# INFECTION PREVENTION & CONTROL POLICIES

*Binfield Surgery*

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| Version 3.0 | January 2019 | Review date: January 2021 (or earlier if any change in National guidelines) |

## INTRODUCTION

***This Policy was created by Kim Goulbourn, in January 2015 and updated by Michaela Hooper in April 2016. Both compiled/updated these documents in their capacity as Infection Prevention & Control Nurses for Berkshire West CCGs.***

***The purpose of the document is to provide the GP Surgeries with a comprehensive structure for the implementation of Infection Control.***
***It is the responsibility of the Infection Control Leads to make any necessary adaptations to suit the individual Surgery needs.***
***The Author(s) will not be held responsible for any changes made to the original content once disseminated.***

## POLICY STATEMENT

This practice is committed to the control of infection within the building and in relation to the clinical procedures carried out within it.

The practice will undertake to maintain the premises, equipment, drugs and procedures. The practice will also undertake to provide facilities and the financial resources to ensure that all reasonable steps are taken to reduce or remove all infection risk.

Wherever possible or practicable the practice will seek to use washable or disposable materials for items such as soft furnishings and consumables, e.g. seating materials, wall coverings including paint, bedding, couch rolls, modesty sheets, bed curtains, floor coverings, towels etc., and ensure that these are laundered, cleaned or changed frequently to minimise risk of infection. The ability to clean effectively will be taken into account at the time of purchase.

## THE MANAGEMENT OF INFECTION RISK

The clinician responsible for Infection Control is Janet Lake Practice Nurse
The non-clinician responsible for Infection Control is Liz Kerr Practice Manager
Janet Lake will be responsible for the maintenance of personal protective equipment and the provision of personal cleaning supplies within clinical areas
Liz Kerr will be responsible for the maintenance of the provision of personal cleaning supplies within non-clinical areas
Janet Lake will be responsible for the maintenance of sterile equipment and supplies, and for ensuring that all items remain “in date”
The nominated lead for managing Legionella risk is Liz Kerr

The following general precautions will apply:

- A daily, weekly, monthly and annual cleaning specification will apply and will be followed by the cleaning staff.
- All staff will be expected to update their infection control training every three years, and this will include hand washing procedures.
- Infection Control Training will take place for all new recruits within 4 weeks of them starting.
- Hand washing posters will be displayed at each designated hand basin.

Infection Control standards will be monitored monthly and the findings will be reported to the practice clinical meeting for (any) remedial action

**INFECTION CONTROL ANNUAL STATEMENT 2018/2019**

**Purpose**

The annual statement will be generated each year in April.
It will summarise:

- Any infection transmission incidents and action taken (these will be reported in accordance with our Significant Event procedure)
- The annual infection control audit summary and actions undertaken
- Control risk assessments undertaken
- Details of staff training (both as part of induction and annual training) with regards to infection prevention & control
- Details of infection control advice to patients
- Any review and update of policies, procedures and guidelines.

**Background:**

Binfield Surgery Lead for Infection Prevention /Control is Janet Lake Practice Nurse, who is supported by Liz Kerr Practice Manager

This team keep updated with infection prevention & control practices and share necessary information with staff and patients throughout the year.

**Significant events:**

In the past year April 2017/April 2018 there have been 0 significant events that related to infection prevention & control.

**Audits:**

Quarterly and annual audits were undertaken by Liz Kerr and monthly infection control checklists were implemented following this.

**Risk Assessments:**

Regular risk assessments are undertaken to minimise the risk of infection and to ensure the safety of patients and staff. The following risk assessments related to infection prevention & control have been completed in the past year and appropriate actions have been taken:

- Control of substance hazardous to health (COSHH)
- DBS for staff
- Disposal of waste
- Medication and prescriptions
- Sharps

**Staff training:**

1 new clinical member of staff joined this Surgery in the past 12-months and received infection control and hand-washing training within 4 months of employment.

100% of the Practice Clinical staff due to update their infection prevention & control update training via on-line training did so.

100% of the Practice non-clinical staff due to update their infection prevention & control update training did so.

The Infection Control Leads attended training updates for their role provided by Louise Foster (Infection Prevention & Control lead for East Berkshire CCG).

**Infection Control Advice to Patients:**

Patients are encouraged to use the alcohol hand gel/sanitiser dispensers that are available throughout the Surgery.

**Policies, procedures and guidelines.**

Documents related to infection prevention & control are reviewed in line with national and local guidance changes and are updated 2-yearly (or sooner in the event on new guidance).

## THE CODE OF PRACTICE

### The Health and Social Care Act 2008.

The table below is the 'Code of Practice' for all providers of healthcare and adult social care on the prevention and control of infections under The Health and Social Care Act 2008 (Department of Health 2015).
This sets out the 10 criteria against which a registered provider will be judged on how it complies with the registration requirements related to infection prevention. Not all criteria will apply to every regulated activity.
Parts 3 and 4 (of the Code of Practice) will help registered providers interpret the criteria and develop their own risk assessments.

| Compliance criterion | What the registered provider will need to demonstrate |
|---|---|
| 1 | Systems to manage and monitor the prevention and control of infection. These systems use risk assessments and consider the susceptibility of service users and any risks that their environment and other users may pose to them. |
| 2 | Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections. |
| 3 | Ensure appropriate antimicrobial use to optimise patient outcomes and to reduce the risk of adverse events and antimicrobial resistance. |
| 4 | Provide suitable accurate information on infections to service users, their visitors and any person concerned with providing further support or nursing/medical care in a timely fashion. |
| 5 | Ensure prompt identification of people who have or at risk of developing an infection so that they receive timely and appropriate treatment to reduce the risk of transmitting infection to other people. |
| 6 | Systems to ensure that all care workers (including contractors and volunteers) are aware of and discharge their responsibilities in the process of preventing and controlling infection. |
| 7 | Provide or secure adequate isolation facilities. |
| 8 | Secure adequate access to laboratory support as appropriate. |
| 9 | Have and adhere to policies, designed for the individual's care and provider organisations that will help to prevent and control infections. |
| 10 | Providers have a system in place to manage the occupational health needs and obligations of staff in relation to infection. |

# HAND HYGIENE

Effective hand hygiene by all members of staff is the most important method of preventing transmission of healthcare associated infection. 'Hand Hygiene' is a generic term that covers the process of removing or destroying loosely attached 'transient' micro-organisms from the surface of the hands. It may include hand washing with soap and water or the use of alcohol gel/sanitiser. Failure of hand hygiene can result in transmission of micro-organisms, leading to infection in vulnerable individuals.

**Hand decontamination**

1. Hands must be decontaminated in all of the following circumstances, immediately (WHO 2009):
   - before every episode of direct patient contact or care
   - before every aseptic technique/procedure
   - after any exposure to body fluids; including after the removal of gloves
   - after every episode of direct patient contact or care
   - after any other activity or contact with a patient's surroundings that could potentially result in hands becoming contaminated.

*See Appendix 1: The 5 moments for hand hygiene at point of care (WHO 2009).*

2. Decontaminate hands preferably with an alcohol hand gel/sanitiser (conforming to current British standards), except in the following circumstances, when liquid soap and water ***must*** be used:
   - When hands are visibly soiled or potentially contaminated with body fluids or chemicals **or**
   - In clinical situations where there is potential for the spread of alcohol-resistant organisms (such as Clostridium difficile or other organisms that cause diarrhoea illness, including Norovirus).

3. Healthcare workers should ensure that their hands can be decontaminated throughout the duration of clinical work by:
   - being bare below the elbow when delivering direct patient care
   - removing wrist and hand jewellery (a plain band wedding ring is permitted)
   - making sure that fingernails are short, clean and free from nail polish/acrylics/gel tips
   - covering cuts and abrasions with waterproof dressings

4. An effective hand washing technique involves three stages: preparation, washing and rinsing, and drying. Preparation requires wetting hands under tepid running water before applying liquid/foaming soap. The hand wash solution must come into contact with all of the surfaces of the hand. The hands must be rubbed together vigorously for a minimum of 10–15 seconds, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers. Hands should be rinsed thoroughly before patting dry with good quality paper towels.
*See Appendix 2: for hand washing and use of hand rub techniques*

5. When decontaminating hands using an alcohol hand gel/sanitiser, hands should be free from dirt and organic material. The hand gel/sanitiser solution must come into contact with all surfaces of the hand. The hands must be rubbed together vigorously, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers, until the solution has evaporated and the hands are dry.

6. An emollient hand cream should be applied regularly to protect skin from the drying effects of regular hand decontamination. If a particular soap, antimicrobial hand wash or alcohol product causes skin irritation the occupational health team should be consulted.

**Hand washing facilities**
Hand washing facilities should be adequate and conveniently located.
Hand-wash basins must be accessible in all clinical/treatment rooms.

Clinical hand wash basins should be dedicated for hand washing only.

Clinical hand washbasins should not have a plug or overflow and should have elbow/wrist lever or sensor operated mixer taps. If hand wash basins do not meet these standards then at the next opportunity for change (e.g. repair, refurbishment) IPC advice must be obtained and an HTM64 compliant wash basin fitted.

- Use wall-mounted liquid soap dispensers with disposable soap cartridges/bottles. Keep them clean and replenished. (Do not refill empty cartridges/bottles this risks contamination of the product).

- Place wall-mounted disposable paper towel dispensers next to the basins. Use soft disposable towels to avoid skin abrasions.

- Position foot-operated pedal bins near the hand wash basin. Make sure they are the right size for the amount of waste generated.

**References:**


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World Health Organisation 2009. *WHO guidelines on hand hygiene in health care. First global patient safety challenge. Clean care is safer care* World Health Organisation, Geneva.

# PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) is used to protect the skin and mucous membranes from exposure to blood and body fluids (and hazardous chemicals), to protect clothing from contamination and provide protection from micro-organisms for both patients and staff.

**Use of personal protective equipment**
Selection of protective equipment must be based on an assessment of the risk of contamination of the healthcare worker's clothing and skin by patients' blood, body fluids, secretions or excretions and/or hazardous chemicals.

PPE should be used for one procedure or one episode of direct patient care, removed in the correct order (that minimises potential for cross infection) and disposed of as clinical waste.

1. Gloves used for direct patient care:
   - must conform to current EU legislation (CE marked as medical gloves for single-use) and
   - should be appropriate for the task (*Appendix3: Guide to Glove Selection*).

2. Gloves must be worn for
   - invasive procedures,
   - contact with sterile sites and non-intact skin or mucous membranes,
   - all activities that have been assessed as carrying a risk of exposure to
     - blood
     - body fluids
     - secretions or excretions
     - sharp or contaminated instruments
     - hazardous chemicals.

3. Gloves must be worn as single-use items.

They must be put on immediately before an episode of patient contact or treatment and removed as soon as the activity is completed.
Gloves must be changed between caring for different patients, and between different care or treatment activities for the same patient.
Hands must be decontaminated before gloves are put on and after removing gloves.

4. Alternatives to natural rubber latex gloves must be available for patients, carers and healthcare workers who have a documented sensitivity to natural rubber latex.

5. Do not use polythene gloves for clinical interventions.

6. When delivering direct patient care:
   - wear a disposable plastic apron if there is a risk that clothing may be exposed to blood, body fluids, secretions, excretions or hazardous chemicals ***OR***
   - wear a long-sleeved fluid-repellent gown if there is a risk of extensive splashing of blood, body fluids, secretions, excretions or hazardous chemicals onto skin or clothing.

7. Face masks and eye protection (e.g. goggles or visors) must be worn where there is a risk of blood, body fluids, secretions or excretions splashing into the face and eyes.

8. Respiratory protective equipment, for example a particulate filter mask (FFP3), must be used when clinically indicated (such as for aerosol generating procedures carried out on patients with influenza or pulmonary tuberculosis). ***These masks need to be tested for fit for each user prior to wearing and are unlikely to be required in the primary care setting***.

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**Legislation**


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# SAFE MANAGEMENT OF SHARPS AND THE MANAGEMENT OF OCCUPATIONAL EXPOSURE TO BLOOD BORNE VIRUSES

Injuries where a person's broken skin, eyes, mouth or other mucous membranes are exposed to another person's blood or body fluids carry a risk of infection with viruses such a hepatitis B and C. Although these infections are potentially serious, prompt action can help prevent complications.

All body fluids should be regarded as potentially infectious. However;

- vomit
- saliva
- urine
- and faeces

are normally considered to be a low risk unless they are visibly blood-stained.

**A blood/body fluid injury/exposure incident includes:**

- Inoculation of blood by a needle or other 'sharp'
- Contamination of broken skin with blood
- Blood splashes to mucous membrane, e.g. eyes or mouth
- Swallowing a person's blood, e.g. after mouth-to-mouth resuscitation
- Contamination where the individual has an open wound, and clothes have been soaked by blood
- Bites (where the skin is broken).

A sharp is defined as any object that can pierce or puncture the skin and is potentially contaminated with blood or body fluids. This can include needles, scalpels, stitch cutters, glass ampoules and sharp instruments. The safe handling and disposal of sharps is paramount in reducing the risk of exposure to blood-borne viruses, and extreme care must always be taken when using and disposing of sharps.

**Health and Safety (Sharp Instruments in Healthcare) Regulations 2013**
The regulations implement aspects of the European Council Directive 2010/32/EU not specifically covered by previous legislation. The Health and Safety (Sharp Instruments in Healthcare) Regulations 2013 have applied since May 2013. The EU directive falls under the Health and Safety at Work Act 1974 and requires employers to provide a safe working environment in relation to sharps injuries, together with safe equipment, training, information and instructions on safe systems of work. The directive covers all workers in all healthcare sectors including the private and public sector.

**The directive requires that:**

- Risk assessment must be carried out to assess the risk of exposure to blood-borne infections from sharps injury.
- Where there is a risk of exposure, employers need to identify how exposure could be eliminated
- Where exposure cannot be eliminated, exposure should be prevented through:
    - Implementing safe procedures for using and disposing of sharps and contaminated waste
    - "The employer must substitute traditional unprotected medical sharps with a safer sharp where it is reasonably practical to do so" (Regulation 5(1) b).

The term "safer sharp" means the device used incorporates a mechanism to reduce the risk of accidental injury. A range of devices are available to retract or cover the needle immediately after use. The following points need to be considered;

- Patient care must not be compromised
- The device must be reliable
- Integral devices are the most practical as they cannot be lost
- Staff must be trained and assessed in the correct use and disposal of sharps and sharps safety devices.

**Safe use and disposal of sharps**

Sharps should not be passed directly from hand to hand, and handling should be kept to a minimum. Used needles must not be bent or broken before disposal and must not be recapped. Used sharps must be discarded immediately by the person generating the sharps waste into a sharps container conforming to current standards (British Standard BS7320/UN3291).

**Sharps containers must:**

- be located in a safe position that avoids spillage, is at a height that allows the safe disposal of sharps, is away from public access areas and is out of the reach of children
- **not** be used for any other purpose than the disposal of sharps
- **not** be filled above the fill line (3/4 full)
- be disposed of when the fill line is reached
- be temporarily closed when not in use
- be disposed of every 3 months even if not full, by the licensed route in accordance with local policy.
- be easily available in all areas where sharps are used.
- be signed and dated correctly when assembled and closed.
- be correctly assembled and the lids securely fastened before using.
- be stored in a secure area away from the general public whilst awaiting collection.

*See Appendix 4: Colour coding of Sharps bins*

**Actions in the event of an occupational exposure including needle-stick or similar injury**
*See Appendix 5: Action in the event of a Needlestick Injury*

**First aid**
Perform first aid to the exposed area immediately as follows:

- **Skin/tissues**
  - Skin/tissues should be gently encouraged to bleed. Do not scrub or suck the area.
  - Wash/irrigate with soap and warm running water. Do not use disinfectants or alcohol.
  - Cover the area using a waterproof dressing.
- **Eyes and mouth**
  - Eyes and mouth should be rinsed/irrigated with copious amounts of water. Eye/mouth washout kits may be available in clinical areas.
  - If contact lenses are worn, irrigation should be performed before and after removing these. Do not replace the contact lens.
  - Do not swallow the water that has been used for mouth rinsing following muco-cutaneous exposure.

Avoid further injury by safely disposing of the item into an approved sharps container

**Report the incident**

Immediately report the incident to senior person on duty who will carry out a risk assessment and if exposure is high risk (including blood/body fluid injury/exposure as above), immediately refer individual to Occupational Health (or A&E Dept) for assessment of the requirement for post-exposure prophylaxis or other treatment. All incidents must be clearly reported/documented.

All staff at risk of sharps injury must receive training on the first aid and reporting required for sharps or blood and body fluid exposure incidents.

**Immunisation of clinical staff**

All healthcare workers who may have direct contact with patients' blood, blood-stained body fluids or tissue, require vaccination against hepatitis B. This includes any staff that are at risk of injury from blood-contaminated sharp instruments, or of being deliberately injured or bitten by patients.

Advice should be obtained from the appropriate occupational health department.

**References:**


Department of Health 2007. *Immunisation against infectious disease – 'The Green Book': 2006 updated edition* Department of Health, London.

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# ASEPTIC TECHNIQUE

Asepsis is defined as the absence of pathogenic organisms. Aseptic technique is used to describe clinical procedures that have been developed to prevent contamination of wounds and other susceptible body sites.

Aseptic technique is essential to reduce the risk of healthcare associated infection (and associated morbidity and mortality) caused by invasive procedures. An aseptic technique should be used during any invasive procedure which breaches the body's natural defences, i.e. the skin or mucous membranes, or when handling equipment which enters a normally sterile body cavity, such as a urinary catheter.

Aseptic technique refers to practices that help to reduce the risk of post-procedural infections in patients by decreasing the likelihood that microorganisms will enter the body during a clinical procedure. Some of these practices also reduce the healthcare worker's risk of exposure to potentially infectious blood and tissue during clinical procedures.

Procedures that require aseptic technique include:

- Wound care for wounds healing by primary intention (before the skin has healed; e.g. surgical wounds)
- Urinary catheterisation
- Suturing
- Any other medical invasive procedures i.e. minor surgery
- Insertion of intravenous lines and dressing/re-dressing intravenous lines
- Nail surgery
- Intrauterine Contraceptive Device insertion

### General recommendations

The steps required to achieve an aseptic technique will depend on the procedure to be undertaken, but the ANTT (Aseptic non-touch technique) rules should always be followed:

**A**lways clean hands effectively
**N**ever contaminate key parts
**T**ouch non-key parts confidently
**T**ake appropriate infection prevention and control precautions.

The key principles of asepsis must be observed when undertaking any invasive clinical procedure. Those key principles of asepsis being:

- Keep exposure of the susceptible site to a minimum.
- Ensure an appropriate hand decontamination technique before and after the procedure and the correct use of sterile gloves.
- Staff must be "bare below the elbows" – no hand or wrist jewellery, long sleeves or artificial nails.
- Staff must not wear dangling neckties or necklaces, and long hair must be tied back to avoid anything contaminating the sterile field.
- Cover uniform or clothing with a disposable plastic apron.
- All fluids and materials used must be sterile (e.g. sterile packs should be checked for evidence of damage or moisture penetration and for expiry date).
- Contaminated or non-sterile items must not be placed on the sterile field.
- Single use items must never be re-used.

**Skin preparation before minor surgical procedures**

The site should be washed with soap and water (this can be done by the patient or by staff).

Shaving is not recommended because it causes small nicks and abrasions to the skin where bacteria can grow and multiply. Hair around the site may be clipped short if it might interfere with the procedure (using clippers with a single-use head DH 2011).

The site should then be decontaminated with a single-use application of alcoholic Chlorhexidine gluconate solution, e.g. (2% Chlorhexidine gluconate in 70% Isopropyl alcohol: Chloraprep ©). Povidone iodine 10% alcoholic solution may be used for patients with chlorhexidine sensitivity.

Allow antiseptic to dry before commencing the procedure.

Alcohol-based antiseptics should not be used for cleansing the vagina, cervix, or other mucous membranes because they will irritate these tissues; use 2% aqueous Chlorhexidine gluconate or 10% aqueous Povidone iodine as an antiseptic for mucous membranes

**References:**


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Rowley S, Clare S, Macqueen S, Molyneux R 2010 ANTT v2: An updated practice framework for aseptic technique *British Journal of Nursing* 19 (5): S5-S11.

# CLEAN TECHNIQUE

A clean technique differs from an aseptic technique in that the use of sterile equipment and the environment are not as crucial as would be required for asepsis.

The non-touch technique is incorporated as part of a clean procedure, i.e. the ends of sterile connections should not be touched or other items that could contaminate a susceptible site.

A clean technique is appropriate for superficial chronic wounds, e.g. leg ulcers or pressure sores.

Clean non-sterile single-use gloves and single-use apron should be worn and these wounds may be irrigated or bathed using tap water.

Normal hand hygiene procedures and the use of clean equipment and a 'clean field' prevent the introduction of microorganisms that would cause an infection.

**Indications for using a clean technique**
A risk assessment should be made to ensure that this technique is appropriate for the procedure.

A clean technique should be used for the following:

- Re-dressing &/or cleaning of superficial chronic wounds healing by secondary intention, e.g. pressure sores, leg ulcers, stoma sites
- Removal of sutures from minor healed wounds
- Management of enteral feeding lines
- Decontamination of buckets used to soak leg ulcers:
    - Line the bucket with a clean plastic bag.
    - After each use, empty the bucket, dispose of the bag as clinical/offensive waste, and then clean the bucket with hot water and detergent.
    - Follow this by wiping it with a chlorine-releasing solution of 1,000 parts per million.
    - Rinse and dry the bucket thoroughly and store inverted

**References:**

Department of Health Jan 2015 *Health & Social Care Act 2008: Code of practice for the NHS on the prevention & control of healthcare associated infections and related guidance.* 292435. DH, London.

National Institute for Clinical Excellence (NICE) 2003 *Standard Principles Clinical Guideline 2. Infection Control.*

# DECONTAMINATION OF PATIENT EQUIPMENT

All equipment used in the delivery of healthcare must be fit for purpose and be decontaminated strictly according to the manufacturer's instructions. The aim of decontaminating medical equipment is to prevent potentially pathogenic microorganisms reaching a susceptible person in sufficient numbers to cause infection.

All staff should be aware of their roles and responsibilities with regard to cleaning and decontamination of equipment. Staff undertaking the cleaning of equipment must be trained in the correct cleaning and decontamination procedures as determined by the local employer. Similarly, all staff undertaking cleaning duties should have access to the appropriate cleaning materials and products at all times.

Equipment needs to be maintained in good condition in order to enable decontamination procedures to be effective.

The requirements for decontamination need to be identified and addressed before items are purchased (the Infection Prevention and Control Nurse can be contacted for guidance).

**Definitions**

- **Decontamination**

A combination of processes to minimise the likelihood of the transfer of micro-organisms to patients or staff.

- **Cleaning**

A process that removes micro-organisms and organic matter. It supports better contact with disinfectant and sterilisation agents. Manual cleaning with neutral detergent and water will physically remove organic material and most micro-organisms from a surface. Low level disinfection requires appropriate personal protective equipment (PPE) and is used to minimise any impact to staff from a hazards.

- **Disinfection**

The destruction of micro-organisms but not usually bacterial spores. The process does not necessarily kill all micro-organisms but reduces them to a level that is not harmful to health. Disinfection is performed using either heat or chemicals. Chemical disinfection is used when steam sterilisation is impractical or undesirable.

When chemical disinfectants are used items must have been manually cleaned with detergent prior to use. Disinfectants are must be used within the expiry date and in accordance with manufacturers' guidance.

- **Sterilisation**

A process intended to destroy or remove living micro-organisms.

**Single Use:**

Any medical device displaying on the packaging, on the device itself, or a combination of both, has been manufactured as 'single use' and in accordance with Device Bulletin MD2000(04) must not be reused or processed under any circumstances.

The re-use of single-use medical devices/equipment is associated with significant risk (including infection) and is in breach of the law.

**Single Patient Use:** The medical device can be used for more than one episode of use on one patient only. The device will need to be decontaminated between each use. The manufacturer must state how the device should be decontaminated and how many times, or for how long, the device can be used prior to disposal.

**Re-usable:** The medical device can be used for repeated episodes of use on different patients, but will need to be decontaminated appropriately between each episode of use, according to the manufacturer's instructions.

**Legal requirements and risk assessment**
The use of medical devices is covered by the statutory requirements of: European Council – Medical Devices Directive 93/42/EEC (MDD) implemented into UK law as the Medical Devices Regulations, 2002.

Compliance to the MDD requires that:

- Decontamination procedures for reprocessing medical devices need to be contracted out to an organisation that meets the requirements of the MDD

Or

- Single use instruments need to be used.

**Risk assessment:**
Decontamination of medical devices is based on a risk assessment as detailed in the table below.

| Risk | Application | Recommendation |
|---|---|---|
| Critical | Invasive medical device introduced into a sterile body area, e.g. theatre surgical instruments | Requires Sterilisation e.g. rigid endoscopes |
| Semi-critical | Would not normally enter sterile body cavity | Requires high level disinfection (Sterilization preferred where practicable) e.g. thermolabile flexible endoscopes |
| Non-critical | Would not normally enter sterile body cavity. In contact with skin | Can be processed by cleaning (and low level disinfection where necessary) e.g. blood pressure cuff, ultrasound |

*HSE Code of Practice for Decontamination of Reusable Invasive Medical Devices 2007*

**Cleaning agents for equipment (not reusable surgical instruments)**

**General Purpose Detergent (GPD)**: general purpose detergent and/or detergent-based wipes are used for routine cleaning. GDP is good for the physical removal of soiling, gross contamination.

**Alcohol hard surface wipes**: provides disinfection after a detergent clean, only use on visibly clean surfaces. Do not use on surfaces that may be degenerated by the action of alcohol (such as examination couches).

**Chlorine-based disinfectants**
Dilution to 1,000 parts per million (ppm) available chlorine. Some chlorine products are available that include detergent, enabling easier dilution and cleaning. If a non-detergent chlorine-based solution is used, a detergent clean must always be undertaken first.

**For blood spillages**: Dilution of 10,000ppm (see body fluid spill section). Ensure that the manufacturer's instructions are followed to obtain correct concentration of solution.

**Maintenance/servicing of medical devices**: If an item of patient equipment needs to be sent away for maintenance/servicing it should be accompanied by a certificate stating that the item has been decontaminated prior to sending.
*See Appendix 6: Decontamination certificate*.

## A-Z TABLE OF DECONTAMINATION METHODS

Always follow instructions for decontamination given by manufacturers. This is intended as additional information and it is not a comprehensive list. Items that require autoclaving should be returned to the Contracted Sterile Services for processing. Items on loan from the Equipment Loan Centre, and items for use in patients' own homes may require different means of decontamination.

- All surfaces must be visibly clean with no blood or body fluids, dust, dirt, debris, adhesive tape or spillages evident.
- Where detergent wipes are stated, detergent and water is equally sufficient.
- Where surfaces are visibly soiled or contaminated with blood or high risk body fluids, enhanced cleaning will be required in line with the management of spillage of blood and high-risk body fluids (see 'Cleaning and decontamination of the environment') and in line with manufacturers' instructions.

| Item | Decontamination Method | Frequency | Who is Responsible |
|---|---|---|---|
| Auroscope | Clean with detergent wipes. Use single-use tips and discard them after use. | After each use | Clinical Staff |
| Baby changing mats | Clean with detergent wipes. | After each use | Clinical staff |
| Baby scales | Clean with detergent wipes at start and finish of each session. Cover with disposable paper roll and change between each baby. | After each use | Clinical staff |
| Patient chairs | Clean with detergent. | Daily or when visibly soiled or dirty. | Cleaning staff |
| Blood Pressure Cuffs | Clean with detergent wipes | After each use | Clinical staff |
| Computer Keyboards | Clean with detergent wipes | Daily or if visibly dirty/dusty | All staff |
| Curtains | Launder or dry clean according to manufacturer's instructions. Alternatively use disposable curtains and change 6 monthly or when visibly contaminated. | Minimum of 6 monthly or when visibly contaminated. Planned programme required. | Environmental Lead to nominate |
| Dressing trolleys | Clean with detergent. | Before and after each use | Clinical staff |
| Drugs cupboard/trolley | Clean with detergent. | Weekly unless visibly dirty | Clinical staff |
| Ear syringing equipment | Follow manufacturer's instructions to ensure thorough disinfection before use. Ensure adequate rinsing with sterile water following disinfection if required. | After each use | Clinical staff |

| Item | Decontamination Method | Frequency | Who is Responsible |
|---|---|---|---|
| Examination couches | Surface must be in good repair. Clean with detergent wipes at start and finish of each session. Cover with disposable paper roll and change between each patient. | Daily | Clinical staff |
| Face masks & O2 tubing (oxygen & anaesthetic) | Single Use | Disposable | Clinical staff |
| Machines/ Monitors/ Pumps: | Clean with detergent wipes.<br><br>Electrodes that stick to patient's chest are single use. | If machine/pump or attachments comes into contact with the patient it must be cleaned after each use otherwise a daily clean is sufficient unless visibly soiled/dirty. | Clinical staff |
| Pillows (enclosed in sealed intact washable cover) | Surface must be in good repair. Clean with detergent wipes at start and finish of each session. Cover with disposable paper roll and change between each patient. | Clean at start and finish of each session and if visibly soiled or dirty. | Clinical staff |
| Stethoscope | Clean with detergent wipe | After each patient use | Clinical staff |
| Telephones/ Handsets | Clean with detergent wipes. | Daily or if visibly dirty/ dusty | Everybody |
| Thermometers | Use disposable thermometers or thermometers with disposable sleeves or covers | Dispose of sleeves or covers after use<br><br>Clean the thermometer device daily | Clinical staff |
| Toys | Toys must have a hard outer surface & be cleanable using detergent wipes. Wooden toys are not suitable as they are not easily cleaned. | Weekly & if visibly soiled or contaminated with high risk body fluid. | Clinical staff |
| Vaginal speculae | Single use/sterile | Single use | Clinical staff |
| Wheelchairs | Clean with detergent. | After each use | All staff |
| Buckets used for patients with leg ulcers. | Line the bucket with a clean plastic bag.<br>• After each use, empty the bucket, dispose of the bag as clinical/offensive waste, and then clean the bucket with hot water and detergent.<br>• Follow this by wiping it with a 1,000 ppm available chlorine solution.<br>• Rinse and dry the bucket thoroughly and store inverted | After each use | Clinical staff |

## References:

Health Technical Memorandum HTM 01-01 A-E: '*Decontamination of re-usable medical devices*'

MHRA Device Bulletin 2005(06) '*Managing Medical Devices*'

MDA Device Bulletin MD 2000(04) '*Single Use Medical Devices: Implications and Consequence of Re-use*'

MDA (2000) '*Equipped to Care – The safe use of medical devices in the 21st century*'

# CLEANING AND DECONTAMINATION OF THE ENVIRONMENT

The clinical environment including support areas such as store rooms and sluices need to be kept clean in order to minimise the risk of cross infection but also to improve the quality of patient experience.

**Relevant documentation:**
Criterion 2 of the 'Code of Practice' requires providers to: Provide and maintain a clean and appropriate environment in managed premises that facilitates the prevention and control of infections (Health and Social Care Act 2008 Code of Practice criterion 2).

The document, "the National specifications for cleanliness: primary medical and dental premises" (http://www.nrls.npsa.nhs.uk/resources/?EntryId45=75241) provides a framework for primary medical care providers to demonstrate to the CQC how they ensure their premises are clean and safe and meet the required standards. This document provides guidance on determining the frequency of cleaning and the standard of cleaning to be achieved.

The Revised Healthcare Cleaning Manual June 2009 provides guidance on how to provide a cleaning service but also gives method statements for tasks performed by cleaning staff.

**Cleaning of the environment**
The practice has a written cleaning schedule which details each area/room to be cleaned and specifies:

- the area to be cleaned
- the standard of cleanliness to be achieved (complying to The National specifications for cleanliness: primary medical and dental premises)
- the person(s) responsible for cleaning (including in the cleaner's absence),
- the frequency of cleaning
- the cleaning methods used (complying with The Revised Healthcare Cleaning Manual 2009)

The frequency of cleaning is determined through the assessment of activities carried out in each area/room. Guidance on this is given in "the national specifications for cleanliness: primary medical and dental premises".

Surfaces need to be kept clear to facilitate cleaning.
Only minimal items should left out on surfaces. Item should be stored in cupboards to reduce contamination where possible.

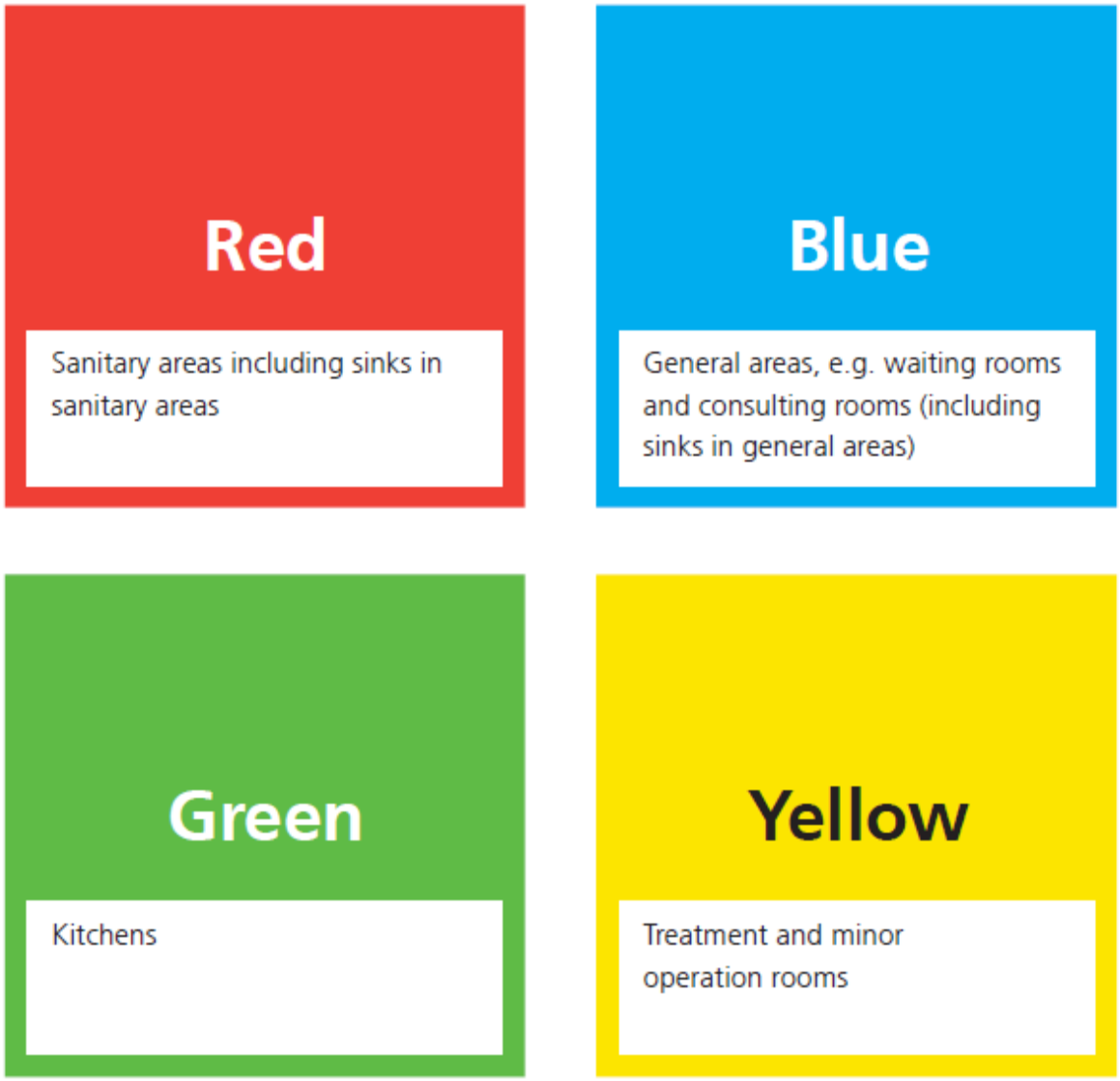
Work surfaces and hard floors are smooth-finished, intact, durable, of good quality, washable, do not allow the pooling of liquids and are impervious to fluids.
Fixtures and fittings need to be maintained in good condition in order to enable cleaning and decontamination procedures to be effective.

Treatment rooms or other clinical areas where there is likely to be contamination with body fluids have washable flooring and are not carpeted. Where carpets are provided there are procedures and/or contracts in place for regular cleaning and for dealing with spillage.
Cleaning products are stored, reconstituted and used in accordance with COSHH regulations.

The National colour coding scheme is used for cleaning equipment and materials (see below).
All staff receive training in relation to their responsibilities for cleaning.

Regular audit of cleaning standards are carried out monthly, written records are available for the standards achieved.  Deficiencies should they occur are addressed in a timely fashion.

**National Colour Coding Scheme**
For cleaning materials and equipment in primary care medical and dental premises.
The NPSA (NPSA 2010) recommend that all Practices adopt the colour code below for cleaning materials (e.g. re-usable and disposable cloths, mops, buckets, aprons and gloves)




**Cleaning agents**

The use of a general detergent is sufficient for effective cleaning in most situations.

The use of chlorine based product is recommended for the disinfection of blood and body fluid spills (to minimise the risk of HIV, Hepatitis B& C), see management of body fluid spills.

A solution of hypochlorite detergent-disinfectant (10,000ppm available chlorine) is required for this purpose.

When chlorine based products are used for the general environment the dilution required is 1000 parts per million available chlorine. Products are available that combine a detergent and a chlorine-based disinfectant for use when cleaning the environment (e.g. Chlorclean)

**Chlorine-releasing agents can be a hazard especially if used in large volumes, in confined spaces or mixed with other chemicals. Protective clothing must be worn and the area must be well ventilated.**

**Chlorine releasing agents must not be used for the cleaning up of urine or vomit.**
***Refer to manufacturers guidelines on making up the product you use in your Practice***

**Management of the spillage of blood and high-risk body fluids**

Blood and body fluid spills must be dealt with quickly and effectively.
Specialist body fluid spill kits are a convenient way of providing the required equipment.

High risk body fluids include:

- Blood
- Cerebral spinal fluid (CSF)
- Semen
- Synovial fluid
- Vaginal secretions
- And faeces or vomit from a person known to be infected with C. difficile or Norovirus

**Cleaning up a blood or a blood stained body fluid spill**
*See Appendix 7: Blood Spillage Guidance*

Standard procedure below

- Prevent access to the area containing the spillage until it has been safely dealt with.
- Obtain a spill kit.
- Put on disposable apron and gloves.
- Sprinkle the disinfectant granules over the spill and leave for 2-3 minutes
- Use the scoop and scraper to pick up the congealed body fluid and place into the clinical waste bag.
- Clean the areas with detergent and water and dry well
- Dispose of all equipment in the clinical waste bag and then finally remove gloves and apron and place in the clinical waste bag.
- Wash hands

***IMPORTANT NOTE****: Chlorine-based disinfectants/absorbent granules should not be used on urine or vomit spills.*
*Chlorine-based disinfectants will give off highly toxic gas if mixed with acidic substances.*
*NEVER mix chlorine-based disinfectants with any other cleaning/disinfectants.*

**Cleaning up vomit or urine spills**

To clean up vomit or urine spills, follow the same process as above but replace chlorine based disinfectant granules with a non-chlorine based product, e.g. Vernagel, or use paper towels to absorb as much of the spillage as possible.

Always clean areas with detergent and warm water.

A 1000ppm solution of chlorine-based disinfectant can then be used to disinfect the area but only after the urine/vomit has been cleaned up first.

**Body fluid spills on carpets and upholstery with or without visible blood**

- Always wear protective clothing (disposable gloves, apron).
- Soak up spill either with paper towels or use an absorbent powder e.g. Vernagel (n.b. chlorine-based granules may bleach the area).
- Clean area with cold water.
- Clean area thoroughly with detergent and hot water or use a steam cleaner if available.
- Allow to dry.
- Remove protective clothing and dispose into clinical waste.
- Wash hands.

**References:**


Department of Health 1991 *Decontamination of equipment linen or other surface contaminated with Hepatitis B and / or HIV* London DH (HC(91)33)

Department of Health 1993 *Protecting healthcare workers and patients from hepatitis B* London. DH (HSG (93) 40) plus addendum EL (96( 77))

Department of Health 1998 *Guidance for clinical healthcare workers protection against blood-borne viruses* London DH (HSC (98) 63)

*Health and Safety at Work Act* 1974. London HMSO 1974

Health and Safety Commission *2002 The control of substances hazardous to health regulations* 4th edn. Sudbury HSE books.

National Patient Safety Agency (NPSA) 2010. *The national specifications for cleanliness in the NHS: Guidance on setting and measuring performance outcomes in primary care medical and dental premises*. Available at: http://www.nrls.npsa.nhs.uk/resources/?entryid45=75241

National Patient Safety Agency (NPSA) 2009. *The revised healthcare cleaning manual*. Accessed via: www.nrls.npsa.nhs.uk/EasySiteWeb/getresource.axd?AssetID=61814.

Norovirus Working Party 2012 *Guidelines for the management of norovirus outbreaks in acute and community health and social care settings*. Accessed via: https://www.gov.uk/government/publications/norovirus-managing-outbreaks-in-acute-and-community-health-and-social-care-settings

## UNIFORMS AND WORK WEAR

Clothing worn by staff should be clean, fit for purpose, facilitate good practice and minimise risk to patients.
Uniforms and work wear should not impede effective hand hygiene.

NICE Guideline (2012) “Infection Prevention and control of healthcare-associated infections in primary and community care” states that healthcare workers should ensure that their hands can be decontaminated throughout the duration of clinical work by:

- being bare below the elbow when delivering direct patient care
- removing wrist and hand jewellery
- making sure that fingernails are short, clean and free of nail polish.

Nothing should be worn that could compromise patient or staff safety during care, for example no false nails, rings (except a plain ring such as a wedding ring), earrings other than studs, and necklaces. There is a risk that rings and jewellery can harbour microorganisms that could contaminate a body site with pathogens. Rings with sharp surfaces may puncture gloves.

Hand hygiene practices are likely to be performed in a suboptimal way if long sleeves, wrist watches, voluminous rings or rings with sharp edges/surfaces are worn.

Jewellery may also be a physical danger to either patients or the healthcare worker during direct patient care, e.g. a necklace may be caught in equipment or bracelets may cause injury during patient handling.

Clean clothing should be worn each day and staff should have sufficient uniforms to facilitate this. Work wear should not be hand washed.

**Washing of uniforms or work wear**
All elements of the washing process contribute to the removal of microorganisms on fabric. Detergents (washing powder or liquid) and agitation release any soiling from the clothes, which is then removed by the volume of water during rinsing. Temperature also plays a part. Scientific observations and tests, literature reviews and expert opinion suggest that:

- There is little effective difference between domestic and commercial laundering in terms of removing microorganisms from uniforms and work wear;
- Washing with detergents at 30ºC will remove most gram-positive microorganisms, including all Meticillin-resistant *Staphylococcus aureus* (MRSA);
- A 10-minute wash at 60ºC is sufficient to remove almost all microorganisms. In tests, only 0.1% of any Clostridium difficile spores remained. The DH advise that this level of contamination on uniforms and work wear is not a cause for concern.

Work wear should be washed at the highest temperature the fabric allows, preferably 60°C.

Washing requirements should be taken into consideration when work wear is purchased.

To allow for the maximum dilution of micro-organisms the machine should be set for a large load and filled to no more than half its capacity with clothes. Laundered items should be allowed to dry thoroughly before reuse. This should preferably be done by tumble drying. Ironing after garments have thoroughly dried further reduces any remaining contamination.

| Good practice and Common sense | Why? |
|---|---|
| Wear short-sleeved tops | Cuffs at the wrist become heavily contaminated and are likely to come into contact with patients. |
| Change immediately if uniform or clothing becomes visibly soiled or contaminated. | Visible soiling may present an infection risk and will be disconcerting for patients. |
| Wash uniforms and clothing worn at work at the hottest temperature suitable for the fabric | A wash for 10 minutes at 60ºC removes almost all micro-organisms. Washing with detergent at lower temperatures – down to 30ºC – eliminates MRSA and most other microorganisms. |
| Have clean, short, unvarnished fingernails (no false nails or acrylics). | Clean nails are hygienic and look professional. Long nails are harder to keep clean and are a potential hazard. |

| Poor practice | Why? |
|---|---|
| Wear any jewellery, including a wrist-watch, on the hands or wrists during direct patient care activity (except a plain ring). | Jewellery and watches can harbour micro-organisms and make effective hand hygiene more difficult. |
| Wear false nails during patient care activity. | False nails harbour micro-organisms and make effective hand hygiene more difficult. |

**References:**


Department of Health Jan 2015. *The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance* Department of Health, London.

Department of Health 2010a *Equality Impact Assessment – uniform and workwear: guidance on uniform and workwear policies for NHS employers.* http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_114755.pdf

Department of Health 2010b *Uniform and workwear: guidance on uniform and workwear policies for NHS employers.* http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_114754.pdf

Department of Health March 2008 *Equality Impact Assessment: bare below the elbows. Ref 0838411* Department of Health, London

Department of Health 2007a *Saving Lives: reducing infections, delivering clean and safe care. High impact interventions* Department of Health, London.

Department of Health 2007b *Uniforms and workwear. An evidence base for developing local policy* Department of Health, London.

National Institute for Clinical Excellence (NICE) 2012. *Infection: Prevention and control of healthcare-associated infections in primary and community care (CG139)*

# PACKAGING AND HANDLING OF SPECIMENS

Biological samples, cultures and other materials should be transported in a manner that ensures that they do not leak in transit and are compliant with current legislation. Staff handling samples must be aware of the need to correctly identify, label and store samples prior to forwarding to laboratories. In addition, they must be aware of the procedures needed when the container or packaging becomes soiled with body fluids

Clinical specimens include any substance, solid or liquid, removed from the patient for the purpose of analysis.

All staff who take/test/handle clinical specimens *must be trained* in safe systems for collection, handling and storage and transportation of specimens for the prevention and control infection

All specimens should be regarded as potentially infectious, the same as exposure to blood/body fluid, and all staff involved in the procedure must adhere to standard infection control precautions to minimise exposure when obtaining, handling and transporting specimens.

The collection, storage and transportation of specimens are governed by legislation relating to both transportation and health and safety at work.

The following legislation applies:

- Health and Safety at Work Act, 1974
- Management of Health and Safety at Work Regulations, 1999
- Control of Substances Hazardous to Health Regulations (COSHH), 2002
- The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations, 2009

Laboratory reports are essential to confirm diagnosis of infectious diseases and to ensure that patients receive appropriate treatment and care.

**General recommendations**

Everyone involved in collecting, handling and transporting specimens should be educated about standard infection control precautions and trained in:

- Hand hygiene
- The use of personal protective equipment
- The safe use and disposal of sharps

Adequate supplies of liquid soap, alcohol hand gel/sanitiser, paper hand towels, protective clothing and sharps containers should be made available wherever care is delivered.
In addition, staff should be familiar with the infection control policies for safe handling of clinical waste, body fluid spillage, and the prevention and management of exposure to blood borne viruses. Leaking and broken specimens should be disposed of as clinical waste.

Reusable cloth tourniquets have been risk assessed and agreed for everyday use in collecting blood samples, however if there is any risk of the patient being infectious, a disposable tourniquet must be used.

## Specimen collection

Wear appropriate personal protective equipment (PPE), e.g. gloves and aprons, when taking specimens or additional PPE based on an assessment of the risk associated with the procedure.

The person taking the specimen must ensure that the following principles are followed:

- Effective hand hygiene is performed before and after collection of the specimen, even if gloves are worn.
- Appropriate protective clothing is worn when collecting the specimen, i.e. non-sterile gloves, apron and, where splashing is possible or expected, goggles or visor.
- Collect fresh material only from the site of the suspected infection, avoiding contact with the surrounding areas.
- The specimen container is sealed well to prevent leakage.
- Ensure the correct specimen container is used.
- Do not overfill containers, especially faecal containers, but ensure that there is adequate volume of specimen to avoid a false negative result.
- The container is labelled with the patient's name, date of birth, NHS number, and the date and time the sample was obtained.
- The appropriate request form is fully completed with details of the patient's relevant medical history, investigation required and dates of any antibiotic treatment received.
- The correct name is on both the specimen container and request form.
- The specimen container is placed in an approved specimen bag and sealed, with the request form in the separate pouch attached.
- The specimen is stored correctly and transported to the laboratory promptly.
- The patient's confidentiality is maintained at all times
- Where the patient cannot transfer a urine sample from the universal pot to the yellow or green collection tube Clinical staff transfer the specimen for them to prevent the sample being rejected

NB. In the event of a suspected outbreak of infection it is important for specimens to be collected promptly and for the request form to be marked as 'Possible Outbreak'.

## Storage of specimens

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

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

Samples taken for blood culture must **not** be refrigerated.
They must be transported to the laboratory as soon as possible for incubation at 37°C.

## Specimen fridge

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

- There is a refrigerator dedicated for the purpose of specimen storage only.
- The temperature in the refrigerator is kept between 4–8°C and a member of staff is allocated to check and record the fridge temperature daily (on working days) using the appropriate documentation.
- The specimen refrigerator is not accessible by the general public.
- The specimen refrigerator is cleaned on a weekly basis, defrosted regularly (if not self-defrosting), and cleaned and disinfected after any spillage or leakage.

**Specimen transport**

Specimens must be transported in accordance with the Carriage of Dangerous Goods Regulations, 2004, updated 2009.

Ensure that the specimen is placed in a sealed plastic specimen bag with the form placed in the second compartment to avoid accidental contamination of the form.

The plastic bag should then be placed in the dedicated refrigerator.

Specimens for transport to the laboratory must be placed in a dedicated, rigid, robust, leakproof container with a tight fitting lid, and then be placed in a rigid container in a designated secure collection area until ready for collection.
Managers must ensure that appropriate rigid containers are available in healthcare areas for transport of specimens to the local laboratory.

The container must be identified with both a biohazard sticker and contact telephone number in case the box is lost. Clinical staff must not transport specimens unless such a container is used.

Containers designated for the transportation of clinical specimens must never be used for any other items.
The containers must be cleaned and disinfected weekly and after any visible spillage.

In the event of a specimen leaking, follow guidance in the 'Cleaning of the Environment' document.

**References:**

Dougherty L & Lister S. 2015. *The Royal Marsden Manual of Clinical Procedures*. . Wiley Blackwell, Oxford. Accessed via: http://www.rmmonline.co.uk/contents/procedures

National Institute for Health and Clinical Excellence (NICE) 2012. *Infection prevention and control of healthcare associated infections in primary and community care.* Accessed via: https://www.nice.org.uk.guidance/cg139

## Management of the infectious patient

In general practice the risk of infection is minimised by the implementation of standard precautions, however there may be situations where a service user may be a risk to others e.g. a child with chickenpox or a patient with influenza during a pandemic influenza outbreak.

In these circumstances arrangements should be made to see the patient in their own home or in a separate area of the practice away from other service users.

Standard precautions and high standards of hand hygiene must be used.

The designated process for dealing with patients who need to kept separate from others due to infection risk is to offer a clinical room where available, or wait on seat in corridor when this is not possible.

Staff who may be at risk of acquiring infection need to be offered appropriate immunisations.

Staff in direct-patient-contact need to know their immunity status for key infections (such as measles, mumps, rubella, chickenpox).

Further advice including guidance on specific infections can be obtained from Thames Valley Public Health England Centre or the Public Health England website.

### Reportable diseases

The prime purpose of the notifications system is the speedy detection and implementation of control measures to manage outbreaks of disease.

Please refer to the list of reportable infectious diseases and the Public Health England Notifications Form (https://www.gov.uk/guidance/notifiable-diseases-and-causative-organisms-how-to-report) .

Notifications are to be made to the Thames Valley Health Protection Team .
Tel: 0344 225 3861 option 1 and then option 3.
Out of hours advice (for health professionals only) 0844 967 0083

### References:

Centres for Disease Control and Prevention (CDC) 2013. *A to Z index.* Accessed via: http://www.cdc.gov/DiseasesConditions/

Public Health England 2014. *Interim guidelines for the public health management of scarlet fever outbreaks in schools, nurseries and other childcare settings.* Access at: https://www.gov.uk/government/publications/scarlet-fever-managing-outbreaks-in-schools-and-nurseries

Public Health England. *Health protection: infectious diseases*. https://www.gov.uk/topic/health-protection/infectious-diseases

Public Health England. 2010. *Notifications of infectious diseases (NOIDs) and reportable causative organisms: legal duties of laboratories and medical practitioners*. Accessed via: https://www.gov.uk/guidance/notifiable-diseases-and-causative-organisms-how-to-report

# LEGIONELLA

Legionellosis is a collective term for diseases caused by legionella bacteria including the most serious Legionnaires disease. This is a potentially fatal form of pneumonia and everyone is susceptible to infection. Legionnaires' disease is normally contracted by inhaling small droplets of water suspended in the air containing the bacteria.

Certain conditions increase the risk from *Legionella*, namely:

- Water is stored or re-circulated as part of your system
- The water temperature in all or part of the system is between 20-45ºC which is suitable for growth of *Legionella*.
- There are deposits that can support bacterial growth such as rust, sludge, scale organic matter and biofilms
- It is possible for water droplets to be produced and if so they can be dispersed over a wide area e.g. showers
- It is likely that any of your employees, patients are more susceptible to infection due to age, illness or a weakened immune system (risk if they are exposed to contaminated water droplets).

Legionella bacteria are killed rapidly at water temperature above 60°C.Below 20°C the bacteria stays dormant but will grow if the temperature is raised and other conditions are favourable.

The approved Code of Practice (ACOP) gives advice on the requirements of the Health and Safety at Work Act 1974 (HSW) and the Control of Substances Hazardous to Health Regulations 2002 (COSHH) and applies to the risk from exposure to legionella bacteria. Health and Safety Executive (HSE 2013)
The guidance applies to duty holders this includes employers and those with responsibility for the control of premises.

To comply with their legal duty under the HSE the Employer Binfield Surgery should :

- Appoint someone competent to help staff meet their Health and Safety duties and take responsibility for controlling any identified risk from exposure to legionella bacteria
- Identify and assess sources of risk; this includes checking whether conditions will encourage bacteria to multiply e.g. temperature between 20-45ºC (ensure the water temperature at representative hot and cold outlets are measured and recorded at least twice a year, and that such records are retained for 2-years afterwards)
- To establish procedures for workers if there are situations presenting serious imminent danger
- To ensure remedial action is taken if the temperatures are outside of the accepted range
- Control of Substances Hazardous to Health (COSHH) provides a framework of actions designed to control the risk from a range of hazardous substances including biological agents.

**References:**

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## Safe Handling of healthcare waste

This guidance contains an outline of waste definitions. The requirements for the disposal of healthcare waste is detailed in:

**The Safe management of healthcare waste manual 2011.1 (HTM 07:01)**

The Medical Centre/Practice is responsible for ensuring that contracts are in place for collection and safe disposal of waste from their premises, paying particular attention to clinical, infectious or hazardous waste streams.
All staff need to be trained in their responsibilities in relation to the management of healthcare waste.
The Medical Centre/Practice is responsible for ensuring that waste is managed safely and in line with national guidelines.

**Definitions of healthcare waste**
Waste regulation requires the classification of waste on the basis of hazard characteristics and point of production.

| **Examples of waste produced in the healthcare sector** | |
|---|---|
| **Hazardous waste** | **Non-hazardous waste** |
| Infectious waste (see below) | Domestic waste (black-bag or municipal waste) |
| Fluorescent tubes | Food waste |
| Laboratory chemicals | Offensive/hygiene waste |
| Cleaning chemicals | Packaging waste |
| Oils | Furniture |

**Hazardous waste definitions**

| **Definitions** | |
|---|---|
| Clinical waste | The Controlled Waste Regulations define clinical waste as:<br>(a) Any waste which consists wholly or partly of human or animal tissue, blood or other bodily fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it:<br>(b) Any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any person coming into contact with it.<br>Broadly, clinical waste can be divided into three categories of materials:<br>Waste which poses a risk of infection.<br>Waste which poses a chemical hazard<br>Medicinal waste. |
| Infectious Waste | The Hazardous Waste Regulations define as:<br>H9: Infectious substances containing viable microorganisms, or their toxins, which are known or reliably believed to cause disease in man or other living organisms. (Traditionally known as “clinical waste”.) |

| **Definitions** (cont.) | |
|---|---|
| Medicinal Waste | Classified into two categories:<br>(f) cytotoxic and cytostatic medicines (classified as Hazardous Waste)<br>(g) other medicines.<br>Failure to segregate cytotoxic and/or cytostatic medicines from other medicines will mean that the entire medicinal waste stream will need to be classified as hazardous. Cytotoxic and cytostatic classifications can be found in the safe management of healthcare waste (HPM 078:01)1 and speak to the prison pharmacist regarding which types of cytotoxic/ cytostatic waste is generated. |
| Offensive/Hygiene | Non-infectious (human waste and sanitary protection) waste such as nappies, incontinence pads etc., which does not require specialist treatment or disposal, but which may cause offence to those coming into contact with it. |

**Waste Segregation**
Segregation of waste at the point of production into suitable colour-coded packaging is vital to good waste management.
The main change in colour-coding that affects healthcare is the change from yellow bags to orange bags for most of the waste that is generated in a healthcare setting (see table below).
Purple and yellow striped bags and purple-topped sharps bins are for cytotoxic/cytostatic waste. The bags are for IV tubing etc contaminated with the drugs.

Colour coding key to segregating waste taken from HTM 07:01

**Handling of healthcare waste**
Waste should be segregated at the point of origin.
Personal protective clothing should be worn when handling waste.

**Waste should be:**
- Correctly bagged in appropriate colour-coded bags which must be UN approved and comply with BS EN ISO 7765:2004 and BS EN ISO 6383:2004.
- Kept in a rigid-sided, fire retardant holder or container with a foot operated lid, and, so far as is reasonably practicable, out of the reach of children and unauthorised personnel.
- Only filled to ¾ full.
- Securely sealed and labelled with coded tags at the point of use to identify their source
- Double bagged where:
    - The exterior of the bag is contaminated.
    - The original bag is split, damaged or leaking.

**Waste should not be:**
- Decanted into other bags, regardless of volume
- In bags which are contaminated on the outside
- Re-used

Sharps must be disposed of into approved sharps containers that meet BS 7320/UN 3291.
Sharps containers should **NEVER** be placed into any waste bag.

**Disposal of healthcare waste**
Waste should be placed in an appropriate bag.
The bag should be removed and securely fastened as frequently as necessary or when ¾ full.
The container label should clearly identify the type of waste and be labelled with its place of origin (for example, practice details) and placed in the designated waste collection point.
Sharps bins should be disposed of when ¾ full or at 3 months.
The relevant paperwork must be available (i.e. .waste transfer note / consignment note) to accompany the waste when it leaves the premises must be provided.

**Storage of healthcare waste prior to removal**
Between collections, waste should be:

- Stored in correctly colour coded bags, with bags of each colour-code kept separate.
- Situated in a centrally designated area of adequate size.
- Sited on a well-drained, impervious hard standing floor, in an area that is well lit and ventilated.
- Kept secure from unauthorised persons, members of the public, entry by animals and free from infestations.
- Accessible to collection vehicles.

**Waste Packaging**

| | | |
|---|---|---|
| Domestic waste |  | Paper, packaging, food, flowers etc<br>Disposed of in landfill - so must not contain contaminated items |
| Clinical waste |  | For any infectious or potentially infectious items<br>Dressings, gloves, aprons, body fluids etc<br>Not for uncontaminated paper or packaging |
| Offensive waste (tiger stripe) |  | Waste contaminated with body fluids but is not infectious |

**References:**

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# VACCINE COLD STORAGE GUIDANCE

As per Department of Health recommendations this Practice, Binfield Surgery:

- Orders, stores, ensures stock control, distributes, transports and disposes of vaccines in accordance with national policy
- We have at least one trained individual, with at least one trained deputy, responsible for the receipt and storage of vaccines and the recording of refrigerator temperatures
- Ensures that vaccines are stored in their original packaging at +2°C to +8°C and are protected from light
- Ensures that vaccine stocks are monitored by the designated person(s) to avoid over-ordering or stockpiling (no surgery should have no more than 2 to 4 weeks' supply at vaccines at any time)
- Refrigerates vaccines immediately on receipt to ensure they are not left at room temperature
- Uses specialist refrigerators to store pharmaceutical products which are used for vaccines and diluents. (Ordinary domestic refrigerators must not be used. Food, drink and clinical specimens must never be stored in the same refrigerators as vaccines)
- Prevents accidental interruption of the electricity supply by using both a switchless socket and by placing cautionary notices on plugs and sockets where no switchless socket is available.
- Uses an approved cool box or alternative refrigerator to store vaccines during de-frosting of the main fridge
- Monitors the temperature of the vaccine fridge using a maximum-minimum thermometer (1 thermometer per fridge; ideally an integral one or if not available a calibrate digital external thermometer) and records this data on every each working day on a Recording Chart & record
    - The current temperature
    - The maximum and minimum temperatures
    - Comments on what action was taken in the event that the temperature was outside of the +2°C to +8°C range
    - Time of the reset
    - Signature of the individual taking the recordings

- Puts arrangements in place for back-up facilities to be available in the event of the fridge failing (not maintaining temperatures between the maximum/minimum range) or breaking down. This will include:
    - Reasons for any temperature fluctuations being recorded in the log
    - Quarantining any exposed stock until assurance has been obtained
    - Contacting each manufacturer for advice; giving details of the temperatures and the time of exposure
    - Ensuring the manufacturers' responses are documented
- Ensures that relevant staff have access to and refer to Chapter 3 of 'The Green Book', Immunisation against Infectious Diseases (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223753/Green_Book_Chapter_3_v3_0W.pdf).

**References:**

PHE (Public Health England) & DH (Department of Health) 2013. Immunisation against infectious disease. Accessed via: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/266583/The_Green_book_front_cover_and_contents_page_December_2013.pdf

WHO (World Health Organisation) 2006. 'Temperature sensitivity of vaccines'. Accessed via: http://apps.who.int/iris/bitstream/10665/69387/1/WHO_IVB_06.10_eng.pdf