



CLINICAL GUIDELINE

Infection Control Guidelines for Community Pharmacy

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Does this version include changes to clinical advice:	No
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Approval Group:	NHSGGC Infection Control Committee

Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Background

The Scottish Government has set standards for Health Boards to achieve in preventing Healthcare Associated Infections (HAIs)¹ and infection control teams are employed to help achieve and maintain these. Community pharmacies are not currently supported by NHS GGC infection control teams. However;

- National Institute for Clinical Excellence (NICE CG139) infection control guidelines state that healthcare workers **must** have appropriate supplies of materials for hand decontamination, sharps containers and personal protective equipment². The use of the term '**must**' describes a legal duty underpinned by legislation.
- The 2009 pandemic influenza outbreak and a small survey of NHS GGC community pharmacies highlighted the need for more detailed infection control advice.
- The subsequent COVID-19 pandemic has further underlined the public facing role of community pharmacy and the need to provide relevant infection control advice.
- Although 'Guidance for owners and superintendent pharmacists of pharmacy businesses' from the General Pharmaceutical Council does not detail infection control, several standards require that they are safe and fit for purpose and they are subject to regulations detailed in the Health and Safety at Work Act³
- Community pharmacies in NHS GGC offer clinical services including immunisation, near patient testing e.g. cholesterol and blood glucose testing.
- Pharmacy staff can be exposed to accidental spillage of blood and body fluids during the course of routine business e.g. requests for first aid.
- Pharmacists may be asked to provide diagnosis and treatment for potentially notifiable diseases e.g. measles.

Purpose of these guidelines

These are **good practice guidelines** intended to provide assistance to Community Pharmacy owners, Responsible Pharmacists and their staff (CPs) to manage infection control risk during the normal course of business (See audit tool) and to further develop their quality management systems which are the subject of inspection by the General Pharmaceutical Council. Separate guidance is available which will be reviewed and issued in the event of any pandemic outbreak.

The guidelines, which have been developed by a multi-professional expert group are intended to be an aid to community pharmacies to develop their own governance processes. This is the responsibility of the Community Pharmacy Superintendent Pharmacist and the regulation of which is the responsibility of the General Pharmaceutical Council.

The recommendations draw from general principles of infection control (**Appendix 1**) and current recommended best practice e.g. management of 'sharps'. They cover;

- **Premises**
- **Planning and managing the pharmacy environment**
- **Cleaning and Personal Protective Equipment**
- **Waste disposal**
- **Hand washing facilities**
- **Behaviours: Protecting staff and patients from infection.**
- **Recognising and managing communicable disease**
- **Resource guide, sources for staff training and references**

Premises

- When fitting or re-fitting a pharmacy keep surfaces such as carpet, or soft furnished chairs to a minimum.
- Ensure areas used for 'near patient' testing are fitted with impervious surfaces which may be readily cleaned.
- Avoid 'clutter', file paperwork away and dispose of waste promptly, particularly in consultation rooms.

Some viruses e.g. norovirus can be transmitted by aerosolised particles when a patient vomits and subsequent vacuum cleaning of soft surfaces may spread infection by aerosolising the virus. Impermeable surfaces such as tiles or vinyl can be more readily cleaned and should be used particularly in areas of the community pharmacy used for 'near patient' testing, such as consultation rooms. These should ideally be fitted with 'curved' skirting boards between the floor and wall to prevent corners for dirt to accumulate and there should be a minimum of paperwork and documents stored in these areas.

Cleaning and Personal Protective Equipment (PPE)

- Have a regular cleaning rota undertaken by designated staff and clean areas that have been coughed or sneezed upon as soon as possible.
- Follow correct protocols when cleaning equipment used for near patient testing such as blood glucose monitoring equipment and smokelysers
- Pharmacies should have a blood spillage kit available.

Community pharmacies should have a regular cleaning rota and Standard Operating Procedures (SOPs) for cleaning in place. The rota and SOPs should ensure that clinical areas receive at least a once daily clean and cleaning tasks should be undertaken by specifically designated staff.

*Most infectious organisms are readily killed by regular cleaning agents so cleaning with detergent i.e. commercially available cleaning agents will be sufficient in normal use, it is unnecessary to use specialist disinfecting agents. A guide to cleaning agents may be found as **Appendix 2**.*

*However, special care should be taken when cleaning surfaces infected by body fluids such as blood or vomit. The assumption must be made that these are always potentially infectious. Further details are available in **Appendix 3a**.*

***Appendix 3b** details procedures to be used in managed healthcare settings.*

***Personal Protective Equipment (PPE)** such as gloves and an apron should be worn when undertaking high risk cleaning tasks. A description of types of PPE may be found in **Appendix 3**. In general it is not necessary to use face masks in community pharmacy*

Waste Disposal

- Paper towels for hand drying and used tissues should be disposed of in a foot operated, lidded and lined pedal bin.
- 'Sharps' either generated by clinical activity in the pharmacy e.g. travel vaccination clinics or returned to Injecting Equipment Providers (IEPs) must be promptly disposed of in an approved container.

- Approved 'sharps' containers must be, assembled correctly, filled no more than 2/3 full, then closed and stored securely until return for incineration by an appropriate carrier. (IEPs should use the designated NHS GGC carrier).
- Returned medicines should be promptly disposed of in an appropriate container.
- All used packaging material and other refuse should be promptly removed from business areas and stored appropriately for regular uplift by waste disposal services.

Hand Washing Facilities

- A sink (ideally a clinical sink) with warm running water should be available for hand washing in all clinical areas e.g. dispensary, consultation room.
- Hand washing facilities should be readily available for all front shop staff.
- Paper towels, liquid soap and lidded, lined foot operated pedal bin should be available at all sinks designated for hand washing.
- The current hand washing guide should be prominently displayed at all sinks designated for hand washing.
- A separate sink should be available for the management of clinical samples
If possible a sink should be designated for hand washing only. Liquid soap dispensers filled with disposable soap pouches and paper towel dispensers should be fitted to the wall at the sink. If hand creams and lotions are used a pump bottle of hand cream with pump dispenser should be available for staff use

Behaviours: Protecting staff and patients from infection

- All staff should receive training in hand washing and should be encouraged to wash their hands frequently.
- Hand washing should always be undertaken before and after patient contact.
- Staff should understand and be able to demonstrate 'cough etiquette'
- All staff working in pharmacies who are 'injecting equipment suppliers' or who are involved with finger prick testing and vaccination procedures should receive immunisation against Hepatitis B infection.
- Community pharmacies should give consideration to vaccinating all staff against Hepatitis B
- All staff should receive education on the management of needle stick injuries.
- The pharmacy should have SOPs in place for the management of patient returned medicines,
- Pharmacies must not accept returned 'sharps' unless they are IEPs who should have appropriate SOPs in place.
- Community pharmacies offering vaccination and 'near patient' testing must follow recommended infection control protocols for these activities.
- Staff should follow basic infection control techniques when offering first aid e.g. wearing gloves to dress a wound when possible.

Many common viruses and infections are spread by hand to mouth contact so encouraging hand hygiene at the most appropriate times is a good cost effective way to prevent staff succumbing to infections they might be exposed to in the pharmacy such

as influenza. Wet hand washing and hand rubbing guides are available as **Appendices 4a and 4b**.

Staff who clearly may be routinely exposed to needle stick injury should be vaccinated against Hepatitis B. This protects both them and their patients.

Consideration should be given to offering this to all staff in the pharmacy, especially those who may be involved in accepting returned patient medicines, as there have been incidents of needle stick injury with returned lancets in bags of returned medicines.

SOPs should detail ways of minimising this occurrence.

Staff should be aware that used needles must never be re-sheathed e.g. after a vaccine has been administered.

Staff should remember hand hygiene when handling items such as inhalers, smokelysers or peak flow meters for demonstration to patients.

Personal Protective Equipment (PPE) such as gloves should be worn when undertaking finger prick testing and administering first aid when possible. A description of types of PPE may be found in Appendix 3. In general it is not necessary to use face masks in community pharmacy.

Recognising and managing communicable disease

- **All patients presenting to community pharmacy suspected of having a notifiable illness or communicable disease should be referred to their GP.**
- **All patients presenting to community pharmacy with symptoms of a communicable disease should be counselled on preventing disease spread appropriately.**
- **Community pharmacy staff should be aware of the NHS GGC Primary Care Infection Management guidelines and counsel on appropriate antibiotic use.**

Patients suspected of suffering a notifiable illness such as meningitis, measles, mumps or rubella should be promptly referred to their GP or appropriate 'out of hours' service through NHS24. To facilitate notification to the public health protection team who will advise on any required treatment for close family members and contact tracing.

If the patient has sought treatment through the Minor Ailments Service (MAS), it is good practice to make a note of the advice on the PCR. For further information see Part 2 of the Public Health Act (Scotland) 2008

<https://www.legislation.gov.uk/asp/2008/5/contents>

Resources and sources for staff training

Hand washing and cough etiquette

- Health Protection Scotland (HPS) hosts a hand hygiene site.
<http://www.washyourhandsofthem.com/home.aspx>
- NHS GGC Infection Control team have a hand washing site at
http://www.nhsggc.org.uk/content/default.asp?page=s710_6 with the poster '6 Steps for Hand Hygiene'
<http://library.nhsggc.org.uk/mediaAssets/Infection%20Control/A4%20-%206-Step%20HH.pdf>
- NHS GGC Standard Infection Control Policy for hand hygiene
<http://www.nhsggc.org.uk/media/233080/hand-hygiene-policy-v4-may-2015.pdf>
- Hand Hygiene National Health Education Scotland (NES) www.nes.scot.nhs.uk
- National Infection Prevention and Control Manual
<http://www.nipcm.hps.scot.nhs.uk/> has useful information and a guide to 'cough etiquette'.

Antimicrobial use and Infectious diseases

- NHS GGC Primary Care Adult Infection Management Guidelines
www.ggcformulary.scot.nhs.uk
- NHS GGC primary Care Paediatric Infection Management Guidelines
www.ggcformulary.scot.nhs.uk
- NES provide courses on Antimicrobial Use, Influenza (Pandemic), Responding to Minor Ailments www.nes.scot.nhs.uk
- HPS pages on Norovirus <https://www.hps.scot.nhs.uk/a-to-z-of-topics/norovirus/>
- Norovirus leaflet for patient use
<http://library.nhsggc.org.uk/mediaAssets/Infection%20Control/Norovirus.pdf>
- NES Coronavirus learning for health professionals
<https://www.nes.scot.nhs.uk/news/coronavirus-covid-19-learning-materials-for-professionals/>

Managing needle stick injury

- Management of Occupational and non Occupational Exposures to Blood borne Viruses NHS GGC
<http://library.nhsggc.org.uk/mediaAssets/PHPU/Posters%20final.pdf>

Managing the environment for vaccination procedures

- The NHS GGC 'Immunisation and Best Practice Guide'
<http://www.staffnet.ggc.scot.nhs.uk/Info%20Centre/PoliciesProcedures/GGCClinicalGuidelines/Pages/CG%20home.aspx> gives details on how an area used for vaccination should be prepared. (N3 connection required).

Infection Control during COVID-19 Pandemic

- Community Pharmacies are asked to observe additional infection control measures during the pandemic which include wearing PPE and ensuring social distancing is observed. General guidance may be found on the HPS website <https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/infection-prevention-and-control-ipc-guidance-in-healthcare-settings/#title-container> . Additional information is supplied by HPS <https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/>

References

1. Healthcare Associated Infection Standards
http://www.healthcareimprovementscotland.org/our_work/standards_and_guidelines/stnds/hai_standards_2015.aspx#:~:text=HAI%20standards%20are%20one%20part%20of%20the%20drive,both%20of%20these%20documents%20is%20mandatory%20across%20NHSScotland . Accessed March 2021
2. National Institute for Clinical Excellence (NICE) Infection: Prevention and control of healthcare-associated infections in primary and community care CG139, <https://www.nice.org.uk/guidance/cg139/chapter/1-Guidance> accessed March 2021.
3. 'The Health and Safety at Work Executive'. 'General information on the Health and Safety at Work Act'. www.hse.gov.uk
4. National Infection Prevention and Control Manual
<http://www.nipcm.hps.scot.nhs.uk/>
5. Pandemic Flu; Guidance for Businesses, Department of Health March 2009, <https://www.gov.uk/government/publications/pandemic-flu-guidance-for-businesses>
6. Infection control precautions to minimise transmission of acute respiratory tract infections in healthcare settings,
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/452928/RTI_infection_control_guidance_PHE_v3_FPF_CT_contents2.pdf
7. 'Dealing with accidents in the pharmacy' Pharmaceutical Journal, 2011;286:69-70.

If you have any questions about these guidelines please contact the NHSGGC Public Health Protection Pharmacist on 0141 201 4824.

Appendix 1

General principles of infection control

Considering the main routes of transmission for respiratory infections can offer some general principles of infection control to be observed in community pharmacy. The four main routes are:

Droplet transmission:

Droplets greater than 5 microns in size (large droplets) may be generated during coughing, sneezing or talking. If droplets from an infected person come into contact with the mucous membranes (mouth or nose) or surface of the eye of a recipient individual, they can cause infection. These droplets do not remain in the air for long and do not travel more than one metre of distance, so closeness is required for transmission.

Airborne route during and after Aerosol Generating Procedures (AGPs):

AGP is the term used to describe clinical ventilation practices usually undertaken in the secondary care setting and is of less relevance to community pharmacy. However some infections such as Norovirus can be airborne and may be aerosolised by subsequent vacuum cleaning of infected surfaces.

Direct contact transmission:

Infectious agents are passed directly from an infected person (for example after coughing into their hands) to a recipient person who then transfers the organism into their mouth, nose or eyes.

Indirect contact transmission:

This takes place when a recipient person has contact with a contaminated object, such as furniture or equipment which is usually in the environment of an infected person. Again, the recipient person transfers the organisms from the object to their mouth, nose or eyes.

Routine hygiene and environmental cleaning is therefore important in helping to control spread through contact. Careful and frequent hand washing or the use of alcohol hand gel/rub is a key message.

Care must always be taken to minimize the risk of splashing when cleaning blood and body fluid spills.

Appendix 2

Suggested cleaning agents and products

Activity	Type of product	Examples of product available
Hand washing	Liquid soap n.b. bar soap is not recommended as it harbours micro-organisms	Wide range available commercially from toiletry manufacturers. Disinfectant soap is not necessary.
Hand cleaning	70% Alcohol gel n.b. Only use hand gel if the hands are not visibly dirty. (Should comply with BS EN 1500: 1997)	Seton hand rub Tel 0800 585501, www.seton.co.uk Spirigel Complete https://en-uk.ecolab.com/offering/spirigel-complete SP Services supply a variety of products contact 01952 288999, www.spservices.co.uk/
Normal and low risk spillage cleaning	Neutral detergent cleaning agent	Wide range available commercially. Disinfectant containing cleaner is not necessary.
High risk spillage cleaning	Chlorine releasing solution for high risk spillage Dichloro-isocyanurate (NaDCC) granules chlorine releasing granules	Household bleach e.g. Domestos® and many other commercially available products. Strength varies but products typically range from 5.25% to 6.15% hypochlorite solution equivalent to 52,500 to 61,500 ppm chlorine Actichlor Plus® Milton ® Precept® Sanichlor® Available from a number of suppliers and wholesalers
Personal Protecting Equipment	Latex or nitrile gloves (Should comply with BS EN 455 parts 1-4: 2000) Disposable plastic apron	Wide variety available from wholesalers or extensive number of suppliers on-line such as www.seton.co.uk , www.JustGloves.co.uk , www.astralhygiene.co.uk
Spill Kits	Gloves granules, scoop, aprons, cloths etc	Kits containing everything needed to mop up a BBF spill are available from specialist suppliers such as www.seton.co.uk , www.astralhygiene.co.uk or the National Pharmaceutical Association.

The above table is for guidance only, any named products are for example and do not bear a specific endorsement. There are a large number of suitable products commercially available which in many instances pharmaceutical wholesalers would be able to supply.

Appendix 3a

Management of Blood and Body Fluid (BBF) Spillages in Community Pharmacy

Blood and body fluids may contain disease causing micro-organisms, which must be dealt with as soon as possible after a spillage has occurred. BBF may be blood, faeces, pus or vomit. It is the responsibility of all staff to deal promptly with such spills.

BBF spills may be classified as high or low risk and this will determine the recommended cleaning process to be employed. It is the responsibility of all staff working in healthcare settings to deal with such spills appropriately.

Assessing the risk level

A **low risk** spillage may be:

- ❖ A urine spill as a result of a toddler 'having an accident'.
- ❖ An area that has been observed as being accidentally coughed or sneezed upon.

A **high risk** spillage may be:

- ❖ All blood should be considered potentially hazardous. *In the event of a blood spillage a community pharmacy has no ready way to ascertain the health status of the patient and cannot exclude the possibility that the blood may represent a blood borne virus hazard.*
- ❖ Vomit, *as it is more than likely that a patient presenting to a community pharmacy who vomits on the premises is acutely unwell with an infection such as norovirus.*
- ❖ Contamination with sputum is often the result of an act of aggression from a 'challenging' patient with a background of drug misuse issues.

While a level of common sense may be applied to decide whether a BBF spillage in community pharmacy is low or high risk, if there is any doubt treat as high risk.

Personal Protective Equipment

Whilst cleaning up either a high or low risk spillage staff may be exposed to pathogens and appropriate personal protective clothing (PPE) should be worn.

PPE comprises; single use vinyl non –sterile disposable gloves, disposable aprons or gowns, Face masks, and eye goggles.

It is unlikely that face masks and eye goggles will be required when cleaning BBF spillages in community pharmacy, Goggles and a mask would be required only if the cleaning task is likely to generate significant splashing or aerosolisation. However disposable gloves and aprons should be used at all times.

Cleaning products

For high risk spillages use a chlorine based disinfectant such as Milton® at the appropriate concentration or chlorine releasing granule type cleaners to soak up BBF spills. These are typically left in contact with a spill for 2 to 5 minutes.

Pharmacies should have a BBF spill kit available. This should contain single use gloves, a disposable apron, a disposable tray, absorbent powder or granular material, a suitable disinfectant, disposable cloths and an infectious waste bag.

For general every day cleaning and low risk spillages use normal detergents.

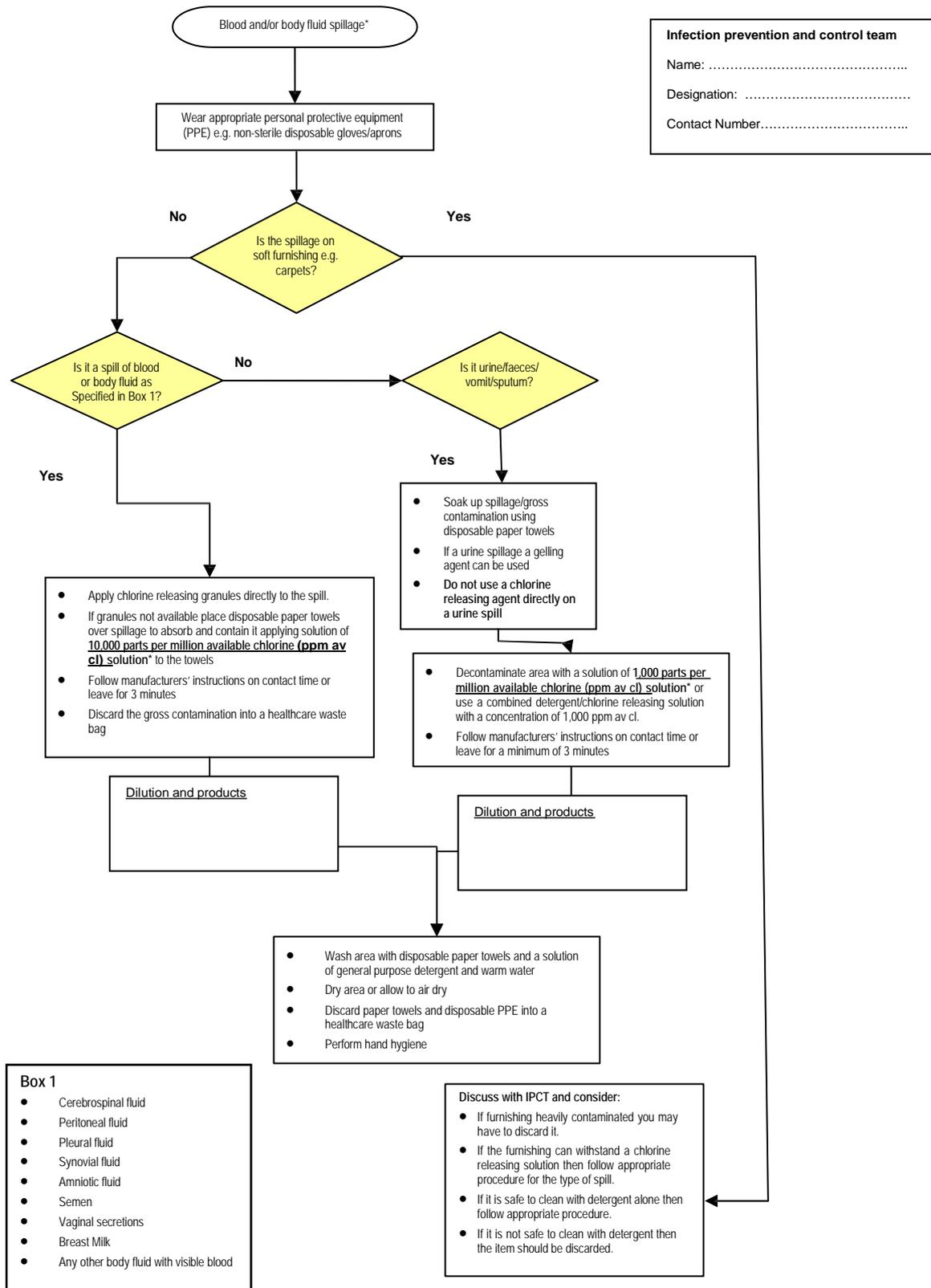
Cleaning Process

1. Put on PPE
2. Soak up excess using disposable paper towels or paper roll.
3. **Low Risk spills** Go to step 4
High Risk spills Apply chlorine based disinfectant to the spillage. This will be a solution or granules of a chlorine releasing agent, with a concentration of 10,000ppm available chlorine (av) for blood and 1000ppm (av) for body fluids. Ensure the spillage is completely covered with the solution/granules as this inactivates blood borne viruses. N.b. Do not apply to large urine spills as this will release chlorine gas. Leave for at least 2 minutes or follow manufacturer's instructions for granules. - this is usually 2-5 minutes.
4. Clear towels/disinfectant/granules from the area, place immediately into a lined and lidded waste bin.
5. Clean the area using fresh disposable towels and a solution of water and general purpose neutral detergent and dry.
6. Dispose of all remaining items into a bag ('spill kits' contain suitable bags) then into a lined and lidded waste bin or clinical waste bag if available.
7. Remove PPE and dispose of as above.
8. Perform hand hygiene.

Note

- ❖ Chlorine based cleaners are bleaching agents which may damage carpets and soft furnishing. If disinfectant can't be used for this reason, the area must be steam cleaned.
- ❖ Alcohol solutions must not be used to decontaminate BBF spillages.
- ❖ Care must be taken not to vacuum clean soft surfaces contaminated by vomit for at least 48 hours after exposure as this will aerosolise viral particles and increase the risk of transmission of infections such as Norovirus.

Appendix 3b – Management of blood and body fluid spillages



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

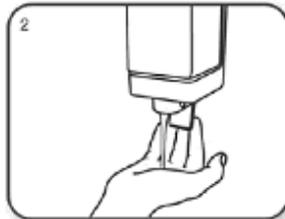
Appendix 4a – How to hand wash step by step images

Steps 3 – 8 should take at least 15 seconds

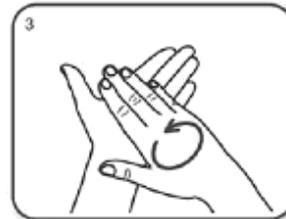
Source: World Health Organisation



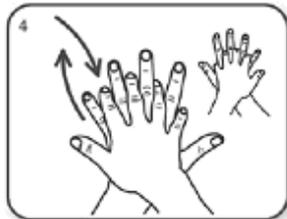
Wet hands with water



Apply enough soap to cover all hand surfaces



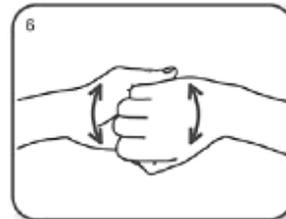
Rub hands palm to palm



Right palm over the back of the other hand with interlaced fingers and vice versa



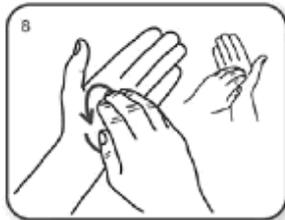
Palm to palm with fingers interlaced



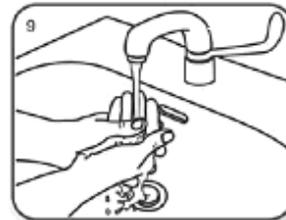
Backs of fingers to opposing palms with fingers interlocked



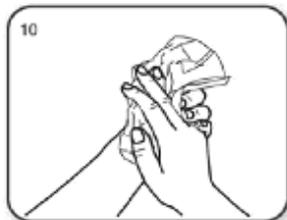
Rotational rubbing of left thumb clasped in right palm and vice versa



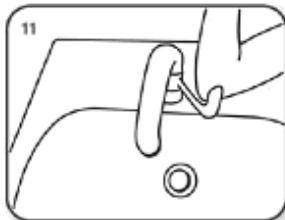
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



Rinse hands with water



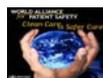
Dry thoroughly with towel



Use elbow to turn off tap or turn off using the towel



...and your hands are safe



Adapted from the World Health Organization

Appendix 4b – How to hand rub step by step images

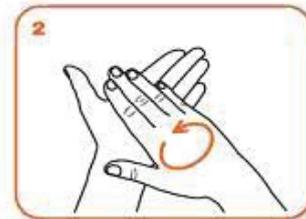
How to handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS ONLY WHEN VISIBLY SOILED!

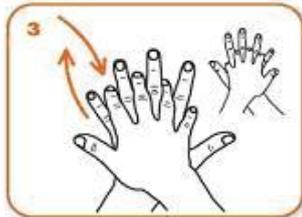
 Duration of the entire procedure: 20-30 sec.



1a Apply a palmful of the product in a cupped hand and cover all surfaces.



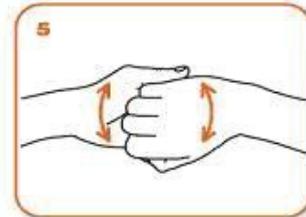
2 Rub hands palm to palm



3 right palm over left dorsum with interlaced fingers and vice versa



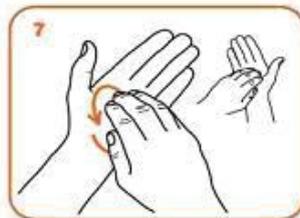
4 palm to palm with fingers interlaced



5 backs of fingers to opposing palms with fingers interlocked



6 rotational rubbing of left thumb clasped in right palm and vice versa



7 rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



8 ...once dry, your hands are safe.

Adapted



from the World Health Organization

NHS SCOTLAND
Germs. WASH your hands of them.

Version	4
Approving Committee:	NHS GGC Partnerships Clinical Governance Forum
Date ratified:	September 2016
Reference Number:	
Name/Department of Originator/author:	NHSGGC Pharmacy Public Health-Community Pharmacy Development Val Reilly Public Health Pharmacist
Name/Title of responsible Committee/individual:	Val Reilly -Public Health Pharmacist
Date issued:	September 2016
Review date:	October 2022
Target audience:	NHSGGC Community Pharmacy

Please direct any enquires to Pharmacy Public Health
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