Infection Prevention and Control
Policies and Procedures
January 2018
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Membership of the policy development/review team: Infection Control and Prevention Team and Clinical and Corporate Policy manager

Consultation: Infection Control Champions

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Further copies of this document can be found on the Foundation Trust intranet.
Introduction

The policies and procedures set out in this manual are based on national and international published best practices. As new information becomes available, this document will be reviewed and updated.

Infection prevention and control strategies are designed to protect service users and healthcare staff from the risk of transmissible disease.

A systematic approach to infection prevention and control requires each health care provider to play a vital role in protecting everyone who utilizes the healthcare system. Healthcare staff must adhere to infection prevention and control guidelines and policies at all times, and use critical thinking, risk assessment and problem solving in managing clinical situations.


The Health and Social Care Act 2008: Code of Practice for the NHS on the Prevention and Control of Healthcare Associated Infections and Related Guidance requires that each NHS body has systems in place that are sufficient to minimise the risk of infections to patients, staff and visitors.

The Healthcare Commission monitors performance against the Code of Practice as part of the annual health-check and compliance with Standards for Better Health. The Infection Control Service ensures that systems are in place to achieve this for example by having an annual programme of work.

The Code requires that an NHS body must, in relation to preventing and controlling the risks of HCAIs, have in place the appropriate core policies. These core policies can be found within relevant sections of the Infection Prevention and Control Policy Manual.

Other trust policies to which this policy relates

- Cleaning services
- Building and refurbishment, including air-handling systems
- Waste management
- Laundry arrangements for used and infected linen
- Planned preventive maintenance
- Pest control
- Management of drinkable and non-drinkable water supplies
- Minimising the risk of Legionella by adhering to national guidance; and monitoring
- Food services, including food hygiene and food brought into the care setting by service users, staff and visitors

Roles and Responsibilities

The Chief Executive

The Chief Executive is responsible for ensuring that there are effective arrangements for infection control within the Trust. These arrangements include the provision of an Infection Control Team and an Infection Control Group that is supported by a Director of Infection Prevention and Control. Also to ensure that there is an annual infection control programme/matrix which is supported and approved by the Trust Board.
The Camden and Islington NHS Foundation Trust Board and ultimately the Chief Executive carry responsibility for infection prevention and control throughout the Foundation Trust.

**The Director of Infection Prevention and Control (DIPC)**

The Director of Infection Prevention and Control (DIPC) will support the Infection Control Team and the Infection Control Committee in their fulfilment of its Infection Control Plan and will:

- Oversee the local Infection Prevention and Control Policies and their implementation.
- Have the authority to challenge inappropriate clinical hygiene practice as well as antibiotic prescribing decisions.
- Take steps to ensure that staff adheres to the Infection Prevention and Control Policy Manual.
- Chair the Infection Control Committee
- Report directly to the Chief Executive and the Trust Board.
- Present the Annual Infection Prevention and Control Report to the Trust Board.

**The Infection Control Committee (ICC)**

The purpose of the Infection Control Committee is to direct the Trust's response to infections and to ensure that the relevant elements of national policies and guidance are addressed.

The committee will ensure that the standards of infection control assure the public to have confidence in the Trust's commitment to safely manage the agenda.

The Infection Control Committee is a sub-committee of the Clinical Governance Committee and will submit its minutes to that committee via the DIPC.

Full Terms of Reference and membership of this group can be requested from the Infection Prevention and Control Team or the Clinical Governance Committee.

**The Infection Prevention and Control Team**

The Infection Prevention and Control Team consists of specialist nursing and medical staff with 24hour seven day a week on-call advice from the Microbiology service at UCLH and is responsible for:

- Co-ordinating infection control audits, education and training, policy and strategy development and the production of relevant infection control reports and data for use with the Trust to monitor and promote improvements in practice.
- Providing timely advice or infection control is available to all Trust staff and key Trust committees.
- Providing advice regarding the purchase of medical devices and equipment, building/renovation and engineering service and contracts relating to Hotel Services, i.e. cleaning, waste disposal, food etc.
- Revising this policy manual so that it complies with current national, professional and Trust guidelines and standards.
- Maintaining close links with the Director of Infection Prevention and Control and reporting to the Infection Control Group.
- Providing support in alert organism/condition and outbreak surveillance and management procedures. These will then be reviewed at the Infection Control Committee.

For ICT contact details see Appendix 1
All Trust Staff are responsible for:

- Ensuring that they follow good infection control practice at all times and that they are familiar with infection control policies, procedures and guidance relevant to their area of work.
- Complying with the procedures outlined in this manual.
- Bringing to the attention of the team manager or infection control team any problems in applying the procedures.

The Team Manager (e.g. person in charge of a clinical area/unit or department) has the responsibility to ensure that:

- This policy is accessible to all staff.
- The required facilities and equipment are available to enable compliance with the manual.
- All clinical staff within their area of responsibility have received training in the procedures outlined in the manual.
- Compliance with the procedures is appropriately audited.
- Carry out a written risk assessment by following Trust Risk Management Strategy Appendix 2, in all clinical and associated areas in respect of hand hygiene facilities/materials and the use of alcohol based hand rub (ABHR) dispensers. Where deemed appropriate ABHR dispensers can be wall mounted, or staff will wear personal bottles.
- Ensure that the management of infection control risks are one of their fundamental duties.
- Be aware that in healthcare, matrons or persons of a similar standing have personal responsibility and accountability for delivering a safe and clean care environment.
- That the nurse or other person in charge of any patient or resident area has direct responsibility for ensuring that cleanliness standards are maintained throughout that shift.

The Infection Control Champions (ICC)

The ICCs are experienced healthcare workers with sufficient experience and credibility to influence colleagues and managers. Their remit is to act as a resource in their area of practice; contribute to the teaching of infection control and to liaise with the Infection Prevention and Control Team.

A full job/role description is available from the Infection Prevention and Control Team.

Estates and Facilities

- Are responsible for providing oversight of the total facilities management contract and to ensure that the contractor is working to best practice and legislation in regard to water safety, cleaning, maintenance and waste management.
- To manage the Pest Control contract
- To provide a report to and assurance to the Infection Control Committee on a quarterly basis with regards to all aspects of total facilities management.
- To involve and work closely with the Infection Control team with regards to new builds, renovations and refurbishments to ensure high standards of infection control and service user safety.
Training and Education Requirements

Infection Control education is mandatory for all staff on a regular basis and on commencement of employment. The Learning and Development team is responsible to ensure that staff are compliant in meeting their training requirements.

The content of the Infection Control education/training during induction and update sessions covers the ‘Standard Principles of Infection Prevention and Control’. The principles of infection control relate to the implementation of a series of basic control measures, and underpin routine safe practice, protecting both staff and service users from infection. Standard infection control principles include best practice for the following:-

- Hand hygiene
- The use of personal protective equipment
- The safe use and disposal of sharps
- Safe handling and disposal of clinical waste
- Spillage of blood and bodily fluids
- Decontamination of equipment and environment
- Safe management of linen

Scope

The scope of this policy applies to all Trust employees that have direct/indirect contact with service users and their environment, including medical and nursing staff, allied health professionals and administration and clerical staff.

Purpose

The purpose of this document is to set down the principles of infection prevention and control according to best practice and evidence based to be available to all members of staff who have contact with service users with the aim of preventing the spread of infection.

Monitoring/Audit

The Infection Control Manual will be monitored by yearly infection control audits (or more frequently if required); audits carried out by Infection Control Champions (Environmental, hand hygiene and medical devices) and any other audit/inspection as considered appropriate by the Infection Control team as well as due diligence visits of catering and laundry facilities.

Explanation of terms used

A

ABHR: See alcohol-based hand rub

Airborne precautions: Actions taken to prevent or minimize the transmission of infectious agents or organisms that remain infectious when suspended in the air.
Airborne transmission: A means of spreading infection in which airborne droplet nuclei are inhaled by uninfected people.

Alcohol-based hand rub (ABHR): A method of hand hygiene that includes an alcohol-containing preparation designed for application to the hands for reducing the number of viable microorganisms on the hands. ABHR is not an alternative for washing with soap and water if hands are visibly soiled.

Antibiotic: Type of antimicrobial agent made from a mold or a bacterium that kills, or slows the growth of other microbes, specifically bacteria. Examples include penicillin and streptomycin.

Antibody: A protein found in the blood that is produced in response to foreign substances (e.g., antigens) invading the body. Antibodies protect the body from disease by binding to these organisms and destroying them.

Antimicrobial agents: A general term for the drugs, chemicals, or other substances that either kill or slow the growth of microbes. Among the antimicrobial agents in use today are antibacterial drugs (which kill bacteria), antiviral agents (which kill viruses), antifungal agents (which kill fungi), and antiparasitic drugs (which kill parasites).

Antimicrobial resistance: The result of microbes changing in ways that reduce or eliminate the effectiveness of drugs, chemicals, or other agents to cure or prevent infections. Examples include multidrug resistant organisms (MDROs) such as methicillin-resistant Staphylococcus aureus (MRSA). Also known as drug resistance.

Antiseptic: A germicide that is used on skin or living tissue for the purpose of inhibiting or destroying microorganisms. Examples include alcohols, chlorhexidine, chlorine, hexachlorophene, and iodine.

Asepsis: Prevention from contamination with microorganisms. Includes sterile conditions on tissues, on materials, and in rooms, as obtained by excluding, removing, or killing organisms.

B

Bacteria: Single-celled organisms that live in and around us. Bacteria may be helpful, but in certain conditions may cause illnesses such as strep throat, most ear infections, and pneumonia.

Blood borne viruses: Disease-producing microorganisms spread by contact with blood or other body fluids from an infected person. Examples include hepatitis B and C as well as HIV.

Body Fluids: Blood; excretions like urine, faeces, vomit, meconium, lochia; secretions like saliva, tears, sperm, colostrum, milk, mucous secretions, wax, vernix; exudates and transudates like lymphatic, pleural fluid, cerebrospinal fluid, ascitis fluid, articular fluid, pus (except sweat); organic samples like tissues, cells, organ, bone marrow, placenta.

C

Case: A person with symptoms.
**Carrier:** A person (host) who harbours a micro-organism (agent) in the absence of discernible clinical disease. Carriers may shed organisms into environment intermittently or continuously and therefore act as a potential source of infection.

**Cleaning:** The removal of visible soil, organic, and inorganic contamination from a device or surface, using either the physical action of scrubbing with a surfactant or detergent and water or an energy based process with appropriate chemical agents.

**Clostridium difficile:** An anaerobic, gram-positive, spore-forming bacillus that can cause diarrhea and other intestinal diseases when competing bacteria in the gut are diminished by antibiotics.

**Clostridium difficile-associated Disease (CDAD):** An intestinal illness caused by toxins that are produced by a specific type of bacteria named Clostridium difficile.

**Contact precautions:** Type of transmission-based precautions that requires barrier precautions for direct contact with resident or objects/surfaces contaminated with an infectious agent.

**Contamination:** The presence of an infectious agent on a body surface or on clothes, gowns, gloves, bedding, furniture, computer keyboards, or other inanimate objects that may be capable of producing disease or infection

**Colonisation:** The presence of micro-organisms at a body site(s) without presence of symptoms or clinical signs of illness or infection. Colonisation may be a form of carriage and is a potential method of transmission.

**Commensal:** A micro-organism resident in or on a body site without causing clinical infection.

**Communicable period:** The time in the natural history of an infection during which transmission may take place.

**Contact:** An exposed individual who might have been infected through transmission from another host or the environment.

**D**

**Decontamination:** A process or treatment that renders a medical device, instrument, or environmental surface safe to handle because it is no longer capable of transmitting particles of infectious material.

**Disinfectant:** A chemical agent used on inanimate (non-living) objects to destroy virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial spores).

**Disinfection:** The destruction of pathogenic and other kinds of microorganisms by physical or chemical means. Disinfection is less lethal than sterilization, because it destroys most recognized pathogenic microorganisms, but not necessarily all microbial forms, such as bacterial spores.

**Droplet precautions:** Actions designed to reduce and prevent the transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.
Droplets: Small particles of moisture that may be generated when a person coughs or sneezes or when water is converted to a fine mist by an aerator or shower head. Droplets may contain infectious microorganisms and tend to quickly settle out from the air; therefore, risk of disease transmission is generally limited to persons in close proximity to the droplet source.

E

Endemic: The usual level or presence of an agent or disease in a defined population during a given period.

Endogenous infection: Micro-organisms originating from the service user’s own body which cause harm in another body site.

Epidemic: An unusual, higher than expected level of infection or disease by a common agent in a defined population in a given period.

Exogenous infection: Micro-organisms originating from a source or reservoir which are transmitted by any mechanism to a person, i.e. contact or airborne routes.

F

FFP3 Mask: see particle filter respirator

Flora: Micro-organisms resident in an environmental/body site.

Hand care: Actions to prevent skin irritation.

G

Gastroenteritis: Inflammation of the stomach and the intestines that causes symptoms such as nausea, vomiting, and diarrhoea.

Gastrointestinal (GI) infection: See gastroenteritis

H

Hand hygiene: A general term that applies the following: 1) hand washing with antimicrobial/non-antimicrobial soap and water or 2) antiseptic handrub (waterless antiseptic product, most often alcohol based, rubbed on all surfaces of hands).

Healthcare-associated infection (HAI): An infection that develops in a patient who is cared for in any setting where healthcare is delivered and is related to receiving health care. Formerly known as nosocomial infection

Hypochlorite: A chlorine (bleach) based disinfectant.

I

Immunization: The process or procedure by which a subject is rendered immune, or resistant to a specific disease. This term is often used interchangeably with vaccination or inoculation, although the act of inoculation/vaccination does not always result in immunity.
**Immunocompromised:** Those whose immune mechanisms are deficient because of congenital or acquired immunologic disorders (e.g., human immunodeficiency virus [HIV] infection), chronic diseases (e.g., diabetes mellitus, cancer, emphysema), malnutrition, or immunosuppressive therapy of another disease process.

**Infection:** The invasion of the body by pathogenic microorganisms and their multiplication which can lead to tissue damage and disease.

**Influenza:** Also known as flu. A serious and sometimes deadly respiratory infection that can spread quickly in a community.

**Invasive procedure:** A medical procedure that involves entering the body, usually by cutting or puncturing the skin or by inserting instruments into the body.

**Latent tuberculosis infection (LTBI):** A condition in which living tubercle bacilli (M. tuberculosis) are present in the body but the disease is not clinically active.

**Mask:** A term that applies collectively to items used to cover the nose and mouth and includes both procedure masks and surgical masks.

**Microorganisms:** An organism that can be seen only with the aid of a microscope and that typically consists of only a single cell. Microorganisms include bacteria, fungi, parasites, and viruses. MRSA: See methicillin-resistant Staphylococcus aureus.

**Norovirus:** A very contagious virus transmitted from person-to-person or via contaminated food, water, or objects, causing outbreaks of vomiting and diarrhoea.

**Nosocomial infection:** See healthcare-associated infection.

**Nitrile:** A synthetic rubber made from organic compounds and cyanide.

**Outbreak:** Two or more epidemiologically linked cases of infection caused by the same micro-organism in place and/or time.

**Particle filter respirator (PFR):** Facemasks which are designed to protect the wearer from inhaling small airborne particles, including microorganisms. They are made to defined performance standards that include filtration efficiency. To be effective they must be fitted close to the face to minimise leakage.
**Personal protective equipment (PPE):** A variety of barriers used alone or in combination to protect mucous membranes, skin, and clothing from contact with infectious agents. PPE includes gloves, masks, respirators, goggles, face shields, and gowns.

**Post-exposure Prophylaxis (PEP):** Drug treatment regimen administered as soon as possible after an occupational exposure where there is indication of HIV to reduce the risk of acquisition.

**R**

**Reservoir:** Any animate or inanimate focus in the environment in which an infectious agent may survive and multiply and which may act as a potential source of infection.

**S**

**Seroconversion:** The development of antibodies not previously present resulting from a primary infection.

**Sharps:** Instruments used in delivering healthcare that can inflict a penetrating injury, e.g. needles, lancets and scalpels.

**Sharps injury:** An injury that results in a sharp instrument/object, e.g. needle, scalpel, cutting or puncturing the skin.

**Single Use:** indicates that the device can only be used once and then must be discarded.

**Source:** Place where micro-organisms are growing or have grown.

**Sporadic case:** A single case which has not apparently been associated with other cases, excreters or carriers in the same period of time.

**Sterile:** Free from all living micro-organisms for the purpose of the item.

**Sterilisation:** A process that removes or destroys all micro-organisms including bacterial spores.

**Standard precautions:** A group of infection prevention practices that apply to all patients, regardless of infection status. Standard precautions is based on the principle that all blood, body fluids, secretions, excretions except sweat, non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard precautions include hand hygiene, and depending on the anticipated exposure, use of gloves, gown, mask, eye protection, or face shield. Also, equipment or items in the patient environment likely to have been contaminated with infectious fluids must be handled in a manner to prevent transmission of infectious agents. Formerly known as universal precautions.

**Surgical masks:** A mask that covers the mouth and nose to prevent large droplets from the wearer being expelled into the environment. As these masks are generally also fluid repellent they also provide some protection for the wearer against exposure of mucous membranes to splashes of blood/body fluid.

**T**

**Transmission:** The method by which any potentially infecting agent is spread to another host.
**Transmission-based precautions:** A set of practices that apply to patients with documented or suspected infection or colonization with highly transmissible or epidemiologically important pathogens for which precautions beyond the standard precautions are needed to interrupt disease transmission.

**V**

**Vaccine:** A product that produces immunity therefore protecting the body from the disease. Vaccines can be administered by injection, mouth, or aerosol.

**Virus:** A microorganism smaller than bacteria that cannot grow or reproduce apart from a living cell. Examples include influenza, chicken pox, hepatitis, and HIV.
Appendix 1: Infection Control Team Contacts Details

INFECTION CONTROL TEAM | CONTACT DETAILS

Lead Infection Control Nurse:
Tel: 020 3317 7383
Mobile: 078 1018 0774

Infection Control Nurse:
Tel: 020 3317 7382

For urgent out of hours enquiries contact:
Infection Control Doctor
Professor Peter Wilson
Via UCLH switchboard - 08451 555000 and ask to be put through to Professor Wilson on bleep UCH 359 or the on-call Microbiologist if he is not available.
Section A: Central principles of Infection Control
A1: Hand Hygiene

1. Introduction

Hand hygiene is now regarded as one of the most important element of infection control activities (Marthur, 2011), and is required even if gloves are worn. Most health care-associated infections (HAIs) are preventable through good hand hygiene – cleaning hands at the right times and in the right way. (WHO, 2012)

Hands are the most common means in which microorganisms, particularly bacteria, can be spread and subsequently cause infection, especially for those patients who are most susceptible.

Staff must consider the potential/actual hazards that have or might be encountered during the course of their duties and how this subsequent hazard may present as potential/actual contamination of their hands and risk to service users, visitors and other staff. This assessment must inform the hand hygiene procedure undertaken by staff to eliminate the risks of cross-infection.

Staff must assume that every person they encounter could be carrying potentially harmful microorganisms that could be transmitted and cause harm to others. As such, staff must carry out effective hand hygiene at the correct point in care as a standard infection control precaution. Hand hygiene is one of the elements of Standard Infection Control Precautions.

Everyone has an important part to play in improving patient safety and contributing to breaking the chain of infection at every opportunity.

To ensure maximum safety hand hygiene has to be performed:

1. Using an effective product
2. By applying the correct technique
3. At precise moments in time (J.Storr, WHO 2008)

2. The microbiology of the hands

There are two groups of micro-organisms on the hands:

Transient skin flora
- Carried temporarily
- Micro-organisms acquired on the hands through contact with other sites on the same individual, from other people, or from the environment
- Easily acquired by touch, and readily transferred to the next person or surface touched, so may be responsible for the transmission of infection.
- Removal of transient micro-organisms is therefore essential in preventing cross-infection, and their removal is easily achieved by washing with soap and water, the use of alcohol rub or hand sanitizing wipes.

Resident skin flora
- Micro-organisms which live permanently in deep crevices and hair follicles, known as skin flora; most are bacteria of low pathogenicity
- Not readily transferred to other people and most are not easily removed by washing with soap.
• Do not need to be removed from the hands during routine clinical care
• During invasive procedures, e.g. minor surgery, there is a risk that resident microorganisms may enter the patient’s tissues and cause an infection

Your Five Moments of Hand Hygiene

The World Health Organisation (WHO) has produced a model (5 Moments for ‘Hand Hygiene at the point of care’) explaining when hands should be decontaminated as described in the table below. Hands must be decontaminated immediately before each and every episode of direct service user contact or care and after any activity or contact that could potentially result in hands being contaminated.

<table>
<thead>
<tr>
<th>Before Service User Contact</th>
<th>WHEN? Clean your hands before touching a service user. WHY? To protect the service user against harmful germs carried on his/ her body.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before an Aseptic Non Touch Technique task is undertaken.</td>
<td>WHEN? Clean your hands immediately before any aseptic task. WHY? To protect the service user against harmful germs, including the service user’s own germs from entering his/ her body.</td>
</tr>
<tr>
<td>After body fluid exposure.</td>
<td>WHEN? Clean your hands immediately after a risk exposure to bodily fluids (and after glove removal) WHY? To protect yourself and the healthcare environment from harmful patient germs.</td>
</tr>
<tr>
<td>After service user contact.</td>
<td>WHEN? Clean your hands after touching a service user and his/ her immediate surroundings when leaving. WHY? To protect yourself and the health care environment from harmful service user germs.</td>
</tr>
<tr>
<td>After contact with service user surroundings.</td>
<td>WHEN? Clean your hands after touching any object or furniture in the service user's immediate surroundings when leaving – even without touching the service user. WHY? To protect yourself and the healthcare environment from harmful service user germs.</td>
</tr>
</tbody>
</table>

Or in the diagram as seen below:

![Diagram of Five Moments of Hand Hygiene]

*Adapted from the WHO Alliance for Patient Safety 2006
To fully understand the Five Moments staff need to be aware of the concept of the ‘service user zone’. Staff need to clean their hands at the ‘Point of Care’ and also when they enter the service user’s ‘zone’ and when they leave it.

Health care workers must decontaminate their hands before and after all contact with service users and whenever hands are visibly soiled. It is best to think of this in terms of:
- What activity has just been undertaken?
- What activity is about to be undertaken?

3. Principles

Hand hygiene can be achieved by hand washing with soap, by the use of alcohol based hand rub or by the use of hand sanitising wipes.

Alcohol-based hand rub is an acceptable alternative to hand washing between caring for different service users or between different caring activities for the same service user as long as the hands are not grossly soiled, they must be free of dirt and organic material. The product needs to be applied to dry hands using the ‘Six Stage’ Technique (Appendix 1) until it has evaporated (dry).

The following technique should be used when using hand sanitizing wipes:

- Liquid soap/skin disinfectant
- Warm running water
- Friction
- Thorough drying
- Disposable paper towels

Hands should be washed with liquid soap:
- Before commencing duty and at the completion of duty span
- Before and after caring for any patient
- Hands visibly soiled or grossly contaminated with dirt or organic matter
- Before the serving of meals and drinks
- Before the administration of medication
- Before meal/drink breaks
- After toilet use

Rub hands palm to palm. Rub back of each hand with the palm of the other with fingers interlaced.
Rub palm to palm with fingers interlaced. Rub with backs of fingers to opposing palms with fingers interlocked.
Using a rotational movement, rub each thumb with other hand. Rub tips of fingers in palm in a circular motion.
Rub each wrist with opposite hand. Discard the wipe in the appropriate waste bin.
Minimum Provision Of Hand Hygiene Facilities Are As Follows:

Dedicated clinical hand wash sink which should conform to the requirements of HBN 00-10(2013); this outlines the minimum requirements for such equipment:
- Elbow/automatically controlled mixer taps that are situated so that water does not follow directly into the waste outlet but are off-set
- Basins without overflow or plug
- Hard wearing paint finish or with ceramic tiles or plastic sheet fitted to the wall as a splash back.
- At the clinical hand wash sink, ensure that there is a liquid soap dispenser, non-perfumed soap, hand towel dispenser all wall mounted.

4. Guidelines

Studies have shown that hand hygiene techniques are often inadequate. All surfaces should be included to remove bacteria effectively (see Appendix 1 for technique).

5. Allergies

Skin allergies can be acquired therefore any member of staff who suspects they have an allergy or signs of irritation must report it to the Occupational Health department for an assessment.

6. Type of Soap
- Do not use bars of soap as they provide a medium on which bacteria thrive.
- For routine hand washing use cartridge non-perfumed liquid soft soap
- Use skin disinfectant agents or liquid soap and then alcohol gel in situations such as prior to aseptic technique, after looking after a patient with MRSA or carrying out a task such as bowel care.
- Where you can operate a soap container with your elbow you should do so.
- Alcohol gel is available in pump action or personal worn dispensers via the Procurement/Logistic Department. Alcohol dispensers should be placed in secure but convenient stations

7. Community Issues

Hand hygiene practices in the patient’s own home should follow the same general principles outlined previously. However, it is accepted that hand wash facilities may not be of an acceptable standard in the patients own home. To minimise risks, in areas where hand washing facilities are unavailable or inadequate, individual practitioners should carry liquid soap and disposable hand-towels. Alternatively 70% Alcohol-based hand gel/rubs and or wipes should be used or hand sanitising wipes as per appendix 1, until skin is completely dry.

Community sized packets of soap, hand wipes and alcohol gel can be purchased through the procurement department and Agresso.

8. Responsibilities of All Staff with Regards To Hand Hygiene

a) Requirements of all Staff, who carry out clinical care:
- Keep nails short and clean
- Do not wear false nails
- Remove all nail polish
A plain ‘wedding’ band may be worn; Otherwise remove jewellery e.g. watches, bracelets and any rings with ridges or stones

‘Bare below the elbows’ – wear short sleeves or roll up long sleeves to above the elbow to expose wrists and forearms (DH, 2010). This must be adopted when carrying out clinical procedures e.g. bed making and or when carrying out clinical procedures in direct contact with a Service User e.g. aseptic technique or taking physical observations/examinations

• Remove jewellery (e.g. watches, bracelets and any rings with ridges or stones).

b) All Staff Should:

• Familiarise themselves with the 6-step technique of hand washing
• Incorporate these guidelines into their clinical practice
• Report deficits in hand hygiene facilities to their manager
• Report problems with providing hand hygiene facilities/materials to their manager and the Infection Control Team and Domestic services
• Ensure that all other staff (including agency/bank staff) apply the principles of hand hygiene.
• Advise service users, carers and visitors of any infection control requirements such as hand hygiene.
• Access hand hygiene instruction/training as advertised via the Infection Control Team
• Participate in hand hygiene audits when requested to do so.

c) Managers Should:

• Assess their clinical areas with respect to hand hygiene facilities
• Carry out a written risk assessment by following Appendix 2 of the Trust Risk Management Strategy, in all clinical and associated areas in respect of hand hygiene facilities/materials and the use of alcohol gel dispensers. Where risk assessed and deemed appropriate alcohol gel dispensers can be wall mounted, or staff will wear personal bottles of alcohol gel.
• Provide adequate supplies of liquid soap, alcohol gel, hand wipes, paper towels and hand cream
• Report problems with providing hand hygiene facilities/materials to their manager and the Infection Control Team and Domestic services.
• Ensure that all staff has had hand hygiene instruction/education as part of mandatory training or periodic update.
• Act on the information received from the Training and Development Department in relation to non-attendance at hand hygiene training. Ensure Hand hygiene audits are undertaken as required by Infection Control Programme.

d) The Infection Control Team will:

• Incorporate Hand Hygiene instruction within all training and education sessions provided by the team, including corporate induction.
• Provide specific Hand Hygiene training and education open to all Trust staff in the form of ‘Hand Hygiene Awareness Campaigns’ as advertised by the team.
• Facilitate Hand Hygiene instruction via electronic methods, for example, power point presentations that can be used by champions/staff within clinical and non-clinical settings.
• Forward details of non-attendees to the Training and Development department relating to specific Hand Hygiene training or Infection Control training and education sessions that incorporates Hand Hygiene, in line with the Trust’s Mandatory Training Protocol
• The Infection Control Team will arrange hand hygiene audits in line with the Policy Manual, either as a standalone audit or part of a wider environmental audit.
9. Hand Hygiene in Service Developments

a) All Managers of services must ensure that the provision of facilities is sufficient to support effective hand hygiene as outlined above. This must be an essential part of each service.

b) In turn, Managers must be supported by the Trust in providing these facilities.

c) All service developments, including changes in the use of existing wards and clinical areas, must consider the provision of adequate hand hygiene facilities as an essential component. Consultation with the Infection Control Team is advised.

d) Posters and other education materials are available on the trust infection control intranet site or from the infection control department.

e) Hand hygiene policy, as part of the Infection Control Manual is made available to service users on the Foundation Trust internet site.

f) Hand hygiene audit tool (Appendix 2) can be used by all clinical and non-clinical managers to ensure that the provision of facilities is sufficient to support the provision of effective hand hygiene within each environment.
Appendix 1: Guidance at a glance

Infection Control at a Glance | HAND HYGIENE

Hand hygiene is now regarded as one of the most important elements of infection control activities. Hands are the most common means in which microorganisms, particularly bacteria, can be spread and subsequently cause infection, especially for those patients who are most susceptible.

For more detailed information see the C&I Hand Hygiene policy

WHEN TO CLEAN YOUR HANDS

1. Before patient contact
2. Before a clean/sterile procedure
3. After exposure to body fluids or blood
4. After patient contact
5. After contact with patient surroundings

How to clean your hands at C&I
1. Soap and water
2. Alcohol-based hand rub (ABHR)
3. Disinfectant wipes (Clinell)

REMEMBER-if you are dealing with someone with diarrhoea or have organic matter on your hands you should wash your hands with soap and water and not use ABHR

How to Clean Your Hands

1. Rub hands palm to palm
2. Right palm over left dorsum with interlaced fingers and vice versa
3. Palm to palm with fingers interlaced
4. Backs of fingers to opposing palms with fingers interlocked
5. Rotational rubbing of left thumb clasped in right palm and vice versa
6. Rotational rubbing backwards and forwards with clasped fingers of right hand in left palm and vice versa

Top Tips for good hand hygiene

- Don’t wear stoned rings or rings with a pattern
- Make sure you roll/push your sleeves up
- Keep nails short
- Don’t wear false nails/nail polish
- Take your wrist watch
- Look after your hands—use hand moisturiser regularly
A2: Standard Infection Control Precautions

1.0 Introduction

1.1 Standard precautions are a set of practices which are designed to prevent cross transmission from recognised and unrecognised sources of infection. These sources of (potential) infection include blood and other body fluids or items in the care environment which are likely to be contaminated.

Standard precautions are intended for use by all healthcare staff at all times, whether infection is known to be present or not to ensure the safety of patients, staff and visitors to the healthcare environment (HPS Scotland) and not only when infection hosts are known or suspected.(Stevens,2003)

There are a number of elements to standard infection control precautions:
- Hand Hygiene
- Gloves
- Personal protective equipment including gloves, masks and face protection
- Safer sharps practice and injection safety
- Decontamination of equipment
- Environmental hygiene
- Clinical waste
- Laundry
- Respiratory hygiene and cough etiquette
- Management of blood and body fluids

Body fluids include:
- Blood
- Urine
- Cerebrospinal Fluid (CSF)
- Peritoneal Fluid
- Pleural Fluid
- Synovial Fluid
- Amniotic Fluid
- Semen
- Vaginal Secretions
- Saliva
- Vomit
- Any other body fluid containing visible blood e.g. urine, faeces, unfixed tissue and organs.

The purpose of this document is to set down the principles of standard precautions and to ensure that they are the minimum level of precautions used when providing care for all patients. They protect both staff and service users by reducing the opportunity for the transmission of micro-organisms.(WHO,2006)

2.0 Knowledge

Standard infection control precautions (SICP) present a barrier when there is a risk of direct contact with body substances, through non-intact skin, mucous membranes or contaminated articles, surfaces or equipment.
2.1 Hand Hygiene

Refer to **Hand Hygiene Policy**

- Hand hygiene must be performed before and after each and every episode of direct patient contact and care, and according to the World Health Organisation’s 5 Moments of Hand Hygiene (WHO, 2009, 2012)
- Hands that are visibly soiled with dirt or blood/body fluids must be washed immediately with soap and water
- Hand hygiene should be performed; preferably with an alcohol based hand rub unless hands are visibly soiled or local infection control advice recommends an alternative product, between caring for different patients or between different care activities for the same patient. (Pratt et al, 2007) Any cuts or grazes must be covered with a waterproof dressing. If this is not possible, you should avoid being involved in any clinical procedure until the lesion is healed and seek advice form the Occupational Health Department.

2.2 Personal Protective Equipment (PPE)

Staff should perform a point of care risk assessment to decide which personal protective equipment to wear prior to any activity which could potentially involve blood and body fluids. (See Appendix 1)

**Gloves**

Disposable gloves must be worn:

- If there is potential of exposure to blood, body fluids, secretions and excretions.
- Glove usage is strongly advised for all health care workers when undertaking venepuncture.
- For invasive procedures, contact with sterile sites and non-intact skin or mucous membranes and all activities that have been assessed as carrying a risk of exposure to blood, body fluids, secretions or excretions.
- When dealing with chemical substances.
- When handling sharps or contaminated instruments/equipment.

Gloves must be worn as single use items. Gloves are not a replacement for hand hygiene and if being used should be put on immediately before an episode of patient contact or treatment and removed as soon as the activity is completed. (RCN, 2012). Gloves must be changed between caring for different patients and between different care and treatment for the same patient.

Gloves should be discarded after each task/care episode and disposed of as clinical waste and hands decontaminated thoroughly after the gloves have been removed. Care should be taken to avoid touching the outer contaminated areas of the gloves when removing them. (See appendix 2)

Do not wash or disinfect gloves for re-use. Washing may cause the enhanced penetration of liquids through undetected holes in the glove.

Gloves should also be worn when looking after service users on other transmission-based precautions such as contact precautions.
Glove Choice

Where ever possible the trust operates a non-latex environment. Medical gloves are available in vinyl, nitrile, sterile and non-sterile and should be chosen appropriate to need. See appendix 3 for a glove choice matrix. **Gloves are not a substitute for hand hygiene.**

Face Masks and Eye Protection

Masks, visors and eye protection should be worn when a procedure is likely to result in blood and body fluids or substances splashing into the eyes, face or mouth.

A particle filter respirator or FFP3 respirator meeting European standard EN149:2001 may be required when dealing with infections transmitted via the airborne route such as pandemic influenza (HPA,2005). All staff that might need to use this type of respirator mask are required to be Fit Tested by a competently trained person. In these circumstances seek specialist advice from the Infection Prevention and Control Team or on-call Microbiologist.

When all masks are removed avoid touching the outer contaminated area of the mask. (see appendix)

Protective Clothing

Disposable plastic aprons or water repellent disposable gowns should be worn where there is a risk that clothing may be exposed to blood, body fluids, secretions and excretions with the exception of sweat or when the service user requires additional transmission-based precautions.

A disposable plastic apron should be worn to protect clothing from contamination with microorganisms when bed making, any direct care, or direct contact with the environment of a service user on transmission-based precautions.

Aprons or other protective equipment should not be worn routinely as part of normal activities but when required. They are for single use items for one procedure or episode of patient care and then discarded and disposed of as clinical waste. See below for a colour-coded list of aprons:

<table>
<thead>
<tr>
<th>Colour</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Aprons</td>
<td>Clinical Care</td>
</tr>
<tr>
<td>Green Aprons</td>
<td>Preparing and Serving Food</td>
</tr>
<tr>
<td>Yellow Aprons</td>
<td>Infection and Isolation</td>
</tr>
<tr>
<td>Blue Aprons</td>
<td>General Cleaning</td>
</tr>
<tr>
<td>Red Aprons</td>
<td>Dirty Utility and Sanitary Cleaning</td>
</tr>
</tbody>
</table>

Hand hygiene should be performed after the removal of all protective clothing.

The use of personal protective clothing requires a risk assessment on the part of the member of staff such as the one below (See Appendix 1)
## Choice of Personal Protective Equipment (PPE)

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>EXAMPLES OF USE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLOVES</strong>*</td>
<td>Standard length: Protect hands from contamination with organic matter, micro-organisms, and chemicals. Minimise cross-infection from staff to patients and vice versa.</td>
</tr>
<tr>
<td></td>
<td>• Contact with non intact skin</td>
</tr>
<tr>
<td></td>
<td>• Contact with mucous membranes</td>
</tr>
<tr>
<td></td>
<td>• Potential exposure to blood</td>
</tr>
<tr>
<td></td>
<td>• Contact with contaminated equipment</td>
</tr>
<tr>
<td></td>
<td>• Contact with chemicals</td>
</tr>
<tr>
<td></td>
<td>• Invasive procedures</td>
</tr>
<tr>
<td></td>
<td>• Contact with sterile sites</td>
</tr>
<tr>
<td></td>
<td>• Cleaning contaminated equipment</td>
</tr>
<tr>
<td></td>
<td>• Contact with non intact skin</td>
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<tr>
<td></td>
<td>• Contact with mucous membranes</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td>• Contact with sterile sites</td>
</tr>
<tr>
<td></td>
<td>• Cleaning contaminated equipment</td>
</tr>
<tr>
<td><strong>APRONS</strong>*</td>
<td>Standard disposable apron: Protect the healthcare workers clothing from contamination (Where lack of shoulder protection is of concern disposable wider shoulder aprons or long sleeved impermeable single use aprons should be considered).</td>
</tr>
<tr>
<td></td>
<td>• Contact with blood or body fluids, secretions excretions with the exception of sweat</td>
</tr>
<tr>
<td></td>
<td>• For direct contact with an infectious service user and their environment</td>
</tr>
<tr>
<td></td>
<td>• When clothing is likely to become wet or soiled, i.e. bathing</td>
</tr>
<tr>
<td></td>
<td>• Cleaning contaminated equipment</td>
</tr>
<tr>
<td></td>
<td>• Use where standard disposable aprons give insufficient coverage of exposed skin and clothing</td>
</tr>
<tr>
<td><strong>MASKS</strong>*</td>
<td>Face mask: Protect healthcare workers from the potential exposure to micro-organisms via splashes of blood and body fluids or contaminated cleaning fluids</td>
</tr>
<tr>
<td></td>
<td>• Healthcare where treatment may potentially cause facial splashing e.g. lancing of abscesses</td>
</tr>
<tr>
<td></td>
<td>• Dental treatment where aerosols are produced</td>
</tr>
<tr>
<td></td>
<td>• Cleaning of contaminated environment e.g. dirty protest</td>
</tr>
<tr>
<td></td>
<td>• For close patient care in a pandemic influenza situation</td>
</tr>
<tr>
<td>Respiratory protection mask: Protect healthcare workers where high level particle filtration is required. The masks may require individual assessment and fitting (It is difficult to obtain a close mask seal to the skin where beards or facial hair is present)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cough inducing procedures on patients known or suspected of infection with Multi Drug Resistant Tuberculosis</td>
</tr>
<tr>
<td></td>
<td>• Cough inducing procedures in a pandemic influenza situation</td>
</tr>
<tr>
<td><strong>EYE PROTECTION</strong>*</td>
<td>Protects the eyes from splash or spray of blood and body fluids</td>
</tr>
<tr>
<td></td>
<td>• During aerosol-prone procedures i.e. Dental treatment</td>
</tr>
<tr>
<td></td>
<td>• During procedures where splashing is possible e.g. cleaning of equipment</td>
</tr>
</tbody>
</table>

* These items are SINGLE USE and SINGLE PROCEDURE USE and must be discarded after each task or episode of care.
2.3 Safe Sharps Practice and Injection Safety
Refer to **Sharps Policy**

**Never re-sheath a needle.**

Take care to prevent injuries when using sharp instruments or devices. Sharps must not be passed directly from hand to hand and handling should be kept to a minimum.

Safer needles and devices should be used whenever possible. These are devices which have a mechanism to blunt the needle, thus reducing the risk of injury (EU, 2010).

Discard used sharps immediately at the point of use into an approved puncture resistant sharps container.

Engage temporary closure mechanism when container is not in use.

Store sharps containers in a safe position off the floor both when in use and after locking prior to disposal.

Sharps containers must not be placed in clinical waste bags. The sharps containers are collected from clinical areas and placed directly into a large transport clinical waste container.

Do not overfill sharps containers. Whenever possible, use a single-dose medication vial for each patient, to reduce cross-contamination between patients (WHO, 2012).

**2.4 Decontamination of equipment**
Refer to **Decontamination policy**

Decontamination is the processes used that make equipment safe for reuse. (RCN, 2012). Inadequate decontamination of equipment is frequently associated with outbreaks of infection.

Clean re-usable equipment between patient uses according to policy guidance. Wear protective clothing when handling contaminated patient care equipment.

Do not reuse single use items or single use equipment.

**2.5 Environmental hygiene**

A dirty or contaminated clinical environment is one of the factors that may contribute to healthcare-associated infections.

Clinical areas should be kept clean and free from dust and clutter.

Particular attention must be paid to horizontal surfaces, floors, beds, and bedside equipment and other frequently touched surfaces.

If the environment is not visibly clean the domestic supervisor should be informed.

**2.6 Clinical waste**
Refer to **Waste Policy**

Waste must be segregated according to Trust policy.
Orange bags must be used to dispose of clinical waste soiled with body substances or identifiable as having been or potentially been used in a clinical process.

Ensure that clinical waste bags are correctly identified with a numbered closure tag in accordance with the Trust Waste Policy.

Staff must wear appropriate personal protective clothing when coming into contact with contaminated waste.

Store waste securely prior to collection.

2.7 Laundry

Do not shake dirty linen. Bag the laundry at the place of use, i.e. patient's bed area.

Linen contaminated with blood/body fluids must be placed directly into red water-soluble alginate bags and then a red plastic bag for safe transportation to the laundry.

Always wear a disposable plastic apron (and gloves where linen is soiled) when handling used linen.

Never place linen (used, soiled or clean) on the floor. Store used/soiled linen securely prior to collection.

2.8 Management of blood and body fluids

Refer to Spillage policy

Deal with any blood/body fluid spillages immediately wearing appropriate protective clothing. Body fluids or materials such as urine, faeces, saliva, sputum, sweat, tears and vomit carry a minimal risk of BBV infection, unless they are contaminated with blood. Care should still be taken as the presence of blood is not always obvious. (Health and Safety Executive, 2011).

Use hospital-approved disinfectants. Never use chlorine-releasing granules directly on urine spillages as a chlorine gas can be released.

Urinary catheters are seldom seen in the Trust. If a patient does have one, staff must adhere to the infection control advice about urinary catheters included in the NICE (2012) Guideline: Infection Prevention and control of healthcare-associated infections in primary and community care

2.9 Respiratory hygiene and cough etiquette

Service users/visitors with a cough should be assisted to perform cough/respiratory etiquette—that is coughing or sneezing into a disposable tissue, disposing of this immediately and then cleaning their hands.

Service users with acute respiratory symptoms should be spatially separated from other patients.
Appendix 1: Point of care risk assessment

Legend
- Facial protection = mask and eye protection, face shield or mask with visor attachment
- PPE = personal protective equipment e.g. aprons, gloves

Infection Control Decision Tool | Point of care risk assessment

Assess service user, environment and interaction

Contact with service user or environment expected?

No → No action required

Yes →

Perform hand hygiene

Yes → Splash/spray of blood or body fluids or secretions anticipated?

Yes → Put on facial protection (see legend)

No → No action required

Yes → Contact with mucous membranes, non-intact skin, blood, body fluids, excretions or soiled or likely soiled item/surface anticipated?

Yes → Put on gloves and apron. Minimise exposure

No → Perform hand hygiene after PPE removal

Taken from PHAC (2018) Routine Practices and Additional Precautions Assessment and Educational tools
Appendix 2: Donning and doffing personal protective equipment

Always perform hand hygiene immediately before donning and after removing PPE.

Risk assessment will determine which items of PPE are required

**Sequence for donning PPE:**
- perform hand hygiene
- apron
- mask
- eyewear
- gloves

**Sequence for doffing PPE**
- all items must be removed and discarded carefully
- apron
- gloves
- perform hand hygiene after gloves/apron removal and before your hands go near your face (for removal of masks and eye protection)
- Mask/face protection

<table>
<thead>
<tr>
<th>Donning PPE</th>
<th>Doffing PPE</th>
</tr>
</thead>
</table>
| 1. How to don an apron  
• remove from pack/roll  
• place over head  
• tie in the rear | 1. How to doff an apron  
• break apron behind neck  
• roll into ball, avoiding the exterior  
• dispose of as clinical waste |
| 2. How to don a mask  
• secure on head with ear loops/tie  
• place over nose, mouth, and chin  
• fit flexible nose piece over bridge  
• adjust fit – snug to face and below chin | 2. Mask removal  
• front of mask is ‘dirty’; handle by ear-loops  
• remove from face, in a downward direction, using ear-loops/ties  
• discard |
| 3. How to don eye protection  
• position eyewear over eyes and secure to head using ear pieces or head loop if using visor | 3. Eyewear removal  
• outside of eyepiece is ‘dirty’; handle by earpieces  
• grasp earpieces with ungloved hands  
• pull away from face  
• place in designated receptacle for reprocessing or dispose of if single use |
| 4. How to don gloves  
• don gloves last  
• perform hand hygiene before donning new gloves  
• insert hands into gloves  
• keep gloved hands away from face  
• remove gloves if they become torn; | 4. Glove removal  
• outside of glove is ‘dirty’; use glove-to-glove/skin-to-skin handling method  
• grasp outside edge near wrist  
• peel away from hand, turning glove inside out  
• hold in opposite gloved hand  
• slide ungloved finger under wrist of remaining glove  
• peel off from inside, creating a bag for both gloves  
• Discard  
• Wash hands |

Taken from the CDC: [http://www.cdc.gov/HAI/prevent/ppe.html](http://www.cdc.gov/HAI/prevent/ppe.html)
## Appendix 3: Glove Use Matrix

### STERILE GLOVES INDICATED

Any surgical procedure; vaginal delivery; invasive radiological procedures; performing vascular access and procedures (central lines); preparing total parental nutrition and chemotherapeutic agents.

### EXAMINATION GLOVES (vinyl, nitrile) INDICATED IN CLINICAL SITUATIONS

*Potential for touching blood, body fluids, secretions, excretions and items visibly soiled by body fluids.*

**DIRECT SERVICE USER EXPOSURE:** Contact with blood; contact with mucous membrane and with non-intact skin; potential presence of highly infectious and dangerous organism; epidemic or emergency situations; IV insertion and removal; drawing blood; discontinuation of venous line; pelvic and vaginal examination; suctioning non-closed systems of endotracheal tubes.

**INDIRECT SERVICE USER EXPOSURE:** Emptying emesis basins; handling/cleaning instruments; handling waste; cleaning up spills of body fluids.

### GLOVES NOT INDICATED (except for CONTACT precautions)

*No potential for exposure to blood or body fluids, or contaminated environment*

**DIRECT SERVICE USER EXPOSURE:** Taking blood pressure, temperature and pulse; performing SC and IM injections; bathing and dressing; transporting patient; caring for eyes and ears (without secretions); any vascular line manipulation in absence of blood leakage.

**INDIRECT SERVICE USER EXPOSURE:** Using the telephone; writing in the patient chart; giving oral medications; distributing or collecting meal trays; removing and replacing bed linen for patient bed; placing non-invasive

### DOMESTIC GLOVES/HEAVY DUTY GLOVES

Should be used only for domestic /portering duties or in the event of a large blood or body fluid spillage
Appendix 4 : Standard Precautions Poster

STANDARD PRECAUTIONS

To be used for all service users all of the time

- Hand hygiene
- Use of personal protective equipment for blood and body fluid exposures
- Safe management of clinical waste
- Environmental hygiene
- Decontamination of medical devices
- Safer sharps practice
- Respiratory Etiquette
- Management of soiled linen
- Management of blood and body fluid spillages

FOR MORE IN DEPTH INFORMATION SEE INFECTION CONTROL MANUAL
A3: Transmission-based Precautions

Introduction

The aim of transmission based precautions is to confine organisms and prevent cross infection. All Health Care Workers (HCW's) should use standard infection control precautions for all service users regardless of whether or not they are suspected or are known to have an infection.

Transmission based precautions should be used in conjunction with standard infection control precautions

In order to be able to implement transmission based precautions the healthcare worker must have an understanding of the way that infections are spread:

- **Contact** – organisms can be transmitted directly to susceptible people via contaminated equipment or by the hands of healthcare workers. It is therefore essential that hands are decontaminated before and after each episode of direct patient care, and that equipment is kept clean and dry and is decontaminated between each use.

- **Droplet**-infections such as influenza are spread by direct contact with respiratory secretions generated during coughing and sneezing

- **Airborne** – organisms can be transmitted in dust or skin scales carried by the air during via respiratory droplets

- **Food Borne** – food poisoning occurs when contaminated foods are ingested

- **Blood Borne** – blood or blood stained material is potentially hazardous and infection is transmitted via inoculation accidents, existing breaks in the skin, gross contamination of mucous membranes, sexual activity or across the placenta from mother to baby.

- **Vector Borne** – disease via biting insects is currently not a major problem in the UK, however insects such as cockroaches can carry pathogenic organisms on their bodies and in their digestive tracts. This may infect the hospital environment, including food and sterile supplies; therefore storage of supplies in a clean well-ventilated area is essential

The most common precautions after standard precautions that we would anticipate seeing in C+I would be Contact Precautions for a gastrointestinal outbreak.

Transmission based Precautions

In addition to standard precautions, additional transmission based precautions may be warranted in certain situations as described below (CDC, 2011). Transmission-Based Precautions are intended to supplement Standard Precautions in service users with known or suspected colonization or infection of highly transmissible or epidemiologically important
pathogens. These additional precautions are used when the route of transmission is not completely interrupted using Standard Precautions.

1. Contact Precautions (see appendix 3)

These precautions are designed for the type of infection that may be transmitted by direct contact with patients (e.g. by touching their skin, lesions or nasal secretions or dealing with infected body fluids, such as diarrhoea).

Some microorganisms may also be able to survive in the immediate environment and be transferred by indirect contact. This may be the more significant route where mode of transfer includes other people, such as via the hands of HCW’s, inanimate objects such as equipment and surfaces, water and food. Examples include Scabies, impetigo, *Clostridium difficile*, herpes simplex and MRSA (meticillin resistant *Staphylococcus aureus*). 

Contact Precautions also apply where the presence of excessive wound drainage, faecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission. (CDC, 2007)

Contact precautions involve the wearing of personal protective equipment and good hand hygiene (See Standard Infection Control Precautions).

Use of side rooms

Service users on contact precautions for organisms such as norovirus should be placed in a side room. (APIC, 2013). In the event of an outbreak, there may not be enough side rooms for every affected service user and it may be required to cohort more than one affected person into multi-bedrooms. Infection Control will provide help and support with this process. See also appendix 2 for a single room priority matrix.

Staff should:
- Provide affected service users and visitors with an explanation of their infection, isolation procedures and treatment.
- Ensure that rooms, bays and areas used for isolation purposes have dedicated hand hygiene and toileting and treatment facilities.
- Clear signage must be displayed on the door or wall to alert staff and visitors to infection control precautions and ensure that doors are kept closed at all times.
- Ensure that doors are kept closed at all times. If the door is to be kept open a risk assessment must be undertaken and documented.

Procedures relating to Contact Precautions

Please note that exact placement of personal protective equipment and plastic bags requires risk.

- Equipment Required

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Personal Protective Equipment; e.g. gloves aprons</td>
<td>i-iv) These essential items are necessary for immediate implementation prior to entering the room of someone on contact precautions</td>
</tr>
<tr>
<td>ii) Appropriate waste bags- clinical and domestic waste</td>
<td></td>
</tr>
<tr>
<td>iii) Alcohol based handrub, sanitizing wipes and sufficient supplies of hand washing supplies – paper towels, soap</td>
<td></td>
</tr>
<tr>
<td>iv) Red linen bags for contaminated linen and clear linen bags</td>
<td></td>
</tr>
</tbody>
</table>
2. Airborne Precautions (see appendix 5)

These precautions are designed to prevent the spread of infections transmitted by the inhalation of microorganisms in droplet nuclei. These minute particles are expelled from the respiratory tract and may remain suspended in air for some time. Aerosols can also be generated when procedures such as suctioning, sputum induction or endoscopy are being undertaken. Examples of such infections include tuberculosis, varicella zoster virus (chickenpox), and measles.

Physical separation from other patients is indicated where an infection is transmitted by airborne particles. Airborne particles remain suspended for much longer and can travel much further distances to be inhaled or contaminate exposed tissues and mucous membranes.

Negative pressure ventilation is required for conditions transmitted via airborne route for example: smear positive (open) pulmonary tuberculosis, Severe Acute Respiratory syndrome (SARS) and Avian Influenza.

Currently this facility is not available for service users in C+I and arrangements will be made to transfer to an Acute Trust, through Clinician to Clinician referral, with support of ICT.

Procedures relating to Airborne Precautions

- Equipment Required

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Appropriately fit tested particle filter respirator mask (FFP3)</td>
<td>i) This type of PPE is essential to protect the healthcare worker when looking after someone on airborne precautions</td>
</tr>
</tbody>
</table>

See the Royal Marsden Online Manual on the intranet for more details of the use of masks

3. Droplet Precautions (see appendix 4)

This type of infection is transmitted by contact with respiratory secretions, including particles produced during coughing and sneezing. These particles do not travel far or remain airborne. (CDC, 2007). Studies have shown that the nasal mucosa, conjunctivae and less frequently the mouth, are susceptible portals of entry for respiratory viruses (Hall et al, 1981).

Many of these infections are also spread by direct contact with infective material. Examples include mumps, pertussis (whooping cough) and influenza. Although, unlike droplet nuclei, these will not travel a great distance or remain airborne for prolonged periods, a single room is recommended to minimise the risk of transmission to other patients likely to be in close proximity in an open ward.

It is also recommended that only staff that are known to be immune to these infections (if immunity can be safely acquired) should care for these patients.

As well as a side room, staff must wear a surgical (droplet) mask when looking after patients with a suspected or actual droplet infection.

Service users, their visitors, families and their decision makers should be educated about the precautions being used, the duration of precautions, as well as the prevention of transmission of disease to others with a particular focus on hand hygiene and respiratory etiquette (see appendix 6) (PHAC, 2012)
See the Royal Marsden Online Manual on the intranet for more details of the use of masks

**Procedures relating to Droplet Precautions**

- **Equipment Required**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Surgical (droplet mask) with ear loops</td>
<td>i) This type of PPE is essential to protect the healthcare worker when</td>
</tr>
<tr>
<td></td>
<td>looking after someone on airborne precautions</td>
</tr>
</tbody>
</table>

**Components of transmission based precautions**

**3.1 Isolation**

The decision to isolate a service user should be based on the infection risk, symptoms and risk of transmission. The utilisation of side wards/isolation rooms should be considered with Appendix 1, and 2, to assist in determining order of prioritisation. The Infection, prevention and control team (ICT) should be consulted for any advice.

Whenever isolation of a service user is considered, the advantages and disadvantages must be weighed up in relation to the associated psychological effects on the service user.

The most effective form of isolation is a single room, whenever a situation arises where there are not enough single rooms available for the isolation of service users, and then appendix 2 should be used to carry out a risk assessment, to support decision making. The bed manager should be contacted and advice taken from the ICT.

Regular assessment and evaluation of the continued need for isolation should be taken in conjunction with the ICT.

**3.2 Hand hygiene**

Hand hygiene forms an important part of preventing the spread of healthcare-associated infections (WHO, 2009) and is part of standard precautions.

Hand hygiene should be performed before and after looking after a patient in a side room on precautions. In most instances use of alcohol based hand rub will be adequate on visibly clean hands and alcohol based hand rub should be readily available. If you are looking after a service user with *C difficile* diarrhoea in a non-outbreak setting alcohol based hand rub is not sufficient, staff must wash hands with soap and water.

In an actual or potential outbreak situation either caused by *Cdificile* or norovirus hand washing with soap and water is mandatory.

Visitors and service users should have good hand hygiene explained to them and be encouraged to perform hand hygiene.

Refer to Hand Hygiene policy for more information
3.3 Personal Protective Equipment (PPE)

PPE is used in addition to normal work clothing (uniforms or own clothing) to protect both the patient and HCW from the potential risks of cross infection. Items of PPE include gloves, gowns and aprons, masks and eye protection and should be worn, when appropriate, as part of standard infection control precautions.

Specific items of PPE will be recommended for use when attending patients with particular infections, for example infectious pulmonary tuberculosis. See Appendix for details.

The level and type of PPE required will also be dictated by the mode of transmission of the organism, as indicated above. In the interests of patient confidentiality, it is not necessary for non-clinical staff to be informed of the reason for the patient’s isolation.

Visitors unless they are participating in the care of the service user do not have to wear PPE(DH,2007)

Please refer to the Royal Marsden Online Manual on the intranet for more information

3.4 Clinical waste

All waste generated from an infectious patient should be treated as clinical waste and placed into clinical waste bags.

Sharps should be disposed of into a sharps container as per trust policy and a portable sharps container should be taken to each side room when required to enable point of use disposal.

All linen generated from side rooms used for isolating infectious patients should be handled as “infected linen” and placed inside a red soluble alginate bag, and then inside a red laundry bag. Used linen should not be stored in linen bags inside the room. Staff handling such linen must wear gloves and aprons which must be disposed of immediately after use as clinical waste inside the room followed by immediate hand hygiene.

Refer to Waste Management policy

3.5 Cleaning

Rooms where patients are on precautions should be cleaned according to agreed schedules paying particular attention to horizontal surfaces, en suite facilities, the floor and any items potentially frequently handled by the patient such as doorknobs and switches. Infection control will consult with the domestic services provider and ward staff with regard to disinfection. This should be carried out with a solution of 0.1% sodium hypochlorite (1000 ppm available chlorine) (HPA, 2012)

The extent of the daily cleaning of side rooms will be as laid out in local cleaning schedules. Domestic staff should wear the PPE required for the infectious condition when cleaning the room and remove it and perform hand hygiene before leaving.

Terminal cleaning of the room after service user discharge must occur before the next person is admitted to the room.(DH,2004) All items in the side room need to be cleaned or disposed of as appropriate. The bed needs to be stripped and the mattress cleaned prior to the domestics commencing their clean. The bed should be made and the room set up for the next person once the cleaners have finished. The room will be ready for occupation when any solutions used for surface cleaning/disinfection have dried.

Refer to the Decontamination policy
3.6 Spillages

Refer to the Spillage Policy.

3.7 Linen

Refer to the Linen Policy.

3.8 Equipment

Equipment used to deliver care to service users can act as a vehicle by which microorganisms are transferred and may result in infection. (Pratt et al, 2007).

Where possible, equipment should be single patient use. Multiple patient use equipment must be decontaminated in accordance with local policy and the manufacturer's instructions. (DH, 2007)

In most situations routine decontamination procedures are sufficient to prevent cross-infection on equipment used by service users on transmission based precautions. Items that do not become contaminated with infectious material do not require special cleaning and it is not usually necessary to discard unopened or unused disposable items in the room after the patient has been taken out of isolation or discharged, unless it is items such as tissues/wipes which are single patient use only.

Excreta from all service users should be treated as potentially infectious and be disposed of in the same way and as soon as possible. Bedpans must be covered with an appropriate cover. Gloves and a plastic apron must be worn and the bedpan disposed of directly into the bedpan washer or macerator. The PPE can then be removed and disposed of as clinical waste in a clinical waste bag and hands washed.

Commodes, bedpan carriers, urine measuring jugs etc. must be cleaned after use. This is equally important if these items are reused on the same patient or if they being shared between more than one patient. If an isolated patient has a suspected or proven enteric infection they should have equipment dedicated for their sole use.

3.9 Service User transfer and movement

Transfer and movement of patients should be kept to a minimum to reduce the risk of infection transmission and should only be undertaken for clinical reasons. Cover or contain potentially infectious body fluids before transport. (APIC, 2013)

If a transfer is necessary, the receiving area must be informed prior to transfer so that effective infection control measures can be put into place. Ideally they should be seen at the end of the list or at the end of the session, if possible.

Support staff such as porters who are involved with the transport of the service user are unlikely to come into contact with infectious material and it is therefore not necessary to wear PPE.

The equipment used to transfer the patient, e.g. a trolley, should be decontaminated after use in accordance with local policy. Sufficient time should be allowed for the terminal clean of the vacated area and environment before it is reused. (DH, 2007)
3.10 Visitors

The number of visitors should be kept to a minimum, especially children. Visitors should report to the person in charge prior to entering the isolation room. If they are in any way unwell, they must inform the person in charge. Staff must instruct visitors on hand washing procedure and appropriate protective clothing.

3.11 Staff Immunity

Non-immune staff should not care for patients who are known to have Chicken Pox/Shingles, Measles, Mumps, Tuberculosis, Diphtheria, Poliomyelitis and Rubella. Further information and advice is available from the Occupational Health Department.

Termination of transmission-based precautions

The need for transmission-based precautions should be discussed regularly with the Infection control team. Once the service user is no longer infected/or has been transferred/discharged, a terminal clean is required for the side room or bay

Procedure for Terminal Cleaning of Rooms/Cohort Bay

This guidance should be followed upon the discharge, transfer or death of a patient with an infection requiring terminal clean. Strict hand hygiene is essential after completing the tasks below.

<table>
<thead>
<tr>
<th>Nursing Role</th>
<th>Domestic Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Put on clean plastic apron and gloves</td>
<td>• Put on a clean plastic apron and gloves</td>
</tr>
<tr>
<td>• Remove all patients property and contents of locker and dispose of appropriately</td>
<td>• Remove room curtains and place in red plastic bag, and then place in red laundry bag</td>
</tr>
<tr>
<td>• Remove bed linen and place into a red plastic bag and then into a red laundry bag</td>
<td>• Ensure nursing duties have been carried out prior to cleaning, if not inform supervisor or nurse in charge</td>
</tr>
<tr>
<td>• Dispose of single use masks and oxygen/suction tubing/suction lining.</td>
<td>• Make up a solution of (Actichlor Plus) and wash all surfaces moving from high to low, and clean to dirty using disposable cloths and rinse regularly between surfaces</td>
</tr>
<tr>
<td>• Wash down oxygen and suction units with detergent and water and dry thoroughly</td>
<td>• Make sure all light fittings are clean</td>
</tr>
<tr>
<td>• Wipe down all medical equipment e.g. commode, using Actichlor plus, remove and store appropriately</td>
<td>• Walls only need to be washed if visibly marked</td>
</tr>
<tr>
<td>• Check mattress and pillows to ensure that impervious covers are intact and able to be cleaned with Actichlor plus Pressure relieving mattresses clean as above and arrange for return to company if rented</td>
<td>• Ensure all surfaces are completely cleaned and dried</td>
</tr>
<tr>
<td>• Arrange for domestic services to clean the room</td>
<td>• Wash floor thoroughly, removing cleaned furniture to access all the room</td>
</tr>
<tr>
<td>• The above tasks must be completed prior to domestic services commencing cleaning</td>
<td>• Remove gloves and aprons and dispose of appropriately and wash hands</td>
</tr>
<tr>
<td>• After completion of all cleaning nurse in charge is to inspect</td>
<td>• Inform nursing staff that room has been cleaned and is ready for inspection</td>
</tr>
<tr>
<td>• Wash Hands</td>
<td>• Waste in a yellow bag and dispose of in sluice bin</td>
</tr>
</tbody>
</table>

Nurse in charge to inform Infection Control Team of service user transfer or discharge
# Appendix 1

## TRANSMISSION-BASED PRECAUTIONS (TBP) FOR COMMUNICABLE INFECTIONS

Please inform the Infection Control Team if a service user requires TBP

<table>
<thead>
<tr>
<th>Disease/condition/syndrome or causative organism</th>
<th>Type of precautions</th>
<th>Patient Placement (AB=any bed, SR=Side Room, NP=Negative Pressure)</th>
<th>Additional information on duration and requirements of precaution</th>
<th>Additional remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abscess Draining, major</td>
<td>Contact</td>
<td>AB</td>
<td>48 hours following antibiotics (depending on the organism) or until drainage stops or can be contained within a dressing</td>
<td></td>
</tr>
<tr>
<td>Adenovirus</td>
<td>Contact/Droplet</td>
<td>SR</td>
<td>Requirements of precautions may be extended due to prolonged shedding of virus, generally until 48 hours following cessation of symptoms</td>
<td></td>
</tr>
<tr>
<td>Anthrax</td>
<td>Contact</td>
<td>AB</td>
<td>Risk mainly from body fluids.</td>
<td></td>
</tr>
<tr>
<td>Bronchiolitis</td>
<td>Contact/Droplet</td>
<td>SR</td>
<td>Infectious agents causing this condition will vary Includes Adenovirus, Parainfluenza and Influenza Precautions usually 5-8 days</td>
<td></td>
</tr>
<tr>
<td>Clostridium difficile</td>
<td>Contact</td>
<td>SR</td>
<td>Precautions remain until patient is 48 hours symptom free Infection can incubate for up to 12 weeks following antibiotic therapy</td>
<td>If possible discontinue the offending antibiotic therapy Specimens are not required for clearance however 25% of cases suffer recurrence of symptoms</td>
</tr>
<tr>
<td>Diarrhoea with a suspected infectious cause</td>
<td>Contact</td>
<td>SR until 48 hours after diarrhoea subsides.</td>
<td>Varies depending on the organism seek local guidance from Infection Control</td>
<td></td>
</tr>
<tr>
<td>Diphtheria –Cutaneous</td>
<td>Contact</td>
<td>SR</td>
<td>Until 2 negative cultures taken 24 hours</td>
<td>Notifiable disease</td>
</tr>
<tr>
<td>Disease</td>
<td>Route(s)</td>
<td>Contact Precaution (CP)</td>
<td>Duration</td>
<td>Notifiable Disease</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------</td>
<td>-------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Diphtheria – Pharyngeal toxigenic strains (Corynebacterium diphtheriae)</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Until negative Patient considered negative when two cultures (Nasal Pharyngeal Aspirate) are taken 24 hours apart</td>
<td></td>
</tr>
<tr>
<td>Epiglottitis due to (Haemophilus influenzae type b)</td>
<td>Droplet/Contact</td>
<td>AB</td>
<td>Until 24 hours into the course of corrective antibiotic therapy</td>
<td></td>
</tr>
<tr>
<td>Hepatitis, viral Type A&amp;E</td>
<td>Contact</td>
<td>SR</td>
<td>For duration of hospital stay – Hep A For duration of hospital illness – Hep E Specifically for incontinent adults</td>
<td></td>
</tr>
<tr>
<td>Human metapneumovirus</td>
<td>Contact</td>
<td>SR</td>
<td>See also section on RSV</td>
<td></td>
</tr>
<tr>
<td>Impetigo</td>
<td>Contact</td>
<td>SR 48 hours following corrective antibiotic therapy</td>
<td>Until 48 hours following corrective antibiotic therapy</td>
<td></td>
</tr>
<tr>
<td>Influenza (seasonal)</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>5 days except in immunocompromised persons</td>
<td>Use of vaccine or antiviral drugs may be considered Avoid placing infected individuals with immunocompromised service users</td>
</tr>
<tr>
<td>Lice</td>
<td>Contact</td>
<td>SR</td>
<td>1. Infectious until completion of treatment and/or removal of live lice/eggs 2. Infectious until 24 hours following treatment with an effective insecticide 3. Infectious until completion of treatment and/or removal of live lice/eggs</td>
<td></td>
</tr>
<tr>
<td>Measles (rubeola)</td>
<td>Airborne</td>
<td>SR</td>
<td>Precautions remain until 4 days after onset of rash. For immunocompromised individuals this is increased for the duration of illness</td>
<td>Notifiable disease Susceptible health/social care workers should not enter the room if immune care givers are available Exposed susceptible care givers may require post exposure vaccine</td>
</tr>
<tr>
<td>Disease</td>
<td>Mode of Transmission</td>
<td>Precaution</td>
<td>Duration of Precautions/Post Exposures</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------------</td>
<td>------------</td>
<td>----------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Meningitis – meningococcal Neisseria meningitidis</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Until 24 hours into the course of corrective antibiotic therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Until 24 hours into the course of corrective antibiotic therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Notifiable disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Post exposure chemoprophylaxis based on local risk assessments for exposed HCW as per Infection Control Team advice</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Household contacts are given prophylactic antibiotics to eliminate carriage and prevent clinical illness</td>
<td></td>
</tr>
<tr>
<td>Meningitis (other causes)</td>
<td>Contact</td>
<td>AB.</td>
<td>Isolation not required for Haemophilis, pneumococcal, Strep Group B, Listeria or E coli</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Precaution duration depends on the causative organism Enterovirus most common cause and symptoms generally do not exceed 10 days. However aetiology can be due to a variety of viruses and bacteria Airborne precautions may be required in cases of suspected/known Mycobacterium tuberculosis presenting with Meningitis</td>
<td></td>
</tr>
<tr>
<td>Monkeypox</td>
<td>Contact/Airborne</td>
<td>SR</td>
<td>Duration of precautions can vary always seek advice from Infection Control</td>
<td></td>
</tr>
<tr>
<td>Mumps (infectious parotitis)</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Until approximately 9 days following appearance of symptoms in hospital. Some evidence that this can be reduced to 5 days in community settings for previously healthy individuals</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Notifiable Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non immune HCW should not provide direct care</td>
<td></td>
</tr>
<tr>
<td>Multidrug-resistant Organisms infection or colonisation (e.g. MRSA, ESBLs)</td>
<td>Standard/Contact-seek advice from ICN</td>
<td>SR unless ICT recommend otherwise.</td>
<td>MDROs will be judged by local or national recommendations depending on the clinical and epidemiological significance.</td>
<td></td>
</tr>
<tr>
<td>Mycobacterium tuberculosis</td>
<td>Airborne</td>
<td>NP</td>
<td>Discontinue precautions only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Notifiable disease</td>
<td></td>
</tr>
<tr>
<td>Disease and Pathogen</td>
<td>Isolation Type</td>
<td>Precautions</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Pulmonary or laryngeal disease – confirmed</td>
<td></td>
<td></td>
<td>when patient is on effective therapy, condition is improving and has 3 negative sputum smears for acid fast bacilli (AFB) collected on 3 consecutive days.</td>
<td></td>
</tr>
<tr>
<td>Mycobacterium tuberculosis (Pulmonary or laryngeal disease – suspected)</td>
<td>Airborne</td>
<td>NP</td>
<td>Discontinue precautions only when the likelihood of infectious TB is deemed negligible (usually after 2 weeks of treatment) and either there is an alternative diagnosis or the 3 sputum smears are negative for AFB. Specimen should be collected 8-24 hours apart at one should be early morning.</td>
<td></td>
</tr>
<tr>
<td>Mycoplasma – atypical pneumonia</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Precautions remain for duration of hospital stay or when symptoms resolve. Patients can be infectious for up to 13 weeks.</td>
<td></td>
</tr>
<tr>
<td>Norovirus</td>
<td>Contact</td>
<td>SR</td>
<td>Service users are infectious until 48 hours following last episode of diarrhoea and/or vomiting.</td>
<td></td>
</tr>
<tr>
<td>Parainfluenza virus infection</td>
<td>Contact/ droplet</td>
<td>SR</td>
<td>Precautions remain for duration of active disease usually 5 days following onset of symptoms, however this can vary depending on the organism.</td>
<td></td>
</tr>
<tr>
<td>Parvovirus B19 – slapped cheek syndrome (Erythema infectiosum – Erythrovirus B19)</td>
<td>Droplet</td>
<td>AB</td>
<td>Non-infectious when the rash appears. If the patient has a chronic disease or is immunocompromised maintain precautions for the duration of illness or whilst patient is. Advice should be sought from an Infection Control/Disease/ Public Health Physician or Consultant Microbiologist when this disease is identified or suspected in pregnancy.</td>
<td></td>
</tr>
</tbody>
</table>
hospitalised
A common childhood infection lasting 2-3 days followed by the rash on the cheeks. In adults can be associated with athralgia

<table>
<thead>
<tr>
<th>Disease</th>
<th>Transmission</th>
<th>Isolation</th>
<th>Duration</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plague - <em>Yersinia pestis</em></td>
<td>Droplet/Contact</td>
<td>SR for 48 hours</td>
<td>Until 48 hours of the course of antibiotic therapy have been completed</td>
<td>Notifiable disease</td>
</tr>
<tr>
<td>Pneumonia - Adenovirus</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Ensure applied for duration of illness</td>
<td>Outbreaks reported in paediatric settings</td>
</tr>
<tr>
<td>Rubella (German Measles)</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Until 7 days after onset of rash</td>
<td>Notifiable disease Susceptible HCW should not provide direct clinical care</td>
</tr>
<tr>
<td>Respiratory syncytial virus (RSV)</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Duration of symptoms (whilst in acute care setting specifically) Particularly affects young children, infants and immunosuppressed patients. Highly transmissible in paediatrics</td>
<td></td>
</tr>
<tr>
<td>Rotavirus</td>
<td>Contact/Droplet</td>
<td>SR</td>
<td>Until 48 hours symptom free. A negative sample is not usually required. Precautions may increase depending on individual situations</td>
<td>Prolonged shedding may occur in Immunodeficient or immunocompromised children</td>
</tr>
<tr>
<td>Scabies</td>
<td>Contact</td>
<td>SR</td>
<td>Service user infectious until completion of the first insecticide application</td>
<td>Consider close/household contacts</td>
</tr>
<tr>
<td>Severe acute respiratory syndrome (SARSCoV)</td>
<td>Droplet/Airborne/Contact</td>
<td>NP</td>
<td>Duration of illness and 10 days following resolution of pyrexia providing no respiratory symptoms</td>
<td>Not currently notifiable but ALWAYS Notify Infection Control/Public Health</td>
</tr>
<tr>
<td>Shingles</td>
<td>Standard/Contact</td>
<td>AB</td>
<td>Until lesions crusted over</td>
<td>Consider a side room if rash is difficult to cover or on the face</td>
</tr>
<tr>
<td>Smallpox</td>
<td>Contact/Airborne</td>
<td>NP</td>
<td>Continue</td>
<td>Notifiable disease</td>
</tr>
<tr>
<td>Disease/Condition</td>
<td>Isolation/Precaution</td>
<td>Level</td>
<td>Duration/Notes</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Staphylococcal disease (skin, wound, burn – major)</td>
<td>Contact</td>
<td>AB</td>
<td>Precautions until all scabs have crusted and separated (3-4 weeks) Currently eradicated Non immune healthcare workers should not provide care</td>
<td></td>
</tr>
<tr>
<td>Streptococcus disease Group A (<em>Streptococcus pyogenes</em>)</td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Until 24 hours of the course of corrective antibiotic therapy or if present in a wound if this is occluded/contained Contact precautions particularly important if lesions present Erysipelas, Scarlet fever &amp; Puerperal fever are notifiable diseases</td>
<td></td>
</tr>
<tr>
<td>Varicella Zoster (Chickenpox)</td>
<td>Airborne/Contact</td>
<td>SR</td>
<td>Until all lesions are dry and crusted In immunocompromised individuals with varicella pneumonia prolonged precautions may be required</td>
<td>Susceptible health/social care workers (e.g. those who are pregnant or immunocompromised) should not enter the room if immune care givers are available</td>
</tr>
<tr>
<td>Whooping cough – <em>Bordetella pertussis</em></td>
<td>Droplet/Contact</td>
<td>SR</td>
<td>Until 5 days of the commencement of antibiotic therapy If untreated patient infectious for up to 3 weeks</td>
<td>Notifiable disease Post exposure prophylaxis for household contacts and in rare circumstances may be indicated for HCWs following prolonged exposure to respiratory secretions</td>
</tr>
<tr>
<td>Viral Haemorrhagic Fevers e.g. Lassa, Ebola, Marburg, Crimean-Congo fever virus</td>
<td>Airborne/Contact</td>
<td>NP</td>
<td>Duration of illness. Person highly infectious in the final stages of illness</td>
<td>Notifiable Disease ALWAYS seek specialist infection control advice if suspected</td>
</tr>
</tbody>
</table>
## Appendix 2: Priority matrix for side room occupancy

The following patients must be isolated in order of priority

<table>
<thead>
<tr>
<th>Priority</th>
<th>Disease/organism</th>
<th>Precautions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Known or suspected pulmonary tuberculosis</td>
<td>Airborne</td>
<td>Patients with pulmonary TB can be taken off precautions when TB is excluded or after two signs of response to two weeks of treatment SEE TB POLICY</td>
</tr>
<tr>
<td>2.</td>
<td>Viral Haemorrhagic Fever (e.g. Ebola) Suspected/confirmed SARS, Avian Influenza,</td>
<td>Airborne and contact</td>
<td>These patients must always be isolated in a side room</td>
</tr>
</tbody>
</table>
| 3.       | Undiagnosed/ diarrhoea and vomiting | Contact | These patients can only move out of isolation if:  
- Diarrhoea/vomiting is not related to an infectious agent  
- In an outbreak situation following consultation with ICT, similarly affected patients may be cohort nursed in bay |
| 4.       | Symptomatic Clostridium difficile diarrhoea | Contact | Take off precautions when patient has had normal stool for 48 hours |
| 5.       | Varicella (chickenpox) | Airborne | Exclude non-immune staff |
| 6.       | Suspected meningitis | Droplet | |
| 7.       | MRSA colonisation/infection | Standard/Contact | SEE MRSA POLICY. Contact Infection Control for assistance |
| 8.       | Neutropenia/immunosuppression | Protective | |
Appendix 3: Contact Precautions guide

CONTACT PRECAUTIONS

In addition to Standard Infection Control Precautions

Clean your hands before and after contact with the service user using soap and water, alcohol sanitiser or sanitising wipes.

Restrict service user to their room as much as safety allows. This could include use of the toilet facilities as well.

Wear a disposable plastic apron when providing direct care to a service user. Remove without touching contaminated areas. Dispose of as clinical waste.

Wear a disposable gloves when providing direct care to a service user. Remove without touching contaminated areas. Dispose of as clinical waste.

FOR MORE IN DEPTH INFORMATION SEE INFECTION CONTROL MANUAL
Appendix 4: Droplet Precautions guide

DROPLET PRECAUTIONS

In addition to Standard Infection Control Precautions

Clean your hands before and after contact with the service user using soap and water, alcohol sanitiser or sanitising wipes

Wear a surgical (droplet mask). Ensure that there is a good seal. Remove without touching contaminated areas after exiting room, and clean your hands. Dispose of as clinical waste

Restrict service user to their room as much as safety allows with the door shut or curtain drawn. Consider asking them to wear a mask if appropriate

Perform risk assessment and wear other personal protective as required by standard precautions

FOR MORE IN DEPTH INFORMATION SEE INFECTION CONTROL MANUAL
AIRBORNE PRECAUTIONS

In addition to Standard Infection Control Precautions

Clean your hands before and after contact with the service user using soap and water, alcohol sanitiser or sanitising wipes.

Wear a fit tested FFP 3 respirator. Perform fit check. Remove without touching contaminated areas after exiting the room, and clean your hands. Dispose of as clinical waste.

Door of the room must remain closed. Room should have negative pressure ventilation.

Perform risk assessment and wear other personal protective as required by standard precautions.

FOR MORE IN DEPTH INFORMATION SEE INFECTION CONTROL MANUAL
Appendix 6: Respiratory Hygiene Guide

Cover your Cough
Stop the spread of germs that can make you and others sick!

Cover your mouth and nose with a tissue when you cough or sneeze. Put your used tissue in the waste basket.

You may be asked to put on a facemask to protect others.

If you don’t have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.

Wash hands often with soap and warm water for 20 seconds. If soap and water are not available, use an alcohol-based hand rub.

A4: Outbreak Management-Viral Gastroenteritis

1. Introduction

All suspected/identified cases of viral gastroenteritis such as norovirus should be reported to the Infection Control team (ICT). Monitoring of such by the ICT with epidemiological investigation will result in the initiation of two categories of management:

A. Single/sporadic cases (predominantly community-acquired)
B. Outbreak, indicated by a localised cluster of cases (usually nosocomial)

Single/Sporadic cases

Service users admitted from the community with symptoms suggestive of viral gastroenteritis or who develop diarrhoea/vomiting which is unrelated to their treatment should be reported to the ICT and have the following infection control measures implemented:

2. Definition of an outbreak

The definition of an outbreak depends not only on the number of people affected but also on the pathogenicity of the causative organism. See Appendix 2 for what to do in the event of a potential outbreak.

3. Outbreak Containment Measures

If an unexpected number of vomiting and/or diarrhoea cases are noticed amongst service users or staff, it is the responsibility of the nurse/manager in charge of that area to inform the Infection Control Team (ICT). The ICT will review all available information on the cases involved and, following discussion with the Director for Infection Prevention and Control (DIPC) and/or duty Infection Control Doctor, will advise if outbreak precautions are to be implemented.

See Appendix 1 for a full list of outbreak containment measures

4. Declaration of an outbreak

The Infection Control Nurse will assess the potential outbreak and after consultation with the Infection Control doctor and relevant managers will advise if the ward/unit should be closed to admissions.

Once closed, no service users should be admitted. The Infection Control Doctor to be contacted in case of any difficulty.

Immediate assessment

Once an outbreak is suspected the ICT team will take immediate steps to:
- investigate whether an outbreak is/has occurred
- establish an initial case definition
- assess severity
- initiate initial control measures
- decide on further action
Further action

If an outbreak has occurred the ICT team will:

- assess the severity and manage the situation itself
- convene an Outbreak Control Group (OCG)

5. Outbreak Control Group:

Outbreak Control Group (OCG) will consist of:

- Infection Control Doctor (ICD)
- Director of Infection Prevention and Control (DIPC)
- Consultant Communicable Disease Control (CCDC)
- The relevant Service Director or their representative
- Infection Control Specialist Nurse
- Consultant in charge of patients or representative of medical staff
- Locality manager or representative of nursing staff
- Occupational Health Service Physician or Representative
- Clinical Service Manager / Assistant Locality Director
- Press Officer
- Others to be invited dependent on outbreak circumstances:
  - Chief Environmental Health Officer
  - Catering Manager
  - Pharmaceutical Manager
  - Domestic Manager
  - Laundry Manager
  - Medical Director
  - Nursing Director

Functions of the OCG:

- To ensure the NE&C London Health Protection Team has been notified if necessary.
- To co-ordinate arrangements for the investigating the cause of the outbreak
- To co-ordinate all control measures.
- To take all steps to ensure adequate care of affected patients.
- To ensure adequate channels of communication are established. The Service Director is responsible for informing the Chief Executive of the Trust and for liaising with the Press Officer.
- To assess the requirement for external assistance and experience
- To ensure arrangements have been made to notify patients’ relatives.
- CCDC or Infection Control Doctor to make approved statements to the Press and Media.
- To meet daily and review progress.
- Evaluation of the outbreak and recommendations for the prevention of future outbreaks.
- The Service Director is responsible for identifying and making available adequate resources required to manage the situation.

Procedure at the meeting:

- The meeting is chaired by the Infection Control Doctor or, in his/her absence the CCDC.
- The Chairperson will direct and co-ordinate the management of the outbreak.
• The Chairperson will ensure that the proceedings of the meeting are accurately recorded.
• At the initial meeting the team decides on the requirement to co-opt other members.
• Tasks are assigned to each member of the team, progress review occurs at subsequent meetings. Date, time and place for next meeting is decided.

Release of information:
• At the initial meeting an interim report is prepared for the Director of Infection and Prevention who would brief the Chief Executive of the Trust.
• The appropriate Clinical Commissioning Groups should also be informed.
• This practice would continue at subsequent meetings.
• The CCDC would inform the Regional Epidemiologist and other relevant personnel.

Report to:
NE&C London Health Protection Team, Public Health England, 2nd Floor 151 Buckingham Palace Road, London SW1W 9SZ, Tel: 020 7811 7100 Fax: 020 7811 7756
The Trust Chief Executive is responsible for updates to the NE&C HPT.
On conclusion of the outbreak a final report is prepared for the NE&C HPU.

6. Movement of staff or service users

Visiting may need to be restricted. No movement of staff or service users from the outbreak ward is allowed until the outbreak is over, except for discharge home. Nursing staff (permanent, students and agency) should remain permanently attached to the ward if at all possible. Extra domestic cleaning support may be needed.

7. End of the outbreak

The Infection Control team in conjunction with the Infection Control doctor and Public Health England if required will advise on the end of the outbreak. Generally this will be 48 hours after the last symptomatic service user has ceased being symptomatic. This might be increased to 72 hours on the advice of the Infection Control Doctor.
**Appendix 1 - Outbreak Control Measures (text based on Health Protection Scotland guidelines)**

<table>
<thead>
<tr>
<th>Ward</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Close affected wards to admissions and transfers</td>
<td>• Keep bedroom doors closed as much as possible</td>
</tr>
<tr>
<td>• Place signage on doors informing all visitors of the closed status of ward and restricting visits to essential staff and social visitors</td>
<td>• Place service users within the ward for optimal safety</td>
</tr>
<tr>
<td>• Prepare for reopening by planning the earliest date for a terminal clean</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Workers (HCWs)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure all staff are aware of the norovirus situation and how norovirus is transmitted</td>
<td>• Take stool specimens as required by the ICT</td>
</tr>
<tr>
<td>• Ensure the use of contact precautions for affected service users</td>
<td>• Ensure all staff are aware of the work exclusion policy and the need to go off duty at first symptoms</td>
</tr>
<tr>
<td>• Allocate staff to duties in either affected or non-affected areas of the ward but not both unless unavoidable</td>
<td>• Allocate staff to duties in either affected or non-affected areas of the ward but not both unless unavoidable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service user/visitor information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide all affected service users and visitors with information on the outbreak and the control measures they should adopt</td>
<td>• Advise visitors of the personal risk and how they might reduce this risk</td>
</tr>
<tr>
<td>• Information is available from PHE:</td>
<td>Information is available from PHE:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continuous monitoring and communications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Maintain an up to date record of all service users and staff with symptoms</td>
<td>• Maintain a regular briefing to the organisational management, public health organisations and Communications</td>
</tr>
<tr>
<td>• Monitor all affected service users for signs of dehydration and correct as necessary</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Protective Equipment (PPE)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use gloves and apron to prevent personal contamination with faeces or vomitus</td>
<td>• Consider use of face protection with a mask only if there is a risk of droplets or aerosols</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hand hygiene</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use liquid soap and warm water as per WHO 5 moments</td>
<td>• Encourage and assist service users with hand hygiene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remove exposed foods, e.g. fruit bowls, and prohibit eating and drinking by staff within clinical areas</td>
<td>• Intensify cleaning ensuring affected areas are cleaned and disinfected. Toilets used by affected service users must be included</td>
</tr>
<tr>
<td>• Decontaminate frequently-touched surfaces with detergent and disinfectant containing 1000ppm available chlorine</td>
<td>• Decontaminate frequently-touched surfaces with detergent and disinfectant containing 1000ppm available chlorine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use single-patient use equipment wherever possible</td>
<td>• Decontaminate all other equipment immediately after use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linen</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Whilst clinical area is closed, discard linen from the closed area in a water soluble (alginate) bag and then a secondary bag</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spillages</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Wearing PPE, decontaminate all faecal and vomit spillages</td>
<td>• See spillage policy for more information</td>
</tr>
</tbody>
</table>
Appendix 2: What to do in event of two or more cases of vomiting and/or diarrhoea in your clinical area

Do you have two or more service users/staff with symptoms of diarrhoea and/or vomiting?

- No further action required
- YES

Commence line listing of service users and staff with symptoms—when they started and what symptoms they have

Assess service users and staff for any alternate diagnosis for diarrhoea and vomiting—laxatives, pre-existing bowel conditions

Contact Infection Control urgently for advice and support

- 020 3317 3487
- 078 10180774

(Mon-Fri Office Hours)

Out of hours and weekends contact

- Collect stool specimens for norovirus and send to the Microbiology Lab for your area
- Inform Senior Nurse, Site Manager, Matron on duty of the situation

Ward staff and Infection Control review situation

Infection Control in consultation with Microbiologist will assess situation and make plans for containment including potentially calling an outbreak
Appendix 3: Management of service users with D+V in day centres

Infection Control Decision Tool: Management of service users with diarrhoea and vomiting in day centres

- Service User reports symptoms of diarrhoea and/or vomiting
- Are they any other service users or staff with similar symptoms?
  - NO OTHER CASES
  - Does the service user have any other medical reasons why they may be experiencing these symptoms (history of bowel disease, on certain medications etc.)?
    - NO
      - If likely cause is infectious please exclude service user from day centre
    - YES
      - Review situation with service user/carers - service user may return to the centre forty-eight (48) hours after commencement of normal bowel motion (i.e. when they have been asymptomatic)
- Potential outbreak situation
  - Call Infection Control for support and advice on 020 33177383 or via UCH switchboard and ask for Prof Wilson on UCH bleep 356
- If symptoms may have a non-infectious reason and hygiene of service user is good, please consult Infection Control Nurse for risk assessment with regard to coming into centre
- Has the service user had symptoms of diarrhoea and vomiting on the premises?
  - YES
    - Contact cleaning company to clean areas like toilets which the service user may have used and then wipe over with sodium hypochlorite
  - NO

Please see the Infection Control Manual sections A4 and C12 for more information
Appendix 4: How to assess diarrhoea and vomiting

Has the service user got diarrhoea?
- Bristol Stool Chart Types 6-7 (increased frequency)

YES

Can diarrhoea be attributed to another cause?
- e.g. inflammatory bowel disease, overflow, laxatives, enteral feeding, service users’ normal bowel habit, new medication

YES

Clinical review
- Indicators including service users’ general condition, abdominal examination, bloods including WCC and CRP

NO

TAKE STOOL SPECIMEN
- Move to single room
- Place on contact precautions
- Medical review
- Contact Infection Control

Considered non-infective diarrhoea

Infective diarrhoea suspected

Review/Modify treatment
- e.g. antibiotics, laxatives, feeds etc.
- Maintain contact precautions for 24 hours and then review with Infection Control

*When assessing diarrhoea please use the Bristol stool Chart to assist your assessment:*
Vomiting

The presence of vomiting with or without diarrhoea should be regarded as a red flag symptom and its presence increases the likelihood that this may be a norovirus outbreak. Please record all episodes of vomiting on the line listing.
Appendix 5-Outbreak ward signage

Alert-All Staff and Visitors
There is an outbreak of diarrhoea and vomiting currently occurring on this unit

Outbreaks of the virus which causes diarrhoea and vomiting is normally referred to as Viral Gastroenteritis/Norovirus. Transmission occurs because a lot of virus is present in vomit and diarrhoea and this can easily contaminate hands and the nearby environment.

**ALL Visitors and Staff**

*Please make sure that you wash your hands with soap and water and/or use wipes, provided, before and after you visit the ward making sure to cover all areas of your hands*

![Handwashing instructions]

The most obvious symptoms of the virus are diarrhoea and vomiting but people may initially have a headache, nausea and/or stomach pains. The virus can last for between 12 and 48 hours.

**Visitors** should not come into the ward if they have symptoms of diarrhoea and/or vomiting until 48 hours after the symptoms have stopped. If you are unsure about any of your symptoms, you should contact your GP or phone NHS 1-1-1.

**If you have any questions please ask to speak to the Nurse in Charge**
## Appendix 6- Daily checklist for use in gastro-intestinal outbreaks (e.g. norovirus)

Unit…………………………………… Completed by……………………………………
Date……………………………………

<table>
<thead>
<tr>
<th>No.</th>
<th>Task</th>
<th>Y</th>
<th>N</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have you completed a daily line listing of service users, accurately tracking symptoms so that it can be provided to Infection Prevention and Control</td>
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<tr>
<td>2.</td>
<td>Have you completed a listing of affected staff/encouraged them to report to Occupational Health?</td>
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<td>3.</td>
<td>Is your unit displaying appropriate outbreak signage? (check with Infection Control)</td>
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<td>4.</td>
<td>Is the Senior Nurse aware that unit is closed to admissions? If any service user has to be transferred out for urgent medical reasons have you informed the receiving hospital that the service user is from an outbreak ward?</td>
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<td>5.</td>
<td>Are all therapy groups cancelled? Are Allied Health Professionals visiting the unit limited to essential personnel only?</td>
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<td>6.</td>
<td>Are nursing staff working on the unit restricted to the unit as much as possible?</td>
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<td>7.</td>
<td>Do you have sufficient supplies of personal protective equipment (PPE) available?-check gloves and aprons</td>
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<td>8.</td>
<td>Does your unit have a spillage kit and do staff know what to do in the event of a body fluid spillage?</td>
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<td>9.</td>
<td>Do you have sufficient quantities of paper towels and soap?</td>
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<tr>
<td>10.</td>
<td>Have you reminded all staff to clean their hands using soap and water?</td>
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<tr>
<td>11.</td>
<td>Do you have sufficient quantities of Universal Wipes available-do the staff know what to clean with them? (see Infection Control poster)</td>
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<tr>
<td>12.</td>
<td>Do you have sufficient supplies of linen available?</td>
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<tr>
<td>13.</td>
<td>Have appropriate measures been put in place to restrict symptomatic service users to toilets in their own rooms or to specific toilets?</td>
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<tr>
<td>14.</td>
<td>Encourage service users to clean</td>
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<td>their hands using soap and water or universal wipes especially prior to eating.</td>
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<td>15. Are the Domestic staff visible and cleaning the ward appropriately. Are the right products being used to clean the ward? (liaise with Infection Control)</td>
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<tr>
<td>16. Have you ensured that all shared foodstuffs have been removed for the duration of the outbreak?</td>
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</table>

This checklist should be used as a guide to recommended practices during an outbreak. Please contact Infection Control for further support.
**Appendix 7: OUTBREAK MONITORING FORMS – TO BE UPDATED DAILY**

<table>
<thead>
<tr>
<th>Ward / Unit</th>
<th>Key to symptoms</th>
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<tbody>
<tr>
<td></td>
<td><strong>D</strong> Diarrhoea</td>
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<td></td>
<td><strong>V</strong> Vomiting</td>
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<tr>
<td></td>
<td><strong>D&amp;V</strong> Diarrhoea and Vomiting</td>
</tr>
<tr>
<td>Phone No</td>
<td><strong>SP</strong> Specimen sent to lab</td>
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<tr>
<td>Ward / Unit Manager</td>
<td><strong>NS</strong> No symptoms</td>
</tr>
</tbody>
</table>

**SERVICE USER RECORD**

<table>
<thead>
<tr>
<th>No</th>
<th>Initials and DOB</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
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<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Specimens sent / Date</th>
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PLEASE COMPLETE SYMPTOMS AND FREQUENCY FOR EACH DAY

SEND STOOL SPECIMENS FOR VIROLOGY AND MICROBIOLOGY – RECORD DATE SPECIMEN SENT AND RESULTS
## Staff:

<table>
<thead>
<tr>
<th>No</th>
<th>Initials and Job Title</th>
<th>Date</th>
<th>Date</th>
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**Note:** It is not required to record staff symptoms/frequency once they are away from the workplace.
A5: Surveillance for Healthcare-Associated Infection (HAI) and Communicable Diseases

1. Aims

The main objectives of surveillance of healthcare-acquired infections are:
- Early detection of outbreaks
- Timely investigation and institution of control measures
- Assessment of infection rates with time

Surveillance is part of the routine infection control programme. It helps to identify risks of infection and reinforces the need for good practices. Preventing outbreaks depends on prompt recognition of one or more infections with alert organisms and instituting special control measures to reduce the risk of spread of the organism. Collection of accurate data allows comparison with other units and measurement of response to changes in practice (audit).

2. Methods of surveillance

2.1 Alert Conditions

Alert conditions are identified through clinical diagnosis, not laboratory tests, and therefore staff in clinical areas must inform the Infection Prevention and Control Team of any suspected occurrence of these conditions at the earliest opportunity. Alert conditions include:

- Chicken pox/shingles (Herpes zoster)
- Diphtheria
- Food poisoning
- Influenza
- Measles
- Meningitis
- Meningococcal septicaemia
- Mumps
- Ophthalmia neonatorum
- Other childhood rashes of unknown origin
- Poliomyelitis
- Pyrexia of unknown origin with history of foreign travel
- Parvovirus

2.2 Alert organisms

Positive microbiology reports are screened and may result in a case review, a search for other carriers or infected patients and ward visits by the Infection Control Nurses and include organisms such as MRSA and other antibiotic resistant organisms e.g. Extended Spectrum Betalactamases (ESBLs), Clostridium difficile, Streptococcus pyogenes, Norovirus and Respiratory Syncytial Virus (RSV).
A service user may be placed on transmission–based precautions or discharged from hospital if considered to be a risk of infection to others.

### 2.3 Notifiable Diseases

Some ‘alert’ conditions are ‘Notifiable diseases’. This is a legal term denoting diseases that must, by law, be reported to the ‘proper officer’ i.e. the Consultant for Communicable Disease Control (CCDC).

When an infection/infectious disease is suspected or diagnosed then the appropriate guidelines should be followed and your relevant Infection Control personnel informed.

Inform the local Health Protection Team:

**NE&C London Health Protection Team**

Public Health England,
2nd Floor, 151 Buckingham Palace Road,
London
SW1W 9SZ,
Tel: 020 7811 7100
Fax: 020 7811 7756 with reference to any suspected or diagnosed notifiable disease.


### 2.4 Targeted surveillance

Detailed targeted surveillance in specific areas will be performed. An example would be surgical wound infection surveillance. Results are fed back to appropriate groups/committees.
A6: Aseptic Technique

1.0 Introduction

Aseptic technique is the effort taken to keep the service user as free from microorganisms as possible when undertaking any clinical procedure. It is a method used to prevent contamination of wounds and other susceptible sites by organisms that could cause infection. A non-touch technique means that when handling sterile equipment, the part of the equipment being used that comes into direct or indirect contact with a key site is not touched or handled. A key site can be a wound, an access site for an intravenous device or a catheter.

2. Responsibilities

2.1 Staff Responsibilities

All staff must be competent to undertake this procedure and follow the policy.

2.2 Line Manager Responsibilities

Line/ward managers are to ensure that all staff carrying out procedure are competent and adhere to this policy.

3. Training

All staff must read and understand this policy prior to carrying out procedures that require using aseptic techniques. Training will be provided to services in line with practice. Infection control will undertake audit(s) to monitor compliance with the technique in line with the Health and Social Care Act (2008) Code of Practice.

4. Indications

Service Users have a right to be protected from preventable infection and nurses have a duty to safeguard the wellbeing of their patients.

An aseptic technique should be used during any invasive procedure that bypasses the body's natural defences, e.g. the skin and mucous membranes or when handling equipment such as intravenous cannula and urinary catheters. Whilst it is difficult to maintain sterility, it is important to prevent contamination of sterile equipment. Poor aseptic techniques can lead to contamination.

5. Using aseptic technique

When should an aseptic technique be used:

- When dressing wounds healing by primary intention, e.g. surgical wounds, burns, self-harm injuries
- When dressing wounds healing by secondary intention, e.g. pressure sores, leg ulcers, simple grazes, removing drains or sutures
- When inserting, re-siting or dressing an invasive device, e.g. intravenous line, urinary catheter, wound drain.

Only trained and assessed as competent staff should perform an aseptic technique. Note wound dressing should not be taken down for a ward rounds unless there is a clinical need.
to see the wound.

5.1 Aseptic Technique Principles

- Ensure that all equipment required is readily available and there is a clear field in which to carry out the procedure. If a dressing trolley is to be used, ensure it is cleaned prior to use.
- Explain the procedure to the service user, obtain verbal consent and position the service user so that the procedure can be performed easily.
- Decontaminate hands with soap and water. Staff involved in care/treatment must adhere to being bare below the elbow.
- Open the sterile pack carefully to prevent contamination of the contents. Packs should include a sterile disposal bag which, once the sterile field is opened, can be used to arrange the equipment, and then if necessary remove the dressing, by placing the nurse’s hand inside the bag and then inverting it. The bag is then attached to the working surface for disposal of waste.
- A non-touch technique is essential to ensure that hands do not contaminate the service user and can be achieved by using sterile gloves:
  - Wear single use disposable apron and single use disposable sterile gloves for the procedure to prevent the introduction of pathogenic bacteria to the site or direct contact with body fluids.
  - Use an aseptic non-touch technique to ensure that only sterile items come into contact with the susceptible site that sterile items do not come into contact with non-sterile objects and that key parts are not touched.
- Single use items must not be reused.
- On completion of procedure remove gloves then apron, dispose of all waste as per policy.
- Decontaminate hands and record the care in the notes.
- Store sterile equipment in clean, dry conditions, off the floor and away from potential damage.

For more information on aseptic technique consult the Royal Marsden Manual chapter on aseptic technique on the C&I intranet
A7: Immunisation of Service Users and Handling and Storage of Vaccines (Cold Chain)

1. Introduction

Immunisation/vaccinations are given as prescribed to Service Users. In particular influenza vaccinations are offered to all inpatients over 65 years who are not able to access this from their GP due to being in hospital, and also inpatient service users under 65 years who were considered to be at high risk, due to physical health problems. Further information on which immunisations to give can be found in the UK Immunisation schedule in the Green Book. (PHE, 2014)

They are also promoted for residents of long stay Specialist Services, Rehabilitation & High Support Units. Immunisation status should be recorded in Service Users records.

Both fluctuations in temperature, and total time outside the correct temperature range, can affect potency of vaccines and expiry date (Grassby, 1993). The correct handling, reconstitution and storage of vaccines prior to administration is essential (Department of Health, Green Book 2013).

Individuals giving vaccinations must have received training in the management of anaphylaxis, and must have immediate access to appropriate equipment.

Before any vaccine is given, consent must be obtained and suitability for immunisation must be established. (Green Book, 2013)

2. Consent

Prior to administration Vaccinators should ensure that:

• there are no contraindications to the vaccine(s) being given
• the service user being vaccinated is fully informed about the vaccine(s) to be given and understands the vaccination procedure

3. Transportation of Vaccines

Vaccines should be stored at between 2 - 8 degrees C, unless otherwise specified in the manufacturer’s product leaflet/packaging, which staff should check. Vaccines are transported from central depots or pharmacy departments to healthcare centres adhering to the ‘cold chain’ system. This is to ensure vaccines maintain their potency. To ensure this cold chain is continuous:

• The courier should hand the vaccines directly to the designated staff member.
• The vaccines should immediately be placed in the designated vaccine fridge and not left at room temperature.
• The courier should obtain the signature of the person to whom the vaccines are handed to at each clinic.

4. Cold Chain

Storage of Vaccines
Vaccines are sensitive to temperature. Some vaccines are damaged if they get too warm, others if they are frozen. In order to maintain their effectiveness vaccines have to be maintained within a specific temperature range (normal range 2-8°C), from the time of manufacture through distribution until they are administered. This is called the Cold Chain. It is essential to ensure that the Cold Chain is maintained at all times and that vaccines are stored in conditions specified by the manufacturer to prevent any deterioration in potency or effectiveness (DH 2006).

It is essential that vaccines are stored under the recommended storage guidelines to maintain their potency and effectiveness, therefore:

• All vaccine fridges should have a maximum and minimum thermometer in order to keep a regular check on the temperature within the fridge.
• A temperature check should be done daily and recorded by a designated person/s.
• If when recording the temperature, and the maximum or minimum temperatures are too high or too low, it should be reported immediately to the appropriate line manager, and the pharmacist contacted for further advice on usage of these vaccines. The Community Service Pharmacists will have detailed information about the stability of vaccines. They should be contacted by practitioners for advice, if storage temperatures fall outside this range, or if there is a problem with refrigerators.
• The vaccine fridge should be defrosted regularly and checked every six months. Please see the individual fridge manufacturer's instructions for defrosting the fridge.
• The vaccine fridge should only be used for storing vaccines.

5. Skin Preparation

If the skin is clean no further preparation is required-if the skin is dirty it should be washed with soap and water

6. Spillages and breakages

6.1 Sharps should be disposed of, safely, in a sharps bin.
6.2 Inactivated or toxoid vaccine spillages should be wiped up using a paper towel and general purpose detergent and disposed of as clinical waste.
6.3 For live vaccine spillages, the COSHH regulations decontamination procedure should be followed. COSHH safety data sheets are usually supplied with the product but can also be requested directly from the manufacturer. Spillages must be cleared up quickly and gloves should be worn. The spillage should be soaked up with paper towels, taking care to avoid skin puncture from glass or needles. Make up a solution of 1% hypochlorite and pour it on to the surface (Acticlor tablets diluted in 1 litre of water, in special container provided).

Additional information is available on the vaccine information leaflet or direct from the vaccine manufacturer.

7. Disposal of Vaccines

Follow the Trust procedure for disposal of pharmaceutical and clinical waste by immediately placing the items in the type of clearly labelled sharps bin authorised by the clinical waste contractor.
Once they are reconstituted, vials of these multi-use vaccines (e.g. BCG) must be discarded at the end of each immunization session or at the end of six hours, whichever comes first. (WHO,2014)

Pharmacy Department should be advised if “in date” stock that is in excess to requirements remains so that Pharmacy Department can re-distribute it.

8. Review and Audit

- Pharmacy staff will monitor vaccine prescriptions/supplies and the refrigerator temperature records (monthly).
1. Introduction

According to the Department of Health (2013) “… the infection prevention and control (IPC) team should be consulted throughout every stage of a capital project and their views taken into account…” (Health Building Note 00-09: Infection control in the built environment)

The Infection Control Team has issued the following checklist outlining basic infection control requirements. This is not an exhaustive list, as it must be recognised that all clinical building needs vary due to service users, location and procedures to be carried out. This guidance will be revised as new legislation is introduced.

The Infection Control Team must be involved in the first planning meetings of any building or renovation project

The Infection Control Team recommends that Health Building Note 00-09: Infection control in the built environment (DH, 2013) is followed for all new building and renovation projects.

The Infection Control Team will consider:

- How the product, equipment, rooms or clinic is used?
- What possible solutions are available?
- What infection control principles or external regulations apply?
- What does the evidence suggest in relation to the specific context?
- What are the laws governing the project?
- What are the standards and guidelines from architectural and engineering bodies, government departments and accrediting agencies?
- Which product or design best balances the infection control requirement with employee and patient safety and satisfaction, and cost constraints?

2. Decant of Facilities

If a facility is moved for the duration of works the area where services are re-provided must be sufficiently clean, maintain the privacy and dignity of the service user and be safe to deliver the care required. Deep cleaning should be undertaken prior to handover of area which has undergone building works and the area inspected for ‘snags’ prior to receipt and use for clinical activities

3. Building Work Risk Assessment

Prior to commencing a construction project a risk assessment should be completed to identify the risk measures required when construction is undertaken as per the DH (2013). (See appendix 1)

Help to reduce specific infection problems during construction
A planned contamination-control programme is essential when building work of any nature is planned. Early and sustained involvement of Infection Control in the planning process is essential and will lead to minimising of potential infection risks.

Building dust control measures may not be sufficient for the control of fungal spore release; therefore, the following should be considered:

- Use floor-to-ceiling barriers that completely enclose the work area.
- Seal windows in areas accommodating patients assessed as susceptible to minimise ingress of fungal spores generated by nearby building work.
- If vacuum cleaners are used, ensure they have high efficiency filters on exhausted air.
- Use a vacuum cleaner with a HEPA filter to clean areas daily or more often if necessary.
- Transport debris in sealed bags or containers with tightly fitting lids, or cover debris with a wet sheet.
- The removal of debris by chutes is liable to produce airborne fungal spores. The use and positioning of chutes should be carefully considered.
- Do not haul debris through patient-care areas but through an exit restricted to the construction crew.

4. Issues to consider when designing a healthcare facility

The following is intended as guidance only and Infection Control should be contacted for a complete assessment.

Design should aim to eliminate the reservoirs of infection:

- Keep lines simple and clean, without unnecessary ornamentation.
- Use finishes that are impervious and seamless, as far as practicable
- Run hard flooring up the walls for a short distance to provide an easy-to-clean coving.
- Minimise dead-legs and blind ends in water systems, but in the original design and as the systems are modified.
- Ensure good ventilation, with appropriate ventilation rates where specified.
- Consider "no-hands" operation of utilities (for example, sensor taps, automatic lights, movement sensors for toilet flushes etc).
- Consider enclosed blinds as an alternative to curtains at windows.
- Discourage pests such as rats, pigeons etc. by designing-out the places where they nest or feed.
- Design-in pest control such as fly screens etc. Encourage desired behaviour (for example, tidiness, hand hygiene)
- Provide sufficient space in all areas to allow for easy movement – including movement of equipment and supplies.
- Provide sufficient storage for each service user and for all supplies. Storage areas should be enclosed.
- Ensure proper segregation and management of waste, including clinical waste from linen.
- Provide enough hand hygiene stations – both wash-hand basins and alcohol-based handrub (ABHR) dispensers.
- Plan for and deliver good separation of clean and dirty activities.
- Provide sufficient space for storage and preparation of cleaning equipment and materials, both for cleaning staff and ad-hoc use by non-cleaning staff.
- Provide suitable facilities for local cleaning of equipment.
Common Pitfalls

There may be pressure to choose the cheapest products or design. Attention to whole-life costs, including the costs of cleaning, is important. Design that leaves the building exposed to unnecessary contamination, or which encourages poor practice, will cost more in the end. Clean to dirty workflows need to be incorporated to ensure that the staff can practice safely and risks are reduced.

5. Hand Hygiene

HBN 00-10 compliant clinical hand wash sinks must be provided in areas such as clinical rooms, laundry facilities and dirty utility rooms.

Alcohol-based hand rub (ABHR) MUST NOT be situated within bathrooms and kitchens and should be kept to areas where it can be supervised by staff. Staff are also encouraged to use body-worn ABHR or ‘tottles’ as much as possible. Hand hygiene facilities should be easily visible and accessible and should not be obscured by curtain rails, doors, equipment etc.

Hand wash facilities should be designed for purpose and conform to the full guidance i.e.

- No overflow
- No plug
- Made from non-scratch material such as porcelain
- Elbow operated or no touch sensor taps.
- Sink, large enough to allow adequate room for proper hand washing to take place and curved to avoid splashing
- Suitably sited, foot operated waste bins and wall mounted dispensers for approved hand hygiene products. Placement of hand hygiene products will be discussed with Infection Control
- Suitably sited wall mounted dispensers will be available for disposable paper towels in an approved presentation
- Have a sealed waterproof back splash to allow effective cleaning of all surfaces.

Non-clinical wash-hand basins

- All en-suite facilities should have a wash-hand basin
- All toilet facilities should have a hand wash basin
- Tap outlets that are not sited above the waste pipe outlet to avoid splashing of contamination from the waste pipe.
- Have a sealed waterproof back splash to allow effective cleaning of all surfaces

Wash-hand basins, baths, and WCs in service user-accessible areas should have concealed traps and pipework.(HBN 03-01)

6. Design and Cleaning

For certain microorganisms, including Clostridium difficile, cleaning plays a key role in managing outbreaks. Good design can make cleaning immeasurably easier:

- Use robust finishes that resist staining, but which are also easy to clean.
- Use hard flooring in all clinical area.
- Where items must be removed for cleaning (for example, curtains, radiator covers, ventilator grilles), make removal and replacement easy.
- Ensure that all storage areas can be easily emptied for cleaning (for example, use trolleys within storage bays or removable storage baskets within cupboards).
- Use wall-hung WCs/wash-hand basins etc to allow floors to be cleaned easily.
- Use bumper rails as necessary to prevent scuffing trolleys, beds etc.

**Domestic Cupboards**

Sufficient accommodation must be provided in the form of a separate room for cleaning equipment. The size and number required will depend on the activity and types of services provided within the area.

All cleaning cupboards should have space for a slop hopper for the disposal of dirty water, a sink system to clean cleaning equipment, hand wash sink, sufficient storage racks for colour coded segregation of cleaning equipment and storage facilities for replenishments. Vinyl flooring in domestic cupboards should have coving (between the floor and the wall 100mm) present.

The cupboard should be lockable if it contains COSHH chemicals.

**7. Service User Accommodation**

**Dormitory Accommodation**

Bed spacing has direct implications for the prevention of infections. Sufficient space for activities to be undertaken and prevent the spread of infections is required. Infection Control will advise on spacing and is influenced by the nature of the health care facility and the type of care e.g. SAMH and rehabilitation services. Bed groupings should contain the smallest number of beds.

En-suite toilet and shower facilities should be incorporated into the bed bay. This provides patients with facilities within their immediate environment and also enables the bay to be used for isolation purposes during outbreak situations.

**Single Rooms**

Where possible an increase in the proportion of single rooms is recommended with sufficient space for necessary equipment. Single rooms should have en-suite toilet and bathroom facilities.

**8. Dirty Utility Room**

It is essential that ancillary areas are of an acceptable standard and appropriate size for purpose. The exact requirements will depend on the use of the area, the types of services accessing the area and the activities that will be undertaken within the area. The dirty utility room should be sited in close proximity to where procedures are carried out and have sufficient space to identify the workflow from dirty to clean.

Separate receivers such as slop hoppers should be provided for contaminated wastewater or blood and body fluids. A deep sink for the contamination of equipment should be provided as well as a separate clinical wash-hand sink compliant to HBN 00-10 part C. Some areas may also require a macerator.
Space and facilities for holding and reprocessing equipment must be incorporated. Adequate storage facilities for equipment such as linen bag holders and urine testing equipment. Storage facilities for temporarily holding items for disposal must be included. Racking should be installed for disposable items such as bed pans and urinals. Infection Control suggests a wall-mounted cupboard and a work surface as minimum requirements for a dirty utility room.

9. Clinical Room

The clinical room should be of an adequate size for staff to work in comfortably and it is important to ensure that the room is designed to the appropriate infection control standards e.g. furnishings, fixtures and fittings must be impervious to water and adequate storage facilities provided. Flooring should be coved to the wall.

Any storage cupboard must have a sloped roof to prevent storage of items on top of the cupboard and to facilitate ease of cleaning. HBN 00-10 compliant hand washing facilities must be available.

If the clinical room is used for examinations or investigations; it should have an examination couch which is covered with an impervious washable covering and should have blue paper roll affixed to it which must be changed between service users.

Sharps bins should be wall-mounted near the point of care as possible and provision should be made to have both domestic and clinical waste bins.

10. Management of Linen

Linen cupboards should be large enough to ensure that the linen is not stored on open trolleys. Cupboards should be situated in a place that is accessible for clinical use as well as for clean deliveries. Shelves within cupboards should be impervious to water and cleanable. Sufficient storage facilities should be allowed for in use linen skips and bags awaiting disposal.

Used linen MUST NOT be stored within the same environment as clean linen or other clean products. Clear segregation of clean and dirty items must be maintained (NHS Estates HBN 4).

Where laundrettes are provided in hospitals for long-stay patients, there must be a dedicated area specifically for laundering and not used for any other purpose. There must be segregation of clean and dirty linen, industrial standard washing machines and dryers and hand wash facilities dedicated for hand hygiene purposes.

11. Kitchens and Beverage Areas

Service users are particularly vulnerable to food-borne infections. Therefore it is essential to ensure that high standards are maintained within all food preparation facilities. All equipment, fixtures and fittings, finishes and facilities within ward kitchens, pantries, therapeutic kitchens and beverage areas must comply with the Food Safety Act 1990. Dedicated hand wash facilities must be incorporated. The reprocessing of service user crockery and cutlery should be undertaken within a dishwasher.

12. Finishes

Flooring
Carpets are not to be used in clinical areas. Evidence indicates that carpets are contaminated with infectious micro-organisms and have been well associated with outbreaks (Skoutelis et al, 1994; Sarangi and Roswell 1995).

Hard floors that are impervious to water, sealed and non-slip must be incorporated into all other areas. Wood and tile floors must be avoided as they can be reservoirs for infection micro-organisms. Clinical room floors should be coved between the floor and the wall with about 100mm present.

Fixtures, fittings and hard surfaces should be easily accessible and easy to clean.

**Surfaces**
High level surfaces should be avoided. All soft furnishes such as chairs should be chosen with cleaning in mind. In all clinical areas, the designs should be smooth, non-porous and water resistant.

**Windows**
Blinds should be avoided in all clinical areas as they are difficult to clean and will not withstand disinfectants. Frosted glass is recommended.

Curtains need to be made of material that can withstand temperatures above 65°C and require a regular cleaning schedule.

**Doors, walls and ceilings**
Doors and walls need to be smooth, hard and impervious surfaces.

Ceilings need to be made of a material that is cleanable. False ceilings can be associated with the accumulation of dust, fungi and pests. Upon completion of building work, these should be checked to ensure that there is no unwanted material and that there is no access for pests.

NB All finishes must be able to withstand the use of cleaning and disinfection products that are recommended for use within Health Care Trusts

**13. Storage**
Adequate provision of storage cupboards / facilities for clean and used items of equipment must be included in schemes particularly for large pieces of equipment such as mattresses, wheelchairs, hoists etc.

Storage of equipment in sluices and bathrooms is inappropriate and must not occur. Storage facilities are often insufficient within new schemes and lead to both infection control and health and safety implications within the clinical area. Storage racks, boxes and shelving need to be accessible and easily cleaned. Storage space should be sufficient to discourage storing items on the floor.

Storage cupboards placed on walls should be built up to the ceiling or have sloping surfaces to prevent items being put on top of cupboards and also to prevent a reservoir for dust to collect. Wardrobes/ bedside locker facilities must be of a design that adequately contains the service user’s personal effects.
14. Lighting and heating

Electrical power sockets and light switches where possible should be flush mounted to avoid dust accumulation. Lamps to be in sealed unit, easily cleaned, with no ridges where dust can gather.

Radiators should be smooth, accessible and easily cleaned to facilitate 6 monthly cleaning / deep cleaning. Pipes and cable should be sealed/boxed in a smooth-surfaced box that is easy to clean.

15. Equipments

Infection Control should be involved in decisions for new equipment for example paper towel dispensers, soap dispensers, to ensure that it is compatible with IC requirements.

16. Water Systems

Hot and cold water supplies must conform to HTM 04-01 The control of Legionella, hygiene, “safe” hot water, cold water and drinking water systems

Water coolers must be fed from a main water supply and the drainage system attached to a main waste system. Bottled water coolers are not advised

17. Waste

There are stringent legislations and guidelines for the management of all health care waste. Good design and space can minimise problems associated with inadequate storage, waster segregation and disposal (HTM 07-01). Storage cupboards for waste situated at ward entrances must be designed into any new build schemes and where possible into any new renovation / refurbishment to prevent sluices becoming cluttered with waste waiting to be collected. These cupboards must only be used for the storage of waste and used linen. In other health care facilities such as clinics, all waste bags must be contained in lockable containers that comply with waste guidelines. The waste management group must advise on these plans.

18. Toilets

The ratio of toilets as identified in HBN 04-01 must allow for service users to be appropriately segregated in the event of an outbreak.

Hospital pattern WCs should be rimless, washdown pans and be of the “back to wall” or wallhung type with concealed cistern and services. All toilets will have covered toilet paper dispensers that dispense single sheets of paper. Service user toilets will be easy to maintain to render them hygienic and cleanable. Padded backrests with soft plastic covers should not be used.

Visitor toilets

These should provide enough space and have a high grade of finishes to maintain a good standard of hygiene.

There should be provision of disposal facilities for sanitary waste in both women and mixed-sex toilets.
19. Waiting Rooms, Entrances and Receptions

Consideration needs to be given to the durability of and ease of cleaning any fixtures, fittings and furnishings incorporated into the scheme. Toilet facilities should be available within these areas for service users and other visitors.
**Appendix 1: Construction Risk Matrix**

1. First identify construction activity type from the table below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>Inspection and non-invasive activities includes but not limited to:&lt;br&gt;• Removal of ceiling tiles for visual inspection on corridors and non-clinical areas&lt;br&gt;• Painting and minimal preparation in corridors and non-clinical areas&lt;br&gt;• Electrical trim work (all plugs, switches, light fixtures, smoke detectors, ventilation fans)&lt;br&gt;• Minor plumbing and activities that do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.</td>
</tr>
<tr>
<td>Type B</td>
<td>Small scale, short duration activities that create minimal dust. Includes:&lt;br&gt;• removal of a limited number of ceiling tiles in low risk clinical areas for inspection only;&lt;br&gt;• installation of telephone and computer cabling;&lt;br&gt;• access to chase spaces;&lt;br&gt;• cutting of walls or ceiling where dust migration can be controlled in non-clinical areas.</td>
</tr>
<tr>
<td>Type C</td>
<td>Any work of long/short duration which generates a moderate-to-high level of dust or requires minor building works, demolition or removal of any fixed building components or assemblies. Includes, but is not limited to:&lt;br&gt;• sanding of walls for painting or wall covering;&lt;br&gt;• removal of floor coverings, ceiling tiles, panelling, and wall-mounted shelving and cabinets;&lt;br&gt;• new wall construction;&lt;br&gt;• minor duct work or electrical work above ceilings;&lt;br&gt;• major cabling activities.</td>
</tr>
<tr>
<td>Type D</td>
<td>Major demolition and construction projects. Includes, but is not limited to new construction/machinery and equipment installations, rectifications and modifications</td>
</tr>
</tbody>
</table>

2. Then identify the infection control risk group by area

<table>
<thead>
<tr>
<th>Group 1 (low risk)</th>
<th>Group 2 (medium risk)</th>
<th>Group 3 (high risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office areas/corridors, plant rooms/ service ducts Primary care/community treatment rooms</td>
<td>A&amp;E clinical rooms Radiology/magnetic resonance imaging General surgery recovery units Wards Nuclear medicine Echocardiography Admissions/discharge units Other departmental clinical areas Out-patient department Pharmacy (general) Laboratories Endoscopy clinics Examination rooms</td>
<td>Day surgery rooms All intensive care units All operating suites All high dependency units Dialysis &amp; transplant units Oncology Cardiology Cardiac catheterisation suite Pharmacy clean rooms Sterile services departments Bone marrow transplant units</td>
</tr>
</tbody>
</table>

3. Now identify the “risk class” by correlating “construction type” with “risk group” (from 1 and 2 above) in the matrix below.

<table>
<thead>
<tr>
<th>Risk group</th>
<th>Type A</th>
<th>Type B</th>
<th>Type C</th>
<th>Type D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Class 1</td>
<td>Class 2</td>
<td>Class 2</td>
<td>Class 3</td>
</tr>
<tr>
<td>Group 2</td>
<td>Class 1</td>
<td>Class 2</td>
<td>Class 3</td>
<td>Class 3</td>
</tr>
<tr>
<td>Group 3</td>
<td>Class 2</td>
<td>Class 3</td>
<td>Class 3</td>
<td>Class 4</td>
</tr>
</tbody>
</table>
4. After identifying the risk class from 3 above, follow the risk measures advised for each class

| Class 1 | • Execute work by methods to minimise dust from construction  
|         | • Immediately replace any ceiling tile displaced for visual inspection |
| Class 2 | • Where appropriate, isolate HVAC (heating, ventilating, and air conditioning) system in areas where work is being performed  
|         | • Provide active means to prevent airborne dust from dispersing into atmosphere if practicable, i.e. dust bag to machine  
|         | • Water-mist work surfaces to control dust while cutting  
|         | • Avoid pooling of water which may be prolonged  
|         | • Seal unused doors with duct-tape  
|         | • Block off and seal air-vents  
|         | • Wipe work surfaces with detergent  
|         | • Contain construction waste before transport in tightly covered containers  
|         | • Wet-mop and vacuum with filtered vacuum cleaner before leaving work area  
|         | • Place dust-attracting mat at entrance and exit of work area (tacky mat)  
|         | • Remove isolation of HVAC system |
| Class 3 | • Where appropriate, isolate HVAC system in area where work is being done to prevent contamination of duct system  
|         | • Complete all critical barriers and implement dust control methods before construction begins  
|         | • Maintain negative air pressure within work site. Use HEPA (high efficiency particulate air)-equipped air filtration unit if there be a risk that air will enter building  
|         | • Do not remove barriers from work area until complete project is clinically clean  
|         | • Vacuum with filtered vacuum cleaner during works  
|         | • Wet-mop area during works  
|         | • Remove barrier materials carefully to minimise spreading of dust and debris associated with construction  
|         | • Contain construction waste before transport in tightly covered containers  
|         | • Remove isolation of HVAC system in areas where work has been done and appropriate checks performed |
| Class 4 | • Isolate HVAC system in area where work is being done to prevent contamination of duct system  
|         | • Complete all critical barriers and implement dust control methods before construction begins  
|         | • Maintain negative air pressure within work site using HEPA-equipped air filtration unit  
|         | • Seal holes, pipes, conduits and punctures appropriately  
|         | • Construct airlock and require all personnel to remove dirty apparel and clean down before leaving the work site. The use of cloth/paper disposable overalls/shoes, etc., may be required  
|         | • Do not remove barriers from work area until completed project is thoroughly cleaned (as before) and repeat clinical clean after barrier removed  
|         | • Vacuum work area with filtered vacuum cleaner  
|         | • Wet-mop area with detergent during works  
|         | • Remove barrier materials carefully to minimise spreading of dust and debris associated with construction  
|         | • Contain construction waste before transport in tightly covered and sealed containers  
|         | • Remove isolation of HVAC system in areas where work has been done and appropriate checks performed |

From Infection Control in the built environment (DH, 2013)
A9: Guidance When Working Dogs or Domestic Dogs are visiting ‘Service Users’ in Healthcare Premises

Visiting Animals Assistance dogs (e.g. guide dogs, hearing dogs for the auditory impaired) and pets used for “therapy” are allowed access to the clinical area when they are working.

The animals used are usually dogs and the following guidance will apply. The animal:
- Must be fully trained.
- Must be regularly vaccinated, de-wormed and treated against fleas/other infestations.
- Must be house trained and kept on a leash and accompanied by their owners at all times.
- Must be capable of confinement to designated areas of the healthcare environment, e.g. day room, relatives’ room, etc.
- Must be excluded from clinical treatment rooms and kitchens at all times. Must be kept away from other service users with phobias or allergies.
- Must not be excited or provoked and must only visit patients where permission has been sought.
- Must be discouraged from licking service users/staff.

Others service animals such as drug dogs may also visit the clinical environment and the guidance would apply to them as well.

However, care must be taken where there are ‘service users’ with suppressed or compromised immunity who may acquire diseases from animals. Care must also be taken with pregnant women (including new mothers), babies and young children.

Please also remember that some people have allergies to animals.

Infection Prevention and Control Precautions

Staff Hygiene
Thorough hand decontamination using the six-step technique and liquid soap and water must be carried out following contact with the animal or its environment, cleaning, feeding and/or any other equipment (see Hand Hygiene policy). This is the most important aspect of minimising infection risk.

First Aid
If a bite or scratch occurs, it must be treated as an injury/accident in accordance with current policy. All such incidents should be dealt with immediately.
Encourage local bleeding under a running tap.
Wash thoroughly with soap and water.
Cover injury with waterproof dressing.
Inform your line manager and initiate the required reporting procedure.
Medical attention MUST be sought for all animal bites and injuries

Pet Excreta
Pet excreta can present an infection risk. Dogs should be encouraged to eliminate away from the health care environment. Animal excreta eliminated within the health care environment should be dealt with as a body fluid spill. The owner/handler/other suitable person must clean up the spillage and the area then decontaminated using a neutral
detergent and hot water followed by a 1,000 p.p.m. chlorine releasing agent and disposed of as clinical waste (see Body Fluid Spillage guidelines).
A10: Care of the deceased

1. Introduction

It is important that all health care personnel protect themselves from contamination from body fluids and sharps regardless of whether the patient was known to have an infection.

2. Principles

Standard Precautions
As in life, the infectious state of the individual is not always known. It is therefore essential that the same standard precautions are adopted in the management of the deceased. See Standard Infection Control Precautions policy.

Compliance with standard infection prevention and control precautions will minimise risks from occupational exposure.

Containment of Body Fluids
Reasonable measures need to be taken to contain leakage of body fluids, with the use of incontinence pads/sheets for faecal and/or urinary leakage.

Notification
The undertaker must be informed if the body presents an infection risk. However, if the diagnosis is divulged, as in life confidentiality must be maintained.

Preparation of the Body-Last Offices

There should be minimal handling of the body. Staff should wear gloves and aprons whilst performing last offices.

Viewing of the Body

Viewing of the body by relatives and close friends should not be discouraged. Viewing includes standing by the body, touching or lightly kissing the face and hands.

<table>
<thead>
<tr>
<th>Action</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Gloves and apron should be worn and must be worn if the patient is infectious</td>
<td>i) To prevent possible contamination of skin and clothing</td>
</tr>
<tr>
<td>ii) Unless notified to coroner, remove drips, drains, catheters etc. unless coroner is involved. Dispose of immediately into appropriate clinical waste/sharps container.</td>
<td>ii) To alleviate distress of the relatives and to promote patient dignity</td>
</tr>
<tr>
<td>iii) Leaking wounds should be sealed with occlusive dressings. If removing catheters or dressing wounds, splashes must be avoided</td>
<td>iii) To prevent leakage of body fluids</td>
</tr>
<tr>
<td>iv) Place the body into a plastic body bag. In the home care setting, this is performed by the undertaker</td>
<td>iv) To minimise potential infection risks</td>
</tr>
</tbody>
</table>
v) Discard gloves and apron into yellow clinical waste bag and wash your hands thoroughly.

v) Handwashing is the single most important measure in the prevention of spread of infection.

**NB** in certain cases e.g. if there is extensive untreated tuberculosis, it may not be advisable to view the body. Religious procedures should not take precedence over precautions to avoid the spread of infection. Certificates for transport abroad (Freedom from Infection) have to be issued by the Consultant in Communicable Disease Control. Category 4 pathogens, e.g. Lassa fever, Marburg, Ebola, require special precautions and need high security isolation. Contact the Infection Control Team.
Section B-Environmental hygiene and safety
B1: Decontamination

1. Introduction

This policy gives guidance for all staff to follow for the processes of decontamination, cleaning and disinfection. The scope of this policy applies to all staff, including bank and agency staff who work in the Trust.

The purpose of this document is to ensure all staff are aware of how to clean equipment, and the environment what products, equipment and materials to use and their roles and responsibilities in relation to decontamination, cleaning and disinfection.

1.1 Policy Statement

Decontamination is an umbrella term used to describe processes that make equipment safe for re-use which includes the destruction or removal of micro-organisms. Inadequate decontamination is frequently associated with outbreaks of infection in hospitals, and all health care staff must be aware of the implications of ineffective decontamination and their responsibilities to service users, themselves and their colleagues.

Decontamination is a combination of processes – cleaning, disinfection and/or sterilisation – that are used to ensure a reusable medical device or care equipment is safe for further use.

Equipment used in health care may be designated as single use, single patient use or reusable multi-patient use. Any equipment not designated as a single use item must be made safe following use to prevent micro-organisms being transferred from equipment to patients and potentially resulting in infection.

2. Guidelines/Procedure/Methods

2.1 Choice of decontamination method for multi-patient use medical devices

All equipment will require cleaning. Some equipment will also require disinfecting or sterilizing. Decontamination will work less efficiently on equipment that is difficult to clean, and/or in a poor condition.

Compatibility of equipment with the chosen method of decontamination will be determined from information from the manufacturer. Manufacturers of medical devices are required to
provide decontamination guidance for reusable products.

The choice of method also depends on the purpose of the equipment and other risk factors.

2.2 Cleaning and/or disinfection of equipment must:

- Take place after and between uses on individual service users.
- Once cleaned/disinfected, pieces of equipment e.g. drip stands, commodes should be labelled with an appropriate tag to identify that it has been cleaned. The label should be dated and signed.
- Audits should be carried out regularly on cleanliness of equipment in each area. An audit form can be obtained from the Infection Control Team.
- Equipment requiring service or repair must be thoroughly cleaned and decontaminated prior to inspection and a label attached identifying method of decontamination.

See Appendix 1 for a list of common equipment used in the Trust and how it should be decontaminated.

2.3. Outbreaks

In the event of an outbreak of an infection the Infection Control team may recommend additional measures for the decontamination/disinfection of equipment.

3 Single Use Equipment

Medical devices that are designed for single use must never be re used and should be discarded immediately after use (MDA DB 2000, 04). If they were re used, this would cause serious hazards, as they are not designed for reprocessing. If they are re used, legal liability will be transferred from the manufacturer to themselves, or to the organisation that employs them.

**This label denotes single use; do not ‘re use’**

3.1 Potential Hazards with Re-Use

- Inadequate cleaning and disinfection
- Materials becoming adversely affected, leading to device failure.
Infection arising due to inadequate cleaning, disinfection or sterilisation.

The status of the reprocessed device being unclear as a result of inadequate labelling.

Reaction to endotoxins

Single Patient Use: Equipment marked with single patient use may be used for more than one episode of use for the same patient, such as nebuliser masks. The device will require decontamination between each use.

3.2 Decontamination of any equipment leaving an area for servicing/repair

Any equipment that leaves an area for any reason, such as service or repair must be correctly labelled, with the green label. When being sent for repair, the equipment type, ID number and label number should be entered in the loan register located in the Estates Information folder. The 'Decontamination Label' must be signed by the user who knows the conditions in which the equipment has been used. (See appendix)

4. Environmental Hygiene

The environment must be visibly clean, free from dust and soilage and acceptable to service users, their visitors and staff. In order for the environment to be kept clean areas must be kept tidy and free of clutter. Cleaning frequencies should be in line with the National Standards of Cleaning Framework e.g. frequency depends on level of risk (NHS Estates 2003). A cleaning schedule should be available on the ward with daily and weekly cleaning tasks.

Methods for cleaning are usually termed “dry” or “wet”

- Dry- Vacuum or dust attracting mops (sticky or static)
- Wet- General detergent solutions on surfaces and floors.

Cleaning Materials

- Vacuum, cleaners should contain bacteria retaining filter or bag and the exhaust directed away from the floor.
- Brushes must not be used in clinical/ward areas as they disperse bacteria into the air in large numbers.
- Cleaning materials such as cloths and mops if kept moist act as an ideal growth medium for bacteria, which will multiply rapidly. It is important, therefore that disposable materials that are for single use such as cloths, are disposed of after the
task. Any re-usable items (e.g. mop heads) must be laundered on a regular basis i.e. at end of day’s cleaning.

Colour coded cleaning equipment

Colour coding of hospital cleaning materials and equipment ensure that these items are not used in multiple areas, therefore reducing the risk of cross infection.

All cleaning materials and equipment, for example, cloths (re-usable and disposable), mops, buckets, aprons and gloves must be colour coded according to the cleaning code. Buckets should be cleaned and left dry at the end of the task. (See Appendix 4).

4.1 Environmental Cleaning in an outbreak

Increased levels of cleaning should be enforced in outbreaks of infection to at least twice daily or on advice from infection control. Facilities/service provider should be informed as soon as an infection or outbreak is suspected.

Specified products (such as Actichlor Plus- a sodium hypochlorite with a detergent) should be used where the pathogen concerned survives in the environment and environmental contamination may be contributing to spread and on advice from infection control team.

In the event of an outbreak, disposable or single use mops and cloths should be used.

5. Responsibilities

5.1 All staff (providing care in the healthcare setting) has a responsibility to:

- Apply the principles of standard infection control precautions
- Follow cleaning schedules which are clearly defined, monitored, documented and available on the ward/area dept. These can be found on the Intranet.
- Meet requirements of the Health and Safety at work act (1974) and the Control of substances Hazardous to Health (COSHH) regulations (HSE, 2004) to ensure that the equipment in their area is correctly decontaminated between uses and patients. Manufacturer’s guidance must always be followed for cleaning and disinfecting equipment.
- Report to line manager any deficits in relation to knowledge of management of care equipment/equipment/environment or incident that may have resulted in cross contamination.
5.2 Managers have responsibility to ensure that:

- Manufacturer’s guidance is available for equipment prior to any purchase.
- All other staff/agencies apply the principles of Standard infection control precautions.
- All staff have had instruction/education on the principles of managing care equipment/controlling the environment and Standard infection control precautions.
- Adequate resources are in place to allow for recommended infection prevention and control measures such as, managing cleaning, care equipment, a clean environment and fit for purpose.
- A risk assessment where necessary, is used to optimise patient/client and staff safety, such as the use of chlorine based solutions, consulting relevant infection control and prevention policies as required.
- Cleaning schedules/standards are defined, monitored, documented and made available.

5.3 Infection Prevention and Control Team have responsibility to

- Provide education for staff and management on this policy
- Act as a resource for guidance and support when advice on controlling the environment and managing of care equipment is required.
- Provide advice on individual risk assessments for controlling the environment and management of equipment decisions.

5.4 Estates and Facilities Staff must:

- Draw attention to any instances where equipment presented for repair is seen to be dirty / contaminated or where, in the case of repair a decontamination label is not attached.
- Take adequate precautions if any contamination is found internally after equipment covers have been removed. These precautions will be as stated in the Estates Department’s Policy for staff working on dirty or contaminated equipment together with additional advice, as required depending on the hazard, and from Infection Control team (ICT).
5.5 Monitoring – staff/team responsibilities

- The trust ensures that all staff responsible for cleaning and decontamination have the appropriate skills and knowledge to do so. The Learning and Development team will monitor this.
- All staff will undertake mandatory training on a two yearly basis.
- The Medical Devices checklist will be completed weekly by clinical staff.
- The environmental hygiene assurance audit will be completed by clinical staff two weekly. Copies of the audit are available from Infection Control.
- The Infection Control Team will carry out yearly audits to monitor compliance with the policy in line with their annual plan.
- The policy will be reviewed in light of any changes or recommendations to products and equipment use and cleaning.
# Appendix 1: Commonly used equipment and how to decontaminate it

<table>
<thead>
<tr>
<th>Individual items</th>
<th>Recommended method of Routine Cleaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airway</td>
<td>SINGLE USE ONLY&lt;br&gt;dispose after use</td>
</tr>
<tr>
<td>Ambubag and Mask</td>
<td>SINGLE USE ONLY&lt;br&gt;dispose after use</td>
</tr>
<tr>
<td>Auriscope Ear piece</td>
<td>Single use</td>
</tr>
<tr>
<td>Auriscope</td>
<td>Clinell Universal wipes</td>
</tr>
<tr>
<td>Baby Bottles and Teats</td>
<td>Pre-prepared single use feeds recommended</td>
</tr>
<tr>
<td>Baby changing mats</td>
<td>Clinell Universal wipe&lt;br&gt;Detergent solution and dry&lt;br&gt;&lt;strong&gt;Additional Notes&lt;/strong&gt;&lt;br&gt;Check integrity regularly. Discard if worn/damaged&lt;br&gt;Hypochlorite solution if soiled with body fluids(see spillage policy)</td>
</tr>
<tr>
<td>Baby Scales</td>
<td>Clinell Universal wipe&lt;br&gt;Detergent solution and dry&lt;br&gt;&lt;strong&gt;Additional Notes&lt;/strong&gt;&lt;br&gt;Line with disposable paper</td>
</tr>
<tr>
<td>Bath</td>
<td>Clean with detergent solution and hot water. Rinse after cleaning&lt;br&gt;Domestic clean daily&lt;br&gt;&lt;strong&gt;Additional Notes&lt;/strong&gt;&lt;br&gt;To be cleaned between service users&lt;br&gt;Any service user with an infection use hypochlorite solution (see spillage policy)</td>
</tr>
<tr>
<td>Bedpans and urinals</td>
<td>Disposable recommended or automated washer/disinfector at 80 degrees for at least a minute&lt;br&gt;&lt;strong&gt;Additional Notes&lt;/strong&gt;&lt;br&gt;If cleaning required in home setting use detergent solution and dry. If service user has enteric symptoms use hypochlorite solution ( see spillage policy)&lt;br&gt;Use PPE and empty contents into toilet</td>
</tr>
<tr>
<td>Beds</td>
<td>Clean between service users with hot water and detergent solution or Clinell Universal wipes&lt;br&gt;&lt;strong&gt;Additional Notes&lt;/strong&gt;&lt;br&gt;If soiling evident t then immediately clean and then wipe over with hypochlorite solution ( see spillage policy)</td>
</tr>
<tr>
<td>Item</td>
<td>Instructions</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Blood pressure monitoring equipment</td>
<td>Wipe after each use with a Clinell Universal wipe</td>
</tr>
<tr>
<td>Commodes</td>
<td>Wipe after each use with a Clinell Universal wipe. Use separate wipes for armrests and seats</td>
</tr>
<tr>
<td>Duvets</td>
<td>Clinell Universal wipe</td>
</tr>
<tr>
<td>Dressing trolley/trays</td>
<td>Clinell Universal wipe</td>
</tr>
<tr>
<td>ECG Equipment</td>
<td>Use disposable</td>
</tr>
<tr>
<td>-Electrodes</td>
<td>Clinell Universal Wipe</td>
</tr>
<tr>
<td>-Leads</td>
<td>Manufacturers Guidance (or Clinell Universal Wipe)</td>
</tr>
<tr>
<td>-Machine</td>
<td></td>
</tr>
<tr>
<td>Examination Couch</td>
<td>Clinell Universal Wipe</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>Damp dust with a general purpose detergent or wipe with a Clinell Universal wipe</td>
</tr>
<tr>
<td>Gym Equipment</td>
<td>Hot water and detergent solution or Clinell Universal wipes at the end of each session</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hair brushes/combs</td>
<td>Individual service user use only. Wash weekly in detergent solution</td>
</tr>
<tr>
<td>Item</td>
<td>Instructions</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
</tr>
</tbody>
</table>
| **Hoist** | Hot water and detergent solution or Clinell Universal wipes  
Hoists slings must be for individual service user use only and should be laundered when soiled or when the service user is discharged. |
| **Inhalation compliance devices e.g. Volumatic** | For individual service user use only  
If dirty, wash with warm water and detergent. Rinse and dry thoroughly. |
| **Mattress (and pillows)** | Hot water and detergent solution or Clinell Universal wipes  
**Additional Notes**  
Must be wipeable. Must be cleaned weekly, on discharge or when visibly soiled.  
If soiling evident clean and then wipe over with hypochlorite solution (see spillage policy) |
| **Medicine pots/medicine syringes** | Single use. |
| **Ophthalmoscopes** | Clinell Universal wipe |
| **Shaving equipment** | Each service user should have their own shaving equipment including electric razors. Clean electric razors as per manufacturers' instructions. |
| **Sputum Pots** | Disposable single use-please discard into the orange clinical waste bins |
| **Stethoscopes** | Wipe with a Clinell Universal wipe after each use |
| **Tablet Computers (e.g. iPads)** | Wipe with a Clinell Universal wipe after each use  
**Additional Notes**  
Must have washable cover and screen protector. |
| **Thermometers** | Tempa-dot thermometer-single use only  
All others-use single use plastic cover and dispose of after use-wipe with a Clinell Universal wipe |
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourniquet</td>
<td>Preferably use single use&lt;br&gt;If not available wipe with a Clinell wipe between uses</td>
</tr>
<tr>
<td>Walking Aids</td>
<td>Wipe with a Clinell Universal wipe between uses by different service users and when dirty</td>
</tr>
<tr>
<td>Weighing Scales</td>
<td>Wipe with a Clinell Universal wipe between uses by different service users</td>
</tr>
<tr>
<td>Wheelchairs</td>
<td>Wipe with detergent and hot water solution or Clinell Universal wipes&lt;br&gt;If soiling evident then immediately clean and then wipe over with hypochlorite solution (see spillage policy)</td>
</tr>
</tbody>
</table>

**Additional Notes**<br>Should be cleaned weekly as part of the medical devices checklist, between uses by different service users and when dirty.

NB This does not cover all equipment. Where further guidance is required, please contact Infection Control.
Appendix 2: How to use Clinell Universal wipes

1. Wear recommended personal protective equipment.

2. Remove one wipe from the pack.

3. Working from clean to dirty, wipe in an S shaped pattern, taking care not to go over the same area twice.

4. Change wipe if it becomes dirty or soiled and discard. Let the surface air dry.

For more information please see the Decontamination policy (B2)

Infection Control November 2014
## Appendix 3: Infection risks and categories

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Level of decontamination required</th>
<th>Examples</th>
<th>Method of decontamination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>Cleaning and sterilisation e.g.</td>
<td>• Cleaning and sterilisation e.g. surgical instruments</td>
<td>• Sterilisation, autoclave (or sterile single-use item)</td>
</tr>
<tr>
<td></td>
<td>surgical instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In close contact with a break in the skin or mucous membrane.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Introduced into a sterile cavity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>Cleaning and disinfection or</td>
<td>• Cleaning and disinfection or sterilisation e.g. vaginal specula,</td>
<td>• Sterilisation, high level disinfection (or single use item)</td>
</tr>
<tr>
<td></td>
<td>sterilisation e.g. vaginal</td>
<td>commodes and bedpan holders</td>
<td>• Autoclave</td>
</tr>
<tr>
<td></td>
<td>specula, commodes and bedpan</td>
<td></td>
<td>• Single use</td>
</tr>
<tr>
<td></td>
<td>holders</td>
<td></td>
<td>• Washer/disinfector</td>
</tr>
<tr>
<td></td>
<td>• In contact with mucous membranes.</td>
<td></td>
<td>• Chemical</td>
</tr>
<tr>
<td></td>
<td>• Prior to use on any</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>immunocompromised individual.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contaminated with body fluids</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>particularly virulent or readily</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>transmissible organisms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low Risk</strong></td>
<td>Cleaning is usually adequate</td>
<td>• Manual cleaning using detergent and water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Disinfection if infection risk is present e.g. washbowls and mattresses</td>
<td>• Automated cleaning/disinfection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In contact with intact skin</td>
<td>• Disinfectant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Items not in direct contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimal Risks</strong></td>
<td>Cleaning</td>
<td>• Damp dusting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manual or automated cleaning</td>
<td>• Wet mopping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e.g. floors, walls, ceilings and</td>
<td>• Vacuum cleaners</td>
<td></td>
</tr>
<tr>
<td></td>
<td>furniture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Items not in close contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with the patient or their</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>immediate surroundings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: National colour coding scheme for hospital cleaning materials and equipment

All NHS organisations should adopt the colour code below for cleaning materials. All cleaning items, for example, cloths (re-usable and disposable), mops, buckets, aprons and gloves, should be colour coded. This also includes those items used to clean catering departments.

- **Red**: Bathrooms, washrooms, showers, toilets, basins and bathroom floors
- **Green**: Catering departments, ward kitchen areas and patient food service at ward level
- **Blue**: General areas including wards, departments, offices and basins in public areas
- **Yellow**: Isolation areas
Appendix 5: Handling of equipment prior to service or repair

Handling of equipment prior to inspection, service, repair, return to lending organisation or investigation of adverse incident

Note: it is illegal to send contaminated items through the post

Can the equipment be decontaminated without removing evidence important to a repair or an investigation?
- Yes
  - Decontaminate item
    - Label with contamination status
    - Note fault/defect
    - Off site: pack and despatch for service/repair/investigation
    - On site: store in preparation for service/repair/investigation
- No
  - Inform repair organisation or investigating body

Repair organisation or investigating body agrees despatch?
- Yes
  - Label with contamination status
  - Note fault/defect
  - Pack and despatch for service/repair/investigation
- No
  - Arrange visit by service/repair organisation or investigating body
    - Label with contamination status
    - Note fault/defect
    - Quarantine in preparation for service/repair/investigation
### Appendix 2 Declaration of contamination status

<table>
<thead>
<tr>
<th>From (consignor):</th>
<th>To (consignee):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Reference</td>
</tr>
<tr>
<td>Emergency tel</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of equipment</td>
<td></td>
</tr>
<tr>
<td>Other identifying marks</td>
<td></td>
</tr>
<tr>
<td>Model No.</td>
<td>Serial No.</td>
</tr>
<tr>
<td>Fault</td>
<td></td>
</tr>
</tbody>
</table>

Is the item contaminated?  
- Yes*  
- No  
- Don't know  

* State type of contamination: blood, body fluids, respired gases, pathological samples, chemicals (including cytotoxic drugs), radioactive material or any other hazard

Has the item been decontaminated?  
- Yes†  
- No‡  
- Don't know  

† What method of decontamination has been used? Please provide details
- Cleaning
- Disinfection
- Sterilization

‡ Please explain why the item has not been decontaminated?

Contaminated items should not be returned without prior agreement of the recipient

This item has been prepared to ensure safe handling and transportation:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
<th>Tel</th>
</tr>
</thead>
</table>

DR2003/05 June 2003 12/13
1. **Introduction**

Dealing with spills of blood or other body fluids may expose the health care worker to blood-borne viruses or to other pathogens. This policy aims to reduce the risk of exposure to potentially hazardous microorganisms by outlining a safe procedure for dealing with these spillages (DOH 2008).

Body fluids include
- Blood
- Respiratory and oral secretions
- Vomit
- Vaginal secretions
- Amniotic fluid
- Faeces
- Urine
- Wound drainage
- Semen
- Cerebrospinal fluid
- Pleural fluid
- Gastric
- Aspiration
- Breast milk

NB: depending on the type of spillage it may be necessary to do a risk assessment and report any incident or near miss to the Trust Risk Manager.

Spillages are highly unpredictable and can occur in a wide variety of settings. All spillages of blood or body fluid should be considered as potentially infectious.

It is essential, that all staff receive training in spillage management and that appropriate equipment is readily available in healthcare settings.

The Health and Social Care Act (2008) stipulates that NHS bodies must, have in place appropriate care policies, procedures, including guidance on dealing with blood and body fluid spillages. This is in order to minimise the risk of the transmission of healthcare associated infections (HCAI’s).

2. **Responsibilities**

The Infection Control Team recommends that in preparation of an incident each Manager of clinical area ensures that a spillage kit is made up in advance and kept in readiness in a locked cupboard in the dirty utility room.

The person witnessing the event should deal with spillages immediately. This will reduce the risk of exposure to infectious agents or further contamination.

2.1 **Spillage Cleaning**

**Basic principles**

- Always use standard infection control precautions and carry out a risk assessment of the type of personal protective equipment (PPE) required.
- Always dispose of any waste and PPE into a clinical waste bag
- Always ventilate the room if using a sodium hypochlorite product.
- Do not use a sodium hypochlorite product on a urine spillage
- Details of equipment and procedures can be found in the Infection Control Guidance at a Glance document on blood and body fluid spillages in Appendix A

Urine Spillages

Sodium hypochlorite products should not be used on urine spillages. Spill wipes should be used for urine spillages.

Spillages in a carpeted area

Blue roll should be used to soak up any spillage on a carpeted area, and a solution of detergent and warm water with disposable clothes should be used to clean the area as much as you can. The cleaning supervisor should then be contacted about steam cleaning/shampooing the carpet.

Spillages in the service users’ own home

Standard precautions and good hand hygiene should still be adhered to. Soak up the spillage with paper towels or whatever absorbent material is to hand. Clean area with a solution of detergent and warm water and disposable clothes and then dispose of waste.

3. Accidents and Incidents

Should an accident occur to personnel whilst dealing with a spillage: -

- Ensure first aid is received in the Accident & Emergency Department or Occupational Health Department.

- Complete a Datix form and report the incident to your Manager and Occupational Health Department.
Appendix 1: Guidance at a glance—body and body fluid spillage management

Infection Control at a Glance | Blood and body fluid Spillages

What to put in your spillage kit:
1. Personal Protective Equipment (PPE) - plastic aprons, non-sterile gloves, face mask, goggles
2. Copy of this poster
3. Disposable paper towels and orange clinical waste bag
4. Sodium Hypochlorite tablets (such as Actichlor Plus) and dilution bottle
5. Spill wipes

Before you start
Ensure good ventilation when using chlorine products

TEN (10) 1.7G Actichlor Plus Tablets dissolved in one litre of water =10,000 PPM available chlorine

How to clean up a spillage with Actichlor Plus
- Wear appropriate PPE
- Remove excess body fluids with paper towels - dispose of them into a clinical waste bag
- Cover the area with the Actichlor Plus solution (see above) and leave for five minutes,
- Clean up the area using paper towels.
- Actichlor Plus cleans and disinfects in one.

Important Points
- Don't use chlorine products directly on urine spillages
- See the Infection Control Manual B1 Spillage Policy for more information

In the event of a spillage on a carpeted area, or in a service users’ own home follow the instructions in the Infection Control manual B1

After cleaning up the spillage, remove PPE and place into a clinical waste bin—then wash your hands!

Clean up blood and body fluid spillages promptly
Make sure you are dressed properly to deal with a spillage. Gloves, aprons, mask and face protection should be worn dependant on your risk assessment

How to clean up a spillage with Clinell Spill Wipes
- Wear appropriate PPE
- Place the active side (A) face down on the spill. Leave to absorb for 30 seconds
- Push down on plastic backed side (B) and wipe until spill is fully absorbed. Put the soiled wipe back into the pack
- Remove a disinfectant wipe from a sachet. Clean the spill area in an 'S' shaped motion from clean to dirty
- Put soiled wipes and empty sachet back into the pack, repeat if required and seal

Dispose of all contaminated waste from a spillage into an orange clinical waste bag.
B3: Linen

1. Introduction

Although soiled linen may harbour large numbers of pathogenic microorganisms, the risk of actual disease transmission from soiled linen is negligible. Rather than rigid rules and regulations, common-sense hygienic practices for processing and storage of linen are recommended. (CDC)

However, there is a legal requirement for health care workers to prevent the risk of infection to laundry staff under the Health and Safety at Work Act. The NHS Executive Guidelines HSG (95)18 ‘Hospital Laundry Arrangements for Used and Infected Linen’ also stipulate appropriate action to be taken with regard to used and infected linen.

2. Definitions

‘Linen’ is taken to mean all items requiring laundering. This policy is to be used in conjunction with A2 Standard Precautions. Linen should be separated into three categories prior to transfer to the laundry:

- Used Linen.
- Soiled/Infected Linen - is linen which is soiled with blood, faeces or any other body fluid from any service user or from any service user with a known infection
- Heat Labile Linen - e- fabrics that would be damaged by thermal disinfection, such as wool and other synthetic materials

3. Segregation of linen

It is the responsibility of the person disposing of the linen to ensure that it is segregated appropriately. All linen must be handled with care to minimise transmission of microorganisms. Plastic disposable aprons must therefore be worn when there is potential risk of contamination of the uniform/clothing i.e. when making and changing beds.

Linen should be placed directly into the appropriate laundry bag on removal from the bed/patient. Linen should not be placed on the floor or transported around a ward/area unless within an appropriately colour coded linen bag. Hand hygiene should be performed immediately following the handling of any dirty linen and after removal of disposable gloves and apron that has been used when handling soiled/infected linen.

Extreme care must be taken to separate all extraneous items (i.e. needles, dressings or personal items etc.) from linen before it is placed in laundry bags. Such items are potentially dangerous to staff during the laundry process, and may also damage laundry equipment. To avoid possibility of spillage of used linen, linen bags must never be more than two thirds full, and must be securely tied. These principles are to be applied to handling of linen within all healthcare settings.
Soiled or infected linen must be placed in a soluble alginate bag prior to being placed in a white laundry bag. The soluble bag must be placed directly into the washing machine to prevent any cross-infection to staff or the environment.

4. The laundering process

Many micro-organisms will be physically removed from linen by detergent and water, and most are destroyed by a high temperature wash. Remaining organisms are likely to be destroyed by tumble drying and ironing.

Bed linen/Heat resistant items must, be where possible processed through a cycle of 71 degrees C (for not less than 3 minutes) or 65 degrees C (for not less than 10 minutes). For washing machines of conventional or domestic design (not an industrial type) at least 4 minutes mixing time must be added to these cycle times. Care should also be given to not overfill the washing machine drum.

Personal items

Personal clothing can be laundered in domestic washing machines in Mental Health units provided the above principles are followed. If there is an outbreak of infection arrangements should be made for linen to be processed in a laundry department.

- It is the duty of the Housekeeper or the Healthcare staffs to ensure that the machines are clean and fit for purpose e.g. soap dispensers clean and fluff removed from tumble dryers.
- It is recommended that washing powder tablets are used to prevent spillage and blocking of dispensers

Curtains and soft furnishings

Curtains in clinical areas must be laundered as a minimum six monthly, and immediately if soiled. Any curtains purchased for clinical areas must not be dry clean only. All purchasing of curtains and soft furnishings must be carried out via the procurement process. Alternatively disposable curtains should be considered.

Pillows and duvets must be covered with a plastic waterproof material and be heat sealed to form a protective covering with no openings. If the pillow or duvet becomes soiled, it must be discarded immediately.

Heat Labile Linen.

All linen susceptible to damage by the use of high temperature washing cycles i.e. pure wool. If heat labile items require processing by the laundry please contact Infection Control for advice.

5. On Site Laundry

Any on site laundry must be situated within a designated room that is used for laundry purposes only. All on site facilities must have the following available:

- Separate washing machine and dryer (commercial approved)
- Hand wash basin with liquid soap and paper towel dispenser
- Disposable gloves and aprons
• Segregated area for dirty linen and linen skips
• Segregated area for temporary clean linen storage
• Waterproof dressings available to cover any cuts and sores on the hands
• A separate ironing area must be available away from used linen

The design of the laundry facility must allow for a flow of items from the dirty to clean area. All washing machines and dryers must be subjected to a planned programme of service and maintenance at least annually. All industrial washing machines should have heat sensors fitted. The temperatures should be monitored and the sensor systems tested every six weeks, recalibrating as necessary. Records should be maintained of the above.

6. Storage of Linen

Clean/ unused linen

• All clean linen must be stored off the floor in a clean environment, in a cupboard away from used/soiled linen, dust and pests
• It must not be stored within a dirty utility room or bathroom
• Linen cupboard doors must be kept closed to prevent contamination

Used linen

• All linen bags must be stored in a secure area away from the public access whilst awaiting collection
• Linen trolleys, where used, must be cleaned on a regular basis to prevent build-up of dirt and dust

7. Monitoring, Audit, and Evaluation

Annual due diligence visits to contracted laundry.
B4: Safe Use and Disposal of Sharps

1. Introduction

A sharp may be any item which can puncture/cut the skin and may or may not be contaminated with blood or body fluid, e.g. hypodermic needle, blades, cannulae, razors, instruments, glass ampoules, suture needles, bone splinters or pathology slides.

Sharps injuries therefore include wounds which may be cut, punctured or pierced and may be caused by a variety of items.

2. It is the responsibility of the sharps user to ensure its safe disposal

- Accountability and responsibility for risk assessment and quality of care will be an issue for all health professionals
- All staff have a clear responsibility for their risk assessments and the quality of the service they provide
- Training in the safe use and disposal of sharps will be provided by the Infection Control Team appropriate to clinical and staff setting
- This policy is to be used in conjunction with the principles of Standard Precautions.

3. General principles of safe handling and disposal of sharps

- Ensure that sharps boxes are correctly assembled and marked to identify ward/department of origin.
- Use a tray/sharps box at the point of use.
- Do NOT leave sharps for other members of staff to dispose of.
- Do NOT dispose of sharps into anything other than an approved container.
- Boxes must only be filled to the manufacturer's fill line.
- Never re-sheath any needle by hand.
- Needles and syringes should not be dismantled following use, but disposed of as a single unit.
- On no account should needles be removed, bent or distorted in any way.
- Ensure that needles are not protruding from the box.
- When disposing of sharps do not insert hands/fingers into the box.
- Sharps boxes should be wall or trolley mounted using brackets whenever possible.
Community Settings

In a community/ domiciliary setting the Safe Use and Disposal of Sharps policy is to be followed in full. Where a single sharp is to be used in a service user’s residence, the health care worker must dispose of the sharp in an approved container, and transported to the closest point of safe collection (i.e. a Health Centre).

4. Sharps Containers

All Sharps containers must conform to BS 7320; i.e. they must:-
- Be resistant to penetration or leakage
- Have a biological hazard sign
- Be labelled "DANGER, CONTAMINATED SHARPS ONLY, TO BE INCINERATED"
- Have a handle and a lid
- Possess an aperture which prevents any removal of contents

Colour coding of sharps bins

- Sharps contaminated with blood – NO medicines - Dispose in an orange lidded sharps container.

- Sharps contaminated with medicines - Dispose in a yellow lidded sharps container.

- Sharps contaminated with Cytotoxic or Cytostatic medicines - Dispose in a purple lidded sharps container.

All bins should be an appropriate size for the estimated usage and must be stored off the floor, preferably wall mounted

Collection of sharps boxes

The Trust will ensure that a satisfactory collection system is operational and sharps boxes will be collected from all Trust premises by our waste contractor. All sharps boxes will be kept in a locked area aware from the public prior to collection. The waste contractor will then take the sharps away to be incinerated.

5. Sharps Injuries

The Occupational Health Department provide Hepatitis B immunisation to all staff who may have contact with contaminated sharps.

Following any blood exposure incident (needle stick injury, conjunctiva/mucus membrane splash etc.)

all staff must follow the guidelines contained in the Sharps Injury Policy.
Appendix 1: Guidance at a glance - sharps safety

Infection Control at a Glance

Sharps injuries describe any incident in which a healthcare worker is stuck by a needle, other sharp instrument or tooth and bone fragment which penetrates the skin and which is contaminated with potentially infected blood.

Injury from sharps, especially when the sharp has been in contact with blood/body fluids, poses a risk of infection to both the recipient. Blood borne viruses such as HIV, Hepatitis B, and Hepatitis C, and other pathogens.

For more detailed information see the C&I Safe Use and Disposal of sharps policy.

Engage temporary closure mechanism when not in use

Sharps contaminated with blood – NO medicines - Dispose in an orange lidded sharps container.

Sharps contaminated with medicines - Dispose in a yellow lidded sharps container

Sharps contaminated with Cytotoxic or Cytostatic medicines - Dispose in a purple lidded sharps container

Top Tips for sharps safety
- Get rid of the sharp as soon as you can.
- Have a sharps bin close at hand
- Don’t re-sheathe needles
- Don’t detach needles from syringes
- Know how to use your safety devices
- Don’t try and catch a falling needle/sharp

For all issues related to ordering sharps bins and their collection contact the Cofely helpdesk via email or on 020 3 3173484

Dispose of sharps at the point of use

To wall mount or not to wall mount?
Sharps bin should ideally wall-mounted at shoulder height – don’t keep them on the floor

Complete label prior to use and when closing the bin

Get PROMPTLY
Remember that if you sustain a sharps injury after you have done the first aid such as bleeding or running under water, the most important thing you can do is get assessed ideally within an hour either through OHS or your nearest A&E department. Prompt action will significantly reduce your risk of harm.
### Appendix 2: Dealing with a sharps injury

#### Information for Camden and Islington Employees

**BBV Exposure Incidents**

In the event of BBV exposure please ensure you take the following steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
</table>
| Step 1 | **First Aid Treatment**  
Skin Wound  
Encourage the wound to bleed: wounds should not be sucked  
Wash liberally with soap & water without scrubbing  
Do not use antiseptics or skin washes  
Mucous Membranes  
Irrigate eyes copiously with water, if using contact lenses: eyes should be irrigate before and after removing the lenses  
If the mouth or nose is affected wash liberally using water |
| Step 2 | Report incident to the most senior person on shift / within your work area  
Manager to undertake risk assessment (if manager not available most senior person on shift or individual to complete to the best of their ability) |
| Step 3 | If High Risk immediately report to the local A&E Department. If Low Risk please go to Step 4.  
Request that the A&E Doctor assess you for BBV exposure – high risk and request save serum blood is taken  
Depending upon the outcome of the assessment you may require –  
- Hep B booster / immunoglobulin  
- PEP (Post Exposure Prophylaxis)  
If the Doctor advises you of anything further please ensure you make a note of what this is so that you can inform Occupational Health |
| Step 4 | Contact the PAM Needlestick Reportline on 0330 660 0365  
You will be asked a few questions so that the incident can be logged and followed up by Occupational Health |
| Step 5 | Complete the staff incident form (Datix) |
| Step 6 | Follow up by Occupational Health (OH)  
Within 24 hours (or next working day)  
The OH Adviser will discuss the incident and the action taken at A&E with you, providing any advice / guidance required. You will be informed of what action will be taken e.g. blood samples at 6, 12 & 25 weeks. If you were given PEP at A&E the OH Adviser will be able to provide you with the necessary details for further supplies if necessary.  
Please feel free to ask any questions you may have in relation to the incident with the OH Adviser |
B5: Waste Management

1. Introduction

This policy applies to all premises where healthcare is carried out.

All waste is potentially dangerous and presents a health and safety risk to any personnel both staff and public who have contact with it.

Appropriate waste bins with a lid and a foot control are available via the C&I electronic ordering system and it is the responsibility of the total facilities management contractor to remove waste and to provide areas with clinical waste bags. Any issues with waste should be reported to their helpdesk.

It is the responsibility of every member of Trust staff to ensure the correct waste is disposed of in the correct container and in a safe manner

See Waste Management Policy in Health and Safety Policy Manual for more information. This section should be read in conjunction with the standard precautions and hand hygiene sections of this manual.

- Categories of waste

<table>
<thead>
<tr>
<th>WASTE TYPE</th>
<th>RECEPTACLE</th>
<th>FINAL DISPOSAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Clinical waste (except sharps) e.g. dressings, sputum cartons, incontinence pads, contaminated waste from treatment areas.</td>
<td>ORANGE BAG</td>
<td>Heat treatment</td>
</tr>
<tr>
<td>ii) Household waste (except glass, crockery and aerosols) e.g. paper towels, newspaper, flowers, biodegradable waste.</td>
<td>BLACK BAG</td>
<td>Landfill/ heat treatment</td>
</tr>
<tr>
<td>iii) All *sharps and medical glass e.g. needles, scalpels, razors, capillary sampling devices. These must not be carried in receivers or re-sheathed. Keep out of reach of children.</td>
<td>Sharps contaminated with blood – NO medicines <strong>Dispose in an orange lidded sharps container</strong></td>
<td>Heat treatment/ Incineration</td>
</tr>
<tr>
<td>* waste regulations require that sharps boxes are used to a colour coded system</td>
<td>Sharps contaminated with medicines <strong>Dispose in a yellow lidded sharps container</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sharps contaminated with Cytotoxic or Cytostatic medicines <strong>Dispose in a purple lidded sharps container</strong></td>
<td></td>
</tr>
<tr>
<td>iv) Broken/Non-medical glass e.g. crockery, bottles and aerosols.</td>
<td>Orange BOX for Glass/crockery</td>
<td>Landfill/ incineration</td>
</tr>
<tr>
<td>iv) Soiled/infected linen.</td>
<td>RED BAG</td>
<td>Alginate dissolvable</td>
</tr>
</tbody>
</table>
# Making Waste Segregation Simple

<table>
<thead>
<tr>
<th>Pharmaceutical Waste</th>
<th>Sharps</th>
<th>Clinical Waste</th>
<th>Domestic Waste</th>
<th>Batteries/E-Cigs</th>
<th>Glass Waste</th>
<th>Clozapine Clinic</th>
<th>Special Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Image]</td>
<td>[Image]</td>
<td>[Image]</td>
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<td>[Image]</td>
<td>[Image]</td>
</tr>
<tr>
<td>Contact Trust Waste Manager who will advise of correct disposal method 020 3317 6707</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Examples of waste to be disposed of

- **Medicine bottles, wrapped loose tablets, packets of medicines**
- **Syringe, scalpels, scissors, razors, nail clippers, blood bottles, butterflies**
- **Dressings, plasters, gloves, aprons**
- **Paper, cardboard, deodorants, plastic bottles, tin cans, food, toiletries**
- **Batteries/E-cigs including non-refillable cartridge**
- **Broken glass, broken crockery NO MEDICINES**
- **Reagent bottles**
- **Mercury, large batteries, radioactive and cytotoxic materials, electrical appliances**

*Complete sharps bin label*

For collection and/or assistance contact Cofely (Helpdesk 020 3317 3484)
B6: Specimen Handling and Transportation

1. Introduction

Specimens are requested to determine the causative organism of infection, to confirm or eliminate a specific site or system as the focus infection, and establish vital baseline blood determinates.

The laboratory results are crucial for identification of appropriate therapy, application of isolation protocols, and indication for choice of wound dressing, guidance in appropriate sterilisation and disinfection policies. Therefore they have a considerable impact on service user care.

2. Principles

This Policy must be used in conjunction with Standard Precautions (Section A2), hand hygiene (A1) and the blood and body fluid spillages (B1) policies.

- Laboratory Specimens are time consuming and expensive. Unnecessary tests should be avoided.
- The correct type of specimen should be collected at the appropriate time.
- Collection before the start of antibiotic treatment as small doses of antibiotics will prevent culture of the organism.
- Prompt dispatch of the specimen to the lab.
- Specimen containers should not be more than three quarters full to avoid potential leakage.
- Minimal contamination of the specimen from normal flora from the collector or donor can be achieved by:
  - External information on container which should be completed prior to specimen collection.
  - Sterile containers (with the exception of faeces and sputum) should be used.

3. Documentation

Request forms for laboratory investigations must include the following information. (Unlabelled specimens will not be processed). Without adequate attention to detail, specimen examinations can be inadequate and reporting inaccurate:

Information to be included on the specimen container:
- Service user name and hospital number - names are often similar and hospital numbers minimise risk of misidentification.
- Service User’s age/date of birth - host susceptibility and diseases may vary in accordance with age.
- Ward or department - this will assist the Infection Control Team in the detection of outbreaks of infection.
- Relevant history - tests may be assessed on the basis of clinical history.
- Site of specimen collection - organisms can inhabit areas of the body without harm, but transference of the same organism elsewhere may lead to infection.
- Antibiotic Therapy: omission of this vital information can result in a misleading report.
Date and time of collection: different organisms survive for varying time periods and temperatures.
Name of professional requesting the investigation: urgent telephone conveyance of the result may be required.
Other relevant details may include foreign travel, immunosuppression, occupation or sports, which will determine additional investigations.

4. Specimens Awaiting Collection

Specimens should be as fresh as possible for optimal isolation of microbes. With the exception of blood cultures and any specimens collected for *Neisseria gonorrhoeae*, specimens, which cannot be transported to the laboratory within 2 hours, should be kept in the specimen fridge, delaying growth of bacteria other than suspected organism.

Specimen fridges should be

- maintained at 4°C and specimens should be contained within this fridge.
- locked and away from public access.

Specimens placed within the fridge should be contained within a double sided self-sealing bag to prevent contamination of the fridge.

5. Transportation of the Specimen

5.1 All specimens should be placed in a double-sided sealed plastic pouch, to contain spillage in the event of leakage or breakage.
5.2 Documentation should be separate from the specimen - staples/pins should not be used.
5.3 Staff must place specimen in a secure, robust leak-proof container with a biohazard identification label.
5.4 Containers must be disinfected and cleaned weekly and after any visible spill or leak.
5.5 Specimens should not be transported in pockets or by hand to minimise risk in case of leakage or breakage.
5.6 Accidental spillage or leakage should be cleaned immediately in accordance with Trust policy. Broken specimens should be discarded.
5.7 All vehicles transporting specimens should contain spillage packs and instructions for use.
5.8 In the event of vehicle failure or accident, do not let members of the public handle specimens.
5.9 Personnel should not eat, drink or smoke while carrying specimens.
5.10 Hands should be cleaned in accordance with the Hand Hygiene Policy (Section A1) after handling specimens

6. How to obtain specimens

Please consult the Royal Marsden manual on the C&I Trust intranet for details of how to collect the various specimens.
Appendix 1: Guidance at a glance - Specimen handling

Infection Control at a Glance | Specimen handling and transportation

Specimens are requested to determine the causative organism of infection, to confirm or eliminate a specific site or system as the focus of infection.

For transportation
Staff must place specimen in a secure, robust leak-proof container with a biohazard identification label like this from one Daniels:

- All specimens should be placed in a double-sided sealed plastic pouch, to contain spillage in the event of leakage or breakage.
- Specimens should not be transported in pockets or by hand to minimise risk in case of leakage or breakage.

Specimen fridges should be maintained at 4°C and specimens should be contained within this fridge, locked and away from public access.

What to write on the specimen form
- Service user name and hospital number
- Service User’s age/date of birth
- Ward or department
- Relevant history
- Site of specimen collection
- Antibiotic Therapy
- Date and time of collection
- Name of professional requesting the investigation: urgent telephone conveyance of the result may be required.
- Other relevant details may include foreign travel, immunosuppression, occupation or sports, which will determine additional investigations.

Hands should be cleaned in accordance with the Hand Hygiene Policy (Section A1) after handling specimens.

What to put in your spillage kit:
1. Personal Protective Equipment (PPE) - plastic aprons, non-sterile gloves, face mask, goggles
2. Copy of this poster
3. Disposable paper towels and orange clinical waste bag
4. Sodium Hypochlorite tablets (such as Actichlor Plus) and dilution bottle
5. Spill wipes

Please consult the Marsden manual on the Trust intranet for details of how to collect various specimens.
Section C-Common and important infectious diseases and their management
C1: MRSA

1. Introduction

MRSA is an abbreviation of Methicillin (or Multiple) Resistant *Staphylococcus aureus*. MRSA infection is difficult to treat and may lead to a prolonged stay in hospital for the patient.

Some staphylococci are harmless opportunistic commensals of man. They grow on the skin surface, in the nose, mouth, umbilicus and perineal areas but can become pathogenic when an opportunity arises.

The vast majority of patients with MRSA are colonised rather than infected i.e. the organism is living harmlessly on the skin. However, in some patients MRSA can cause infections of varying severity including septicaemia, cardiovascular conditions, pneumonia and septic foci in other parts of the body, and may prove fatal. This may follow surgery or other breaks in the skin or occur in patients who are immuno-compromised or debilitated.

Prevention of spread is important in order to reduce the risk of transmission to a susceptible patient who may develop an infection. The majority of cross infection occurs from the hands of carers so effective hand washing is important. It is important that any episode of MRSA infection is managed correctly. High standards of infection control, personal hygiene and care for the patient should be exercised at all times.

There is no requirement for people admitted to mental health trust to be routinely screened. The risk of infections such as MRSA bacteraemia has been reported to be low.

2. Screening

Only service users who have been found to be MRSA positive in the past should be screened. See Appendix 1 for how to carry out a screen.

3. Management of positive cases

A service user known to be colonised with MRSA should be nursed in a private room and nursed using standard infection control precautions. (See policy on standard infection control precautions) Contact precautions should not be required unless on the advice of the Infection Control team.

After the results have come back and if the service user remains MRSA positive they should be commenced on decolonisation/suppression protocol (See Appendix 2)

Rescreening should take place after the initial decolonisation/suppression protocol and on the advice of infection control

4. Outbreaks

Two or more related cases in a ward may constitute an outbreak. Service user and staff screening may be required. Large outbreaks may require ward closure to new admissions. This will be reviewed by the IPC team and managed in line with the Trust Outbreak Management policy.
5. **Visitors**

Visitors do not need to wear protective clothing (unless providing care), but should wash their hands with soap and water or rub with alcohol based handrub when leaving the service user. They should be asked not to visit other service users, sit on beds or perform tasks for other service users in the ward.

6. **Discharge**

The General Practitioner and other Health Care staff e.g. District Nurses, Physiotherapists, Podiatrists, Nursing Homes etc., must be informed of the patient's MRSA status.

The presence of MRSA should not be a contra-indication to the transfer of a service user to a nursing or convalescent home. If there is a problem please contact the IPC team.

7. **Community / Service User’s Own Home**

Service user management within a homecare setting reduces the risks of cross infection. However, community staff must be aware of the potential risks of transfer of infection to other patients in the community, and ensure a high standard of infection control are implemented. Effective hand hygiene is critical before and after service user contact.
Appendix 1: MRSA Screening

Screening method
The site for MRSA screening is the nose

- Moisten a swab with transport medium and swab both nostrils with the same swab.
- Complete the request form and mark 'MRSA NOSE SCREEN'

If there are any wounds or catheter/medical device insertion sites swab the wound. If the patient has a productive cough send a sputum. Request C&S (These will be processed for any significant bacteria).

Notes
- Screening must not be done while the patient is on a 'MRSA suppression protocol'.
- Swabs should be sent to the laboratory in normal working hours.
- Swabs taken for MRSA out of the laboratory’s normal working hours can be stored in the specimen fridge. Consultant microbiology advice states that a swab taken on Friday evening can be stored in the fridge over the weekend with no detriment to the result.

INFORM the Infection Prevention and Control Team of positive results.
Appendix 2

Method of application for the topical treatment of MRSA

The treatment protocol below should be given for 5 full days. It may only be repeated once for a further 5 days. Subsequent treatment of patients who persist to be MRSA positive must be discussed with the Infection prevention and Control Team.

Bactroban (Muprocin 2%) nasal ointment (three times a day)

Instructions for use

- Unscrew the cap and squeeze a small amount of ointment, about the size of a match-head, onto a gloved little finger or a cotton bud.
- Apply the ointment to the inside of both nostrils.
- Close the nostrils by pressing the sides of the nose together for a moment to spread the ointment inside each nostril.

Chlorhexidine 4%

a) Chlorhexidine 4% should be used daily for washing instead of soap.

Instructions for use

- Wet the skin before applying.
- Apply to the skin using wet flannel or sponge as for liquid soap or shower gel. This is the correct method of application rather than diluting chlorhexidine in a bowl of water.
- Pay particular attention to skin folds, axillae, groin and behind the knees.

Chlorhexidine 4% should be used as a shampoo twice during the 5-day protocol

Instructions for use

- Use as a shampoo, again ensuring that hair is thoroughly rinsed, to remove all traces.
C2: Carbapenemase-producing Enterobacteriaceae (CPE)

1. Introduction
Enterobacteriaceae are bacteria that usually live harmlessly in the gut of humans. This is called 'colonisation' (a person is said to be a 'carrier'). However, if the bacteria get into the wrong place, such as the bladder or bloodstream they can cause infection. Carbapenemase-producing Enterobacteriaceae (sometimes abbreviated to CPE) are a type of bacteria which has become resistant to carbapenems, a group of powerful antibiotics.

This resistance is helped by enzymes called carbapenemases, which are made by some strains of the bacteria and allows them to destroy carbapenem antibiotics. This means the bacteria can cause infections that are resistant to carbapenem antibiotics and many other antibiotics.

Doctors rely on carbapenem antibiotics to successfully treat certain complicated infections when other antibiotics have failed. The spread of these resistant bacteria can cause problems to vulnerable patients in hospitals or other settings, because there are so few antibiotics available to treat the infections they cause.

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.

Individuals who have these bacteria living in their gut can contaminate their hands when they go to the lavatory. 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.

2. High risk service users
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 carbapenemase producing Enterobacteriaceae.

3. Screening
Unlike acute hospitals, no active screening is required for mental health service users in the high risk categories. Screening requires a rectal swab and would only be done on the advice of Infection Control if there is evidence of transmission in a unit.

4. Management of service users with CPE
In mental health it is unlikely that we would have a service user with an active CPE infection but would expect to see colonisation. Infection Control would provide additional advice if as service user had an active CPE infection.
There is currently no effective decolonisation therapy available for patients found to be colonised with CRE.

In a mental health setting then a service user who is colonised with CPE and is not a high risk of transmitting infection (e.g. has diarrhoea) does not require contact precautions and can use communal facilities. The spread of infection can be minimised through effective hygiene practices and the use of standard precautions for all service users.

It is important that service users who are colonised with carbapenemase-producing Enterobacteriaceae are scrupulous about their own personal hygiene, especially after using the lavatory.

Soap and water should be used for hand hygiene after visiting the toilet and by staff when any faecal matter is involved.

Maintenance of a clean environment is another important infection prevention and control measure. Infection Control will advise on the need for any enhanced cleaning.

See the standard infection control precautions policy for more information.

5. Communication
Information about a service user’s CPE status should be included in discharge and transfer documentation.

6. Outbreaks
Where an outbreak or cluster of cases is suspected—i.e. evidence of transmission in your unit, Infection Control should be notified. With the assistance of Public Health England, an assessment will be made on whether the spread is likely to have occurred within C&I or from elsewhere.

Service users would be managed according to the guidelines above. PHE may request a screening test (rectal swab or faecal specimen) of individuals in the community. Screening helps the PHE centre to understand if there has been spread of carbapenemase-producing Enterobacteriaceae and what the source of this might be.
C3: Tuberculosis

1. Introduction

Tuberculosis (TB) is an infectious disease caused by one of several types of mycobacterium. It often affects the lungs (pulmonary TB) but any part of the body may be infected. The spread of TB is commonly airborne via droplet nuclei and the disease is linked to poverty and overcrowding. The inner city areas of deprivation, such as Camden and Islington, have a prevalence of tuberculosis three times the national average.

Prevention and control of outbreaks are prime concerns for health care workers. The most effective method of control of TB is through the early identification and treatment of cases. Most cases will be found as they present but the diagnosis must be considered in high risk groups e.g. immigrants, the homeless and HIV-infected persons in whom active case finding is recommended. Elderly patients with pneumonia unresponsive to antibiotic treatment always need investigation for tuberculosis.

2. Knowledge

2.1 Recognition of TB

The most important ways of controlling tuberculosis are not only the early identification and treatment of cases but also taking appropriate preventative actions with service users suspected of Tuberculosis where the diagnosis remains to be confirmed.

The most common signs that a service user may have pulmonary TB are:

- A bad cough that lasts 3 weeks or longer
- Pain in the chest
- Coughing up blood or sputum
- Weakness or fatigue
- Weight loss
- No appetite
- Chills
- Fever
- Sweating at night

Anyone can get TB, but certain groups present a higher risk (CDC):

- People with medical conditions that weaken the immune system
- Contact with a person with TB disease
- You are from a country or have visited areas where TB disease is very common
• You live or work where TB disease is more common, such as a homeless shelter, prison, or nursing home.

2.2 Infectivity

Tuberculosis is only infectious when it is pulmonary and the service user has a productive to cough. Tuberculosis in other sites, e.g. lymph nodes, spine, wounds, etc., will still need to be treated, but is not infectious.

As Tuberculosis Bacillus is a slow growing organism, it can take from 3 to 8 weeks to receive a definitive diagnosis of TB; therefore, staff may need to work only with a smear positive diagnosis.

‘Smear positive’ means that acid, alcohol fast bacilli (AAFB) have been found in the specimen. AAFB can be either tuberculosis or another type of Mycobacterium, which may not be infectious; therefore the patient’s signs and symptoms will need to be taken into account.

2.3 Notification

Tuberculosis is a notifiable disease and it is the responsibility of the clinician making or suspecting the diagnosis to inform Public Health England (PHE) to allow contact tracing to commence, even if the service user has died.

Staff should also inform the Infection Control team of an actual or potential case of pulmonary TB.

2.4 Diagnosing active TB

To diagnose active respiratory TB:
• a posterior–anterior chest X-ray should be taken; chest X-ray appearances suggestive of TB should lead to further diagnostic investigation
• multiple sputum samples (at least three, with one early morning sample) should be sent for TB microscopy and culture for suspected respiratory TB before starting treatment if possible or, failing that, within 7 days of starting
• spontaneously produced sputum should be obtained if possible; otherwise induction of sputum or bronchoscopy and lavage should be used (NICE, 2012)

2.5 Multi-Drug Resistant Tuberculosis (MDRTB)

The following are at high risk of MDRTB:
– Those in contact with known cases
– Poor compliance or incomplete treatment for TB in the past
– Positive sputum examination after three months of treatment
– Residence in high risk areas e.g. Asia, Africa, Central or South America, New York and Southern Europe.

These service users should always be managed in negative pressure rooms (never in the open ward) until three negative sputum smears obtained over two weeks or there is loss of cough and fever, and response to treatment in a compliant service user.

All service users with TB should have risk assessments for drug resistance and for HIV.
3. **Infection Control**

If admitted to hospital, people with suspected respiratory TB should be given a single room and placed on airborne precautions (see transmission-based precautions policy).

Service users with respiratory TB should be separated from immunocompromised patients, either by admission to a single room on a separate ward, or in a negative-pressure room on the same ward.

Healthcare workers caring for people with TB should comply with Standard Infection Control Precautions. Wearing of masks is indicated when:

- MDR TB is suspected (FFP3 masks must be used while the patient is considered infectious)
- Aerosol-generating procedures are being performed (FFP3 masks must be used)
- Smear-positive TB patients without risk factors for MDR TB should be cared for in a single room, until:
  - They have completed 2 weeks of the standard treatment regimen or
  - They are discharged from hospital.

Aerosol-generating procedures such as bronchoscopy, sputum induction or nebuliser treatment should be carried out in an appropriately engineered and ventilated area (negative pressure) for:

- All service users on an HIV ward, regardless of whether a diagnosis of TB has been considered
- All service users in whom TB is considered a possible diagnosis, in any setting

Inpatients with smear-positive respiratory TB should be asked (with explanation) to wear a surgical mask whenever they leave their room until they have had 2 weeks’ drug treatment.

**FFP 3 masks are not generally available in Camden and Islington Foundation NHS Trust**

4. **Immunisation**

If BCG immunisation has not been performed, if there are no contra-indications and the tuberculin skin test is negative; the following should be immunised:

- Children 10-14 years
- High risk neonates
- Contacts of active cases
- New immigrants from high risk countries
- Those at risk of occupational exposure
- Those planning to reside in high risk countries for more than one month.
C4: Ectoparasites - scabies, fleas, lice, bed bugs

1. Introduction

Infestation of the skin is an embarrassing and emotional discovery. A good knowledge base of the subject, reduces anxiety of transmission, ensures efficient and effective treatment halting further ectoparasitic spread, ultimately reducing distress to the service user/affected person.

2. Scabies

2.1 Assessment

An initial assessment should include questions in relation to skin problems and direct observation of the skin.

2.2 Knowledge

2.2.1 Sarcoptes Scabiei - Scabies Mite

0.3-0.5 mm long burrows horizontally under the outermost horny layer of the skin. Life span of mite six to eight weeks, lays two to three eggs daily. Burrows are 15-30 cm long and contain eggs and faeces from the mite. Usually found around anterior aspects of the wrists, between fingers, may also be found around nipples of women, penis in men, feet, axilla, groin, buttocks.

Sensitisation to the mite can take several weeks, during which time the service user poses an infestation transmission risk to others.

Spread by contact e.g. prolonged hand holding, close intimate family contact, sexual partners and bed sharers. Symptoms include severe itching exacerbated nocturnally. Hypersensitivity may initiate scratching which results in bleeding.

2.2.2 Norwegian (Crusted) Scabies

In this type of scabies large numbers are found all over the body, presenting a higher infectivity risk.

Norwegian scabies is caused by the same mite as scabies but due to an immuno-deficiency of the hosts there is no natural control of the body to limit the numbers of mites e.g. HIV/AIDS, Long Stay Elderly Units.

The skin is dry, crusts appear, which are heavily contaminated with mites.
2.3 Treatment

The most appropriate treatment should be prescribed by the responsible physician/General Practitioner (GP). The treatment should be applied as per the instruction leaflet and any partners/close contacts of the affected service user should be treated at the same time. Following treatment the patient should don clean clothes. Linen should be treated as contaminated and placed in a red alginate bag to go to the laundry or washed on a hot wash.

Staff applying the cream should wear appropriate personal protective equipment (PPE) such as gloves and aprons, which should be disposed of in the clinical waste

Scabies can spread rapidly in HIV-infected patients. Any suspicious rash in an HIV patient should be referred to a dermatologist for scrapings and direct microscopy. In the event of an outbreak, ward, infection control, dermatology and pharmacy representatives should meet to determine the extent of spread and decide on management.

3. Fleas

3.1 Knowledge

Human flea can live up to eighteen months and survives long periods of starvation. Stains found on underwear caused by human fleas are due to the flea ingesting the host's blood until they are completely full and a small amount then leaks from the anus of the flea.

Reaction to a flea bite is dependent on sensitivity of the host; an urticarial lump may appear within thirty minutes or up to forty eight hours.

Fleas spread from host to host by jumping, during time away from the host it is found on carpets and upholstery.

3.2 Treatment

Fleas should be eliminated from the home by vacuum cleaning and insecticides. Animals and their bedding should be treated. Service user should bathe and clothing should be washed. Staff should adhere to standard precautions.

4. Lice
4.1 Knowledge

Pediculosis Corporis - Body Louse & Egg

The faeces or saliva of the body louse as it bites creates an allergic reaction to the host. The louse lives in the seams of clothing and can lay 2-300 eggs in its three to four week life span.

The louse will bite the host's body for blood two - three times daily, usually the closest contact to clothing e.g. shoulders and upper buttocks. A red macule results from the bite, which creates intense itching, therefore scratching of affected areas.

Sensitisation occurs after initial irritation resulting in additional symptoms of sneezing, generalised rash and watering of the eyes.

Spread is from infested persons’ clothing to new host or their clothing.

4.1.1 Treatment

Service user should be assisted with bathing, and have clothes washed and then tumbled dried for twenty minutes (or disposed of). Notify Pest Control/Environmental Health for treatment of the home.

4.2 Pediculosis Pubis - Pubic Lice

4.2.1 Knowledge

This louse is usually found in the coarser pubic hair, but can be found in the under arms, beard and eyelashes. As with the head louse eggs are attached to hairs close to the skin, they hatch in seven to eight days and maturity is reached by seventeen days.

The host may take four to six weeks to develop sensitisation therefore unaware of infestation. In all cases of pruritus vulvae or ani, pubic lice should not be excluded until fully assessed.

Spread commonly occurs directly by sexual contact. The condition is best managed in Genitourinary Medicine Clinic.

4.2.2 Treatment

Treatment is with a special type of cream or shampoo as prescribed by medical staff. Please follow treatment instructions and adhere to standard infection control precautions when assisting service users in this treatment. Sexual contacts should be treated simultaneously.
4.3 Pediculosis Capitis - Head Lice & egg

4.3.1 Knowledge

The presence of head lice is clinically considered an infestation. However, to reduce the stigma attached to this word, the term ‘infection’ is used in this document instead.

Head lice are grey/brown wingless insects the size of a match head (adult) or pinhead (young). Head lice live at the base of the hair shaft on or close to the scalp, where they can find both food and warmth. Spread is by direct head to head contact.

Head lice affect both clean and dirty hair equally. The female louse lays 5-8 eggs a day glued to hair very close to the scalp. The eggs are flesh coloured and difficult to see. The eggs take 7-10 days to hatch. 6-12 days after hatching, the female begins to mate; she lays new eggs the next day.

Empty egg shells (called nits) are white and easy to see. Their presence does not indicate a new infection. Head lice cannot fly or jump; but crawl through hair. Head lice are caught by head to head contact only. Head lice can survive for a short period off the hair. Therefore, it may be sensible to avoid sharing combs/brushes or hats.

Signs of head lice infection:

**Early Stages:** No symptoms. Therefore, regular (weekly) detection, using the detection comb is important.

**Later Stages:** Nits, and head lice and possibly itching (eczema and other skin conditions can also cause an itchy skin). Black dust on pillows of infected people may be seen, as head lice shed skin, and/or head lice droppings.

**Chronic Infection:** Itching is uncommon as sufferer is desensitised.

Hypersensitivity to the saliva and/or faeces of the louse is followed by irritation. It is usually confined to head area but may occur in the eyebrows, beard and axilla. Shiny, pearl coloured eggs are glued to the base of a hair close to the scalp, with a quick setting secretion from the female louse’s accessory glands. Eggs hatch between six and sixteen days later and reach maturity during the next eight to eighteen days. After hatching has occurred the egg shell remains firmly glued to the shaft and is identifiable as white in colour, this is known as the nit.

The hypersensitivity and irritation can initiate scratching which can cause extensive secondary infection. On detection the infestation has usually been established for at least four weeks.
Detection is by the “Wet Combing” method. Live head lice should be seen by the service user or staff prior to starting treatment (hatched eggs or nits, stuck to the hair, may be signs of previous infections).

4.3.2 Treatment

Insecticides are used in the treatment of head lice as recommended by Pharmacy. They should never be recommended unless a living, moving louse is present (black sesame seed size, not white nit cases). Treatment instructions should be followed closely and more than one treatment may be required.

Treatment guidelines should be based on the latest up to date information available: http://www.phmeg.org.uk/files/1013/2920/7269/Stafford_Headlice_Doc_revise_2012_version.pdf

Mechanical removal of head lice may be a last resort if chemical treatments fail or if the service user has refused treatment with an insecticide or if families prefer this method and are prepared to take the time to undertake. Hair should be washed and with conditioner still on the hair, it is combed gradually using a fine toothed detection comb, section by section to remove the lice. The procedure must be carried out every fourth day for two weeks.

Service users should be encouraged to buy products from their local pharmacy. If a prescription is required they should consult their GP.

Treatment failure

Causes of treatment failure may be due to:

- Incorrect product application.
- “Imaginary head lice” - check if a true infection (live head lice seen on “Wet Combing” was detected prior to treatment). Itching can be caused by insecticides used.
- Inadequate or inappropriate treatment - Where one or two applications of the insecticide tried? Was enough lotion used? Was it properly applied? Were all contacts traced, checked and treated if necessary?
- Misdiagnosis e.g. itch or nits (nits remain on the hair until physically removed or hair is cut off) still present after treating head. Were live head lice seen following treatment when using “Wet Combing” method?
- Young head lice seen following the first application of insecticide may have hatched from eggs after the first application. Determine if head lice seen are:
  
  **Young (pin head size):** This is not treatment failure or re-infection. Need to complete the second application of lotion on day 8, or use “Wet Combing” treatment regimen.

  **Adult (match head size):** Seen 1 day after treatment could be treatment failure. Seen 3 days after treatment or later is re-infection, possibly due to inadequate contact tracing. Advise that a full “Wet Combing” regimen is adopted to treat head lice and then to use “Wet Combing” weekly to detect and prevent re-infections.
4.4 Bedbugs (Cimex Lectularius)

4.4.1 Knowledge

Bedbugs are approximately 5mm long, flat body, rusty red/brown to mahogany coloured, oval, wingless insects that live and lay eggs in wall, furniture and bedding. Faecal tracks may be seen on the walls. Heavily infested rooms may carry a distinctive and unpleasant almond-like smell that is are given off by the bed bugs’ ‘stink glands’

The bedbugs are active at night, causing a biting nuisance and disturbed sleep.

Bed bugs hide and lay their eggs on the floor by the wainscoting cracks and crevices in beds and bed frames, bedclothes, mattresses, bedsprings, furniture, curtains, soft furnishings, under wallpaper and skirting boards etc.

4.4.2 Transmission

Directly for infested premises on portable bedding or baggage. Bedbugs are rarely found on the person, but may be brought in on patient’s clothes or effects. Bed bugs are not disease carriers themselves but their blood feeding can cause severe irritation in some people, resulting in loss of sleep and lack of energy. Their bite often gives rise to a hard, whitish swelling that leaves a dark, red spot surrounded by a reddened area.

4.4.3 Treatment

If you suspect a bed bug infestation contact Pest Control through the E&F Help desk and notify the Infection Control Team.

To eradicate the bed bugs it may be necessary for Pest Control to treat the contaminated area with insecticide on more than one occasion. Depending on the extent of the infestation, the Infection Control Team may advise that some furnishings be replaced or that room redecoration is required.

If the service user is in single accommodation, they will need to transfer to another bedroom. If the patient is in dormitory accommodation, all the service users there will need to transfer to other accommodation **BUT** before moving them so that as much of the debris, eggs and pupae are removed as possible, it is important that

1. All of the bed linen is sent to the laundry service or washed **inside out** on the hottest wash it can tolerate and tumbled dried.

2. All of the service user’s clothing, including any clothes in wardrobes, drawers, bags, etc is washed **inside out** on the hottest wash it can tolerate and tumbled dried.

3. You need to consider if clothing, toys and loose articles or such like from the floor may be infested. Generally, anything that can’t be washed or is past its ‘best’ may need to be disposed of.

4. A prescription of antihistamines may help control skin itchiness from the insect bites.
**C5: Blood Borne Viruses**

1. **Knowledge**

   This policy is to be used in conjunction with Standard Precautions, Spillages, Waste Disposal and Safe Use and Disposal of Sharps policies.

   Human Immunodeficiency Virus (HIV), Hepatitis B (HBV) and Hepatitis C (HCV) are all blood borne viruses. These viruses can be transmitted when a needle or sharp object contaminated with infected blood or body fluid penetrates the skin in the health care setting. These viruses can also be contracted through sexual contact with an infected person because of its presence in semen and saliva (DOH 2000).

   The risk of transmission to a susceptible HCW from an infected patient following such an injury has been shown to be around: 1 in 3 when a source service user is infected with HBV and is ‘e’ antigen positive 1 in 30 when the service user is infected with HCV 1 in 300 when the service user is infected with HIV

   There is no evidence that these infections can occur through social contact such as sharing telephones or other office equipment. The outcome of these infections depends on the particular virus: in the case of HIV, it can progress to severe HIV infection. Hepatitis B and C infections may clear up completely or lead to a chronic carrier, which can progress to cirrhosis of the liver.

   For more information on BBVs-please see Appendix 1

2. **Care of service users with blood-borne viruses**

   Using sterile needles, avoiding unsafe sexual practices and wearing protective equipment when handling blood/body fluids achieve prevention of transmission of blood borne viruses.

   HIV infections in psychiatric patients present the mental health services with a number of challenges. Firstly, it is important that patients with HIV infection receive the same standard of care as any other individual suffering from mental disorders. This means that mental health workers should be educated and trained to manage and treat service users with HIV.

   In addition, mental health workers should not display negative attitudes or have any fears when caring for HIV positive patients. These patients should be cared for in the normal way. The transmission of blood borne viruses, from patient-to-patient, or patient to health care workers can have serious consequences not only for the person infected but also for the trust because of health and safety legislation. In spite of guidance and education, many health care workers continue to be exposed to blood borne viruses from needlestick, sharp injuries and mucosal exposure, (Evans et al 2001).

   Research indicates that the prevalence of infection has increased in drug users and residents of long term institutions and those certain occupational groups have a higher risk of infection, (Rowland 1990), (Van Damme et al 1995) and (DOH 1996). Hepatitis B is a preventable disease and the Department of Health recommends that staff at risk should be vaccinated. This Trust encourages both staff and patients to be immunised against Hepatitis B, (HSC 1998/063).

   Significant findings from the Eye of the Needle report (2014):
• 4830 significant occupational exposures to a bloodborne virus (BBV) were reported among healthcare workers; the annual number of exposures increased from 373 in 2004 to 496 in 2013
• of healthcare workers reporting a significant occupational exposure, half were exposed to hepatitis C (HCV), a third to HIV and one in ten to hepatitis B (HBV)
• seven in ten (71%, 3396/4766) exposures involved a percutaneous needlestick injury, the majority of which were sharps injuries involving a hollowbore needle;
• nine HCV seroconversions following occupational exposure were reported in England, Wales and Northern Ireland; eight of the nine healthcare workers received antiviral therapy of whom seven are known to have achieved viral clearance

Care for Known Carriers of HIV/HBV/HCV

• use standard precautions at all time
• No special toilet or bathing precautions are necessary except if the patient has diarrhoea when a separate toilet is recommended.
• Crockery and cutlery should be washed as normal in the dishwasher.
• Gloves must be worn when giving first aid, removing or changing wound dressings and handling dirty laundry.
• Masks and eye protection must be used when resuscitating patients.
• Service users should not share toothbrushes, razors, or nail scissors/clippers.
C6: Viral Haemorrhagic Fevers

1. Introduction

Viral Haemorrhagic fevers are endemic in Africa and parts of South America, the Middle East and Europe but are very rare in the UK.

Four diseases can be transmitted from person to person and have a high mortality rate: Lassa fever; Crimean/Congo Haemorrhagic fever; Ebola and Marburg viruses.

Accidental inoculation or contamination of mucous membrane or broken skin by body fluids has a potential risk of transmission.

2. Principles - Viral Haemorrhagic Fevers - Knowledge

2.1 Lassa Fever

Epidemiology

Found in West and Central Africa, primarily in rural areas.

Transmission

The initial infection is acquired via contact with urine from the multi-mammate rat. Person to person spread is via needlestick injury or close contact with oral secretions.

Incubation period

The incubation period is 3 - 17 days

Clinical characteristics

Fever (lasting 6-30 days); headache; shivering and a sore throat are common. Swelling of the face and neck, vomiting and diarrhoea can sometimes be followed by renal and circulatory failure, with bleeding into the skin and mucosa.

Treatment

Ribavirin (an antiviral) is an effective treatment

2.2 Ebola Virus

Epidemiology

Ebola virus has caused outbreaks in the Republic of Congo and Sudan with an attendant mortality rate of 89% in secondary cases among carers such as the recent outbreak (2015) in West Africa.

Transmission

Infection can be acquired from monkeys and spread person to person via contact with infected blood or body fluids or through sexual contact.

Incubation period
The incubation period is 4 - 16 days.

Clinical Characteristics

High fever; rigors; headache and myalgia develop, followed by vomiting and severe diarrhoea. Rash and spontaneous bleeding are common.

Treatment

There is no specific treatment available for Ebola virus infection.

2.3 Marburg Virus

Epidemiology

Marburg Disease has occurred in laboratory workers having contact with African green monkeys, their blood or organs. Outbreaks have been reported in Kenya and Zimbabwe.

Transmission

Infection can be acquired from monkeys, and person to person via blood/body fluids.

Incubation period

The incubation period is approximately 4 - 16 days.

Clinical Characteristics

Fever; rigors; headache and myalgia, with diarrhoea and vomiting; Rash and spontaneous bleeding are common.

Treatment

There is no specific treatment for Marburg disease.

2.4 Crimean Congo Haemorrhagic Fever

Epidemiology

Congo Crimean Fever has caused outbreaks of varying severity in the Central Asian Republics, Crimea, Republic of Congo, the Middle East and India.

Transmission

The infection is transmitted by a tick bite but can be acquired by contact with blood.

Incubation period

The incubation period is approximately 7 - 12 days.

Clinical Characteristics

Fever; rigors; headache and limb pain develop, followed by vomiting. Swelling of the soft palate and a petechial rash are common. Bleeding from the nose or gut, and bruising, can be fatal (30-50% of cases).
Treatment

Some antivirals may be beneficial but treatment is generally supportive.

3. Management of Suspected Cases

Service users should be placed in minimum, moderate or high risk groups on suspected diagnosis of viral haemorrhagic fever.

Early in the disease, standard infection control precautions are adequate protection against transmission of infection. Unless the diagnosis can be quickly excluded, the service user must be referred to a specialist centre. The admitting physician must formally notify suspected or confirmed cases of viral haemorrhagic fever to Public Health England.

Minimum Risk

Person has a fever but has not been in a known endemic area or from endemic area. Contact history but more than 21 days after last contact.

Moderate Risk

Person has a fever and is from an endemic area within 21 days before onset of symptoms, or from adjacent area with severe illness, organ failure or unexplained haemorrhage.

High Risk

Person has a fever plus:

From an endemic area within three weeks before illness and in a house for more than 4 hours where there was a suspected case or has nursed ill, febrile patients or had contact with body fluids or dead body of suspected case; previous moderate risk but developed organ failure and/or haemorrhage.

Not from endemic area but cared for suspected case, contact with body fluids or tissues or handled clinical specimens suspected to contain the virus.

4. What to do in the event of a suspected case

4.1 Ask the service user to wait in a private room (can be any room) with the door closed immediately. If this proves problematical call Infection Control for a risk assessment.

4.2 Seek immediate assistance- a clinical member of staff (senior nurse, doctor) should ring the London Ambulance Service (LAS) on 999-they will ask further questions according to the Public Health England algorithm and arrange for transfer of the person out of your facility if appropriate.

4.3 Contact Infection Control for further advice and support-including Out of Hours support from UCLH*
4.4 Standard precautions including hand hygiene and appropriate personal protective equipment should be used in dealing with the person. Remember the service user is only considered infectious if they are symptomatic.

4.5 Once the service user has been discharged from your area, do not use the room until it has been correctly cleaned. Infection Control will provide further advice and support about cleaning the room the service user has been in.

Infection Control is asking that all teams and clinical areas have sufficient stocks of the normal personal protective equipment (PPE) that you carry—this includes gloves, aprons, face protection and surgical masks as well as a spillage kit for dealing with blood and body fluids. In the community setting this PPE may be in your spillage kit.

5. Useful Contacts/Information

- Infection Control – 020 3317 3487/078 1018 0774 or 020 3317 3353/078 8766 1854
- Infection Control Doctor - 0845-155-5000 Ext 9516/99114

*Out of hours* contact 0845-155-5000 and ask to be put through directly to Professor Wilson or the Microbiologist on call

- North East and North Central London Health Protection Team-020 7811 7100
- Occupational Health: 0203 317 3350

6. Occupational Health

Any staff travelling to, or returning from areas of high viral haemorrhagic fever risk are strongly advised to use the screening facilities at both the point of departure from these countries and at entry into UK. Entry Screening will identify your level of risk and you will be given printed information and a Public Health England (PHE) contact details, in case you develop symptoms (up to 21 days).

Any member of staff who has been to an affected area should contact the Occupational Health Department before returning to work, so we can ensure you have the most up to date advice and any additional support you may need.

For most staff returning from this region there are no restriction required and staff can return to all their usual activities, including most work.
C7: Herpes Varicella-Zoster Virus, Chicken Pox and Shingles

1. Introduction

Chickenpox (varicella) is a highly infectious disease caused by the varicella zoster (VZ) virus. The incubation period is between 10-21 days. Chickenpox usually confers lifelong immunity, although the virus persists in a latent form in the sensory nerves. Reactivation of the latent varicella virus in later life results in shingles (Herpes zoster). It is not known what causes the virus to reactivate; reactivation can be spontaneous or follow a period of physical illness or stress.

Immunization against varicella is available.

Clinical Features

- **Chickenpox**
  Characterised by a blister-like itchy rash, appears initially on the face, scalp and trunk, but can spread over the entire body. Other symptoms which may precede the rash by 48 hours include general malaise, fever and headache.

- **Shingles**
  The virus causes severe pain and itching followed by the development of blister-like lesions, occurring at the site of the affected sensory nerve, typically causing a strip-like pattern on one side of the body.

Transmission

- **Chickenpox**
  Chickenpox is transmitted through direct person to person contact, via airborne spread of respiratory droplet nucleii, and vesicle fluid or through contact with infected articles such as clothing and bedding.

- **Shingles**
  Shingles is much less infectious than chickenpox although spread may occur from service users who have extensive lesions and susceptible contacts can develop chickenpox.

  Transmission can occur through direct contact with exudate from wet lesions or airborne via vesicle fluid in disseminated shingles.

Infectious Period

- **Chickenpox**
  The most infectious period is from one to two days before onset of the rash and continues for one week after onset or until all lesions are dry and have crusted. NB immunosuppressed service users may be infective for longer.

- **Varicella Zoster (VZ) Virus, Shingles**
  For one week following onset of eruption or until lesions are dry. NB period of infectivity may be slightly reduced by antivirals such as Acyclovir.
Testing
Adults suspected of having chickenpox require a viral swab taken from a wet vesicle.

2. Infection Control Precautions

Service users with chickenpox or shingles must only be attended by staff known to be immune.

Standard infection control procedures must be used for all service users regardless of perceived or known infection risk factors (refer to standard infection control precautions policy).

Admission of service users with chickenpox should be avoided where possible. In acute settings, service users with suspected or confirmed chickenpox must be placed immediately in a single room on airborne and contact precautions.(See Transmission-based precautions policy).

If symptoms develop during an inpatient stay, transfer to a single room should occur promptly. Isolation rooms used require en-suite facilities, preferably negative pressure, and doors must be kept closed-consider transfer to an acute ward if this kind of isolation is required.

Service users with shingles should ideally be placed in a single room during their infectious period. Infection Control will assist you in performing a risk assessment of the shingles and placement of the service user.

Staff Contacts
Please refer to the Occupational Health.

PREGNANCY CONTACTS

Following known or possible exposure pregnant service users and staff should have their immune status checked. If susceptibility is confirmed by antibody testing the women should be offered Varicella-Zoster Immunoglobulin (VZIG). This must be given within 10 days of contact. Due to the potential risks to the unborn child, pregnant staff should not care for infectious patients unless their immunity has been confirmed by antibody testing. If unsure, staff should check their immune status with Occupational Health.

NOTIFICATION

Healthcare staff must report, at the earliest opportunity, patients suspected or infected with varicella zoster virus (chickenpox or shingles), to the Infection Control Team.
C8: Food Poisoning (Gastro-intestinal infections)

1. Introduction

Food poisoning is an illness caused by eating contaminated food. In most cases, food that causes food poisoning is contaminated by bacteria, such as salmonella or Escherichia coli (E. coli), or a virus, such as norovirus. The symptoms of food poisoning usually begin 1-3 days after eating contaminated food and include:

- nausea/vomiting
- diarrhoea
- stomach cramps

Some toxins can cause food poisoning within a much shorter time. In these cases, vomiting is the main symptom. Foods particularly susceptible to contamination if not handled, stored or cooked properly include:

- raw meat and poultry
- raw eggs
- raw shellfish
- unpasteurised milk
- 'ready to eat' foods, such as cooked sliced meats, pâté, soft cheeses and pre-packed sandwiches

All service users with diarrhoea must be placed on contact precautions and nursed in a single room with en-suite facilities.

The most common cause of diarrhoea in hospitals is associated with antibiotic use but large outbreaks of food poisoning are possible in hospital because of bulk catering.

2. Common causes of food poisoning

- *Campylobacter spp.*
  - Present in uncooked poultry and meat, unpasteurised milk and faecally contaminated water. Like *Salmonella* is resident in the gut of animals.
  - Transferred by careless handling of meat, especially raw poultry, self-contamination and cross-contamination from the hands. Drinking contaminated raw milk has been implicated in some outbreaks.
  - Symptoms similar to salmonellosis. Abdominal cramps followed by foul smelling, bile stained or bloody diarrhoea.
  - Prevention scrupulous cleanliness before and after handling raw meat and poultry. Prevent cross contamination from raw to cooked foods.

- *Salmonella spp.*
  - Present in Raw meat, poultry, untreated milk, made-up foods such as sausage meat, mince, mayonnaise and egg mixes.
  - Transferred from food to hands, utensils or work surfaces which in their turn can contaminate other surfaces or cooked foods such as ham, corned beef and other cold meats to be eaten without further cooking. Also direct contamination from raw to cooked food.
Symptoms: Nausea, vomiting, abdominal pain and diarrhoea, possibly accompanied by headache and fever - from 6-72 hours after eating (usually 12-36 hours). Speed of onset depends on dose. Elderly and AIDS patients susceptible to septicaemia.

Prevention: Hand washing after handling raw food. Thoroughly clean utensils and work surfaces before re-use. Separate storage and preparation areas for raw and cooked food.

**Staphylococcus aureus**
- Present on normal healthy skin or in nose or throat. Septic lesions in food handlers and certain virulent strains are risky.
- Transferred via contaminated hands directly on to cooked food. The organism, though usually destroyed by normal cooking, produces a heat resistant toxin. Once contamination occurs in certain made-up or prepared dishes, re-heating or even thorough cooking will not destroy it.
- Symptoms: vomiting, occasional abdominal pain, diarrhoea, headache, sweating and exhaustion from 1-6 hours after eating.
- Prevention: Frequent handwashing by food handlers. Those with infected wounds on hands and arms should not handle food until wounds have healed. Where possible, avoid handling cooked food.

**Clostridium perfringens**
- Present in soil, in human and animal excreta, in raw meat and poultry and in other food including dehydrated products.
- Transferred by spores - dormant in food, soil and dust and capable of surviving heat and dehydration - may be activated by cooking to germinate and multiply to large numbers necessary to cause illness. The illness is caused by a heat labile enterotoxin. Outbreaks are liable to occur in large-scale catering where meat and poultry dishes are pre-cooked, cooked slowly, incorrectly stored and then re-heated inadequately.
- Symptoms: abdominal pain, headache, vomiting and diarrhoea 8-22 hours after eating contaminated food.
- Special care: Correct cooling time before refrigeration is one of the critical factors. Uneven heating of bulk fluids especially stews can lead to outbreaks.

**Bacillus cereus**
- Present in air and in soil where vegetables, cereals and rice grow.
- Contamination of warm cooked rice, kept in warm moist conditions, allows the spores to germinate, multiply and produce enterotoxins. Growth on rice encourages toxin production. Rapid reheating of rice (e.g. “fried rice”) is not sufficient to inactivate these toxins.
- Symptoms of two kinds (i) nausea, vomiting within 1-6 hours (like *S. aureus*), (ii) acute diarrhoea with occasional vomiting within 6-16 hours (like *C. perfringens*). Never both.
- Prevention: Proper storage of cooked rice.

Acute diarrhoea caused by viruses
- Acquired by eating undercooked shellfish or by the faecal-oral route. Generally very infectious and easily transmitted from person-to-person. Outbreaks often occur in nurseries and in hospitals (especially care of the elderly wards) where hygiene is deficient.
- Symptoms: Incubation period a day or two depending on the virus. Preceded by a cold-like symptoms (hence the term “gastric ‘flu), the first GI symptom is usually
vomiting, often unexpected and projectile- hence the infectivity. Proceeds to major watery diarrhoea usually without blood and pus.

- **Prevention:** No undercooked or raw shellfish in hospital. Isolate all patients with diarrhoea. Obsessional hand hygiene.

**Specific viruses:**

- **Rotavirus:** resistant to disinfectants and survive well on fomites. Replicates and destroys intestinal epithelium. Common in infants and the elderly.
- **Norovirus and other Small Round Structured Viruses (SRSV):** Acute gastroenteritis, extremely infectious.
- **Caliciviruses:** probably obtained from animals. Some explosive outbreaks.

- Escherichia coli O157 (an example of enterohaemorrhagic E. coli)
  - Present in undercooked meat, especially beef and unpasteurised milk products.
  - Transferred by cross contamination from hands, with occasional outbreaks. Widespread outbreaks are associated with undercooked hamburgers and unpasteurised milk. The infective dose is very low.
- **Symptoms:** cramping abdominal pain and diarrhoea, often bloody. Vomiting is present in half the patients affected but fever is no usually a feature. Rarely infection is associated with Haemolytic Uraemic syndrome because of the shiga toxin (from *Shigella dysenteriae*), which is carried by the organism. The patient has haemolytic anaemia, acute renal failure with a low platelet count.
- **Prevention:** Thorough cooking of beef products and pasteurisation of all dairy products. Handwashing before preparing food and eating. Care with occupational and recreational exposure to animals.

3. **Service User Management**

**Contact Precautions (see Transmission-based precautions policy)**

Inform Infection Control Team about service users with diarrhoea. Place in single room on contact precautions.

If an outbreak is suspected, follow guidance in Outbreak Policy A2.

**Treatment of Acute Gastroenteritis (All Causes)**

Replace fluids and electrolytes. Carbohydrate: sodium ratio 1.2:1. Use oral rehydration unless severe. Intravenous rehydration often used unnecessarily.

Do not use antisecretory drugs (bismuth), antimotility drugs (loperamide), absorbants (kaolin), antiemetics. They are all ineffective in acute infection and do not prevent fluid loss.

Antibiotics are ineffective for most gastroenteritis, which is self-limiting, but essential for elderly patients with salmonella septicaemia. Antibiotics probably prolong the carrier state of *Salmonella* and *Shigella*.

4. **The Ten Most Common Causes Implicated In Outbreaks of Food Poisoning**

1) Food prepared too far in advance

2) Food stored at room temperature, i.e. not under refrigeration
3) Cooling food too slowly prior to refrigeration
4) Not reheating food to high enough temperature to destroy food poisoning bacteria and heat labile toxins
5) The use of cooked food contaminated with food poisoning bacteria
6) Undercooking meat and meat products (including poultry)
7) Not thawing frozen meat and poultry for sufficient time
8) Cross contamination from raw to cooked foods
9) Storing hot food below 63°C (145°F)
10) Infected food handlers

5. Preventing food poisoning
The best way to avoid getting food poisoning is to ensure you maintain high standards of food hygiene when storing, handling and preparing food.

According to the Food Standards Agency (FSA), a useful way of preventing food poisoning is to remember the four Cs:
- cleaning
- cooking
- chilling
- cross-contamination (avoiding it)

5.1 Cleaning
The spread of harmful bacteria and viruses can be reduced by maintaining good personal hygiene standards and keeping work surfaces and utensils clean.

Regularly wash your hands with soap and warm water. You should never handle food if:
- You have diarrhoea and/or vomiting
- You have sores and cuts (unless they are covered with a waterproof dressing)

5.2 Cooking
It is important to cook food thoroughly, particularly poultry, pork, burgers, sausages and kebabs. This will kill any harmful bacteria that may be present, such as listeria and salmonella.

5.3 Chilling
Certain foods need to be kept at the correct temperature to prevent harmful bacteria from growing and multiplying. If food has to be refrigerated the fridge temperature should be between 2 and 8 degrees centigrade.

5.4 Cross-contamination

Cross-contamination occurs when bacteria are transferred from foods (usually raw foods) to other foods. Contamination can be:

- **direct** – where one food touches or drips onto another food
- **indirect** – where bacteria on your hands, work surfaces, equipment or utensils are spread to food

To prevent cross-contamination:

- always wash your hands after handling raw food
- store raw and ready-to-eat foods separately
- store raw meat in sealable containers at the bottom of your fridge so that it cannot drip onto other foods
- use a different chopping board for raw food and ready-to-eat food, or wash it thoroughly in between preparing different types of food
- clean knives and other utensils thoroughly after using them with raw food
- do not wash raw meat or poultry – any harmful bacteria will be killed by thorough cooking, and washing may splash harmful bacteria around the kitchen
Appendix 1: Food hygiene at a glance guidance

**Infection Control at a Glance**

**FOOD HYGIENE**

The definition of a food handler is anyone involved in the handling or preparation of food and beverages and the storage of food products. This therefore includes such staff groups as catering, domestics, housekeeping, portering, nursing, therapy, all care staff, and service users.

For more detailed information see the C&I Food Hygiene policy

**Fridge and freezer temperatures**

Fridge and freezer temperatures should be monitored daily and recorded.

Fridges should be between 2 and 8 degrees and freezers should be below -18 degrees if they are not keep doors closed and report the fault.

**Hand Hygiene**

Hands must be washed before handling food using hot water and soap to remove harmful bacteria, then dried using clean paper towels.

**Sickness**

Food handlers must report any sickness i.e. diarrhoea and/or vomiting and must not return to work until they have been clear of diarrhoea and/or vomiting for 48 hours.

**Colour-coded chopping boards**

Some foods contain bacteria e.g. raw meat, dirty vegetables, raw egg and raw fish. They must be prepared separately from ready to eat foods to prevent contamination. Separate chopping boards and surfaces should be used.

**FOOD STORAGE**

Raw meat, dirty vegetables, raw egg and raw fish must be stored separately or below cooked or ready to eat foods i.e. cooked chicken as they contain bacteria which could contaminate foods.

**TOP TIPS for Food Hygiene**

- Kitchens must be kept clean and tidy at all times.
- Use blue towel to dry up any items you have used.
- Wear clean clothes when you are cooking.

**Cooking and reheating food**

When cooking and reheating foods, it must reach 75°C or hotter at the centre of the food. Dishes must be hot (steaming) all the way through with no pink or red meat in the centre. A thermometer is the most accurate way of checking.

**Cooling**

Food must be cooled as quickly as possible (within 90 minutes) to stop bacteria from growing. In order to speed up the cooling process you could transfer food into smaller containers or store foods in a cool area before placing them in the fridge.
C9: Legionnaires' disease

1. Introduction

Legionellosis and other forms of "atypical" pneumonia are not considered to be an infectious risk to contacts. It usually affects more than one lobe of the lung and is caused by a Gram-negative bacillus Legionella pneumophila.

The air conditioning in buildings is a common source of Legionella pneumophila. The disease was first recognised during an outbreak involving delegates to the 1976 Pennsylvania American Legion convention at a Philadelphia Hotel. Clusters of cases are associated with air conditioning and there are sporadic cases, which presumably arise from domestic or hotel showers or baths. In hospital the organism may be transmitted from faulty air conditioning or in drinking water.

This policy should be read in conjunction with the Estates Department’s policy on the Legionella Management and Control policy which will include such things as testing.

2. Transmission

Most transmission is by the inhalation of aerosols or by micro-aspiration of contaminated water. Aerosol-generating systems linked to outbreaks include cooling towers, wet evaporative air cooling systems, respiratory-therapy equipment and whirlpool baths. Drinking water has been implicated as a source in some immunosuppressed patients.

Several studies have shown nosocomial legionellosis associated with aspiration particularly via nasogastric tubes and a higher incidence among patients who had undergone head and neck surgery. There is no evidence of person-to-person spread.

Legionellosis tends to affect middle-aged sedentary men who smoke. The attack rate is low but the mortality is high. Pontiac Fever is also caused by Legionella pneumophila and paradoxically is probably caused by a large inoculum. This is an influenza-like illness with a short incubation period and high attack rate. The mortality is negligible and recurrences on re-exposure are common.

3. Action

Examining the urine for legionella antigen makes the diagnosis. Antibody rises tend to be delayed so are not helpful in making the initial diagnosis.

If a case is suspected or proved you should inform the Infection Control Team who will liaise with the NENC Health Protection Unit. Isolation is not necessary.

If the case is suspected to be hospital acquired an outbreak meeting will be convened.

4. Prevention:

Trusts have a duty of care and responsibility to control legionellosis in the water supply by applying the guidance in:

A. Health Technical Memorandum (HTM) 2040. The control of legionellae in healthcare premises,
B. HSC L8 in accordance with HTM 04-01.
C. HTM 2027 Hot and cold water supply and mains services,
D. HSE HS(G) 70 The control of legionellosis,
E. HSE ACOP The prevention and control of legionellosis
F. BS6700 and Health and Safety at Work Act 194,
G. Control of Substances Hazardous to Health Regulations 2002.

All Service User/staff showers and taps that are under used, i.e. a minimum of twice per week or not used for 4 days*, should be flushed twice a week in line with best practice guidance Run the water on hot for the minimum of 2 minutes and record on log sheet, Appendix 1 – the record sheet should be kept in the folder along with the Medical Devices Checklist, Hand Hygiene Audit and Environment Hygiene Check List.

*Any shower, bath, sink or toilet that is not regularly flushed through can compromise the water system of the whole building. It is essential that any rooms with water outlets that are used for storage must either have:

Access for staff to reach the sink, toilet, shower, bath to flush the system

Or

Notify the Estates Department to take the piping back to stop the water to that room. (Keep copy of paper work in the log file).

Temporary or Permanent Closure of Wards or Buildings

The Estates Department must be informed of any temporary or permanent closures so that the water can either be turned off or flushing system be out in pace.
Appendix 1: Register of underused outlets and flushing schedule

Definition: Underused outlets are those outlets which are not used on a regular basis i.e. a minimum of twice per week or not used for 4 days.

Ward/Area: ..................................
Week Commencing: .......................  

<table>
<thead>
<tr>
<th>Outlet and Exact Location</th>
<th>.........day Flush</th>
<th>.........day Flush</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.g. Shower in male toilet</td>
<td>Tick</td>
<td>Tick</td>
</tr>
<tr>
<td>Wash hand basin in male toilet</td>
<td>Initials</td>
<td>Initials</td>
</tr>
</tbody>
</table>

To help prevent Legionella

Twice a week flush underused water outlets which are not used on a regular basis for a minimum of 2 minutes. Then document it’s been done

Please keep this record sheet in the folder with the Medical Devices Checklist, Hand Hygiene Audit and Environment Hygiene Check List.
C10: Antibiotic Associated Diarrhoea (Clostridium difficile)

1. Introduction

Clostridium difficile (C. difficile) is a spore-forming organism that can survive in the healthcare environment and colonisation is usually acquired by ingestion after contact with a contaminated environment, equipment, other patients or the hands of staff. However there are approximately 3% of the population who are naturally colonised with the spores as part of their normal bowel flora.

C. difficile Infection (CDI) occurs when the normal flora of the bowel is disrupted, usually as a consequence of treatment with broad spectrum antibiotics. This is confirmed by the toxin A & B test.

C. difficile infections are most common in people over the age of 65 years but any age group may be susceptible. Illness ranges from mild diarrhoea of short duration to severe and potentially life threatening inflammation of the bowel called Pseudomembranous colitis.

Outbreaks of infection can be prolonged and difficult to control. Large outbreaks of C. difficile associated with loss of life have occurred in healthcare facilities.

2. Risk factors

- Aged > 65 years
- Severity of underlying disease
- Chemotherapy
- Chronic Renal disease
- Immunocompromised
- Gastrointestinal procedures / Bowel surgery
- Enteral feeding / NG tube
- Proton Pump Inhibitors (PPI) – and H2 antagonists
- Recent healthcare intervention
- Antibiotic therapy – Almost all cases of C. difficile infection (CDI) will have had a recent history of antibiotics (NHS England 2015)

Symptoms

- Watery diarrhoea / type 5, 6, 7 on Bristol Stool Chart – stool smells offensive and can contain mucous / be green in colour
- Abdominal pain / tenderness
- Fever / nausea / loss of appetite

3. Management

A range of factors may cause diarrhoea and it is therefore essential to identify any underlying causes which are abnormal for the patient and may be indicative of infection. In order to prevent spread to other service users an assessment must be undertaken using the diarrhoea assessment tool (appendix 1) and contact precautions must be employed promptly

The essential components in the prevention and control of C. difficile disease are:

- High index of suspicion – C.difficile is to be suspected when there is no clear alternative cause for diarrhoea.
• All symptomatic service users must have stool tested promptly.

• All symptomatic service users must have each episode of loose stool recorded on a stool chart using the criteria of the Bristol Stool Chart (Appendix 2)

• Prudent antibiotic prescribing to reduce the use of antibiotics particularly quinolones and cephalosporin’s.

• Use of Contact Precautions for service users with C. difficile diarrhoea and strict infection control practices. (See Transmission-based precautions policy)

• Hand washing with soap and water (hand sanitiser does not kill the spores of C. difficile) before and after direct patient contact and/or contact with potentially contaminated clothing or equipment, and wearing of gloves and aprons appropriately.

• Enhanced environmental cleaning and the prudent use of high level disinfectant products (under the direction of the Infection Prevention Team) where there are cases of C. difficile infection in order to reduce environmental contamination.

3. Treatment

a) Stop the antibiotic if it is still being prescribed
b) Ensure hydration with fluid and electrolyte replacement
d) Report all cases to Infection Control Team.

20-30% of patients treated apparently successfully will relapse and require further treatment.

4. Prevention

The transmission of Clostridium difficile can be service user to service user, via contaminated hands of healthcare workers or via contaminated healthcare equipment.

a) Scrupulous hygiene relating to Service Users and the environment
b) Use of contact precautions Service Users with diarrhoea
c) Hand washing with soap and water is essential to decontaminate hands, as alcohol gel may not be effective against this spore-forming organism.
d) Reduce the usage of antibiotics, especially cephalosporins
C11: Variant Creutzfeldt-Jakob Disease

1. Introduction

Creutzfeldt-Jakob disease (CJD), a transmissible spongiform encephalopathy, has been recognised for over 70 years as a disease causing degeneration of the nervous system ending in death. CJD is rare and only 35 cases occur in the UK per year. The disease presents at 55-75 years old and in 15% of cases is caused by an inherited gene mutation. A small proportion (1%) of cases has been transmitted in injections of human pituitary derived growth hormone, corneal transplants and brain surgery following contamination of instruments. In 1996 a new variant was recognised which affected younger patients producing different symptoms and type of brain damage, variant CJD (vCJD).

2. Knowledge

2.1 Epidemiology

By 2009, there had been 170 cases of vCJD in the UK. Current data indicates that the epidemic reached a peak in the year 2000 when there were 27 diagnoses and 28 deaths and this has since declined to a current incidence of about 1 diagnoses/death per year the eventual number likely to develop the disease is uncertain. The agent is probably an abnormal form of a prion protein. Prion proteins are found normally in the tissues of healthy people and animals but the disease is caused when a prion protein folds in an abnormal way, changing its shape. Nervous tissue in the brain and elsewhere is damaged resulting in a spongy microscopic appearance. The Spongiform Encephalopathy Advisory Committee found that the emergence of vCJD was probably the result of transmission of Bovine Spongiform Encephalopathy (BSE) to man.

2.2 Transmission

Infection is not transmitted by normal clinical or social contact with a patient with CJD (classical, variant or inherited). However, classical CJD has been transmitted by medical procedures. Variant CJD, unlike other types of CJD, has now been found in the appendix of a patient who only developed vCJD some months later. In addition, the abnormal prion has been demonstrated in tonsils, spleen and lymph nodes of confirmed cases of vCJD but not in other types of CJD. The prion protein may be fixed rather than inactivated by normal sterilization methods.

There is a possibility of transmission to another patient of the abnormal prion protein from lymphoid tissue of a patient in whom symptoms have not yet appeared. Surgical instruments may not be free of the abnormal protein despite standard methods of sterilization. Other types of CJD have been transmitted by direct inoculation, implantation or transplantation of infectious material. The highest concentrations of the protein are in the brain, spinal cord and eye and it is almost never found in blood or urine.

2.3 Incubation period

Service users who developed classical CJD following injections of growth hormone showed a variable incubation period of 3-22 years.
2.4 Clinical characteristics

Ataxia and poor coordination are common, followed by dementia. The presentation is quite variable, depending on the area of the brain affected. In most service users, mental deterioration with behavioural disturbance is rapidly progressive ending in death in 7-9 months. Myoclonus, nystagmus, tremor and ataxia are common.

2.5 Treatment

There is no treatment and all cases end fatally.

3. Management of Suspected Cases

Any patient suspected clinically to have any form of CJD must be notified by the Infection Control Doctor or a senior member of clinical staff responsible for the patient to the CJD Surveillance Unit in Edinburgh. This will ensure control measures can be started.

Professor R. G. Will,
Director National CJD Surveillance Unit
Western General Hospital
Crewe Road,
Edinburgh EH4 2XUT Tel: 0131 332 2117 Fax: 0131 343 1404

The abnormal prion protein is extremely difficult to inactivate and resists the usual methods used for surgical instruments. Effective cleaning before sterilization is very important to reduce the risk of transmission of vCJD. Cleaning and sterilization of all instruments must be of the highest standard in all patients regardless of suspicion of vCJD. For advice and guidance consult www.doh.gov.uk/cjd

Surgical instruments must be kept in good condition to allow proper cleaning. Instruments which are difficult to clean should be gradually replaced with ones more easily cleaned.

The Advisory Committee on Dangerous Pathogens (ACDP) and the Spongiform Encephalopathy Advisory Committee (SEAC) have produced guidance on the use and disposal of surgical or diagnostic instruments used on patients known or suspected of having vCJD.

Do not re-use instruments or equipment used in the care of service users with confirmed CJD of any type. Dispose of by incineration. If instruments have been used on a suspected case, they must be quarantined until diagnosis is made. They must be destroyed by incineration if no alternative diagnosis is made.

Service users given hormones derived from human pituitary glands or human dura mater grafts or patients with a family history of CJD are considered a potential risk.

Single use instruments and equipment should be used as far as possible in patients at risk of CJD. Instruments and equipment used in procedures on the brain, spinal cord or eyes of a patient at risk must be destroyed by incineration.
Staff members exposed to CJD must be recorded under COSHH regulations 2002. Lumbar punctures must always be performed with single use kits.

- Single use devices must not be reused under any circumstances.
- Contact lenses must not be issued for trial wearing.
- Flexible endoscopes must have a unique identifier which should be recorded for every patient usage to allow for quarantine and possible destruction without risk of destroying all instruments in a pool.
- All blood donated since 31/10/1999 and used for red cell or platelet transfusion will have been leucodepleted (white cells removed).
- Blood products (e.g. Factor VIII, immunoglobulin and anti-D for Rhesus negative pregnant women) are made from plasma donated outside the UK.
- Guidance regarding transplants is under review. Donors should not be accepted if they received pituitary derived hormones or human durra mater implants, had surgery on the brain or spine before August 1992, had known or suspected CJD or a family history thereof, had degenerative neurological disease or were recipients of corneal transplants.
C12: Rubella

1. Introduction

Rubella is **dangerous to the foetus** if caught during pregnancy

All staff must be **immunised**

Rubella (German measles) is highly infectious and the foetus of a pregnant woman may be severely affected if she acquires the disease early in pregnancy. It is only by ensuring that all staff (including males) are immune, that cross infection in the hospital environment can be prevented. The aim of ensuring that all staff are immune is to prevent the acquisition and spread of rubella by all health care workers and subsequent transmission to patients.

2. Objectives

Protection of female service users who may be, or who are known to be pregnant

Protection of female members of staff for their own future safety

3. Staff

All staff will attend the appropriate Occupational Health Department, before commencement, clerical and administrative staff must undergo rubella screening in order to determine their immunity. Screening consists of examining serum for antibodies. Those who are not immune will be given rubella vaccine as soon as is practicable. The screening will normally be done before employment commences. Staff already in post, who have not been checked, should attend the Occupational Health Department at the earliest opportunity. Medical Staff on rotational appointments or visiting staff must be included.

Medical School Staff and Students

Rubella screening and immunisation should be done and documented before students start on the wards.

Voluntary Workers

Voluntary Services Organisers should, wherever possible, encourage their volunteers to accept screening for rubella if they work in obstetrics, gynaecology and children's departments. Screening is available from the Occupational Health Department.


3.1 Establish previous rubella or rubella vaccination history in the pregnant woman.

3.2 Take a clotted blood sample and request Rubella antibody titre stating full history of contact, gestation of the pregnancy, any recent illness or rash, vaccination history and results of previous tests.

3.3 If no antibodies are present, repeat tests will be needed at 28 days after exposure (or one week after the onset of an illness) to determine whether infection has been acquired.
3.4 If there is a delay between the contact and the first specimen, it may be extremely difficult to determine the susceptibility of the mother to rubella at the time of contact.

3.5 Detailed discussions with the virologists/microbiologists are then required.
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2. CPE


3. Tuberculosis


4. Ectoparasites


7. Chickenpox/shingles


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## Equality Impact Assessment Tool

<table>
<thead>
<tr>
<th></th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the policy/guidance affect one group less or more favourably than another on the basis of:</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Race</td>
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<tr>
<td>Ethnic origins (including gypsies and travellers)</td>
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<td>Nationality</td>
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<td>Gender</td>
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<td>Culture</td>
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<td>Religion or belief</td>
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<td>Sexual orientation including lesbian, gay and bisexual people</td>
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<td>Age</td>
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<tr>
<td>Disability - learning disabilities, physical disability, sensory impairment and mental health problems</td>
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<td>2. Is there any evidence that some groups are affected differently?</td>
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<td></td>
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<tr>
<td>3. If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?</td>
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<td></td>
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<td>4. Is the impact of the policy/guidance likely to be negative?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>5. If so can the impact be avoided?</td>
<td>N/A</td>
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<tr>
<td>6. What alternatives are there to achieving the policy/guidance without the impact?</td>
<td>N/A</td>
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<tr>
<td>7. Can we reduce the impact by taking different action?</td>
<td>N/A</td>
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