already be compromised, cirrhosis may be advanced by hepatitis A infection.

9.3 Hepatitis D (HDV)

Hepatitis D causes infection only in those who have active Hepatitis B infection. Hepatitis D infection can occur either as co-infection with HBV or as a super-infection of an HBV carrier. Since Hepatitis D depends on an HBV infected host for replication, prevention of Hepatitis B infection by immunisation will also prevent Hepatitis D infection.

9.4 Human Immuno-Deficiency Virus (HIV / AIDS)

Human immuno-deficiency virus interferes with the body's immune response to infection. An individual infected with HIV may experience an initial acute illness followed by a period in which there are no signs or symptoms, although antibodies to the virus may be detected in the blood. People with HIV infection can remain well for several years.

Ultimately, if the virus continues to replicate, there is reduction of CD4 cells with a resultant immunodeficiency, infected persons becoming at increased risk of opportunistic infections and certain tumours.

Routine screening tests for HIV detect antibodies to HIV-1 or HIV-2. Such tests should only be carried out with informed consent. If the screening test is reactive, this result is then confirmed by two different additional assays. A provisional report is issued requesting an additional blood sample before sending out a final HIV report.

All individuals, other than neonates, who have antibodies to HIV also have the virus; viral nucleic acid may be detected by polymerase chain reaction (PCR) and the level of viraemia quantified. It should be stressed that antibodies to HIV do not appear immediately after primary infection. The median time is 3-6 weeks but, during this 'window period', patients may have a high viral load and be highly infectious.

In general, HIV is the least infectious of the blood borne viruses, with HIV-2 being considerably less infectious than HIV-1.

Acquired Immune Deficiency Syndrome (AIDS)

Acquired immune deficiency syndrome is diagnosed when a person with HIV infection is found to have one or more of a number of specific infections, such as *Pneumocystis* pneumonia, Kaposi sarcoma or Tuberculosis. These infections are described as opportunistic and become life threatening due to the breakdown of the individual's immune system or the direct effect of the virus on the nervous system.

Control is by prevention of acquisition of the virus. This is accomplished by applying vigorous universal infection prevention and control precautions, education about safe sex and the use of needle exchange facilities for intravenous drug users.

Post exposure prophylaxis for HIV is also available. All health care workers who sustain a sharps injury should follow advice from the trust appointed Occupation Health service (information about the service is accessible on trust intranet).

9.5 Bacterial meningitis/septicaemia

Bacterial Meningitis is an infection of the surface of the brain (meninges) by bacteria that have usually travelled there from mucosal surfaces via the bloodstream. The

most frequent causes of bacterial meningitis include *Neisseria meningitidis* (meningococcus), *Streptococcus pneumoniae* (pneumococcus) and *Haemophilus influenzae* type b (Hib). These organisms occur normally in the upper respiratory tract and can cause invasive disease when acquired by a susceptible person.

United Kingdom Health Security Agency (UKHSA) has developed a policy for the control of meningococcal meningitis and septicaemia. Part of this policy includes, an understanding of the action UKHSA takes following the presumptive diagnosis of a case. Once the local UKHSA office has been notified of an individual (presumptive) case the communication and information cascade will commence for which the CCDC is responsible for coordination of the outbreak management which includes :

- The contact tracing necessary outside of the hospital.
- Arrangement for provision of prophylaxis to both household and other contacts..

The aim of prophylaxis is to prevent secondary cases by eliminating nasopharyngeal carriage of *N. meningitidis* in close contacts of the index case, thereby reducing the risk of invasive disease in other susceptible members of the household.

Chemoprophylaxis should be given as soon as possible (ideally within 24 hours of diagnosis of index case) to all close contacts.

9.6 Chicken pox and shingles

Chickenpox is an acute, infectious disease caused by the varicella-zoster virus and is most commonly seen in children under 10 years old. This virus, if re-activated in a person who has had chickenpox previously, can also cause shingles (herpes zoster). Shingles tends to be more prevalent in adults.

It is not possible to develop shingles from exposure to a person with chickenpox. It is possible however, to develop chickenpox as a result of exposure to a person with shingles.

Transmission: Chickenpox is highly contagious, infecting up to 90% of susceptible people who come into contact with the disease. Transmission is through direct person to person contact, airborne droplet infection or through contact with infected articles such as clothing and bedding. The incubation period (time from becoming infected to when symptoms first appear) is from 10 to 21 days.

The most infectious period is from 1 to 2 days before the rash appears, but infectivity continues until all the lesions have crusted over (commonly about 5 to 6 days after onset of illness).

Symptoms of Chickenpox: Chickenpox may initially begin with cold-like symptoms followed by a high temperature and an intensely itchy, vesicular (fluid-filled blister-like) rash. Clusters of vesicular spots appear over 3 to 5 days, mostly over the trunk and more sparsely over the limbs. The severity of infection varies, and it is possible to be infected but show no symptoms.

Shingles (Herpes Zoster) : Following chickenpox infection, the virus can lay dormant in the nervous tissue for several years but may reappear following

reactivation of the virus as shingles (also called herpes zoster). It is not known what causes the virus to reactivate but reactivation is usually associated with conditions that depress the immune system such as old age and a lowered immune system.

The first sign of herpes zoster is usually pain in the area of the affected nerve - most commonly in the chest. A rash of fluid-filled blisters then appears in the affected area, typically only on one side of the body. This rash is usually present for about 7 days, but the pain may persist for longer. Persistent pain is more common in elderly people and is termed 'post herpetic neuralgia'. On average this lasts for 3 to 6 months although it can continue for years.

As mentioned above, people with shingles are contagious to those people who have not had chickenpox. However, it is not possible to catch shingles from a person who has chickenpox.

Possible Complications and High-Risk Groups

Chickenpox is usually a mild illness and most healthy children recover with no complications.

Certain groups of people however, such as neonates (infants within the first four weeks of life), adults, pregnant women and those who are immunocompromised due to illness or treatments such as chemotherapy or high-dose steroids, may experience more serious complications. These include viral pneumonia, secondary bacterial infections and encephalitis.

Varicella infection in pregnant women can cause severe chickenpox with increased risks for the mother from varicella pneumonia and other complications. It also carries the risk of congenital varicella syndrome for the foetus. The risk of this occurring within the first 20 weeks of pregnancy has been estimated to be less than 1% in the first 12 weeks and around 2% between 13 and 20 weeks of pregnancy.

Occasional cases of fetal damage following maternal varicella infection between 20 to 28 weeks gestation have been reported but the risk is likely to be substantially lower than that of the typical congenital varicella syndrome that can occur in the first 20 weeks gestation.

Infection with varicella in the later stages of pregnancy can cause premature delivery or neonatal chickenpox infection. This is particularly serious if the mother becomes infected 7 days before birth.

For these reasons, susceptible pregnant women may be offered immunoglobulin - a specially prepared vaccine containing preformed antibodies to help fight the infection.

Treatment : There is no specific treatment for chickenpox. It is a viral infection that will therefore not respond to antibiotics. Treatment should be based on reducing symptoms such as fever and itchiness.

Shingles can be treated with oral antiviral drugs such as acyclovir.

People at higher risk of developing serious complications from chickenpox or shingles may be given antiviral drugs such as acyclovir and/or immunoglobulin (a

specialised preparation of antibodies taken from the plasma of blood donors), which may prevent severe illness developing.

Prevention

Varicella vaccination is now recommended for non-immune healthcare workers in direct contact with patients (frontline staff) . CPFT staff should contact occupational health, their own GP or midwife if they are concerned or unsure of their vaccination status.

9.7 Gastro-intestinal diseases

All in-patients with symptoms of potentially or confirmed infectious diarrhoea/vomiting should be nursed in a side room with barrier precautions.

Hepatitis A

The illness caused by Hepatitis A is usually mild; symptoms usually improve and disappear as jaundice develops. It is a food borne disease, often spread via shellfish. There are no carriers of the virus. The virus is normally excreted in bile 7-14 days before the onset of jaundice, excretion then declines over the next 5-7 days. The virus is present in both urine and faeces of infected patients.

Vaccination and Control : Hepatitis A is not part of the routine UK childhood schedule. Vaccination should be considered for travel to some countries and for close contacts of cases of the disease.

Salmonella, Shigella and Campylobacter: These are **notifiable** (by the doctor caring for the patients) infections and some of the most common causes of gastrointestinal disease. A stool sample is usually required to provide a definitive diagnosis, but notification should be made on an index of suspicion to the infection control team and onward notification to environmental health officer and appropriate organisation.

Salmonella is the second most reported cause of infectious intestinal disease in the UK and can result in large outbreaks particularly due to food borne transmission. All cases are reviewed by the environmental health officers and follow up of cases is carried out. Person to person spread may occur through the faecal-oral route without food as an intermediary. This risk is highest during the diarrhoeal phase of the illness and risks are greater among babies and toddlers and faecally incontinent adults. Incubation ranges from 6 hours to 3 days or occasionally longer.

Shigella are a group of bacteria that cause intestinal infection including bacillary dysentery. Shigellosis is primarily a disease of children with the highest rates in the under-fives, followed by the 5-14 age group. Transmission is via the faecal-oral route either directly or by contaminated food or water. Food borne outbreaks are relatively rare.

Campylobacter species causes diarrhoeal and systemic illness in humans and animals and is the most commonly identified cause of infectious intestinal disease in

developed countries. Campylobacter is found in the gastrointestinal tract of birds and mammals and animals develop a lifelong carrier state. Although food borne outbreaks are rarely identified, occasional large outbreaks due to contaminated water or milk may occur. Campylobacter is often associated with barbeques.

9.8 Norovirus and similar viruses

This section covers gastroenteritis caused by calciviruses, particularly Norwalk like agents. Although generally causing mild illness, spread particularly in institutions may be rapid. Other causes of viral gastro enteritis include rotavirus, adenovirus and astrovirus. All ages are affected and although cases are reported throughout the year greater numbers are notified in the cooler months. Recorded outbreaks in the UK occur mainly in hospitals or residential institutions such as nursing homes although outbreaks have occasionally been reported in hotels, ships and schools.

Norovirus (Winter Vomiting disease) is relatively mild, lasting 12-60 hours. It causes Abdominal cramps and nausea which are usually early symptoms, followed by vomiting and/or diarrhoea (type 7 stools). Forceful -projectile vomiting is especially characteristic. Diarrhoea is usually mild with no blood mucus or white cells. Other symptoms may include anorexia, lethargy, myalgia (muscle pains), headache and fever. The illness may be debilitating in the elderly.

Transmission is person to person via the faecal-oral route either directly through contaminated food or water, or indirectly through contamination of environmental surfaces and other items. Norovirus can remain viable for many days on curtains and carpets which might explain spread in some outbreaks. Humans are the only known reservoir of Norovirus and the infectious period lasts until at least 48 hours after the resolution of symptoms. Every effort should be made to segregate any individual suspected of infection and specimens collected. Thorough hand washing (alcohol gels should be removed from use) and use of PPE is important in reducing spread.

Electron microscopy of faecal specimens of type 5-7 Bristol stool chart collected early on is the mainstay of confirmation of the infection. Specimen forms should clearly state a request for virology. Norovirus. If laboratory confirmation is lacking, clinical symptoms can be used to assess the likelihood of an outbreak/period of increased incidence. It is more common to diagnose Norovirus via signs and symptoms of the person affected and contact with other cases than via microbiological results.

If there are 2 or more people in a unit/team then please contact the IPaC team for further advice and follow the outbreak plan.

Rotavirus: Rotaviruses are a very common cause of childhood diarrhoea. Peak incidence is at 6 months to 2 years of age and clinical infection is unusual above 5 years. Onset is usually sudden with vomiting and diarrhoea, but illness usually only lasts a few days. Spread is person to person via the faecal-oral route although there may also be spread from respiratory secretions and sometimes contaminated water. Babies are now offered Rotavirus vaccination at 2 and 3 months of age.

9.9 Clostridium/Clostridioides Difficile

Clostridium difficile (C.difficile; C.diff) is a spore-bearing anaerobic bacterium that is a major cause of healthcare-associated diarrhoea. It is often associated with the use of broad-spectrum antibiotic therapy. Clinical onset of *Clostridium difficile* infection (CDI) often occurs when patients are on antibiotics or within four weeks of finished a course of antibiotics. The risk of colonisation with C. diff increases with the proximity of an infected person and the length of inpatient stay, especially within an acute hospital. The incidence increases significantly in patients over the age of sixty-five years.

Any diarrhoea should be suspected of having an infective cause until proven otherwise. Standard infection prevention and control precautions must be used for contact with faecal matter, in particular gloves and aprons must be worn and effective hand hygiene practiced. Diarrhoea may be self-limiting in some cases. Stools may be watery and/or bloody with a distinctive foul smell and green or yellowish-brown appearance. Patients may have related fluid and electrolyte disturbance and a low-grade temperature. In some cases, pseudo-membranous colitis may result, which can be fatal.

All cases of potentially infectious diarrhoea (2 or more loose stools in 24 hours), and particularly where there is more than one case of diarrhoea on a unit within 48 hours, must be reported to the Infection Prevention & Control Team. Out of office hours, further information is available on trust intranet IPC page or by contacting On-call manager or microbiology for further support if required.

Management of patients suspected of having *Clostridium difficile* infection (CDI)

Patients must not be admitted or transferred into any other inpatient unit without advice from the IPC team, if they have had any diarrhoea within the previous 48 hours.

If a patient is admitted or transferred in with diarrhoea e.g. because of inaccurate information being supplied by the transferring hospital, an incident form must be completed, and the Infection Prevention & Control Team must be notified. Staff must make every effort to obtain accurate patient information from the transferring hospital to avoid this situation occurring. Admission of a patient with diarrhoea on to an open ward, could put other patients at risk of infection. Therefore, the points above must be strictly enforced in these areas.

Diarrhoea - SIGHT

All clinical staff must apply the following protocol (SIGHT) when managing suspected, potentially infectious diarrhoea:

S Suspect that a case of diarrhoea may be infective where there is no clear alternative cause for the diarrhoea

I Isolate - within two hours of 1st episode of diarrhoea and if unable to do this, escalate to senior manager in charge and consult with the Infection Prevention and Control Team (IPCT) while determining the cause of the diarrhoea

G Gloves and aprons must be used for all contacts with the patient, their body fluids and their environment

H Handwashing with soap and water should be carried out before and after each contact with the patient and the patient's environment ,alcohol hand gel is not effective for c.diff spores

T Test the stool for CDI toxin by sending a specimen, ensure a stool chart is in place.

If a patient is suspected of having CDI, follow the SIGHT action, download and complete the care bundle on IPC intranet page and follow additional guidelines below:

- Patients with diarrhoea should be isolated in a single, en-suite room where possible, any excess equipment should be removed from the room. Where isolation is not possible, due to a lack of single rooms please discuss this with the IPC Team.
- On units with affected patients, there may be significant contamination with *Clostridium difficile* on toilets, bedpans, floors, the bed area, lockers, patient call buttons and the hands of personnel. Spores can survive for prolonged periods in the environment. Therefore, thorough daily cleaning of equipment and the environment and disinfection with chlorine-based solution is essential.
- Clean and disinfect frequently touched surfaces such as taps and door handles at regular intervals (i.e. 4-6 times per day) during an outbreak .
- Separate cleaning equipment must be clearly marked and used for isolation rooms and toilets used by patients with CDI.
- Specimens must be sent to the laboratory as soon as possible. Samples should be taken if the stool is abnormal for that patient (Bristol stool chart types 5-7), For any patient with potentially infectious diarrhoea, send a stool specimen (five to ten millilitres) for 'bacteriology, including Clostridium difficile toxin testing,' to the laboratory immediately following collection.
- Once a positive sample has been confirmed please do not send further samples in 28days, even if diarrhoea continues. Contact the IPaC nurse for further advice. Bloods should be taken to look for markers for severe disease including white cell count (WCC), creatinine and CRP.
- In consultation with medical staff, check the prescription chart and stop laxatives and iron supplements if currently prescribed

- Medical staff must review antimicrobial medication and discontinue antibiotics if clinically indicated. Discuss alternative treatment with the Microbiologist or the Pharmacist if necessary.
- Antibiotic prescribing should be in accordance with the Trusts prescribing guidelines, inappropriate administration of broad-spectrum antibiotics should be avoided, and prescribing should be regularly monitored, with feedback to prescribers as appropriate.
- Anti-diarrhoeal agents should be avoided if *C. diff* is suspected, as these may aggravate colitis symptoms, which could lead to toxic megacolon.
- Isolation of the patient may be discontinued when the patient has not had diarrhoea for 48 hours. However, it should be recognised that the stools may remain positive for the toxin sometime after resolution of symptoms.
- After the patient comes out of isolation, the room should be terminally cleaned, i.e. all surfaces cleaned with water and detergent, followed by disinfection with Chlorine based solution 1,000 ppm and all curtains laundered.
- Further information staff, patients and carers on *Clostridium difficile* is available to download from the infection control intranet webpage.

9.10 Scabies, headlice and worms

Scabies: Scabies is a parasitic infestation caused by a tiny (invisible to the naked eye) whitish, translucent mite, *Sarcoptes Scabiei* that can burrow tunnels in the epidermis. Scabies are host specific, so it is impossible to catch scabies from an animal. **Transmission** of scabies occurs by prolonged skin to skin contact.

There are two main clinical manifestations of scabies: **Classic** (the form that is usually seen) and **Crusted** scabies.

Classic scabies : Individuals present with an itchy symmetrical allergic rash, especially worse at night. Other allergic lesions such as papules or vesicles may accompany it.

Normally, the incubation period in adults is 8 weeks, but in re-exposed individuals' symptoms can present after 1 to 4 days. The areas that are particularly affected by lesions include:

- Between the fingers and toes
- On the insides of the wrists and elbows
- Axillae
- Male genitalia
- Women's breasts

Crusted scabies : The crusted form is characterised by hyperkeratotic skin lesions (Norwegian Scabies). Itchy bullous lesions, lichenification and or erythrodermic reactions may also be present. Lesions are particularly found on the:

- Palms and soles
- Nail beds of hands
- Feet and wrists
- Buttocks and penis

Diagnosis: The definitive diagnosis of scabies is made by microscopic identification of the mites, eggs or mite faeces. Skin scrapings and detection of the mite at the end of its burrow are both recommended methods.

Treatment for scabies: The infested individual and their close physical contacts should be treated at the same time. This includes household family contacts.

For 1 case in an inpatient unit, only treat the affected person. For 2 or more cases in an inpatient unit, mass treatments of staff, patients and others will be necessary if the cases are confirmed and are associated. This must be done in a controlled manor as a possible outbreak; people should not treat themselves individual, contact the IPC Team to support with single case or outbreak management.

The lotion or cream treatment must be applied to the whole body with particular attention to the groin, fingernails, toenails and behind the ears. The product should be washed off as instructed by the manufacturer leaflet and clothes and bed linen changed. The treatment must be repeated after 7 days as the eggs are not killed.

In the crusted form of scabies at least three treatments may be necessary, 48 hours apart. There is also a tablet form of treatment available (Ivermectin). Patients should be advised that itching could persist for up to 6 weeks after the end of correctly applied scabicial therapy. Oral antihistamine treatment may help.

All staff **MUST** inform their line manager or Occupational Health if they suspect that they are infected and must seek further advice from the IPC team

Head Lice: Head lice are host specific; that is human head lice will only live on humans. The adult louse is 3mm long and spends its whole life cycle on human hair. They can live on the scalp for up to four weeks but cannot live free of the head. Head lice and live eggs are difficult to see, and in most infections at any one time there are approximately 10-12 lice on the scalp.

They do not jump or fly and can only be spread by prolonged contact of more than one minute. Infection with head lice is most common in children aged 6-11 years. It is usually asymptomatic (only 15-35% of people experience itching).

Diagnosis: It is essential to make the correct diagnosis, verified by direct observation. A diagnosis of head lice can only be made if a living, moving louse is found. It cannot be based on the presence of nits (the empty shell) alone, as nits can remain stuck to hair long after an infection has been eradicated.

Usually, it is easier to find head lice on damp hair using a specially designed plastic detection comb. Ideally, combing should be done over a pale piece of paper.

Treatment: Treatment is only required for those who are infected, there is no need to automatically treat all household members, although all close contacts should be checked for presence of lice and treated if lice are seen. Hedrin lotion is the 1st treatment choice - Treat twice, 7 days apart. Nits are not removed by treatment,

however, if they cause concern, they can be removed by combing with a nit comb. If there is failure after 2 treatments, contact the IPaC Nurse for further support.

An alternative treatment method is Bug Busting. This involves washing hair with shampoo, applying conditioner thoroughly, and combing hair with a plastic detection comb. The hair is combed until no more lice are found. Each treatment session takes about 30 minutes and must be repeated every 3 to 4 days for a minimum of 2 weeks. At least three combing sessions are needed after the last adult louse is found.

9.11 Worms

Ascariasis or Roundworm Infection; this is caused by the nematode *Ascaris lumbricoides*, the usual life span of an adult worm is 12 months. Diagnosis is by Microscopic examination of faeces for eggs or the presence of the worms in the faeces (they look like very pale creamy earthworms).

Usually, there are few or no symptoms. Live worms can be passed in the stools or occasionally from the mouth or nose. Some may develop lung symptoms caused by larval migration and characterised by wheezing, coughing, fever and blood eosinophilia.

Thread worms: Threadworms, sometimes known as pinworms, are small, white, thread-like worms a few millimetres long that live in the human gut. They are more common in school or pre-school children than in adults, but can sometimes affect whole families, especially in overcrowded conditions.

The threadworm passes from person-to-person because of poor personal hygiene. The female worm lays eggs around the anus, which often leads to scratching. Eggs can then become stuck to fingertips or under the fingernails and be transferred to other people, to food, children's toys, kitchen utensils, or toothbrushes. When people come into contact with the eggs, touch their mouths and swallow the eggs, they become infected with threadworm. You cannot get or give threadworms from your pets.

Although there is no way to completely prevent threadworm infection, therefore high standards of personal hygiene can reduce the risk both in adults and children, particularly good hand hygiene after going to the toilet and before eating.

Many people do not show any symptoms. But symptoms can include: Itching around the anus (and in girls the vagina too), which becomes much worse at night causing; disturbed sleep and irritability, secondary skin infection due to bacteria entering scratches, loss of appetite and weight loss.

When going to the toilet it looks as if the infected person is passing strings of white cotton thread. Threadworms can grow to become 2-13 millimetres long, living for up to six weeks in the host body. The eggs can survive for up to three weeks outside the body and can sometimes hatch on the skin and re-enter the bowel.

While using medication to treat threadworm you should follow strict personal hygiene measures to prevent re-infection. Drugs will kill the worms in the intestines but not the eggs laid outside the anus. Eggs can survive for up to three weeks outside the body, on underwear, bedding, in the dust, etc. For treatment to be successful, the affected person should adhere to good standard of personal hygiene, daily have a bath or shower, washing especially around the anal region, maintain good hand washing, changing bed of beddings and clothing and others such as;

- change and wash underwear, nightwear, and bed linen and towels each day (avoid shaking them as this also spreads eggs). Avoid sharing towels or face flannels
- keep fingernails short
- wash hands and scrub under the nails first thing in the morning, after using the toilet or changing nappies/pads, and before eating or preparing food
- put toothbrushes in a closed cupboard, and rinse them well before use
- avoid eating food in the bedroom (eggs can be shaken off bedclothes and survive in dust)
- discourage children from sucking their thumbs
- encourage children to wash their hands before eating and after visiting the toilet
- disinfect bathroom surfaces daily and vacuum carpets and damp dust surfaces daily, washing the cloth frequently in hot water.

9.12 Meticillin (Methicillin) Resistant *Staphylococcus aureus* (MRSA)

***Staphylococcus aureus*:** *S.aureus* is a bacterium which is found on the skin and in the nose of up to 30% of healthy individuals. It can cause a range of infections in susceptible individuals, including wound infection, abscesses and bacteraemia. *S.aureus* can cause problems to some acute hospital units, especially surgical, intensive care and burns units, where the patient is immunocompromised and the skin is not intact due to invasive procedures such as wounds or intravenous cannulae.

MRSA is a strain of *S.aureus* which has become resistant to a range of commonly used antibiotics such as penicillin and flucloxacillin. It behaves in the same way as ordinary *S.aureus* and does not cause more severe or different infections.

MSSA -Meticillin susceptible *S aureus* (MSSA) shares similar traits with MRSA in that the majority affected will be colonised rather than infected; however, MSSA does respond to antibiotics that MRSA may not.

Colonisation/Carriage :Colonisation is where a microorganism occupies a body site, such as the nose and skin, without causing any symptoms of infection.

Infection: Infection is where a microorganism multiplies and invades tissues causing symptoms including pain, swelling redness and heat. An infection is considered to be present where at least two of these symptoms are present and a positive microbiology specimen has been obtained.

A frequent mode of transmission of *S. aureus*, MRSA and MSSA is via contact; either by direct face to face or indirect contact from an inanimate object or item of equipment that has not been effectively decontaminated. Droplet transmission is rare, though may occur in someone who has a productive cough and sputum that is

colonised with MRSA. The droplets do not tend to go far; therefore, special ventilation is not required.

Screening :Screening is part of a risk assessment following which a microbiology specimen (via a swab), or set of specimens, may be taken in order to detect the presence of a microorganism.

In the UK 1-3% of the total population are colonised (carriers) of MRSA. Carriage may be long or short term. MRSA rarely causes infection in healthy people. Outside of physical health hospital unit's people may carry MRSA without it causing harm to themselves or others.MRSA infection may be more difficult to treat as there are fewer antibiotics with which to treat it, and some of these antibiotics must be given by injection or infusion. They may also cause unpleasant side effects

MRSA Infection can develop into an MRSA bloodstream infection (bacteraemia) which is associated with a 10-20% mortality. MRSA bacteraemia require a post infection review (PIR) to be undertaken to identify the cause of the infection and identify any actions that may be taken to reduce the risk of recurrence as per the national zero tolerance approach to MRSA bloodstream infections.

In hospitals, attempts are made to eradicate MRSA from colonised patients; however, this may not be necessary for all patients in low-risk clinical areas, where the situation is similar to that found in community residential or nursing homes.

All inpatient units across CPFT are expected to screen their patients on admission (to assess whether or not swabbing is required),complete and return the MRSA screening return monthly to the infection control as part of the essential steps audit process wic is monitored by the IPC team .

Screening and swabbing of Service Users/patients : All patients admitted to physical health wards must be swabbed on admission. In mental health and learning disability inpatient units screening is undertaken to assess the following which are considered to be at high risk of acquiring MRSA and therefore if applicable then the patient should have swabs taken:

- those who are admitted following surgical procedures,
- those that are admitted following admission to an acute Trust,
- those who are admitted from a care home or other institution such as prison
- intravenous drug users,
- those who self harm,
- people with chronic wounds e.g. leg ulcers, or with indwelling devices such as catheters or PEG feeding tubes.
- those who have previously been positive for MRSA should also be screened on admission or transfer. **Note**; Patients who are known to be positive for MRSA and who are already being treated for MRSA do not need to be screened until their cycle of treatment is complete.

Swabs should be taken from

- The nose (anterior nares)
- The groin
- Any wounds or skin lesions (including PEG and other indwelling device insertion sites).
- A catheter specimen of urine is required if an indwelling urethral catheter is in situ.

The screening form is available via the infection control webpage

Staff Screening: Routine screening of staff for MRSA carriage is not recommended practice, although rarely the Infection Control team may advise screening when staff member or members may be the source of linked cases of MRSA infection.

Carriage of MRSA is not a contra-indication to the transfer into our Trust or to a nursing or residential home or their own home. When MRSA positive patients are due admitted/transferred to any other healthcare facility, that facility should be informed of the patient's status and MRSA history. MRSA positive patients will need to be isolated within physical care wards and admission may be delayed if an appropriate area is not available. All patients who have or have had MRSA need to have the infection noted on their paper discharge letter or electronic record updated.

Topical Treatment (decolonisation) : This is treatment aimed at eradicating MRSA from the skin and nose, thus reducing the risk of infection to the individual and the risk of transmission to others. The treatment comprises washes with and antimicrobial soap (Octenisan) and nasal application of an antibiotic cream (mupirocin). The decolonisation chart is available via the medicines management webpage of the trust intranet.

Treatment and management of the MRSA positive patient : The MRSA care bundle, MRSA screening tool, MRSA patient leaflet and other related documentations are available via the document section on the infection control webpage.

- Isolation in a side room is required in physical health wards;
- Isolation of MRSA carriers is not generally necessary in mental health and learning disabilities in-patient units or in the community due to the lower level of risk to others
- Standard precautions should be used while caring for those who are infected or colonised
- The patient should be encouraged to practice good hygiene with hand washing after using the toilet and before eating .
- In mental health, learning disability units and care homes the patient/service user may use communal areas, such as sitting or dining rooms, providing any sores or wounds are covered with a dressing.
- In physical health units where the other patients are at higher risk, positive patients should routinely be cared for in their own room. In consultation with the IPC team, patients may be allowed into communal areas for rehab, especially once they have negative swab results.
- No special precautions are necessary with crockery or cutlery as they are washed in high temperature using dish washer.

- Items for laundry from an MRSA colonised or infected patient should be sent as infectious linen, packed in appropriate bag (red alginate bag).
- Clothes should be machine washed, preferably on a hot wash setting, or dry-cleaned if unsuitable for machine washing, or in accordance with manufacturer's instructions, they should then be tumble dried or ironed
- Equipment that has been in contact with the patient such as a commode, BP cuff should be thoroughly cleaned either with detergent wipes, disinfectant wipes or with detergent and water and as per manufacturer's instructions.
- All staff should maintain good infection prevention and control practice, especially cleaning and hand hygiene, when carrying out clinical procedures or talking therapies on all patients regardless of MRSA status.

Follow-up : Three negative swabs from previously positive sites should be obtained before accepting that MRSA has been cleared. However, there may be individual circumstances where patients are frequently positive, further guidance in this case can be obtained through the IPC team . There may be some local variation between the acute trusts in their management of MRSA colonisation/infection. Where appropriate, please follow the advice given for individual cases.

Wound Carriage: Dressings containing certain antiseptics i.e. silver may be applied to infected or colonised wounds. These are unlikely to eradicate the organisms but should prevent further growth. Please contact the tissue viability nurse, district nurse (for those cared for in the community), dermatologist or the infection prevention and control nurse. If the patient has 4-layer bandaging then the decolonisation treatment should be applied each time the bandage is changed. The need to wash the leg daily needs to be assessed against the risk of changing the bandages when not required. If a patient has a wound with MRSA healing is the priority not eradication. Regular swabbing is rarely recommended as MRSA usually clears once wound is healed up .

Care of the Patient in their Own Home : Carers who attend a patient with MRSA in their own home usually require no special management apart from routine practice of hand decontamination and use of PPE for procedures where contamination is possible. This should be no different to care delivered to other patients. However, the minimal risks to other patients could be reduced further by seeing patients with infections or MRSA colonisation at the end of the shift although this may not always be practicable.

9.13 ESBL – Extended spectrum beta-lactamase resistance

Enterobacteriaceae are a family of bacteria that include *Escherichia coli* (E.coli) that commonly cause urine and blood infections and *Klebsiella pneumoniae*, which can cause severe chest infection.

Cephalosporins are antibiotics commonly used against the above types of bacteria and include Cefuroxime, Cefotaxime and Ceftazidime. Resistance occurs as the bacteria produce a special enzyme, beta-lactamase that breaks down the antibiotic making it ineffective.

Colonisation occurs when the bacteria are present in or on the body but the person is well and unaware of their presence, however the infection can still be spread to others.

Infection occurs when the bacteria are present in or on the body and the person develops signs and symptoms of infection such as fever, pain, wound swelling, redness and production of pus or symptoms of a urinary tract infection. ESBL's commonly affect the urinary tract, especially in patients with indwelling urinary catheters.

Prevention of spread is by good hand hygiene, regular cleaning and appropriate decolonisation of equipment.

- In physical health wards where other patients are more vulnerable and at higher risk of acquiring ESBLs, patients who are infected or colonised with the bacteria must be isolated in a side room, IPC team must be informed.
- In mental health and learning disability wards and in the community, including care homes, patients with ESBLs do not need to be isolated but attention to personal and environmental hygiene is of importance.

Patients with indwelling urinary catheters should be assessed to ensure that they have a valid reason for their ongoing catheter and the catheter removed if possible. Other people with catheters are at a higher risk of becoming colonised with ESBLs than those without issues with their urinary systems.

9.14 Carbapenemase producing Enterobacteriaceae (CPE)

Enterobacteriaceae are a large family of bacteria that usually live harmlessly in the gut of all humans and animals. However, these organisms are also some of the most common causes of opportunistic urinary tract infections, intra-abdominal and bloodstream infections. They include species such as *Escherichia coli*, *Klebsiella* spp. and *Enterobacter* spp.

Carbapenems are a valuable family of antibiotics normally reserved for serious infections caused by drug-resistant Gram-negative bacteria (including Enterobacteriaceae). They include meropenem, ertapenem, imipenem and doripenem. Carbapenemases are enzymes that destroy carbapenem antibiotics, conferring resistance. They are made by a small but growing number of Enterobacteriaceae strains. There are different types of Carbapenemases, of which KPC, OXA-48, NDM and VIM enzymes are currently the most common.

If a person is a carrier, they do not need to be treated. If the resistant bacteria cause an infection then treatment, including antibiotics, will be required. These infections are difficult to treat due to their resistance to carbapenem antibiotics. Most people will be unaware that they are a carrier and, in general, the chance of developing an infection from the bacteria is low. However, immunocompromised individuals and those receiving complex care in the community with frequent hospital admissions, will be more vulnerable. These individuals are at greater risk of colonisation and of suffering more serious consequences should they develop an infection. Colonised individuals with indwelling devices *in situ* may be at greater risk of developing an infection.

Individuals who have these bacteria living in their gut can contaminate their hands when they go to the toilet. Because of this, there is a risk that the bacteria can contaminate and survive in the environment and potentially spread to other people, particularly when standards of hand hygiene and environmental cleanliness are poor. The bacteria can also be passed on by the hands of carers to others through touch. Individuals who have been an inpatient in a UK hospital known to have had problems with spread of carbapenemase -producing Enterobacteriaceae or those who have been an inpatient in a hospital abroad are at higher risk of acquiring CPE.

While the level of risk for infected or colonised individuals is lower than that in acute settings, if the levels of hygiene in the care setting are inadequate, resistant bacteria may spread among individuals who congregate together e.g. in a community hospital ward or care home. This may increase the risk of the spread of infection within the care setting therefore, application of good standard infection prevention and control measures and application of antibiotic stewardship are keys to minimizing the spread of the infection/ development of carbapenem resistance.

9.15 SARS-COV-2 (Covid'19 Infection)

COVID-19 is a highly infectious respiratory disease caused by a novel coronavirus. The disease was discovered in China in December 2019 and has since spread around the world.

Coronaviruses are a large family of viruses with some causing less severe disease, such as the common cold, and others causing more severe disease, such as Middle East respiratory syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) coronaviruses. SARS-CoV: Severe acute respiratory syndrome coronavirus, the virus responsible for the 2003 outbreak of human coronavirus disease. SARS-CoV-2 Severe acute respiratory syndrome coronavirus 2, the virus responsible for the 2019 outbreak of COVID-19 disease.

COVID-19 presents with a range of symptoms of varying severity. Asymptomatic infection also occurs often although frequency is not defined. More common symptoms are ;

- a high temperature or shivering (chills) – a high temperature means you feel hot to touch on your chest or back (you do not need to measure your temperature)
- a new, continuous cough – this means coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours
- a loss or change to your sense of smell or taste
- shortness of breath
- feeling tired or exhausted
- an aching body
- a headache
- a sore throat
- a blocked or runny nose
- loss of appetite
- diarrhoea
- feeling sick or being sick

Transmission: SARS-CoV-2 is primarily transmitted between people through respiratory (droplet and aerosol) and contact routes especially where people are in close proximity. Airborne transmission can occur in health and care settings in which procedures or support treatments that generate aerosols are performed. Airborne transmission may also occur in poorly ventilated indoor spaces, particularly if individuals are in the same room together for an extended period of time.

Incubation and infectious period: The incubation period is from 1 to 14 days (median 5 days) and most patients will not be infectious until the onset of symptoms. In most cases, individuals are usually considered infectious while they have symptoms; how infectious individuals are, depends on the severity of their symptoms and stage of their illness. The median time from symptom onset to clinical recovery for mild cases is approximately 2 weeks and is 3 to 6 weeks for severe or critical cases. There have been case reports that suggest possible infectivity prior to the onset of symptoms, with detection of SARS-CoV-2 RNA in some individuals before the onset of symptoms.

Covid '19 Infection Prevention and Control measures. Standard infection control precautions (SICPs): These are the basic infection prevention and control measures necessary to reduce the risk of transmission of an infectious agent from both recognised and unrecognised sources of infection. Additional transmission based precautions (TBPs) are applied when SICPs alone are insufficient to prevent cross transmission mostly applicable in severe cases of the infection, for aerosol generating procedures on confirmed cases of Covid '19.

10 Outbreak management

The purpose of this document section is to provide clear infection prevention and control guidelines and a management process for the closure or management of an inpatient setting following the identification of a PII/outbreak of transmissible infection. It provides guidance where there is more than one patient that may have the same communicable disease/symptoms. The advice of the Infection Prevention and Control Team must always be sought if an PII/outbreak is suspected. **Note;** The difference between a PII and an outbreak is a matter of judgement – expert opinion from the Infection control team or microbiology department **must** be sought.

Initial investigation - Key objectives:

- To identify whether a problem exists
- To determine the extent of the problem
- To decide what immediate steps need to be taken to:
 - Identify those who are ill
 - Ensure patients receive appropriate care
 - Identify those at risk
 - Control the source
 - Contain the infection using hierarchy of IPC control
- To identify whether the episode is of sufficient significance to require special arrangements for investigation and management

PII / or Outbreak : Two or more cases may not require full closure of a ward/unit, in which case the definition is that of period of increased incidence (PII). Where cases can be managed without full closure then a PII is declared.

- All movement to and from the ward should be restricted and avoided if at all possible.
- Any admissions should be risk assessed and if possible delayed until the ward/unit has been symptom free for at least 48 hours.
- Staff should not move between units and staff on an affected unit should not work elsewhere until 48 hours after working on the affected unit. Where clinical situation will make this challenging to implement, risk assessment should be discussed with IPC team
- Patients should not be discharged unless to own home without care or onward carer setting must be duly informed to put appropriate measures in place where necessary .
- If patients are required to visit other departments during an outbreak of infection, this should be delayed if possible or if urgent then the receiving unit must be informed prior to the visit.

PII/outbreaks of infection within a hospital or healthcare setting vary greatly in extent and severity; ranging from a few cases restricted to a single ward or area to a hospital wide outbreak involving many services, patients' staff and visitors. PII/outbreaks may be acute which leads to a sudden increase in numbers of cases; often associated with a point source, or persisting, which develop over a number of days or weeks; often involving a disease in which person to person spread is common.

The number of cases required for a situation to be regarded as an outbreak varies according to the infectious agent, severity of symptoms and number of cases at the time, period and location. **The decision to classify a situation as an outbreak** will be made by the IPC Team in consultation with the Director of Infection Prevention and Control (DIPC) and the infection control doctor / Consultant in Communicable Disease Control as appropriate.

Where an outbreak is declared IPC Team or operational team will initiate activation of an outbreak meeting. If the safe operation of the ward hospital is compromised, then an outbreak meeting will be called by the DIPC with expert advice from the infection control team / lead and the Consultant in Communicable Disease Control.

A 'Period of Increased Incidence' /outbreak is normally characterised by a cluster of similar infections occurring in one area of the Trust within a concentrated period of time. Total or partial closure may be necessary to prevent transmission if significant risks to patients and staff are identified following a risk assessment. **If an outbreak is declared this must also be declared as a significant incident.**

Restricting of movement within a Ward/Department - for a PII

Where two or more patients are experiencing symptoms of infection such as diarrhoea and vomiting, the IPC team should be notified immediately. Out of hours the on-call consultant microbiologist should be notified, ensuring that the IPC team are contacted on the next working day. The IPC Team /Consultant Microbiologist will assess the situation. Following a risk assessment, the final decision to close beds, a

ward or department will be made by the IPC T/Consultant Microbiologist in collaboration with the operational leads. The decision may be to manage the ward with reduced movement. It is imperative that the IPC Team /microbiologist are given sufficient and appropriate information.

Definition of Ward/Department Closure – for an outbreak

A closed ward/department is unable to accept new admissions or inter ward transfers; neither can it discharge patients to other health or social care premises. In exceptional circumstances the IPC Team /consultant microbiologist should be contacted for further advice. If a patient needs to be transferred to A&E, please inform the receiving department prior to leaving the unit.

Major Outbreak

Full guidance on the management of a major incident can be found in the organisation's critical incident plan and Pandemic Flu plan.

Outbreak Control Team meeting

If deemed necessary, the DIPC will convene an Outbreak Control Team meeting. The core membership of Outbreak Control Team will be as follows:

- DIPC
- Infection Prevention and Control Doctor (Consultant Microbiologist)
- Head of Infection Prevention & Control
- Infection Prevention and Control Nurses
- Consultant in Public Health (PHE)
- Ward Manager
- Medical Director
- Communication Lead.
- Estate manager / representative

The following may also be invited: -

- Occupational health Advisor
- Catering Manager (if outbreak is related to food poisoning)
- Other Trust Managers, depending on nature of outbreak
- Pharmacist
- Matrons
- Directorate Heads of Nursing
- Temporary staffing services (TSS).

The remit of the Outbreak Control Team will be to:

- Discuss the situation relating to the outbreak and plan the appropriate actions to follow.
- Ensure that the outbreak is reported to relevant public health bodies
- Ensure that infection prevention and control measures in place and are working
- Monitor the availability of adequate additional resources i.e. pharmaceutical supplies, cleaning, portering and laundry supplies.
- Monitor progress and arrangement of containment.
- Monitoring of staff transfers both into and out of departments. This should be limited or seized depending on the outbreak/PII situation.
- Update the organisation's board on developments.

- Provide infection prevention and control advice and briefing to staff, patients, carers and visitors.
- Agree/ Provide relevant information to the Communication Lead in the event of press enquiries for the outbreak investigation.
- Review the outbreak when it is over and provide a final report with recommendation to the Infection control committee.
- The outbreak team and IPC reviews infection control related incidents and outbreak in collaboration with other cooperate functions in the trust using new Patient Safety Incident Response Framework (PSIRF) .

Reopening the Ward

Ongoing review of the need for closure will be undertaken by the IPC Team and reported to the outbreak control meetings, trust management and commissioners (where appropriate). The IPC team will recommend the re-opening of a ward as soon as it is appropriate. Once re-opening is sanctioned arrangements for terminal cleaning of the area will be delegated to the relevant Service Head and undertaken in advance of the re-opening. The ward cannot be reopened until a complete deep clean has occurred.

10.2 General IPC precautions during Outbreak/PII Management

The following interventions should be implemented if more than one patient or staff are experiencing diarrhoea, vomiting, or suspected to be having communicable infection.

1. Isolate affected patients if possible or cohort nurse where appropriate .
2. Inform the Infection Control Team or, out of hours, the on-call Microbiologist via your nearest acute hospital switchboard
3. Complete the “Patient and staff Record Sheet” (including bed number) of the occurrence of symptoms , samples taken , date .
4. The IPC Team or microbiologist on call will guide on further actions If laboratory confirmation is unavailable. Clinical symptoms can be used to assess the likelihood of an outbreak and indicate the need for particular precautions.
5. Place notice at the entrance to the ward/area to inform visitors, patients, and staff that an outbreak/PII has been declared and advise that special precautions are in force. Visitors will be requested not to enter the ward if they have or have had any symptoms in the last 72 hours. (Notice posters are available on the intranet in the infection prevention and control section)
6. Implement specific restrictions or actions including reducing visiting (subject to appropriate exclusions where visitors to visit one ward and one patient only), in consultation with IPC team .
7. Patients are not to be discharged from the affected ward/area to nursing or residential homes or to intermediate care. Patients may however be discharged to their own homes if they are clinically fit. Patients who will be receiving care at home should be assessed on an individual basis with the care provider.

8. If patient care permits therapy services (and other peripatetic) staff should work only in the area affected or, visit the affected wards/areas/patients at the end of their working day, and change their clothes after visiting these areas.
9. Ensuring TSS/Bank staff working either within the affected ward or elsewhere. If they have worked in the affected ward, they must not work on another ward for at least 48 hours. Non-essential staff must not visit the ward during the outbreak.
10. Asking visitors to wash hands on entering and leaving the ward. Provide an information leaflet for visitors and patients. Hands must be washed using soap and water (or alcohol gel where applicable) on arrival on the ward and prior to leaving the ward.
11. Staff must wash hands after dealing with each service user, whether they are showing symptoms of the infection or not .
12. PPE's – gloves and aprons (masks when dealing with vomit) should be used and disposed of into clinical waste. After removal of PPE, perform hand washing using soap and water.
13. Ensure cleaning staff pay special attention to patient and staff toilets in the affected areas, increased cleaning frequency is required .
14. Commodes should be single-patient use where possible and thoroughly cleaned between each use with Chlorine releasing solution.
15. There should be no communal biscuits/sweet nor eating or drinking by staff on the open ward during an PII/outbreak.
16. Ensure foods are kept in appropriate lidded bowls as aerosol or dried matter vomit and faeces may settle on exposed foodstuffs.
17. Hand hygiene is extremely important with food handling , also wearing of blue gloves and aprons where appropriate.
18. Symptomatic staff must not be at work /nor return until they have been symptom-free for 48 hrs.
19. These precautions usually remain in place for at least 48- 72 hours after the last new case or episode of uncontrolled vomiting or diarrhoea. Refer to infection control page on the intranet for D&V checklist, algorithm and other related documentation.

11 Monitoring Policy Compliance

CPFT Trust will monitor compliance with this policy through the established trust Clinical governance committees and processes such as Datix for incident reporting , training , and Infection control annual workplan which include various clinical audit and operational strategy on compliance with The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance

All practitioners will be expected to follow practices that are clinically safe, effective and evidenced based with particular commitment given to following the guidelines and recommended practices introduced by the National Institute for Health and Clinical Excellence (NICE).

This policy will be reviewed every 3 years in line with Trust policy review protocol and changes to national guidance.

12 Other Related Policies and guidelines

This list is not exhaustive

- Admission, transfer, Discharge Policy
- Control of Substances Hazardous to Health (COSHH) policy
- Patient Safety Incident response Policy
- Health and Safety Policy
- Legionella Management and control policy
- Mandatory Training Needs Analysis (TNA)
- Medical Devices Policy
- Pandemic Influenza Contingency Plan
- Risk Management Framework
- Uniform and Dress Code Policy
- Water safety policy & Water safety Plan
- Waste management policy