National Infection Prevention and Control Manual

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Version History:

This literature review and/or National Infection Prevention and Control Manual will be updated in real time if any significant changes are found in the professional literature or from national guidance.

Version	Date	Summary of changes since previous version
4.6	26th January 2023	Update to section 1.2 hand washing
4.5	4th November 2022	Section 1.1 Patient placement/assessment of infection risk updated
4.4	16th Aug 2022	Section 1.4 glove use guidance updated
4.3	1st June 2022	Section 1.1 wording updated regarding recording of CV-19 test results
4.2	May 2022	Section 1.1 and 1.4 updated to include COVID-19
4.1	April 2022	Section 1.10 updated to include definitions for Occupational Exposure and Exposure Prone Procedures (EPPs).
4.0	December 2021	Section 1.4 addition of transparent face mask guidance.
3.9	October 2021	Updated to align with national changes.
3.8	February 2021	Updated to align with National changes. Addition to Section 1.9 regarding sharps. Addition to section 1.7 regarding management of patient clothing.
3.7	September 2020	Update to section 1.2 Hand hygiene as per national update.
3.6	September 2020	Minor change to linen management section 1.7 to align with local practice, soiled linen should not be placed in a clear bag after placing in an alginate bag.
3.5	January 2020	Reformatting of manual and appendices to align with HPS NIPCM. Removal of Transmission Based Precautions- chapter 2. (This is national guidance and is accessible online at http://www.nipcm.hps.scot.nhs.uk/)
3.4	June 2019	Appendix 12 updated to reflect changes to waste management
3.3	March 2019	Minor amendments to Section 1.2 and section 1.4 as per HPS update. http://www.nipcm.hps.scot.nhs.uk/news?newsid=22946 Update to waste procedures section 1.9 and addition of appendix 16.
3.2	November 2018	Section 1.10 amended.
3.1	August 2018	Appendix 7 and Appendix 11 updated: references to Actichlor Plus removed. References to Actichlor Plus removed from sections 2.3 and 2.5 Appendix 12 link to intranet site updated.
3.0	August 2018	All links to literature reviews updated.
2.9	January 2018	Changed wording in 1.9 Safe Disposal of Waste, taking out the reference to 'swan neck'.

2.8	October 2017	Added a link to 1.7 Safe Management of Linen http://www.sehd.scot.nhs.uk/mels/CEL2010_42.pdf
2.7	July 2017	All references to cleaning chemicals updated to include use of Actichlor Plus and Tristel Fuse. All references to use of separate detergent followed by chlorine agent have been removed as Actichlor Plus and Tristel Fuse are combined agents.
2.4	January 2015	Section 1.7 – inclusion of recommendation that linen deemed unfit for re-use should be returned to the laundry for disposal. Chapter 2. Transmission Based Precautions the distance for droplet precautions has been changed from “less than 3 feet (1
2.3	April 2014	Wider Consultation changes SLWG Appendix 14 and Section 2.4. Update and agreed content.
2.2	October 2013	Insertion of Chapter 2, TBPs and Glossary Add Appendix on Glove changes Add care homes consensus
2.1	January 2013	Amended after Board (ICN Leads) Consensus Meeting 9 January 2013.
2.0	December 2012	Amended after Board (ICN Leads) Consensus Meeting 1 November 2012.
1.0	January 2012	New document

HPS ICT Document Information Grid	
Description:	This evidence based National Infection Prevention and Control (NIP&C) Manual for Scotland is intended to be used by all those involved in care provision. The manual currently contains information on Standard Infection Control Precautions (SICPs), Chapter 1, Transmission Based Precautions (TBPs), Chapter 2 and Healthcare Infection Incidents, Outbreaks and Data Exceedance, Chapter 3. It is planned to further develop the content of the manual.
Update/review schedule:	Updated in real time with changes made to practice recommendations as new evidence emerges and/or legislation changes.
Cross reference:	**Standard Infection Control Precautions (SICPs) Literature Reviews**

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What is the National Infection Prevention and Control Manual (NIPCM)?

The NHSScotland National Infection Prevention and Control Manual was first published on 13 January 2012, by the Chief Nursing Officer (CNO (2012)1), and updated on 17 May 2012 (CNO(2012)01-update).
It is an evidence based National Infection Prevention and Control (NIP&C) Manual for Scotland is intended to be used by all those involved in care provision. The manual currently contains information on Standard Infection Control Precautions (SICPs), Chapter 1 and Transmission Based Precautions (TBPs), Chapter 2 and Chapter 3 Healthcare Infection incidents, outbreaks and data exceedance. It is planned to further develop the content of the manual.
It is a practice guide for use in Scotland which when used can help reduce the risk of Healthcare Associated Infection (HAI) and ensure the safety of those being cared for, staff and visitors in the care environment.

It aims to:

- Make it easy for care staff to apply effective infection prevention and control precautions.
- Reduce variation, promote standardisation and optimise infection prevention and control practices throughout Scotland.
- Help reduce the risk of Healthcare Associated Infection (HAI).
- Help align practice, monitoring, quality improvement and scrutiny.

Who should use the NIPCM?

- It is mandatory for NHSScotland:
- In all other care settings to support health and social care integration, the content of this manual is considered best practice.
- The Infection Prevention and Control Manual for Older People and Adult Care homes is mandatory within the care home setting.

It should be adopted for all infection prevention and control practices and procedures.

Is the NIPCM based on scientific literature?
The recommendations for practice made in the NIPCM are based on real-time reviews of the current scientific literature (for example Medical Journals) and best practice. Any major changes identified in the scientific literature may lead to a change being made to the NIPCM.

- View the literature reviews

What is in the Appendices?
The Appendices can be used as practical implementation of the NIPCM and contain graphical representations (for example diagrams and charts) that can be used along with the contents of the NIPCM. Many of the Appendices can be printed off as posters for local use.

Are there any other materials that I can use along with the NIPCM?
The resources page links to the SICPs Campaign Materials, Education and Training Links and Posters.
You can also look at the literature reviews and SBARs for the NIPCM.
The resources section is not mandatory but can be used as a supporting tool for the NIPCM

How can I find out what all the scientific and medical words mean in the NIPCM?
A glossary section has been provided in the NIPCM website.

Does the NIPCM website work on mobile devices?
The NIPCM website works on mobile devices e.g. laptops, smartphones. Appendices 1 to 4 have been designed to work on mobile devices and we are currently working on the other appendices.

Responsibilities for the content of this manual

ARHAI Scotland must ensure

- that the content of this manual remains evidence based or where evidence is lacking, content is based on consensus of expert opinion.

Stakeholders of the ARHAI Scotland programmes must ensure

- full participation in the working groups and oversight programmes including full engagement with the consultation process outlined in the Terms of Reference associated with each group

Responsibilities for the adoption and implementation of this manual

Organisations must ensure:

- the adoption and implementation of this manual in accordance with their existing local governance processes
- systems and resources are in place to facilitate implementation and compliance monitoring of infection prevention and control as specified in this manual in all care areas
    - compliance monitoring includes all staff (permanent, agency and where required external contractors)
- there is an organisational culture which promotes incident reporting and focuses on improving systemic failures that encourage safe infection prevention and control working practices including near misses

Managers of all services must ensure that staff:

- are aware of and have access to this manual
- have had instruction/education on infection prevention and control through attendance at events and/or completion of training (for example via NHS Education for Scotland (NES) and/or local board or organisation)
- have adequate support and resources available to enable them to implement, monitor and take corrective action to ensure compliance with this manual. If this cannot be implemented a robust risk assessment detailing deviations from the manual and appropriate mitigation measures must be undertaken and approved through local governance procedures.
- with health concerns (including pregnancy) or who have had an occupational exposure relating to the prevention and control of infection are timeously referred to the relevant agency, for example General Practitioner, Occupational Health or if required Accident and Emergency
- have undergone the required health checks or clearance (including those undertaking Exposure Prone Procedures (EPPs)
- include infection prevention and control as an objective in their Personal Development Plans (or equivalent)

Staff providing care must ensure that they:

- understand and apply the principles of infection prevention and control set out in this manual
- maintain competence, skills and knowledge in infection prevention and control through attendance at education events and/or completion of training, for example NHS Education for Scotland (NES) and/or local board or organisation
- communicate the infection prevention and control practices to be taken to appropriate colleagues, those being cared for, relatives and visitors without breaching confidentiality
- have up to date occupational immunisations/health checks/clearance requirements as appropriate
- report to line managers and document any deficits in knowledge, resources, equipment and facilities or incidents that may result in transmission of infection including near misses e.g sharps or PPE failures

- do not provide care while at risk of potentially transmitting infectious agents to others - if in any doubt they must consult with their line manager, Occupational Health Department, Infection Prevention and Control Team (IPCT) or Health Protection Team (HPT)
- contact HPT/IPCT if there is a suspected or actual HAI incident/outbreak

Infection Prevention and Control Teams (IPCTs) and Health Protection Teams (HPTs) must:

- engage with staff to develop systems and processes that lead to sustainable and reliable improvements in relation to the application of infection prevention and control practices
- provide expert advice on the application of infection prevention and control in all care settings and provide support to develop individual or organisational risk assessments where deviations from the NIPCM are necessary
- have epidemiological or surveillance systems capable of distinguishing patient case or cases requiring investigations and control
- complete documentation when an incident/outbreak or data exceedance is reported (IPCTs should ensure application of the HIIAT where applicable and report incidents and outbreaks using the ORT as outlined by the HIIAT).

Chapter 1: Standard Infection Control Precautions (SICPs)

Standard Infection Control Precautions (SICPs), covered in this chapter are to be **used by all staff, in all care settings, at all times, for all patients[1] whether infection is known to be present or not** to ensure the safety of those being cared for, staff and visitors in the care environment.

The Hierarchy of Controls detailed in appendix 20 should also be considered in controlling exposures to occupational hazards which include infection risks.

SICPs are the basic infection prevention and control measures necessary to reduce the risk of transmission of infectious agent from both recognised and unrecognised sources of infection. The application of SICPs during care delivery is determined by an assessment of risk to and from individuals and includes the task, level of interaction and/or the anticipated level of exposure to blood and/or other body fluids.

Sources of (potential) infection include blood and other body fluids secretions or excretions (excluding sweat), non-intact skin or mucous membranes, any equipment or items in the care environment that could have become contaminated and even the environment itself if not cleaned and maintained appropriately.

The application of SICPs during care delivery is determined by an assessment of risk to and from individuals and includes the task, level of interaction and/or the anticipated level of exposure to blood and/or other body fluids.

To be effective in protecting against infection risks, SICPs must be applied continuously by all staff. The application of SICPs **during care delivery** must take account of;

- risk to and from the individual for whom care is being provided
- the task to be undertaken
- level of interaction
- the anticipated level of exposure to blood and/or other body

Doing so allows staff to safely apply each of the 10 SICPs by ensuring effective infection prevention and control is maintained.

SICPs implementation monitoring must also be ongoing to demonstrate safe practices and commitment to patient, staff and visitor safety.

Further information on using SICPs for Care at Home can be found on the NHS National Education Scotland (NES) website.

[1]The use of the word 'Persons' can be used instead of 'Patient' when using this document in non-healthcare settings.

There are ten elements of SICPs:

1.1. Patient Placement/Assessment for infection risk

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

Patients who may present a particular cross-infection risk should be isolated on arrival and appropriate clinical samples and screening undertaken as per national protocols to establish the causative pathogen. This includes but is not limited to patients: With symptoms such as loose stools or diarrhoea, vomiting, fever or respiratory symptoms.

- With symptoms such as loose stools or diarrhoea, vomiting, fever or respiratory symptoms. This includes COVID-19 (see COVID-19 respiratory symptom assessment questions and testing requirements within Appendix 21 COVID-19 Pandemic controls)
- With a known (laboratory confirmed) or suspected infectious pathogen for which appropriate duration of precautions as outlined in A-Z pathogens are not yet complete.
- Known or suspected to have been previously positive with a Multi-drug Resistant Organism (MDRO) e.g MRSA, CPE.
- Who have been a close contact of a person who has been colonised or infected with CPE in the last 12 months.
- Who have been hospitalised outside Scotland in the last 12 months (including those who received dialysis).

For assessment of infection risk see Section 2: Transmission Based Precautions.

Further information can be found in the patient placement literature review.

1.2. Hand Hygiene

Hand hygiene is considered an important practice in reducing the transmission of infectious agents which cause HAIs.

Hand washing sinks must not be used for the disposal of other liquids. (See Appendix 3 of Pseudomonas Guidance)

Before performing hand hygiene:

- expose forearms (bare below the elbows);
- remove all hand/wrist jewellery* (a single, plain metal finger ring or ring dosimeter (radiation ring) is permitted but should be removed (or moved up) during hand hygiene); bracelets or bangles such as the Kara which are worn for religious reasons should be able to be pushed higher up the arm and secured in place to enable effective hand hygiene which includes the wrists;
- ensure finger nails are clean, short and that artificial nails or nail products are not worn; and
- cover all cuts or abrasions with a waterproof dressing.
- Hand washing should be extended to the forearms if there has been exposure of forearms to blood and/or body fluids.

*For health and safety reasons, Scottish Ambulance Service Special Operations Response Teams (SORT) in high risk situations require to wear a wristwatch.

To perform hand hygiene:
Alcohol Based Hand Rubs (ABHRs) must be available for staff as near to point of care as possible. Where this is not practical, personal ABHR dispensers should be used.

Perform hand hygiene:

1. before touching a patient;
2. before clean/aseptic procedures;
3. after body fluid exposure risk;
4. after touching a patient; and

5. after touching a patient's immediate surroundings. Some

additional examples of hand hygiene moments include:

- Before handling medication
- Before preparing food
- Before donning and doffing PPE
- After visiting the toilet
- Between carrying out different care activities on the same patient
- After cleaning and disinfection procedures
- After handling waste

Wash hands with non-antimicrobial liquid soap and water if:

- hands are visibly soiled or dirty; or
- caring for a patient with vomiting or diarrhoeal illness
- caring for a patient with a suspected or known gastro-intestinal infection e.g. norovirus or a spore forming organism such as *Clostridium difficile*.

In all other circumstances use ABHRs for routine hand hygiene during care.

Hands should be washed with warm/tepid water to mitigate the risk of dermatitis associated with repeated exposures to hot water and to maximise hand washing compliance. Compliance may be compromised where water is too hot or too cold. Hands should be dried thoroughly following hand washing using a soft, absorbent, disposable paper towel from a dispenser which is located close to the sink but beyond the risk of splash contamination.

Staff working in the community should carry a supply of Alcohol Based Hand Rub (ABHR) to enable them to perform hand hygiene at the appropriate times.

Where staff are required to wash their hands in the service user's own home they should do so for at least 20 seconds using any hand soap available.

Staff should carry a supply of disposable paper towels for hand drying rather than using hand towels in the individual's own home. Once hands have been thoroughly dried, ABHR should be used.

The use of antimicrobial hand wipes is only permitted where there is no access to running water. Staff must perform hand hygiene using ABHR immediately after using the hand wipes and perform hand hygiene with soap and water at the first available opportunity.

For how to wash hands see Appendix 1.

For how to hand rub see Appendix 2.

Skin care:

- Alcohol based hand rubs when used for hand hygiene should contain emollients in their formulation.
- Warm/tepid water should be used to reduce the risk of dermatitis; hot water should be avoided.
- Pat hands dry thoroughly after hand washing using disposable paper towels; avoid rubbing which may lead to skin irritation/damage.
- Use an emollient hand cream during work and when off duty.
- Do not use refillable dispensers or provide communal tubs of hand cream in the care setting.
- Staff with skin problems should seek advice from Occupational Health or their GP.

Surgical Hand Antisepsis

Surgical scrubbing/rubbing: (applies to persons undertaking surgical and some invasive procedures)

Perform surgical scrubbing/rubbing before donning sterile theatre garments or at other times e.g. prior to insertion of central vascular access devices.

- Remove all hand/wrist jewellery.
- Nail brushes should not be used for surgical hand antisepsis.
- Nail picks (single-use) can be used if nails are visibly dirty.
- Soft, non-abrasive, sterile (single-use) sponges may be used to apply antimicrobial liquid soap to the skin if licensed for this purpose.
- Use an antimicrobial liquid soap licensed for surgical scrubbing or an ABHR licensed for surgical rubbing (as specified on the product label).
- ABHR can be used between surgical procedures if licensed for this use or between glove changes if hands are not visibly soiled.
- For surgical scrubbing technique see Appendix 3.
- For surgical rubbing technique see Appendix 4.

Hand Hygiene posters/leaflets can be found at Wash Your Hands of Them Resources.

Information on the WHO World Hand Hygiene Day 2021 with the theme 'Achieving hand hygiene at the point of care' is available.

Further information can be found in the Hand Hygiene literature reviews:

- Hand washing, hand rubbing and indications for hand hygiene
- Hand hygiene products
- Skin care
- Surgical hand antisepsis in the clinical setting

1.3. Respiratory and Cough Hygiene

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

- Cover the nose and mouth with a disposable tissue when sneezing, coughing, wiping and blowing the nose. If a disposable tissue is not available use elbow to cover the nose and mouth when coughing or sneezing.
- Patients showing symptoms of respiratory illness should be encouraged to wear a surgical (TYPE II R FRSM) face mask where it is clinically safe and tolerated by the wearer.
- Dispose of used tissues and face masks promptly into a waste bin.
- In the absence of disposable tissues and hand hygiene facilities only, individuals should cough or sneeze into their elbow/sleeve.
- Wash hands with non-antimicrobial liquid soap and warm water after coughing, sneezing, using tissues, or after contact with respiratory secretions or objects contaminated by these secretions.
- Where there is no running water available or hand hygiene facilities are lacking, staff may use hand wipes followed by ABHR and should wash their hands at the first available opportunity.
- Keep contaminated hands away from the eyes nose and mouth.

Staff should promote respiratory and cough hygiene helping those (e.g. elderly, children) who need assistance with this e.g. providing patients with tissues, plastic bags for used tissues and hand hygiene facilities as necessary.

Further information can be found in the cough etiquette/respiratory hygiene literature review.

1.4. Personal Protective Equipment (PPE)

Before undertaking any procedure staff should assess any likely exposure and ensure PPE is worn that provides adequate protection against the risks associated with the procedure or task being undertaken.

All PPE should be:

- located close to the point of use

- stored to prevent contamination in a clean/dry area until required for use (expiry dates must be adhered to)
- single-use only items unless specified by the manufacturer
- changed immediately after each patient and/or following completion of a procedure or task
- disposed of after use into the correct waste stream i.e. healthcare waste or domestic waste
- Reusable PPE items, e.g. non-disposable goggles/face shields/visors must have a decontamination schedule with responsibility assigned.

Further information on best practice for PPE use for SICPs can be found in Appendix 16

Gloves must be:

- worn when exposure to blood, body fluids, (including but not limited to secretions and/or excretions), non-intact skin, lesions and/or vesicles, mucous membranes, hazardous drugs and chemicals, e.g. cleaning agents is anticipated/likely;[2]
- Gloves are a single-use item and should be donned immediately prior to exposure risk and should be changed immediately after each use or upon completion of a task;
- never be worn inappropriately in situations such as; to go between patients, move around a care area, work at IT workstations;
- be changed if a perforation or puncture is suspected or identified;
- be appropriate for use, fit for purpose and well-fitting;
- not be worn as a substitute to hand hygiene

Double gloving is only recommended during some Exposure Prone Procedures (EPPs) e.g. orthopaedic and gynaecological operations or when attending major trauma incidents and when caring for a patient with a suspected or known High Consequence Infectious disease. Double gloving is not necessary at any other time.

For appropriate glove use and selection see Appendix 5.

Further information can be found in the Gloves literature review.

Aprons must be:

- worn to protect uniform or clothes when contamination is anticipated/likely
- when in direct care contact with a patient or their immediate environment e.g. providing toileting support or changing bed linen;
  and
- changed between patients and following completion of a procedure or task.

Full body gowns/fluid repellent coveralls must be:

- worn when there is a risk of extensive splashing of blood and/or other body fluids e.g. in the operating theatre;
- worn when a disposable apron provides inadequate cover for the procedure/task being performed;
- changed between patients and immediately after completion of a procedure or task.
- The choice of apron or gown is based on a risk assessment and anticipated level of body fluid exposure. **Routine sessional use of gowns/aprons is not permitted.**

Sterile surgical gowns must be:

- worn by all scrubbed members of the operating theatre surgical team;
- worn for insertion of central venous catheters, insertion of peripherally inserted central catheters, insertion of pulmonary artery catheters and spinal, epidural and caudal procedures.

Reusable gowns must:

- not be worn in the operating theatre environment or for aseptic surgical procedures;
- be appropriately processed between uses based on manufacturer's instructions.

If hand hygiene with soap and water is required, this should not be performed whilst wearing an apron/gown in line with a risk of apron/gown contamination; hand hygiene using ABHR is acceptable.

Further information can be found in the Aprons/Gowns literature review**.**

Eye/face protection must:

- be worn if blood and/or body fluid contamination to the eyes/face is anticipated/likely and always during Aerosol Generating Procedures.
- be worn by all scrubbed members of the surgical team for all surgical procedures;
- not be impeded by accessories such as piercings/false eyelashes;
- not be touched when worn;
- cover the full peri-orbital region and wrap around the sides of the face;
- be removed or changed in accordance with manufacturer's instructions, if vision is compromised through contamination with blood or body fluids, if the integrity of the equipment is compromised, at the end of a clinical procedure/task and/or prior to leaving the dedicated clinical area;
- Regular corrective spectacles and safety spectacles **are not** considered eye protection.

Further information can be found in the eye/face protection literature review.

Fluid resistant Type IIR surgical face masks must be:

- worn by a patient known or suspected to be infected with a micro-organism spread by the droplet or airborne route when leaving their room or when moving between clinical areas including transfers by portering staff and ambulance services.
- worn if splashing or spraying of blood, body fluids, secretions or excretions onto the respiratory mucosa (nose and mouth) is anticipated/likely;

(as part of SICPs a full face visor may be used as an alternative to fluid resistant Type IIR surgical face masks to protect against splash or spray.)

- worn in combination with a full face shield, integrated half face shield or goggles for AGPs on non-infectious patients;
- worn to protect patients from the operator as a source of infection when performing invasive spinal procedures such as myelography, lumbar puncture and spinal anaesthesia, inserting a Central Vascular Catheter (CVC), performing intra-articular (joint) injections;
- worn by all scrubbed members of the theatre surgical team for all surgical procedures;
- worn by non-scrubbed members of the theatre surgical team if deemed necessary following a risk assessment of exposure to blood and/or body fluids;
- well-fitting and fit for purpose (fully covering the mouth and nose);
- removed or changed;

    - at the end of a procedure/task;
    - if the integrity of the mask is breached, e.g. from moisture build-up after extended use or from gross contamination with blood or body fluids; and
    - in accordance with specific manufacturers' instructions.

Further information can be found in:

- aerosol generating procedures literature review
- surgical face masks literature review
- section 2.4 of the NIPCM
- appendix 11 of the NIPCM

Transparent face masks:

Transparent face masks may be used to aide communication with patients in some settings

Transparent face masks must;

- meet the specification standards of the Transparent face mask technical specification (Department of Health and Social Care - November 2021);and
- have been approved by the UK Transparent Mask review group for use within health and social care settings
- only be worn in areas where Fluid Resistant Type IIR surgical face masks are used as personal protective equipment.

Further information can be found in:

- aerosol generating procedures literature review
- surgical face masks literature review
- section 2.4 of the NIPCM
- appendix 11 of the NIPCM

During the ongoing COVID-19 pandemic please also refer to the Scottish Government Extended Use of Facemask Guidance. The extended use of facemask guidance is not considered an element of SICPs but an additional mitigation measure applied in response to the ongoing COVID-19 pandemic response.

Footwear must be:

- non-slip, impervious, clean and well maintained, and support and cover the entire foot to avoid contamination with blood or other body fluids or potential injury from sharps
- removed before leaving a care area where dedicated footwear is used e.g. theatre. Employees must clean and decontaminate footwear upon removal and when visibly soiled with blood and/or body fluids following manufacturers recommended instructions for cleaning and disinfection
- dedicated for use in settings such as theatres and stored in a designated area when not in use
- Footwear found to be defective should be repaired or replaced before further use.
- Overshoes/shoe covers should not be used in the general health and care environment.

Further information can be found in the footwear literature review.

Headwear must be:

- worn in theatre settings/restricted and semi-restricted areas;
- worn as PPE for procedures where splashing/spraying of body fluids is anticipated, and as source control when performing clean/aseptic procedures where risk of infection is deemed to be high.
- well fitting and completely cover the hair;
- changed/disposed of at the end of a single clinical procedure/task; or at the end of a theatre session (for sessional use); immediately if contaminated with blood and/or body fluids;
- removed before leaving the theatre/clean room.

Further information can be found in the headwear literature review

For the recommended method of putting on and removing PPE see Appendix 6.

COVID-19 - the correct order for donning, doffing and disposal of PPE for HCWs in a primary care setting from NHS National Services Scotland on Vimeo.

Sessional use of PPE:

Typically, sessional use of any PPE is not permitted within health and care settings at any time as it may be associated with transmission of infection within health and care settings.

Due to the much wider and frequent use of FRSMs eye/face protection (where required) by HCWs during the ongoing COVID-19 pandemic and during periods of increased respiratory activity in health and care settings both as part of service user direct care delivery and extended use of facemasks guidance, sessional use of FRSMs and eye/face protection is permitted at this time.

This means that FRSMs and eye/face protection (where required) can be used moving between service users and for a period of time where a HCW is undertaking duties in an environment where there is exposure to patients with suspected or confirmed respiratory infection. A session ends when the healthcare worker leaves the clinical setting or exposure environment. When using FRSMs and eye/face protection sessionally it is important to note the following;

- FRSMs/FFP3/Eye/Face protection must be replaced if visibly contaminated, wet, damaged, uncomfortable, when moving between patients with suspected or confirmed respiratory infection and those without.
- FRSMs must be replaced following procedures where splash/spray is generated
- HCWs must not touch their FRSM, eye/face protection or FFP3 respirator whilst in situ. If they inadvertently do so, they must perform hand hygiene immediately afterwards

The above measures in conjunction with safe donning and doffing of PPE ensure the safety of the HCW and the service user.

No other PPE is permitted to be worn sessionally moving between service users or care

tasks. This includes gloves, aprons and gowns.

PPE for Visitors:

PPE may be offered to visitors to protect them from acquiring a transmissible infection. If a visitor declines to wear PPE when it is offered then this should be respected and the visit must not be refused. PPE use by visitors can not be enforced and there is no expectation that staff monitor PPE use amongst visitors. Below is the PPE which should be worn where it is appropriate to do so and when the visitor chooses to do so.

[2]Scottish National Blood Transfusion Service (SNBTS) adopt practices that differ from those stated in the National Infection Prevention and Control Manual.

Visitors do not routinely require PPE unless they are providing direct care to the individual they are visiting. In line with extended use of face mask guidance, visitors are strongly recommended to continue to wear a face covering when visiting a healthcare setting. Should they arrive without one, they can be provided with a FRSM.

The table below provides a guide to PPE for use by visitors if delivering direct care:

IPC Precaution	Gloves	Apron	Face covering/mask	Eye/Face Protection
Standard Infection Control Precautions (SICPs)	Not required*1	Not required*2	Where splash/spray to nose/mouth is anticipated during direct care Encourage the use of face covering (or provide with Type IIR FRSM if visitor arrives without a face covering) in line with Extended use of face masks guidance	Not required*3
Transmission Based Precautions (TBPs)	Not required*1	Not required*2	If within 2 metres of service user with suspected or known respiratory infection Encourage the use of face covering (or provide with Type IIR FRSM if visitor arrives without a face covering) in line with Extended use of face masks guidance	If within 2 metres of service user with suspected or known respiratory infection

*1 unless providing direct care which may expose the visitor to blood and/or body fluids i.e. toileting.

*2 unless providing care resulting in direct contact with the service user, their environment or blood and/or body fluid exposure i.e. toileting, bed bath.

*3 Unless providing direct care and splashing/spraying is anticipated

1.5. Safe Management of Care Equipment

Care equipment is easily contaminated with blood, other body fluids, secretions, excretions and infectious agents. Consequently, it is easy to transfer infectious agents from communal care equipment during care delivery.

Care equipment is classified as either:

- **Single-use** – equipment which is used once on a single patient and then discarded. Must never be reused even on the same patient. The packaging carries the symbol to the right.
    - Needles and syringes are single use devices. They should never be used for more than one patient or reused to draw up additional medication.
    - Never administer medications from a single-dose vial or intravenous (IV) bag to multiple patients.
- **Single patient use** – equipment which can be reused on the same patient.
- **Reusable invasive equipment** - used once then decontaminated e.g. surgical instruments.
- **Reusable non-invasive equipment (often referred to as communal equipment)** - reused on more than one patient following decontamination between each use e.g. commode, patient transfer trolley.

Before using any sterile equipment check that:

- the packaging is intact
- there are no obvious signs of packaging contamination
- the expiry date remains valid

Decontamination of reusable non-invasive care equipment must be undertaken:

- between each use
- after blood and/or body fluid contamination
- at regular predefined intervals as part of an equipment cleaning protocol
- before inspection, servicing or repair

Adhere to manufacturers' guidance for use and decontamination of all care equipment.
All reusable non-invasive care equipment must be rinsed and dried following decontamination then stored clean and dry.
Decontamination protocols should include responsibility for; frequency of; and method of environmental decontamination.
An equipment decontamination status certificate will be required if any item of equipment is being sent to a third party e.g. for inspection, servicing or repair.
Guidance may be required prior to procuring, trialling or lending any reusable non-invasive equipment.

Further information can be found in the management of care equipment literature review.
For how to decontaminate reusable non-invasive care equipment see local version of Appendix 7 below.

1.6. Safe Management of the Care Environment

It is the responsibility of the person in charge to ensure that the care environment is safe for practice (this includes environmental cleanliness/maintenance). The person in charge must **act** if this is deficient.

The care environment must be:

- visibly clean, free from non-essential items and equipment to facilitate effective cleaning
- well maintained and in a good state of repair and
- routinely cleaned in accordance with the Health Facilities Scotland (HFS) National Cleaning Specification

A fresh solution of general purpose neutral detergent in warm water is recommended for routine cleaning. This should be changed when dirty or at 15 minute intervals or when changing tasks.

Routine disinfection of the environment is not recommended. However, Tristel Fuse solution should be used routinely on sanitary fittings.

Staff groups should be aware of their environmental cleaning schedules and clear on their specific responsibilities. Cleaning protocols should include responsibility for; frequency of; and method of environmental decontamination.

Further information can be found in the routine cleaning of the environment in hospital setting literature review

1.7. Safe Management of Linen

Clean linen

- Should be stored in a clean, designated area, preferably an enclosed cupboard.
- If clean linen is not stored in a cupboard then the trolley used for storage must be designated for this purpose and completely covered with an impervious covering that is able to withstand decontamination.

Linen used during patient transfer

- Any linen used during patient transfer e.g. blankets, should be categorised at the point of destination.

For all used linen (previously known as soiled linen):

- Ensure a laundry receptacle is available as close as possible to the point of use for immediate linen deposit.

Do not:

- rinse, shake or sort linen on removal from beds/trolleys
- place used linen on the floor or any other surfaces e.g. a locker/table top
- re-handle used linen once bagged
- overfill laundry receptacles or
- place inappropriate items in the laundry receptacle e.g. used equipment/needles.

For all **infectious linen (this mainly applies to healthcare linen)** i.e. linen that has been used by a patient who is known or suspected to be infectious and/or linen that is contaminated with blood and/or other body fluids e.g. faeces:

- Place directly into a water-soluble/alginate bag and secure before placing in a red terylene hamper*. This applies also to any item(s) heavily soiled and unlikely to be fit for reuse.
- Used and infectious linen bags/receptacles must be tagged e.g. ward/care area and date.
- Store all used/infectious linen in a designated, safe, lockable area whilst awaiting uplift. Uplift schedules must be acceptable to the care area and there should be no build-up of linen receptacles.

All linen that is deemed unfit for re-use e.g torn or heavily contaminated, should be categorised at the point of use and returned to the laundry for disposal.

Further information can be found in the safe management of linen literature review and National Guidance for Safe Management of Linen in NHSScotland Health and Care Environments - For laundry services/distribution.
Further information about linen bagging and tagging can be found in Appendix 8.

Management of patient clothing

- Patient clothing may be sent home with visitors if required.
- NB Where clothing is contaminated with blood/body fluids the **visitors must be informed** of this and must **agree** to take this clothing home for laundering.
- A leaflet 'Washing clothes at home' should be given to visitors.

The linen must be placed in an alginate bag. Please inform relatives / carers that the bag must be placed directly into the washing machine and washed at a minimum of 50°C.

For guidance on Home Laundering of Uniforms see Section 3.2 of the National Uniform Policy, Dress Code and Laundering Policy.

Further information about linen bagging and tagging can be found in Appendix 8 *

(*NB: NHS Borders deviates from National Guidance; clear bags are not required in addition to the alginate bag for infectious linen as per local risk assessment).

Further information can be found in the safe management of linen literature review and Safe Management of Linen in NHSScotland Health and Care Environments for Laundry Services/distribution.

1.8. Safe Management of Blood and Body Fluid Spillages

Spillages of blood and other body fluids may transmit blood borne viruses. Spillages must be decontaminated immediately by staff trained to undertake this safely. Responsibilities for the decontamination of blood and body fluid spillages should be clear within each area/care setting.

For management of blood and body fluid spillages see local version of **Appendix 9** below.

If superabsorbent polymer gel granules for containment of bodily waste are used these should be used in line with national guidance. In Scotland refer to http://www.hfs.scot.nhs.uk/publications/1575969155-SAN(SC)1903.pdf.

Further information can be found in the management of blood and body fluid in health and social care settings literature review.

1.9. Safe Disposal of Waste (including sharps)

Scottish Health Technical Note (SHTN) 3: NHS Scotland Waste Management Guidance contains the regulatory waste management guidance for NHS Scotland including waste classification, segregation, storage, packaging, transport, treatment and disposal. The Health and Safety (Sharp Instruments in Healthcare) Regulations 2013 outline the regulatory requirements for employers and contractors in the healthcare sector in relation to the safe disposal of sharps.

Categories of waste:

Healthcare (including clinical) waste – is produced as a direct result of healthcare activities e.g. soiled dressings, sharps.
Special (or hazardous) waste – arises from the delivery of healthcare in both clinical and non-clinical settings. Special waste includes a range of controlled wastes, defined by legislation, which contain dangerous or hazardous substances e.g. chemicals, pharmaceuticals.
Domestic waste – must be segregated at source into:
Dry recyclates - (glass, paper and plastics, metals, cardboard).
Residual waste - (any other domestic waste that cannot be recycled).

Waste Streams:

Black – Trivial risk

- Domestic waste or yellow and black stripes (small quantities of hygiene waste). Final disposal to Landfill. Clear/opaque receptacles may also be used for domestic waste at care area level.

Orange, Light Blue(laboratory) – Low risk

- **Orange** - consists of items which are contaminated or likely to be contaminated with infectious blood and/or body fluids. Final disposal following heat disinfection is to landfill.
- **Light Blue** – laboratory/microbiological waste that must be autoclaved before disposal via the orange stream.

Yellow– High risk

- Waste which poses ethical, highly infectious or contamination risks. This includes anatomical and human tissue which is recognisable as body parts, medical devices and sharps waste boxes that have red, purple or blue lids. Disposal is by specialist incineration.

Red – Special waste

- Chemical waste.

For care/residential homes waste disposal may differ from the categories described above and guidance from local contractors will apply. Refer to SEPA guidance http://www.sepa.org.uk/waste.aspx.

Safe waste disposal at care area level:

Always dispose of waste:

- immediately and as close to the point of use as possible; and
- Into the correct segregated colour coded UN 3291 approved waste bag (either orange/yellow for healthcare waste or black/clear/opaque for domestic) or container (sharps box).

Waste bags

- must be no more than 3/4 full or more than 4 kgs in weight;
- all clinical waste bags must be sealed using the **"swan-neck**" approach; and use a ratchet tag/or tape (for healthcare waste bags only) with the point of origin clearly marked on the tape/tag;
- sealed bags must be placed carefully in the large yellow Eurobins with the neck of the bag facing upwards

Liquid waste management: see **Appendix 9.**

Store all waste in a designated, safe, lockable area whilst awaiting uplift. Uplift schedules must be acceptable to the care area and there should be no build-up of waste receptacles.

Sharps boxes must:

- have a dedicated handle;
- have a temporary closure mechanism, which must be employed when the box is not in use;
- be disposed of when the manufacturers' fill line is reached;
- be labelled with point of origin and date of closure;
- disposed of after 3 months even if not full;
- be colour coded and fit for purpose;
- should be located out of the reach of children and positioned safely away from public access areas.

For further advice on management of waste see local Waste management microsite for NHS Borders and national safe disposal of waste literature review

1.10. Occupational Safety: Prevention and Exposure Management (including sharps)

Exposure in relation to blood borne viruses (BBV) is the focus within this section and reflects the existing evidence base.

The Health and Safety (Sharp Instruments in Healthcare) Regulations 2013 outline the regulatory requirements for employers and contractors in the healthcare sector in relation to: arrangements for the safe use and disposal of sharps; provision of information and training to employees; investigations and actions required in response to work related sharps injuries.

Sharps handling must be assessed, kept to a minimum and eliminated if possible with the use of approved safety devices. Manufacturers' instructions for safe use and disposal must be followed.

- **Needles must not be re-sheathed/re-capped.** [4]
- Always dispose of needles and syringes as 1 unit.
- If a safety device is being used safety mechanisms must be deployed before disposal.

An occupational exposure is a percutaneous or mucocutaneous exposure to blood or other body fluids.

Occupational exposure risk can be reduced via application of other SICPs and TBPs outlined within the NIPCM.

A significant occupational exposure is a percutaneous or mucocutaneous exposure to blood or other body fluids from a source that is known, or found to be positive for a blood borne virus (BBV). Examples of significant occupational exposures would be:

- a percutaneous injury e.g. injuries from needles, instruments, bone fragments, or bites which break the skin; and/or
- exposure of broken skin (abrasions, cuts, eczema, etc); and/or
- exposure of mucous membranes including the eye from splashing of blood or other high risk body fluids.

There is a potential risk of transmission of a Blood Borne Virus (BBV) from a significant occupational exposure and staff must understand the actions they should take when a significant occupational exposure incident takes place. There is a legal requirement to report all sharps injuries and near misses to line managers/employers.

Additionally, employers are obligated to minimise or eliminate workplace risks where it is reasonably practicable. Immunisation against BBV should be available to all qualifying staff, and testing (and post exposure prophylaxis when applicable) offered after significant occupational exposure incidents.

For the management of an occupational exposure incident see Appendix 10

Exposure prone procedures (EEPs) are invasive procedures where there is a risk that injury to the healthcare worker may result in the exposure of the patient's open tissues to the blood of the worker (bleed-back).

There are some exclusions for HCWs with known BBV infection when undertaking EPPs. The details of these and further information can be found in the occupational exposure management (including sharps) literature review.

[4] **A local risk assessment is required if re-sheathing is undertaken using a safe technique for example anaesthetic administration in dentistry.**

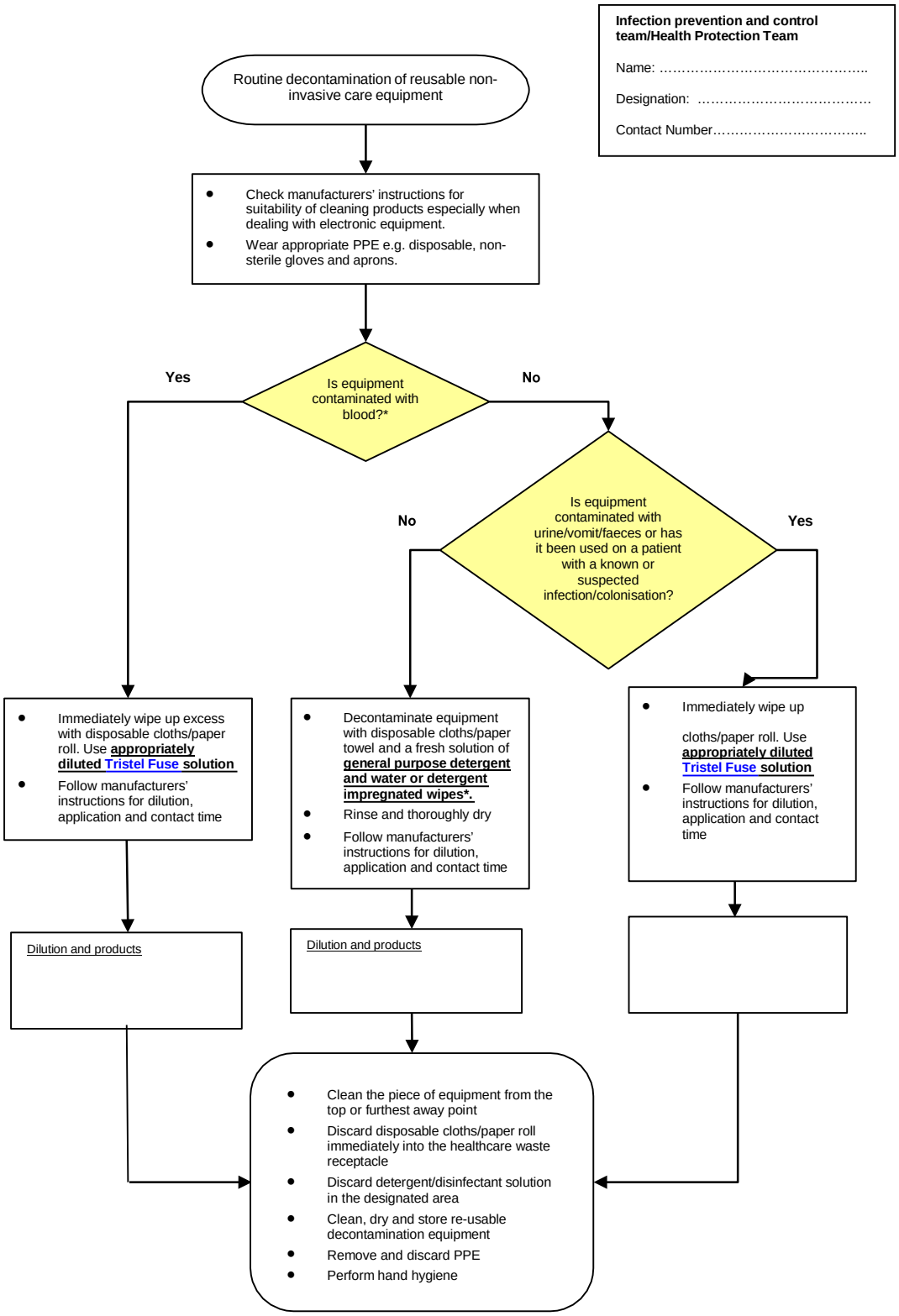
Glossary

http://www.nipcm.hps.scot.nhs.uk/glossary/

Appendices

NB: All appendices are available online except for appendices 7 and 9 which are provided below due to the requirement for local amendments.

Appendix 7 - Decontamination of reusable non-invasive care equipment

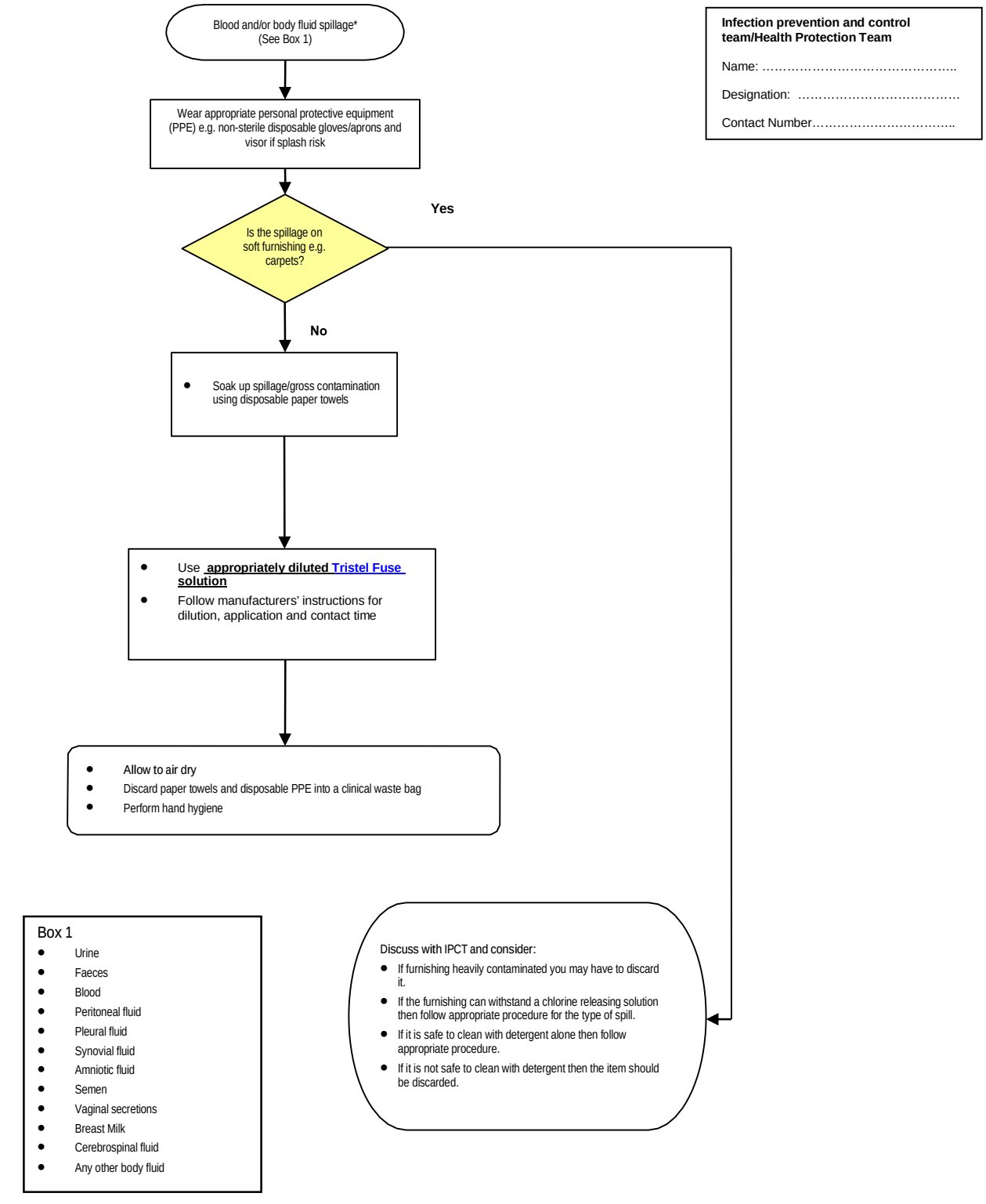


***** Scottish National Blood Transfusion Service, Scottish Ambulance Service and GP practices use products that differ from those stated in the National Infection Prevention and Control Manual,

Local Equipment Decontamination Status Certificate

Further information can be found at **http://www.hfs.scot.nhs.uk/services/incident-reporting-and-investigation-centre-iric/how-to-report-adverse-incidents/**

Appendix 9 – Management of blood and body fluid spillages



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