

CHECKLIST 3

FOR LOCAL / GRASSROOTS HEALTHCARE PROJECTS,
VOLUNTARY GROUPS & FACILITIES IN LOW RESOURCE
SETTINGS.

Prepare: **Infection
Prevention & Control &
PPE**

Version 1.1

PREPARING FOR COVID-19



Foreword

As the world faces its first pandemic in living memory, it is the most vulnerable communities with little or no access to healthcare who will face the greatest consequences and lives lost. Urgent efforts to mobilise learning and resources for infection prevention and control, the provision of personal protective equipment [PPE] to frontline health workers, as well as concentrated efforts on community awareness campaigns, will provide the greatest first line of defence against COVID-19 and save lives.

Many local and grassroots organisations dealing with this crisis [especially those that are not led by medical experts] are struggling to practically translate and filter out the wealth of information available, often full of medical or technical terms. These four checklists were put together by Doctors Worldwide to provide a starting point for local health projects and facilities in low-resourced settings, who are preparing for COVID-19. We ask that anyone who uses the checklists to get in touch with their feedback so that we may improve them further.

In the absence of a vaccine, humanitarian organisations have a collective responsibility to urgently prepare the local communities, partners and organisations who make up to 90% of the first responders in any worldwide crisis. With governments in lockdown, borders closed and airports grounded, humanitarian organisations are reminded once again that we must fulfil a core role of supporting local partners to stand on their own two feet, and that we must collectively work together as enablers in this worldwide crisis affecting us all.

Monowara Gani
Chief Executive, Doctors Worldwide

Acknowledgement

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The information in this booklet is based on Doctors Worldwide medical and operational experiences gained over the last 19 years since its launch in 2001. In addition, excerpts and passages have been adapted from various sources including: The World Health Organisation COVID-19 Infection Prevention and Control online resources; The African Federation of Emergency Medicine; The UK National Health Service, NHS, COVID-19 online resources; Guidance for Infection prevention and control in healthcare settings 2020 issued jointly by the Department of Health and Social Care (DHSC), Public Health Wales (PHW), Public Health Agency (PHA) Northern Ireland, Health Protection Scotland (HPS) and Public Health England; Interim Guidance; Tips and Advice on the Use of Personal Protection Equipment for Health Workers Coming into Direct Contact with COVID-19 patients, 3 April 2020, Produced by: Frontline Collaboration Against COVID-19 Humanitarian Analysis, Guidance and Support for NHS Workers, Dr Najeeb Rahman; Scaling up COVID-19 outbreak readiness and response operations in humanitarian situations including camps and camp-like settings Version 1.1 March 2020 IFRC, IOM, UNHCR, WHO; Managing COVID-19 across the Indo-Pacific - A guide for emergency departments with limited resources by the Australasian College for Emergency Medicine (ACEM) Global Emergency Care Committee; The Handbook of COVID-19 Prevention & Treatment from Zhejiang University School of Medicine; Guidance for infection prevention and control in healthcare settings Adapted from Pandemic Influenza; Guidance for the prevention of COVID-19 infections among high-risk individuals in camps and camp-like settings, Version: 31 March 2020, London School of Hygiene & Tropical Medicine

Disclaimer: The advice in this document is based on expert consensus and guidelines/resources from key public health authorities. Doctors Worldwide accepts no responsibility for the accuracy of the content.

Cover Design: Amira Farag, Design & Multimedia Officer, Doctors Worldwide

About Doctors Worldwide

Doctors Worldwide is a specialist medical charity based in the UK with a mission to support and collaborate with local communities to build and sustain quality healthcare services in both development and emergency settings. Access to quality healthcare is not a privilege, it is a human right; and we work towards making that a reality - especially for the most vulnerable communities.

Since our launch in 2001, we have delivered more than 95 healthcare projects across Asia, Africa and Central America impacting over 3 million lives and counting.

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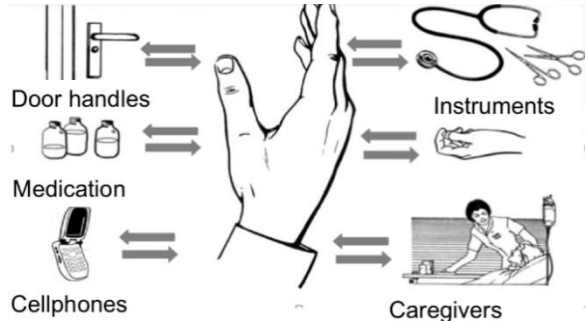
CHECKLIST 3 – INFECTION PREVENTION & CONTROL AT PRIMARY CARE/OUTPATIENT LEVEL

Everyone is responsible for preventing infection and adopting measures to control the spread of infection. The **basic level of IPC saves lives and reduces the spread of any virus or pathogen**. In the absence of a vaccine, **IPC is the first line of defence against COVID-19, alongside public health awareness campaigns on prevention**. Everyone working in a healthcare setting or project is obligated to follow the basic level of IPC required.

Checklist – INFECTION PREVENTION & CONTROL Primary Care Level	To Do	Due for review	In progress	Complete
What is infection prevention and control, IPC?				
<ul style="list-style-type: none"> Infection prevention and control is an approach with practical solutions to prevent harm caused by infections to patients and healthcare workers. IPC aims to; <ul style="list-style-type: none"> reduce transmission of healthcare associated infections to enhance the safety of staff, patients and visitors enhance the ability of the organisation or the health facility to respond to an outbreak reduce the risk of the healthcare facility or the organisation from increasing the outbreak 				
Why is IPC important?				

<ul style="list-style-type: none"> Everyone is responsible for preventing infection and adopting measures to control the spread of infection. The basic level of IPC saves lives and reduces the spread of any virus or pathogen. In the absence of a vaccine, IPC is the first line of defence against COVID-19, alongside public health awareness campaigns on prevention. Everyone working in a healthcare setting or project is obligated to follow the basic level of IPC required. 				
When to do IPC				
<ul style="list-style-type: none"> IPC is not just for COVID-19. It is the standard basic requirement for all health-related activities, programmes and facilities. If you do not have a protocol/guideline in place for IPC or you are not implementing IPC, please do so immediately. Utilise the guidance in this booklet as a basic starting point only. 				
Check locally				
<ul style="list-style-type: none"> With the COVID-19 crisis unfolding rapidly, local Ministry of Health may start to organise urgent IPC refresher training. Please check locally, and lobby your MOH/DHO to support or provide this. See checklist 4 on what you can do to. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Find out if there are any refresher trainings being offered on IPC 			

8 Standards of IPC				
<p>The next section of this checklist will focus on the 8 standard precautions for infection prevention and control - IPC. This is the basic level of IPC to be used for ALL patients at ALL times.</p> <ol style="list-style-type: none"> 1) Hand hygiene 2) Respiratory hygiene [etiquettes] 3) Personal protective equipment PPE according to risk assessment carried out 4) Safe injection practices, sharps management and injury prevention 5) Safe handling, cleaning and disinfection of patient care equipment 6) Environmental cleaning 7) Safe handling and cleaning of soiled items 8) Waste management 				
1) Hand Hygiene				
<ul style="list-style-type: none"> • COVID-19 spreads by touching our face, eyes, mouth and nose after touching a surface or item that had the virus on it [and through droplets in the air from an infected person entering our body through the mouth, eyes or nose]. 				

<ul style="list-style-type: none"> Evidence shows that hand hygiene is the best way to prevent the spread of pathogens in a healthcare setting or community setting. As healthcare workers working with patients, our hands are the main tools we use to work with. They are the key link in the chain of transmitting a pathogen – and breaking that link. 				
<ul style="list-style-type: none"> The image below gives an example of some of the surfaces or items we are likely to touch as healthcare workers or caregivers in the community, and how any pathogen can spread to and from e.g. if you touch a door handle that has the pathogen, and then touch a medical instrument, which is then used to touch a patient [or many patients], the pathogen will spread on all those surfaces including the pen/paper used, your phone and every person you come into contact with. Patients can then go on to spread it to their families in their homes.  <p>[image taken from WHO IPC for novel coronavirus COVID-19]</p>	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Identify the high touch points in your space and facility, make a list and ensure the cleaners and staff are aware to clean these areas regularly. It is good practice to provide a tick list with daily date and name of individual to encourage and remind everyone that cleaning effectively and properly is not an optional task but a standard basic requirement. 			

<ul style="list-style-type: none"> • In your clinics or setting, think about the 'high touch points' i.e. those surfaces touched regularly such as door handles, switches, taps, phones etc and ensure these are regularly disinfected throughout the day. • As much as possible, consider other means of reducing touch when coming into contact with high touch point e.g. your elbow or foot to open or push doors, leave your mobile phone in your bag, only designated people to touch medication etc. 				
<p>Before performing hand hygiene</p>				
<p>Before performing hand hygiene, healthcare workers are required to do and maintain the following:</p> <ul style="list-style-type: none"> • remove all hand and wrist jewellery • ensure finger nails are clean, short and that artificial nails or nail products are not worn; • cover all cuts or abrasions with a waterproof dressing. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> • Put a poster up with these instructions near the sink as a reminder for staff 			

5 moments of hand hygiene				
<ul style="list-style-type: none"> The World Health Organisation [WHO] promotes the five moments of hand hygiene – these are the 5 situations or moments when you must carry out hand hygiene. Hand hygiene is washing the hands or using alcohol rub. <p>Moment 1: Before entering the patient environment and touching a patient, you should be doing hand hygiene. This involves either alcohol-based hand rub or water and soap.</p> <p>Moment 2: Before preparing a clean or aseptic procedure, you should be practicing hand hygiene again.</p> <p>Moment 3: After bodily fluid exposure or risk, you should be practicing hand hygiene. This means if you have soiled gloves or soiled hands, you should be taking them off and practicing hand hygiene with water and soap.</p> <p>Moment 4: After touching a patient you should also be performing hand hygiene.</p> <p>Moment 5: And after leaving the patient environment or surroundings, you should again be performing hand hygiene. This means that after taking off your PPE you should be performing hand hygiene as the last step.</p>	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Put a poster up with these instructions/diagram in every treatment room. See appendix for a larger version For homecare activities, have a laminated printout as a reminder, ensure it is wiped down 			

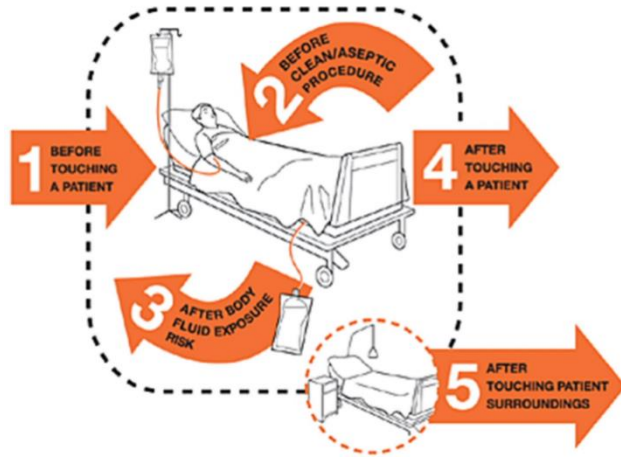

























Image taken from WHO IPC, large version available in the appendix.

What to use during hand hygiene

The COVID-19 virus can be easily destroyed by washing the hands with basic soap and water however you must wash the hands for at least 30 seconds to make sure this is effective, and using the correct TECHNIQUE in washing the hands. Items to use during hand hygiene are:

- Use the alcohol rub on hands when there is no visible soiling such as blood or bodily fluid
- Use hand wash with water when there is visible soiling.


<ul style="list-style-type: none"> If any hand sanitiser is not available, washing the hands with clean water and soap for at least 30 seconds is effective. Follow the handwashing technique below. 				
<p>Technique – how to use alcohol hand rub</p>				
<p> Duration of the entire procedure: 20-30 seconds</p> <div data-bbox="271 574 1008 1284"> <div>    </div> <div>    </div> <div>    </div> </div> <p>See appendix for larger version – source WHO</p>	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Put a poster up with these instructions with the hand rub as a reminder for staff Practice the technique with others, help each other 			

Technique – how to wash your hands with water and soap				
<p>WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB</p> <p> Duration of the entire procedure: 40-60 seconds</p> <div data-bbox="264 464 517 598"> <p>0</p>  <p>Wet hands with water;</p> </div> <div data-bbox="546 464 799 598"> <p>1</p>  <p>Apply enough soap to cover all hand surfaces;</p> </div> <div data-bbox="828 464 1081 598"> <p>2</p>  <p>Rub hands palm to palm;</p> </div> <div data-bbox="264 667 517 801"> <p>3</p>  <p>Right palm over left dorsum with interlaced fingers and vice versa;</p> </div> <div data-bbox="546 667 799 801"> <p>4</p>  <p>Palm to palm with fingers interlaced;</p> </div> <div data-bbox="828 667 1081 801"> <p>5</p>  <p>Backs of fingers to opposing palms with fingers interlocked;</p> </div> <div data-bbox="264 869 517 1003"> <p>6</p>  <p>Rotational rubbing of left thumb clasped in right palm and vice versa;</p> </div> <div data-bbox="546 869 799 1003"> <p>7</p>  <p>Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;</p> </div> <div data-bbox="828 869 1081 1003"> <p>8</p>  <p>Rinse hands with water;</p> </div> <div data-bbox="264 1072 517 1206"> <p>9</p>  <p>Dry hands thoroughly with a single use towel;</p> </div> <div data-bbox="546 1072 799 1206"> <p>10</p>  <p>Use towel to turn off faucet;</p> </div> <div data-bbox="828 1072 1081 1206"> <p>11</p>  <p>Your hands are now safe.</p> </div> <p>See appendix for larger version – source WHO</p>	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Put a poster up with these instructions near the sink as a reminder for staff Practice the technique with others, help each other 			

2) Respiratory Hygiene				
<ul style="list-style-type: none"> COVID-19 is thought to spread through droplets in the air from coughing/sneezing which can enter a person through the nose or mouth. [as well as from touching the eyes, nose or mouth]. Good respiratory hygiene, or respiratory etiquettes can significantly reduce the spread of the virus. The 3 principles of respiratory hygiene are: <p>Principle 1: Cough or sneeze into a tissue, throw away the tissue in a bin immediately and then wash your hands.</p> <p>Principle 2: If there are no tissue available, cough or sneeze into your elbow. Avoid touching the elbow area afterwards.</p> <p>Principle 3: Do not cough or sneeze into your hands as you may not be able to wash your hands straight away and in the meantime, you may touch several surfaces and pass on the virus to others.</p> <ul style="list-style-type: none"> If for any reason you do cough or sneeze into your hands, wash your hands straight away or use alcohol rub. In the clinic and in other settings such as the home, encourage all the patients to follow the above respiratory hygiene/etiquettes. Have posters available and ensure there are hand washing facilities or alcohol rub available, as well as tissues and suitable bins [deep and not overflowing]. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Put a poster up for the public / patients to practice respiratory hygiene 			

<ul style="list-style-type: none"> For any patient displaying respiratory symptoms, give them a mask and keep these patients in a separate room or area as per your triage or screening process. 				
3) PPE – personal protective equipment & principles				
<ul style="list-style-type: none"> PPE stands for 'personal protective equipment'. It is used to protect the healthcare staff, cleaners and anyone else who comes into contact with patients or the areas where patients are kept. The main principles of PPE are: PPE must be available and in various sizes, and the appropriate items worn according to the risk assessment carried out [see further down]. PPE should NEVER be reused. If you have reusable PPE, these must be cleaned, disinfected and dried after EVERY PATIENT e.g. goggles, face shields. Reusable PPE can be placed in a detergent solution in the hot zone. These can then be cleaned/disinfected, dried thoroughly, and placed in the cold zone for reuse. See checklist 2 for hot/cold zones. Ensure everyone knows who is responsible for cleaning reusable PPE. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Ensure everyone knows who is responsible for cleaning reusable PPE 			

<ul style="list-style-type: none"> • Cloth, cotton or similar hand-made PPE such as cloth face masks must not be used by healthcare workers. Please note we do not recommend handmade PPE and it is known to spread infection. • Always clean your hands before and after wearing PPE. • PPE should be available when and where it is indicated e.g. outside treatment rooms and inside if you anticipate needing PPE for some sort of activities. • PPE should always be put on before contact with the patient and their environment. • PPE should always be immediately removed after completing the task and leaving the treatment room or any area where patients are being seen. • Consider having hot and cold zones for PPE for putting on and taking off PPE [see checklist 2] • In the appendix of this checklist, you will find a detailed table adapted from WHO on the different settings that PPE need to be worn, who and the type. Use the table to identify your activity and the appropriate levels of PPE you will need. 				
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Types of PPE				
<p>The image below is an example of some of the main PPE used in healthcare settings.</p> <div data-bbox="369 478 878 813">  <p>Face Mask Nose + mouth</p> <p>N95 Mask Nose + mouth</p> <p>Face shield Eyes + nose + mouth</p> <p>Goggle Eyes</p> <p>Gown Body</p> <p>Apron Body</p> <p>Gloves Hands</p> <p>Head cover Head + hair</p> </div> <ul style="list-style-type: none"> • Medical/surgical mask - this covers the nose and the mouth from respiratory secretions entering those areas. • FFP2 or N95 masks - if a patient is having an aerosol generating procedure, the healthcare worker should have at LEAST an FFP2 or N95. • The goggles may be used with the surgical mask to protect the eyes. • The face shield is available as an alternative to the goggles and it protects the eyes, nose, and mouth but we recommend using it with a surgical mask. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> • Check the table in the appendix for the type of PPE you will require for your activities • Ensure PPE is purchased and available 			

<ul style="list-style-type: none"> • The gown should be used for droplet and contact precautions, to protect the body and the clothing of the health care worker. The gown and aprons should also be used by cleaners. • The gloves should be used to protect the hands after hand hygiene is performed. • Headcovers and shoe covers may be sometimes recommended for example around heavily soiled patients or in a treatment facility. • Boots or closed work shoes must be used by cleaners. All staff should try to wear closed shoes. 				
<p>When to wear PPE and which PPE to wear</p>				
<ul style="list-style-type: none"> • Depending on the type of work you are doing, and the type of patient you are seeing, you will not require all the PPE equipment. • In the appendix of this checklist, you will find a detailed table adapted from WHO on the different settings that PPE need to be worn, who and the type. Use the table to identify your activity and the appropriate levels of PPE you will need. • Have a risk-assessment approach with patients and with the clinical environment to ensure you select the most appropriate PPE items to wear based on this assessment. Build this as part of 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> • Carry out a risk assessment on the types of activities you do and the patients you see, and the PPE required. Include who will monitor. 			

<p>your routine so that you can ensure you and your patient are protected.</p> <ul style="list-style-type: none"> At all times you must continue to practice hand hygiene and the 5 moments especially around patients whether in the facility or at their homes, as well as respiratory hygiene. Think about what needs to be done each time you see a patient, have a step by step checklist with you. 				
How to put on and take off PPE				
<ul style="list-style-type: none"> There are a few key principles that need to be followed when putting on or taking off PPE. These are: <ul style="list-style-type: none"> Keep hands away from the face and the PPE being worn Change the gloves if they tear or heavily contaminated Limit the surfaces touched when in the patient environment Regularly perform hand hygiene Always practice hand hygiene after removing the gloves – remember the gloves are contaminated [follow specific way of taking gloves off, see appendix] Put the PPE equipment on correctly, fully and PATIENTLY 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Print out the posters or diagram on how to put on and take off PPE Put them in the hot zone and cold zone [see checklist 2 for hot/cold zone information] 			

<ul style="list-style-type: none"> PPE cannot be taken off in any order, it has to follow a system so as not to contaminate yourself or other items. Use the following basic guide as well as the detailed guide/poster in the appendix of this checklist. 				
Mask Management				
<p>The correct use of masks:</p> <ul style="list-style-type: none"> place mask carefully to cover mouth and nose and tie securely to minimise any gaps between the face and the mask; while in use, avoid touching the mask; remove the mask by using appropriate technique (i.e. do not touch the front but remove the lace from behind); after removal or whenever you accidentally touch a used mask, clean hands by using an alcohol-based hand rub or soap and water if visibly soiled replace masks with a new clean, dry mask as soon as they become damp/humid; do not re-use single-use masks; discard single-use masks after each use and dispose of them immediately upon removal. Cloth (e.g. cotton or gauze) masks are not recommended under any circumstance. 				

[mask management taken from: Infection prevention and control of epidemic- and pandemic prone acute respiratory infections in health care. World Health Organization. (2014)]				
4) Safe injection practices, sharps management and injury prevention				
<ul style="list-style-type: none"> • IPC includes the standard precautions that you should continue to do day to day, irrespective of COVID-19, as these precautions are part of the basic requirements when working in healthcare. Safe injection and sharps management will not only reduce injury, but also reduce the spread of infection from sharp objects and from/to patients by the healthcare worker. Needles can cause blood contamination and spread other viruses such as HIV if safe and hygienic needle and sharps practice are not maintained. • When using injections or needles of any type, there are a few steps to ensure safe injections and use. These are: • Always have a clean workspace • Perform hand hygiene before using any sharps on a patient • Use only sterile pre-packed equipment • You should perform skin cleaning and antisepsis on the patient before any needle or sharp is used 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> • Check what local Ministry of Health containers are provided for the safe disposal of sharps, needles and other contaminated items • Make sure you have these containers available and stocked – this includes for homecare patients 			

<ul style="list-style-type: none"> • Perform medication preparation with sterile safety-engineered syringes, sterile vial of medications. • Ensure you have appropriate sharps bin/container with an appropriate sharp waste management in place [usually yellow]. Sharps CANNOT be thrown in the normal or public bins. Sharps must be disposed of in the correct medical way as guided by your local ministry of health. • For patients at home who use needles for diabetes or for other uses, as well as healthcare workers visiting patients in the homes, you should have with you an appropriate sharps box/container that is medically graded and according to local Ministry of Health guidance. 				
<p>5) Environmental Cleaning - cleaning & decontamination terms & principles</p>				
<ul style="list-style-type: none"> • Cleaning refers to the first step required to physically remove contamination. Cleaning removes organic material such as blood secretions, excretions, and microorganisms, and to prepare a medical device for disinfection or sterilisation. • Routine cleaning is cleaning that applies to all rooms and done regularly. It is to remove the organic material, and minimise microbial contamination, and to provide a visually clean environment, and particularly cleaning surfaces where patients are and high touch areas such as door handles, switches etc. 				

<ul style="list-style-type: none"> • Terminal cleaning is cleaning and disinfection after the patient is discharged or transferred from a particular room the patient was staying in. This includes the removal of organic material and significant reduction and elimination of microbial contamination to ensure that there is no transfer of microorganisms to the next patient who will occupy that room. • Decontamination is the process that removes soil and pathogenic organisms from objects so that they are safe to handle, safe to process, safe to use and safe to discard. • Disinfecting refers to the process to reduce the number of viable microorganisms to a less harmful level. This process may not inactivate bacterial spores, prion and some viruses, and thus sterilisation is needed. • Sterilisation is a process used to render an object free from viable microorganisms. These include viruses, bacterial spores, but not prions. Sterilisation involves using steam and very hot water above boiling. It can also include some chemicals. • It is important to ensure that the environmental cleaning and disinfection procedures are followed consistently and correctly by all staff. • Thoroughly cleaning surfaces with water and detergent and applying commonly used hospital level disinfectants are effective and sufficient procedures. 				
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<ul style="list-style-type: none"> Medical devices and equipment, laundry, and food service utensils and medical waste should be managed in accordance with safe routine procedures. 				
Cleaning Principles				
<ul style="list-style-type: none"> Cleaning is the physical removal of foreign material and organic material. It physically removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action. Any hospital/clinic grade detergent can be used, as well as chlorine/bleach-based solution that has the active ingredient sodium hypochlorite. Follow manufacturer guidance on preparing bleach-based solutions and check the strength of sodium hypochlorite to make up the correct amount. Where possible, dedicate cleaning supplies in higher risk areas such as isolation rooms, delivery rooms and operating rooms among others. When cleaning always move from the cleanest area to the dirtiest area, and clean from high to low areas, outer to inner. Clean the isolation areas last with their own dedicated equipment. Damp dusting and wet mopping is recommended to minimise dust. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Train cleaners on the cleaning principles, observe and mentor cleaners Consider having a cleaning sheet to sign/date when certain actions have been done and by who Provide instructions in both written and picture format Purchase and have in stock the correct items for cleaning including hospital/clinic grade detergent or bleach-based solution that has sodium hypochlorite, mops, buckets, disposable towels etc 			

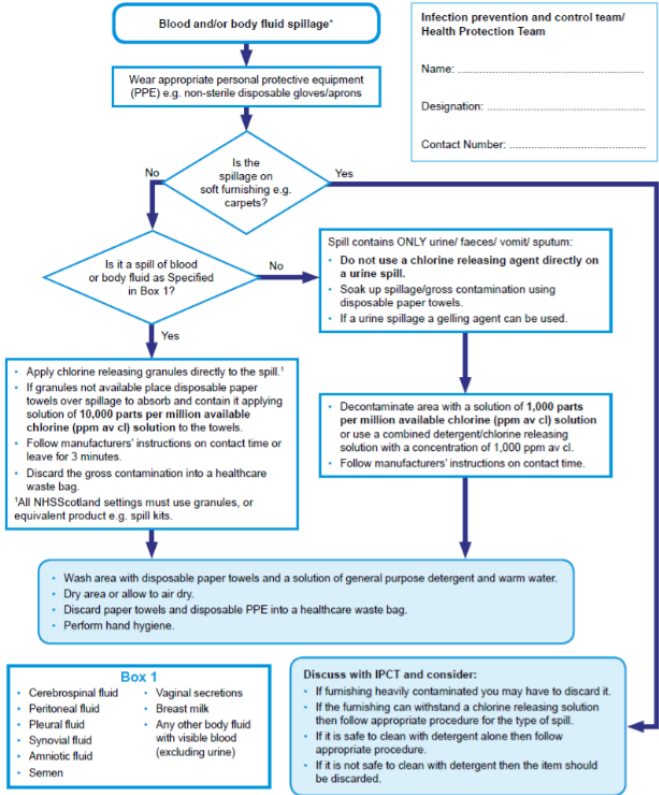
<ul style="list-style-type: none"> • Use the 3-bucket system for cleaning and disinfection. The first bucket contains water with detergent used in the beginning. The mop is then rinsed in the second bucket and dipped in the third bucket which can also contain a disinfectant and the mopping done again. • The water used should be clean water. Do not reuse water or cleaning solution prepared from the day before. Always make a fresh daily solution. • Cleaning equipment such as mop heads should be thoroughly washed with chlorine/bleach solution and dried before reuse, including the buckets and utensil used. • Do not use the same cloths that were used for the bathrooms/toilet/sink area to clean patient waiting area or treatment rooms. Toilets/bathrooms must have their own separate cleaning cloths and must not be used to clean the patient area or treatment area/rooms, pharmacy etc. Toilets should have their own separate cleaning cloths/brushes and must not be used to clean other parts of the bathroom such as taps, sinks, door handles etc. • PPE must always be worn by cleaners. 	<ul style="list-style-type: none"> • Have separate cleaning equipment for the COVID-19 treatment rooms/patient areas • Ensure all cleaners have PPE and are trained on PPE, including taking on/off in the hot/cold zones • Ensure appropriate waste disposable bins – see waste management section 			
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Isolation Room Cleaning				
<ul style="list-style-type: none"> For isolation rooms, you should be increasing the frequency of cleaning by housekeeping in patient care areas. Isolation rooms should have their own cleaning supplies that are separate from clean patient care areas. The cleaning supplies for isolation should be kept and only used in the isolation rooms. Standard hospital grade disinfectant or bleach-based detergent can be used [see other areas of this checklist]. All waste from isolation rooms should be considered contaminated and should be disposed following your facility's method for contaminated waste. Cleaners or housekeeping should ensure that they are wearing the appropriate PPE when cleaning an isolation room or area. The minimum is apron, heavy duty gloves, surgical mask and goggles/eye cover. Dedicated boots or closed shoes should also be worn by cleaners. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> Check the table in the appendix for the type of PPE you will require for the isolation room Have separate cleaning equipment for the COVID-19 treatment rooms/patient areas Ensure all cleaners have PPE and are trained on PPE, including taking on/off in the hot/cold zones Ensure appropriate medical and hazardous waste disposable bins – see waste management section 			


<p>6) Safe handling, cleaning and disinfection of patient care equipment</p>				
<ul style="list-style-type: none"> • Handling, cleaning and disinfecting patient care equipment that are reusable such as stethoscope, wheelchairs, crutches, bath aids etc, should be routinely cleaned and decontaminated irrespective of COVID-19 outbreak. If you are following existing guidance from your local Ministry of Health and standard procedures, this is sufficient for managing the disinfecting of equipment for COVID-19. If you are not sure whether you are, check with your local Ministry of Health or District Health. Use the flow chart in the appendix to help determine the type and level of cleaning required. • Ensure the equipment is cleaned using the correct cleaning detergent and tools e.g. hypochlorite or similar, disposable cloths/paper roll, correct waste containers, bins or bags etc. • Follow any manufacture guidance on cleaning for example electronic equipment. • Wear appropriate PPE such as disposable gloves and aprons, and other PPE such as masks and googles especially if there is any contamination of blood, vomit, urine, faeces or other bodily fluid. 	<p>Person/s Responsible:</p> <hr/> <ul style="list-style-type: none"> • Access MOH standard procedures for handling, cleaning and disinfecting and implement within your setting 			

7) Safe handling and cleaning of soiled fabric/linen				
<ul style="list-style-type: none"> • Soiled [all bodily fluids and matter] linen/fabric or similar items need to be handled appropriately and cleaners must wear PPE according to the risk when handling used or soiled linen. • You should be handling soiled linen with minimum agitation/movement to avoid contamination to the environment. • Linen/fabric includes: floor towels used for environmental cleaning, bed curtains, clothes, bed sheets, bed covers and pillowcases used by patients • Place the soiled linen into bags at point of care [i.e. do not transport it to another room to be placed in bags, place it in a bag at the scene]. • If the linen is grossly soiled, remove the gross soil with a gloved hand and using a flat tool, preferably a disposable flat tool. • Discard the solid material into the toilet. Discard glove in to the infectious waste bin [see waste management for types of waste and bins]. If the tool is not disposable, place into a container with chlorine-based solution for disinfecting and wash immediately. Have this solution prepared in advance. tools should be wiped with chlorine-containing disinfectant (with 1000 mg/L active chlorine). 				

<ul style="list-style-type: none"> Place the soiled linen into a clearly labelled, leak-proof container in the patient care area before transport. Linen should be sorted and transported in a way to prevent contamination. Infectious fabrics should be separated from other infectious fabrics (non-COVID-19) and washed in a dedicated washing machine if available. Wash and disinfect fabric with chlorine-containing disinfectant at 90°C for at least 30 minutes. Clean linen should be stored in a designated area, for example, a closed room or a closet or closed container away from public access 				
<p>Management of blood and body fluid spillage</p>				
<ul style="list-style-type: none"> Use this flow chart to help decide how best to clean and disinfect surfaces that have been contaminated with any of the items found in box 1. A larger version of this poster can be found in the appendix. The flow chart has been taken from NHS Scotland. 				

 <p>Blood and/or body fluid spillage*</p> <p>Wear appropriate personal protective equipment (PPE) e.g. non-sterile disposable gloves/aprons</p> <p>Is the spillage on soft furnishing e.g. carpets?</p> <p>Is it a spill of blood or body fluid as Specified in Box 1?</p> <p>Box 1</p> <ul style="list-style-type: none"> Cerebrospinal fluid Peritoneal fluid Pleural fluid Synovial fluid Amniotic fluid Semen Vaginal secretions Breast milk Any other body fluid with visible blood (excluding urine) <p>Spill contains ONLY urine/ faeces/ vomit/ sputum:</p> <ul style="list-style-type: none"> Do not use a chlorine releasing agent directly on a urine spill. Soak up spillage/gross contamination using disposable paper towels. If a urine spillage a gelling agent can be used. <p>Decontaminate area with a solution of 1,000 parts per million available chlorine (ppm av cl) solution or use a combined detergent/chlorine releasing solution with a concentration of 1,000 ppm av cl.</p> <p>Follow manufacturers' instructions on contact time.</p> <p>Wash area with disposable paper towels and a solution of general purpose detergent and warm water.</p> <p>Dry area or allow to air dry.</p> <p>Discard paper towels and disposable PPE into a healthcare waste bag.</p> <p>Perform hand hygiene.</p> <p>Discuss with IPCT and consider:</p> <ul style="list-style-type: none"> If furnishing heavily contaminated you may have to discard it. If the furnishing can withstand a chlorine releasing solution then follow appropriate procedure for the type of spill. If it is safe to clean with detergent alone then follow appropriate procedure. If it is not safe to clean with detergent then the item should be discarded. 				
<p>8) Waste management</p>				
<ul style="list-style-type: none"> There are different types of waste produced during healthcare activities. It is the responsibility of all staff to ensure safe disposal of waste in the appropriately marked bins. Bins should be covered 	<p>Person/s Responsible:</p> <hr/>			

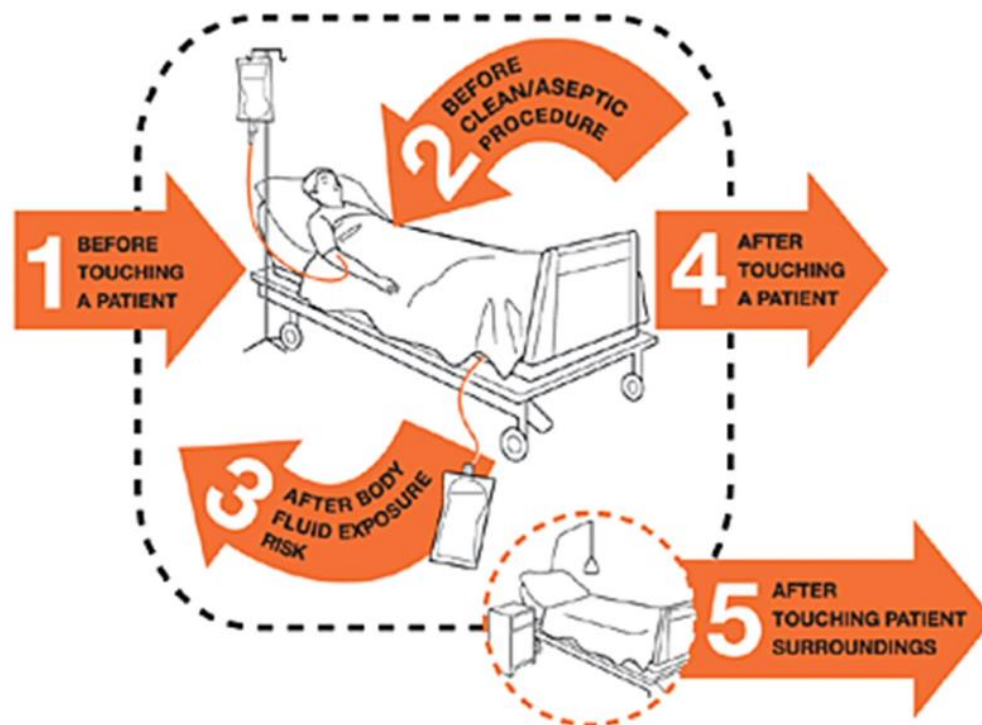
<p>and ideally have a foot-operated lid/cover. Waste should never overflow or overspill. Some of the main types of waste are:</p> <p>General Medical Waste:</p> <ul style="list-style-type: none"> • General medical waste are the largest portion in healthcare waste • They are non-hazardous in nature • General waste includes paper, plastic, and office wastes • These can be disposed of regularly and don't require any special handling [source: public health notes] <p>Infectious Medical Waste:</p> <ul style="list-style-type: none"> • Infectious waste can pose several risks of infection to humans, animals, and overall environment • They contain pathogens • The waste includes blood-soaked bandages, sharps waste, surgical waste, human or body parts, cultures from laboratory and swabs • Sharps waste have their own sharps disposal container • Infectious wastes are treated before disposal and they are to be handled with care [source: public health notes] <p>Hazardous Medical Waste:</p> <ul style="list-style-type: none"> • Hazardous waste is dangerous waste • Sharps fall into this category. Sharps, needles, blades etc. can further puncture the handlers or users. Sharps should have their own type of safe bin/container to be disposed of. • Chemicals, solvents, etc. also fall in this category [source: public health notes] 	<ul style="list-style-type: none"> • Follow local guidance for waste management • Access protocols for waste management • Implement protocols – train staff and cleaners • Ensure you have the right equipment and disposable bins 			
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<p>If you are not sure what the waste management system should be for your facility or clinic, follow local ministry of health guidance and local government guidance on waste disposal and management.</p> <p>The diagram shows the basic steps in safe waste management.</p>  <pre>graph LR; A[minimizing] --> B[segregating]; B --> C[collecting]; C --> D[transporting]; D --> E[storing]; E --> F[treating]; F --> G[disposing];</pre>				
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APPENDIX 3

In this section you will find additional resources including larger versions of the diagrams, images and tools for use and printing.

5 MOMENTS OF HAND HYGIENE – IN CLINIC, HOSPITALS & PATIENTS AT HOME



<https://www.who.int/infection-prevention/tc>

DIFFERENT TYPES OF PPE & WHAT THEY PROTECT

Face Mask



**Nose +
mouth**

N95 Mask



**Nose +
mouth**

Face shield



**Eyes + nose +
mouth**

Goggle



Eyes

Gown



Body

Apron



Body

Gloves



Hands

**Head
cover**



**Head +
hair**

[Taken from WHO COVID-19 online resource]

TABLE A SHOWING THE PPE REQUIRED ACCORDING TO PERSON, SETTING & TYPE OF ACTIVITY*A

Setting	Target personnel or patients	Activity	Type of PPE or procedure
Inpatient facilities			
Patient room		Providing direct care to COVID-19 patients	Medical mask Gown Gloves Eye protection (goggles or face shield)
		Aerosol-generating procedures performed on COVID-19 patient	Respirator N95 or FFP2 standard, or equivalent. Gown Gloves Eye protection Apron
	Cleaners	Entering the room of COVID-19 patients	Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals) Boots or closed work shoes
	Visitors *B	Entering the room of COVID-19 patients	Medical mask Gown Gloves
Other areas of patient transit (e.g. wards, corridors).	All staff, including health care workers	Any activity that does not involve contact with COVID-19 patients	No PPE required

Triage	Health care workers	Preliminary screening not involving direct contact.	Maintain spatial distance of at least 2 metre. No PPE required
	Patients with respiratory symptoms	Any	Maintain spatial distance of at least 2 metre. Provide medical mask if tolerated by patient.
	Patients without respiratory symptoms	Any	No PPE required
Laboratory	Lab technician	Manipulation of respiratory samples	Medical mask Gown Gloves Eye protection (if risk of splash)
Administrative areas	All staff, including health care workers.	Administrative tasks that do not involve contact with COVID-19 patients	No PPE required
Setting	Target personnel or patients	Activity	Type of PPE or procedure
Outpatient facilities			
Consultation room	Health care workers	Physical examination of patient with respiratory symptoms	Medical mask Gown Gloves Eye protection
	Health care workers	Physical examination of patients without respiratory symptoms	PPE according to standard precautions and risk assessment.
	Patients with respiratory symptoms	Any	Provide medical mask if tolerated.

	Patients without respiratory symptoms	Any	No PPE required
	Cleaners	After and between consultations with patients with respiratory symptoms.	Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes
Waiting Room	Patients with respiratory symptoms	Any	Provide medical mask if tolerated. Immediately move the patient to an isolation room or separate area away from others; if this is not feasible, ensure spatial distance of at least 2 metre from other patients
	Patients without respiratory symptoms	Any	No PPE required
Administrative areas	All staff, including health care workers	Administrative tasks	No PPE required
Triage	Health care workers	Preliminary screening not involving direct contact.	Maintain spatial distance of at least 2 metre. No PPE required
	Patients with respiratory symptoms	Any	Maintain spatial distance of at least 2 metre. Provide medical mask if tolerated.
	Patients without respiratory symptoms	Any	No PPE required

Setting	Target personnel or patients	Activity	Type of PPE or procedure
Community			
Home	Patients with respiratory symptoms	Any	Maintain spatial distance of at least 2 metre. Provide medical mask if tolerated, except when sleeping
	Caregiver	Entering the patient's room, but not providing direct care or assistance	Medical mask
		Providing direct care or when handling stool, urine, or waste from COVID-19 patient being cared for at home	Gloves Medical mask Apron (if risk of splash)
	Health care workers	Providing direct care or assistance to a COVID-19 patient at home	Medical mask Gown Gloves Eye protection
Public areas (e.g. schools, shopping malls, train stations)	Individuals without respiratory symptoms	Any	No PPE required

Setting	Target personnel or patients	Activity	Type of PPE or procedure
Points of entry			
Administrative areas	All staff	Any	No PPE required
Screening area	Staff	First screening (temperature measurement) not involving direct contact* C	Maintain spatial distance of at least 2 metre. No PPE required
		Second screening (i.e. interviewing passengers with fever for clinical symptoms suggestive of COVID-19 disease and travel history)	Medical mask Gloves
	Cleaners	Cleaning the area where passengers with fever are being screened	Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes
Temporary isolation area	Staff	Entering the isolation area, but not providing direct assistance	Maintain spatial distance of at least 2 metre. Medical mask Gloves
	Staff, health care workers	Assisting passenger being transported to a health care facility	Medical mask Gown Gloves Eye protection
	Cleaners	Cleaning isolation area	Medical mask Gown

			Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes
Ambulance or transfer vehicle	Health care workers	Transporting suspected COVID19 patients to the referral health care facility	Medical mask Gowns Gloves Eye protection
	Driver	Involved only in driving the patient with suspected COVID19 disease and the driver's compartment is separated from the COVID-19 patient	Maintain spatial distance of at least 2 metre. No PPE required
		Assisting with loading or unloading patient with suspected COVID-19	Medical mask Gowns Gloves Eye protection
		No direct contact with patient with suspected COVID-19, but no separation between driver's and patient's compartments	Medical mask
	Patient with suspected COVID19.	Transport to the referral health care facility.	Medical mask if tolerated
	Cleaners	Cleaning after and between transport of patients with suspected COVID-19 to the referral health care facility.	Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes

Setting	Target personnel or patients	Activity	Type of PPE or procedure
Special considerations for rapid-response teams assisting with public health investigations * D			
Community			
Anywhere	Rapid-response team investigators	Interview suspected or confirmed COVID-19 patients or their contacts.	No PPE if done remotely (e.g. by telephone or video conference). Remote interview is the preferred method.
		In-person interview of suspected or confirmed COVID-19 patients without direct contact	Medical mask Maintain spatial distance of at least 2 metre. The interview should be conducted outside the house or outdoors, and confirmed or suspected COVID-19 patients should wear a medical mask if tolerated.
		In-person interview with asymptomatic contacts of COVID-19 patients	Maintain spatial distance of at least 2 metre. No PPE required The interview should be performed outside the house or outdoors. If it is necessary to enter the household environment, use a thermal imaging camera to confirm that the individual does not have a fever, maintain spatial distance of at least 2 metre and do not

			touch anything in the household environment.
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A* In addition to using the appropriate PPE, frequent hand hygiene and respiratory hygiene should always be performed. PPE should be discarded in an appropriate waste container after use, and hand hygiene should be performed before putting on and after taking off PPE.

B* The number of visitors should be restricted. If visitors must enter a COVID-19 patient's room, they should be provided with clear instructions about how to put on and remove PPE and about performing hand hygiene before putting on and after removing PPE; this should be supervised by a health care worker.

C* This category includes the use of no-touch thermometers, thermal imaging cameras, and limited observation and questioning, all while maintaining a spatial distance of at least 2m.

D* All rapid-response team members must be trained in performing hand hygiene and how to put on and remove PPE to avoid self-contamination.

Adapted from WHO document: https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE_use-2020.2-eng.pdf

SCROLL FURTHER FOR POSTERS – DONNING/DOFFING PPE, MASKS, HAND WASH AND RUB TECHNIQUE ETC

Steps to put on personal protective equipment (PPE) including gown

- 1** Remove all personal items (jewelry, watches, cell phones, pens, etc.)



- 2** Put on scrub suit and rubber boots¹ in the changing room.

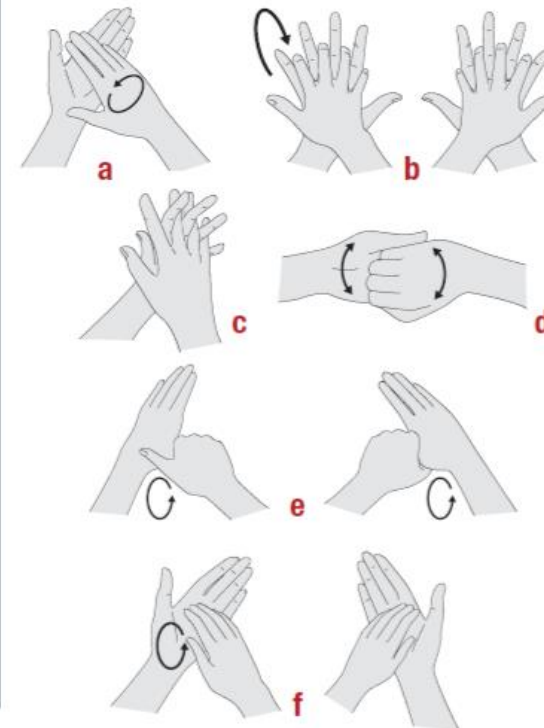


- 3** Move to the clean area at the entrance of the isolation unit.

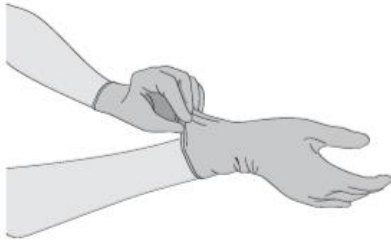
- 4** By visual inspection, ensure that all sizes of the PPE set are correct and the quality is appropriate.

- 5** Undertake the procedure of putting on PPE under the guidance and supervision of a trained observer (colleague).

- 6** Perform hand hygiene.



7 Put on **gloves**
(examination,
nitrile gloves).



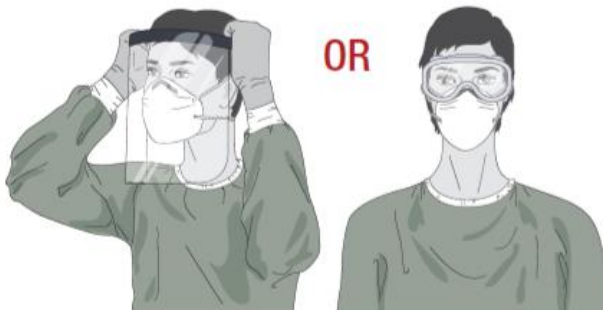
8 Put on disposable
gown
made of fabric that
is tested for resistance
to penetration by blood
or body fluids
OR to blood-borne
pathogens.



9 Put on **face mask**.



10 Put on **face shield OR goggles**.



11 Put on **head and neck covering**
surgical bonnet covering neck and
sides of the head (preferable with face
shield) **OR** hood.



12
Put on
disposable
waterproof
apron
(if not available,
use heavy duty,
reusable
waterproof
apron).



13 Put on second pair of (preferably long cuff) **gloves** over the cuff.



¹ If boots are not available, use closed shoes (slip-ons without shoelaces and fully covering the dorsum of the foot and ankles) and shoe covers (nonslip and preferably impermeable)



Steps to take off personal protective equipment (PPE) including gown

1 Always remove PPE under the **guidance and supervision of a trained observer** (colleague). Ensure that infectious waste containers are available in the doffing area for safe disposal of PPE. Separate containers should be available for reusable items.

2 Perform **hand hygiene** on gloved hands.¹

3 Remove **apron** leaning forward and taking care to avoid contaminating your hands. When removing disposable apron, tear it off at the neck and roll it down without touching the front area. Then untie the back and roll the apron forward.



4 Perform **hand hygiene** on gloved hands.

5 Remove **outer pair of gloves** and dispose of them safely.

Use the technique shown in Step 17

6 Perform **hand hygiene** on gloved hands.

7 Remove **head and neck covering** taking care to avoid contaminating your face by starting from the bottom of the hood in the back and rolling from back to front and from inside to outside, and dispose of it safely.



OR



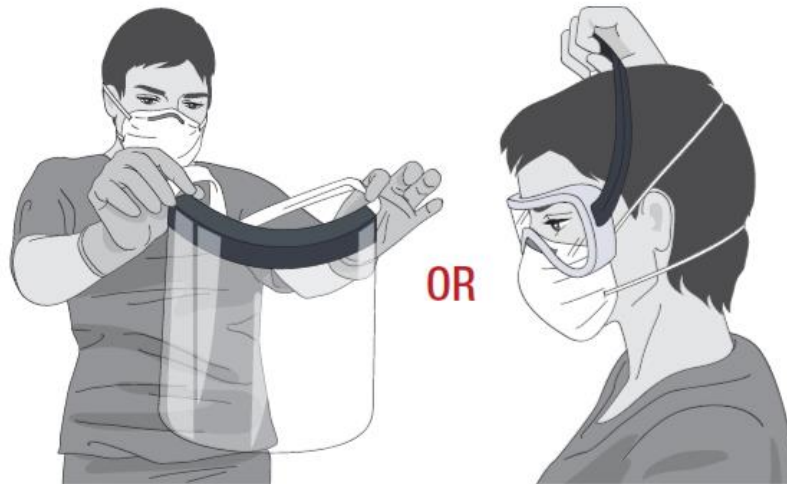
8 Perform **hand hygiene** on gloved hands.

9 Remove the **gown** by untying the knot first, then pulling from back to front rolling it from inside to outside and dispose of it safely.



10 Perform **hand hygiene** on gloved hands.

- 11** Remove **eye protection** by pulling the string from behind the head and dispose of it safely.



- 12** Perform **hand hygiene** on gloved hands.

- 15** Remove rubber **boots** without touching them (or overshoes if wearing shoes). If the same boots are to be used outside of the high-risk zone, keep them on but clean and decontaminate appropriately before leaving the doffing area.²

- 16** Perform **hand hygiene** on gloved hands.

¹ While working in the patient care area, outer gloves should be changed between patients and prior to exiting (change after seeing the last patient)

² Appropriate decontamination of boots includes stepping into a footbath with 0.5% chlorine solution (and removing dirt with toilet brush if heavily soiled with mud and/or organic materials) and then wiping all sides with 0.5% chlorine solution. At least once a day boots should be disinfected by soaking in a 0.5% chlorine solution for 30 min, then rinsed and dried.

- 13** Remove the **mask** from behind the head by first untying the bottom string above the head and leaving it hanging in front; and then the top string next from behind head and dispose of it safely.



- 14** Perform **hand hygiene** on gloved hands.

- 17** Remove **gloves** carefully with appropriate technique and dispose of them safely.





- 18** Perform **hand hygiene**.




World Health
Organization

How to **put on, use,** **take off and dispose** of a mask

- 

Before putting on a mask, wash hands with alcohol-based hand rub or soap and water
- 


Cover mouth and nose with mask and make sure there are no gaps between your face and the mask

Avoid touching the mask while using it; if you do, clean your hands with alcohol-based hand rub or soap and water
- 

Replace the mask with a new one as soon as it is damp and do not re-use single-use masks
- 

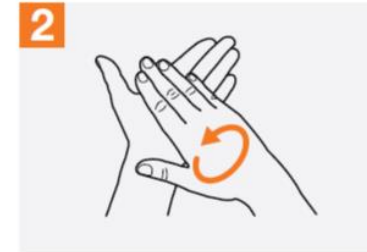
To remove the mask: remove it from behind (do not touch the front of mask); discard immediately in a closed bin; wash hands with alcohol-based hand rub or soap and water

TECHNIQUE ON HOW TO USE AND APPLY HAND RUB / SANITIZER

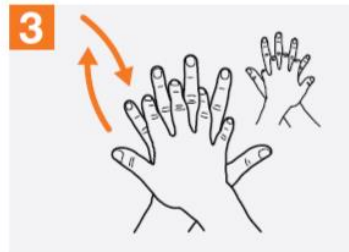
 Duration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;



Right palm over left dorsum 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;




Once dry, your hands are safe.

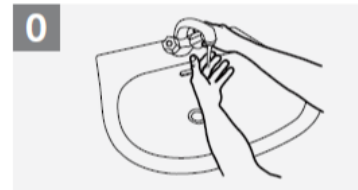
image taken from the WHO how to handrub poster, full poster can be found here:

<https://www.who.int/gpsc/5may/resources/posters/en/>

TECHNIQUE ON HOW TO WASH HANDS

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

 Duration of the entire procedure: 40-60 seconds



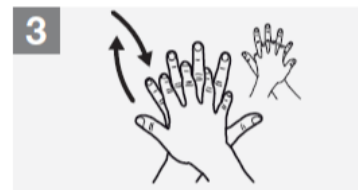
Wet hands with water;



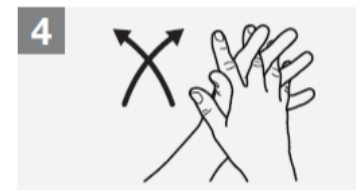
Apply enough soap to cover
all hand surfaces;



Rub hands palm to palm;



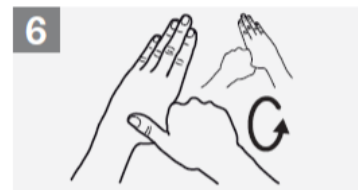
Right palm over left dorsum with
interlaced fingers and vice versa;



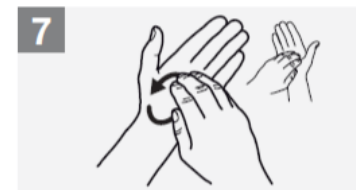
Palm to palm with fingers interlaced;



Backs of fingers to opposing palms
with fingers interlocked;



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



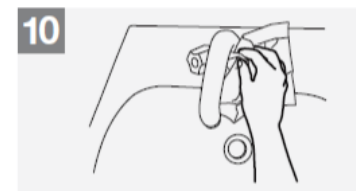
Rotational rubbing, backwards and
forwards with clasped fingers of right
hand in left palm and vice versa;



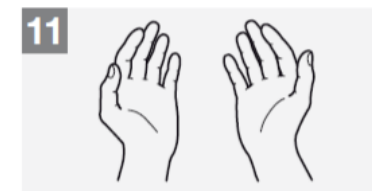
Rinse hands with water;



Dry hands thoroughly
with a single use towel;



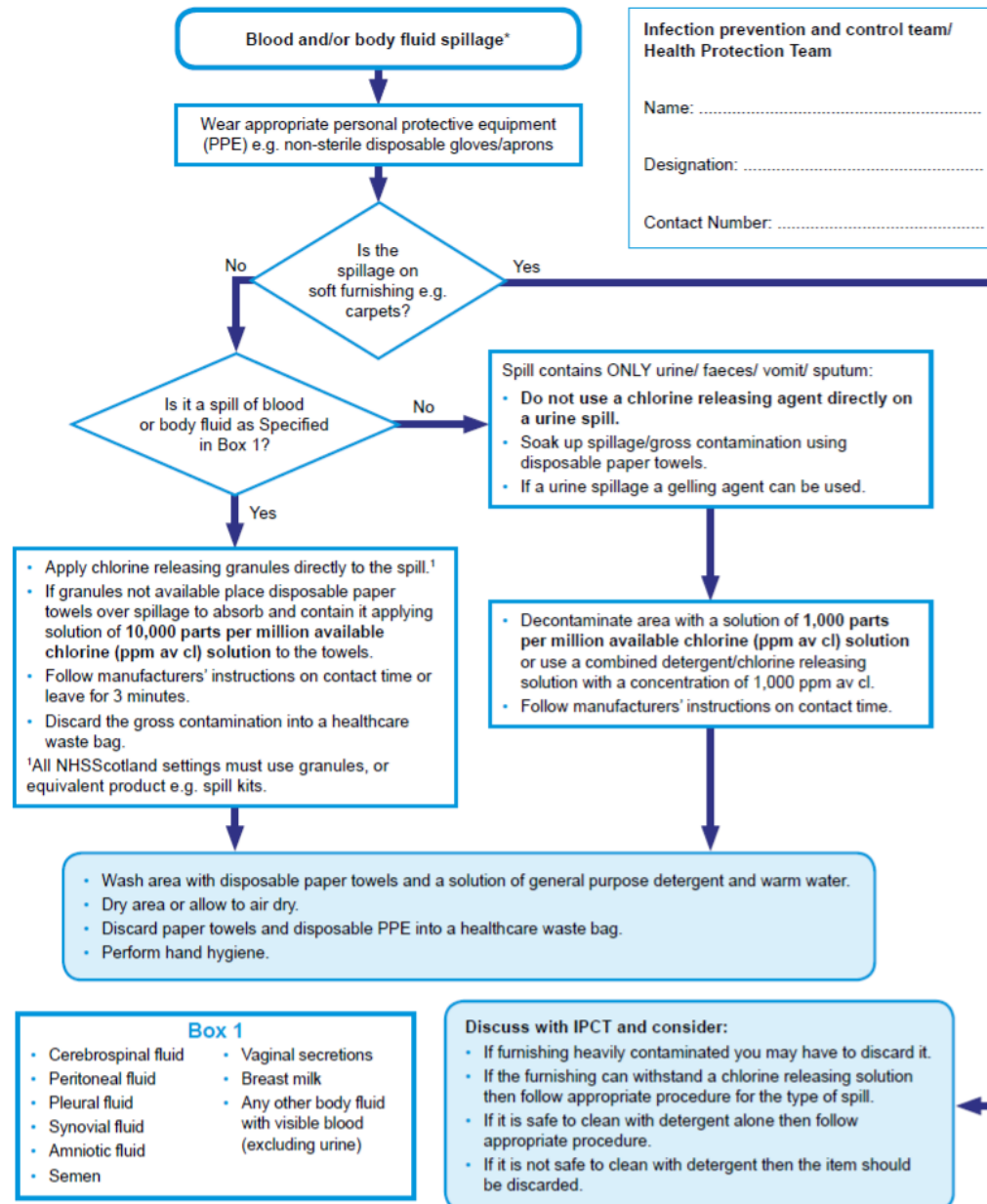
Use towel to turn off faucet;



Your hands are now safe.

image taken from the WHO how to handwash poster,
full poster can be found here:

<https://www.who.int/gpsc/5may/resources/posters/en/>



MANAGEMENT OF BLOOD AND BODY FLUID SPILLS

Part of the National Infection Prevention and Control Manual (NIPCM), available at: <http://www.nipcm.hps.scot.nhs.uk/>.
Produced by: Health Protection Scotland, July 2018.



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Save a Life. *Change a Life.*