Standards for Minor Operations undertaken in Primary Care setting

Patients undergoing invasive procedures such as minor surgery will have an increased risk of infection. It is essential therefore that appropriate infection prevention and control procedures are in place to ensure protection of both patients and staff.

Good infection prevention and control depends on an appropriately designed environment and procedure room, adequate supplies of sterile equipment and access to reprocessing facilities and a good operative technique.

The Main purpose of this appendix is to support reducing risk of infections during invasive procedures

This appendix will cover:

- The environmental standards required to undertake minor operation procedures in a primary care setting.
- Infection prevention and control standards for staff undertaking minor operation procedures in a primary care setting.
- Cleaning, disinfection and sterilization of instruments, equipment and the environment.
- Recommendations for audit of practice and improvement pathways.

This appendix will not cover:

- The individual competencies required to undertake specific procedures or the standards for specific procedures. These should be covered by Local Safety Standards for Invasive Procedures (LocSSIPs), Standard Operating Procedures (SOP) or similar.
- Please note that there may be additional requirements for specialised procedures.

Definition

The term “Minor operations” can be used to cover a number of procedures/interventions undertaken in primary care.

The National Institute for Health and Care Excellence (NICE) defines an “interventional procedure” as a procedure used for diagnosis or for treatment that involves:

- Making a cut or a hole to gain access to the inside of a patient's body - for example, when carrying out an operation or inserting a tube into a blood vessel, or
- Gaining access to a body cavity (such as the digestive system, lungs, womb or bladder) without cutting into the body - for example, examining or carrying out treatment on the inside of the stomach using an instrument inserted via the mouth, or
- Using electromagnetic radiation (which includes X-rays, lasers, gamma-rays and ultraviolet light) - for example, using a laser to treat eye problems.

In addition, the NHS England National Safety Standards for Invasive Procedures (NatSSIPs) describes an invasive procedure as:

Those procedures that have the potential to be associated with a Never Event if safety standards are not set and followed, to include:

- All surgical and interventional procedures performed in operating theatres, outpatient treatment areas, labour ward delivery rooms, and other procedural areas within an organisation.
- Surgical repair of episiotomy or genital tract trauma associated with vaginal delivery.
- Invasive cardiological procedures such as cardiac catheterisation, angioplasty and stent insertion.
- Endoscopic procedures such as gastroscopy and colonoscopy.
- Interventional radiological procedures.
- Thoracic interventions such as bronchoscopy and the insertion of chest drains.
- Biopsies and other invasive tissue sampling.

Exclusions include:

- Simple penetration of the skin or entry of a body cavity such as insertion of intravenous line or a urinary catheter or the taking of plain X-ray
A non-invasive procedure is one that does not break the skin, for example changing a dressing. A minimally invasive procedure is one that breaks or punctures the skin, for example injections and taking blood.

Non-invasive and minimally invasive procedures may be undertaken by a suitability qualified clinician in a designated area of a consulting/examination room, treatment room or examination/physical therapy room, depending on space requirements and provided the designated area meets the infection prevention and control environmental standards.

An invasive procedure is one that cuts the superficial layers of the skin, for example removal of moles, warts or corns, biopsies or any endoscopic procedure accessing any body orifice. A local anaesthetic or sedation may be required with an invasive procedure however such procedures are not carried out under spinal or general anaesthesia. Some invasive procedures can take place in a designated treatment room. Other procedures should only take place in a specifically designed theatre suite (that is, with mechanical ventilation).

Examples of minor procedures under various surgical disciplines that may be performed outside a ventilated operating theatre are in the table below. This is not exhaustive and some of the procedures listed might be considered as requiring conventionally ventilated operating theatre facilities, e.g. carpal tunnel decompression. To undertake any of these procedures, the clinician will need to be qualified, skilled, trained and experienced in each specific procedure.

<table>
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<tr>
<th>Surgical discipline</th>
<th>Procedure</th>
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<td>Breast</td>
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<td>Vacuum-assisted excision biopsy</td>
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<td>Trans-anal excision of lesion of anus</td>
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<td>Haemorrhoid injections and haemorrhoidectomy</td>
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<td></td>
<td>Excision of epidermoid cysts, lipoma (&lt;2 cm), basal cell carcinoma and ‘small bumps and lumps’</td>
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<td>Hydrocele aspiration</td>
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<td>Gynaecology</td>
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<td>Intra-articular injection</td>
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<td>Carpal tunnel surgery (seek further advice)</td>
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<td>Vascular surgery</td>
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<td>Other</td>
<td>Liver, renal and bone marrow biopsy</td>
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<td>Caudal block</td>
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<td>Endoscopy via natural orifices, e.g. cystoscopy and gastroscopy</td>
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<td></td>
<td>Vasectomy (seek further advice)</td>
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<td>Pleural drain insertion</td>
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<td>Radiologically guided CT or ultrasound drain insertion and biopsies</td>
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Environmental standards required to undertake minor operations in a primary care setting.

Core Standards
• Ideally, all minor operations would take place in a designated procedure (minor surgery) room
The environment must comply with relevant Health Technical Memorandums (HTM) and Health Building Notes (HBN) (see reference list).

Single use medical devices are preferred. If reusable medical devices are used, then decontamination must take place in a fully compliant accredited Sterile Services Department (SSD).

All medical devices must be fully traceable through the full cycle of use and processing with records also traceable to all patient records.

Standard Precautions must be adhered to at all times.

Some procedures will need a ventilated operating area. Further advice should be sought from a person with expert knowledge in ventilation standards.

Facilities specifications
The theatre environment must comply with published guidance available from the Department of Health and can be accessed from:

- General
  o Size - large enough to allow access for the operator and assistants to move freely around the patient, instrument trolley and other fixed or mobile equipment. Some invasive procedures may require all-round couch access, including access to the head of the couch.
  o Keep equipment and furniture to a minimum (reduces duct and allows easy cleaning). The room should be uncluttered with only the equipment needed for the procedure close by.
  o Fans must not be used before or during a procedure.

- Ceiling should be made from non-porous material, be intact, solid and painted with a product able to withstand cleaning with detergent and hot water and chemical disinfection with a chlorine-releasing agent. Suspended ceilings are not recommended and should not be installed in new facilities.

- Lighting should be sealed and of suitable construction that allows easy cleaning and does not allow a build-up of dust or insects. Lighting should allow for good visibility to perform procedures.

- Walls should be made from non-porous/monolithic material, be intact, solid and painted with a product able to withstand cleaning with detergent and hot water and chemical disinfection with a chlorine-releasing agent.

- Windows should be in a good condition and state of repair and be visibly clean. They must be closed before and during the procedure and non-openable if in a room with mechanical ventilation. Windows must not compromise patient privacy.

- Doors should be self-closing with a vision panel to facilitate observation of procedures (this has to be balanced with the necessity for patient privacy). Doors must close properly and movement in and out of the operating room must be kept to a minimum – in a ventilated operating room the doors to the theatre should remain closed to ensure the effective ventilation of the area.

- Floors should be slip resistant, intact, smooth, impervious, with sealed joints/welded seams, and be easily cleanable with detergent and hot water and able to withstand being disinfected with a hypochlorite solution. Flooring needs to be durable and strong enough to support the machinery that will be necessary for some procedures. The skirting should be coved.

- Work surfaces and trolley tops – should be intact, seamless, easily washable and all joints must be sealed. Kept clear of unnecessary items. Items such as paper work, books and pot plants should not be in the procedure room. Work surfaces should be designated according to clean/dirty tasks being performed; for example, a separate area for preparing equipment or sterile supplies, specimen receipt and instrument processing.

- Patient couch covering must be intact and of a material impervious to body fluids. During procedures, the couch should be covered with a paper toweling and changed between patients. Clean between
patients with a detergent wipe and at end of session with detergent and hot water. If contaminated between patients, then disinfect the couch with a chlorine-releasing agent.

- Instruments and sterile pack storage. There should be adequate designated separate store area for all sterile packs/instruments within a washable cupboard, with due regard to the range of procedures carried out and the throughput of patients. Do not store sterile items on open racking or shelving to minimize the deposition of dust.
- Single-use instruments are preferred and their use is encouraged as single-use items eliminate the increasingly rigorous requirements to decontaminate surgical instruments to a standard that would be difficult to comply with outside specialized sterile supply departments.
- If procedure is undertaken in a treatment room, a separate area for the laying up of instruments is not required, but should be separate and away from any used or dirty instruments. Instruments should only be laid up as required and not in advance.
- Storage facilities for all necessary sterile equipment should be available and located away from the sterile field. Sterile goods must be stored off the floor and used in date rotation. Damaged or damp/wet packs must not be used. Tracking numbers from sterile packs must be written in patient notes and theatre records.

All reprocessable used sterile instruments/trays must be sent back to an accredited Sterile Supplies Department (SSD) for decontamination in a sealed box/container supplied by SSD. Dedicated secure facilities should be provided for the storage and collection of re-usable instruments, including endoscopes and their accessories (which require pre-cleaning in a separate sink), to ensure their safety and to avoid damage to the instruments themselves.

- Blinds and curtains. Blinds must be vertical, weighted, not chained, at the bottom, impervious to moisture and able to withstand cleaning. Disposable privacy curtains are recommended – write the date of when hung and change every six months, more often if contaminated – if room is not used regularly, then risk access frequency of changing and record decision.
- Hand wash facilities – A scrub area separate to the minor surgery room is desirable. If the area has a recessed scrub area this must be located away from the area containing laid up instrument trolleys in order to prevent contamination. If a scrub area is not available then a dedicated hand washing sink must be provided, with running hot and cold water, thermostatically controlled mixer facet, ‘hands-free’ taps, wall mounted soap dispenser, antiseptic/detergent or alcohol hand rub and disposable paper towels. Hand Wash basins must not be used for cleaning instruments. The sink should be at a height to facilitate hand and arm washing and prevent splashing of clothes.
- Facilities for instrument processing, the collection and disposal of used single-use equipment, clinical waste, sharps and contaminated linen should be provided in a separate well ventilated room adjacent to the procedure room.
- Staff changing – a room for staff to change into suitable clothing should be sited near to the procedure room. Hand washing and toilet facilities should be readily accessible from the staff changing rooms.
- Ventilation for minor surgical procedures – it is recommended that specialist advice be sought.
- Patient preparation and recovery area
  - An area or room providing privacy should be available near the procedure room for patient changing, with ready access to toilet and hand wash facilities. The recovery area should be supervised and depending on the procedure may need to accommodate a couch or trolley. Equipment for managing body fluid spillages should be available in these areas.
Standard infection prevention and control Precautions for a dedicated Minor Surgery Area

The fundamental principles of aseptic technique must be adhered to when performing surgical hand antisepsis, gowning and gloving prior to surgical intervention – including all aspects of minor surgery. Training and induction for all new personnel should be undertaken as well as regular education for all staff and audit of practice. This must be documented.

- Staff – involved in minor surgery should be vaccinated against Hepatitis B (records of vaccination should be kept)

- Hands
  Surgical Hand Decontamination
  - Surgical hand washing using an antiseptic solution aims to substantially reduce resident micro-organisms and to remove transient micro-organisms.
  - Surgical hand decontamination must be carried out prior to invasive procedures, where extra care must be taken to prevent micro-organisms on hands from being introduced into the patient's tissues if gloves are damaged.
  - Hands must therefore be surgically decontaminated before putting on sterile gloves, prior to all minor surgery procedures requiring sterile gloves.

- Method
  - A two minute wash (decontamination) using aqueous disinfectants such as 7.5% Povidone iodine (Betadine) or 4% Chlorhexidine gluconate (Hibiscrub) before the first surgical procedure needs to take place. The six step technique should be followed but to also include wrists and forearms.
  - Hands must remain above the level of the elbows and away from clothing to avoid contamination from splashing.
  - Rinsing should be performed from the fingertips to the elbows using the water flow only allowing excess water to drain from the elbows into the sink.
  - Nails can be cleaned using a disposable nail pick under running water.
  - Nail brushes must be sterile and single use.
  - Hands should be dried thoroughly by blotting the skin with sterile towels (do not rub the skin) working from the fingertips to the elbows whilst maintaining strict asepsis.
  - 70% alcoholic hand rubs (using the correct technique) are an acceptable alternative to repeated washing of clean surgical hands that have already been decontaminated by conventional methods.
  - Alcoholic hand rubs are not appropriate for use when hands are visibly contaminated.
  - Subsequent washes should encompass two thirds of the forearms to avoid compromising the cleanliness of the hands.
  - Wrist jewellery and stoned/engraved rings should not be worn, and fingernails should be short with no varnish/false nails worn.
  - Staff should be ‘bare below the elbow’ when performing procedures – i.e. no clothing or jewellery on the lower arms or hands.
  - All cuts and skin abrasions must be covered with a waterproof dressing.
  - For general staff hand hygiene and six step technique

- Personal Protective Equipment (PPE)
  Single-use sterile non-powdered gloves; disposable single use plastic aprons should be worn if possible contact with blood or body fluids and goggles/face protection should be used if splashing of body fluids is likely. Sterile gloves and a plastic apron are the minimum personal protective equipment requirement for carrying out minor surgical procedures.
  However, full precautions, including fresh sterile gowns for each case, are required for minor surgical procedures if a sterile device is being implanted and when there is a risk of significant post-procedure infection, or if there are other factors predisposing to infection.
  Masks are not usually required except when a sterile device is being implanted, or when there are other issues predisposing to infection. However, face protection (e.g. mask with eye protection) for operators and other staff who may be affected is required, if splashing is likely.

Gloves
Gloves play a dual role, as a barrier for personal protection from patients’ blood and exudates and to prevent bacteria from the wearers’ hands entering the surgical site.

- A fresh pair of sterile gloves should be worn for each procedure.
- Single use unsterile, unpowdered and low protein latex gloves should be worn by those not directly involved in the procedure, for all contact with body fluids.
- Latex free alternative products must be available for those staff or patients who are latex sensitive.

**Surgical Drapes and Gowns - if used**
- Theatre gowns and drapes should be made of waterproof, disposable material which when donning the gown staff must ensure that they only touch the inside of the gown.

**Aprons**
- If gowns are not used then aprons should be worn by those performing minor surgical procedures to protect themselves and the patient from cross-infection/contamination via clothing.
- A new disposable plastic apron should be worn for each patient.

**Face Masks**
- The use of masks to reduce post-operative wound infections is questionable; studies have shown no increase in infection rate when masks were not worn for general surgery.

**Theatre Caps**
- Disposable headwear only need to be worn by ‘scrubbed’ staff because of their proximity to the operating field.
- Headwear should be donned prior to donning the scrub suit to eliminate the possibility of hair or dandruff being shed onto scrub clothing.
- Headwear should be changed daily unless it becomes soiled when it should be changed immediately.
- After use dispose of headgear and do not wear outside of theatre.
- Non-scrubbed staff should keep their hair clean and out of the way.

**Footwear for use in Theatre**
- Well-fitting dedicated footwear with impervious soles needs to be provided for staff to wear in the theatre complex.
- Footwear worn in theatres should be for that use only.
- The footwear needs to be cleaned with hot soapy water after each session, dried thoroughly and stored in a clean ‘rack’ system, each member of staff to be responsible for their own footwear. If footwear is contaminated with blood or body fluids cleaning must be followed by disinfection with a chlorine releasing agent.
- Plastic overshoes do not need to be worn at all.

**Disposal of used sharps and waste**
Follow guidance in manual on pages Sharps 16-22 and Waste 28

**Linen**
All linen used within the minor surgery environment must be disposable or processed in a fully compliant processing facility – not taken home by a member of staff.
This includes: Pillowcases and cover blankets; Surgical scrub suits; Curtains

**Waste**
All waste bins should be foot operated and lidded. The facilities and the procedures for the safe disposal of waste must comply with the current guidelines for holding waste prior to collection/disposal. (See HTM 07-01) A separate secure area, inside or outside the operative facility, e.g. a lockable bin, should be provided.

**Specimen storage/transport**
- There should be adequate facilities and space for the collection and storage of specimens, with temperature controlled conditions, for important or key specimens.

**Patient preparation**
- If patients are to keep their own clothes on these must be clean.
• If required - patients to change into theatre gown provided in patient changing area and place all clothes into locker provided.
• Underwear does not need to be removed unless it is in the operative field.
• Plastic overshoes do not need to be worn by patients.
• Patients do not need to remove jewellery unless it is in the operative field.

Hair Removal
Avoid hair removal if at all possible
Only hair around the area to be incised needs to be removed
• Use depilatory cream the day before operation, if this is not possible, use a clipper with a disposable head immediately before surgery.
• Shaving with a razor is not recommended.
• Shaving brushes should not be used.

Skin preparation
• Showering or bathing on the day of the procedure is recommended.
• Alcohol solutions are preferred to aqueous solutions for pre-operative skin preparation but it is important to allow the alcohol to dry after application and before the use of electocautery.
• Solutions should be available in single-use sachets and not multi-use bottles as these may become contaminated on repeated opening.
• Skin preparation solutions should be kept in a locked cupboard according to COSHH regulations.

Staff Dress Code
• Scrub suits may be worn in the minor surgery environment.
  o The home laundering of these is not recommended.
  o If scrub suits are used then a changing area should be provided, with adequate provision for storing personal and theatre clothing.
• If theatre scrub suits are not worn then:
  o Staff undertaking minor surgery should ensure that they wear clean clothing and cover their clothing with correct Personal Protective Equipment.
• All clothing worn in the minor surgery area should be changed daily or if become soiled or excessively wet.
• Theatre attire should be provided freshly laundered and in good condition
• Theatre attire must not be worn outside the clinical area or in public places
• All theatre personnel must change into outdoor clothing before leaving the theatre environment, this includes removing hats and masks
• Fresh clean attire must be donned on return to theatre

Environmental Cleaning Schedule

Annual cleaning
There should be a planned schedule for thorough cleaning of walls, doors and ceilings at least every 6 months. Arrangements should be made for this and at the same time any defects, repairs and planned maintenance work should be undertaken.
Blinds, light fixtures and radiators clean at least annually or more often if contaminated.

Frequent cleaning
➢ Clean all fixtures and any equipment by wiping with general purpose detergent, hot water and a disposable lint free cloth or by using disposable detergent wipes daily.
➢ All areas contaminated by blood or body fluids must be decontaminated using a chlorine releasing agent
➢ Damp dust overhead lights using general purpose detergent, hot water and disposable lint free cloth or by using disposable detergent wipes.

Floors
• Should be scrubbed daily using a correct dilution of a general purpose detergent.
• Should be disinfected at the end of each session using a correct dilution of a disinfectant such as a chlorine releasing agent.
• Specific spillages of blood or body fluids should be dealt with immediately.
• Mop buckets for spillage should be emptied after each use and kept dry until the next occasion when they are required.
• Mop heads should be laundered and dried daily or be disposable.

**Trolleys**
• Must be free of dust and without dirt or spillage.
• The trolleys should be in good condition without rust or damage.
• Should be cleaned using a disposable cloth and general purpose detergent at the correct dilution or with a disposable detergent wipe between patients and at the beginning and end of each session.
• Procedure trolleys/couches contaminated by blood or body fluids should be decontaminated using a chlorine releasing agent.

➢ Work surfaces clean with detergent and hot water and dry before and after use. If it becomes contaminated, disinfect with chlorine-releasing solution.

**Preparation and Maintenance of Equipment/Environment**
• All medical and electrical equipment is examined for potential faults and any contaminants, cleaned and disinfected according to manufacturer’s instruction.
• All medical and electrical equipment requiring a service/repair or for loan is decontaminated before leaving the area and a decontamination certificate attached.
• Records relating to maintenance of equipment and environment must be maintained and made available for inspection as required.
• The fabric of the room should be kept in a good state of repair. Any chipped tiles, pealing paint, defects in floor surface/material should be replaced or repaired as a matter of urgency. This aids effective cleaning.

**Competencies**
Practitioners carrying out minor surgical procedures must be able to provide evidence of competency, appropriate mandatory training and ongoing continuous professional development.

Modifications may be made for minor surgical procedures as appropriate.

**Audit Tools**
The Infection Prevention Society (IPS) has a number of audit tools, Quality improvement tools and Rapid improvement tools that can be adapted and used in Primary Care. They are available at [https://www.ips.uk.net/professional-practice/quality-improvement-tools1/](https://www.ips.uk.net/professional-practice/quality-improvement-tools1/)

Although designed for acute care, many elements can be measured in Primary Care

Designed for acute care but very useful tool for Primary Care

**References**


Heating and ventilation systems Health Technical Memorandum 03-01: Specialised ventilation for healthcare premises

HBN 00-09 - Infection control in the built environment


Acknowledgement
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