REPÚBLICA DEMOCRÁTICA DE TIMOR-LESTE
MINISTÉRIU da SAÚDE

Manual for Covid-19 Infection Prevention & Control Practices for border entrances

Servisu Sekretariadu
Covid-19 IPC Pilar VI

Preface

Ministry of Health, Timor-Leste has already been engaged in varying capacities and strengths to implement infection prevention and control (IPC) initiatives. In line with that, a comprehensive guideline for IPC practices for Covid-19 in Timor-Leste was developed in 2020 for achieving success in practicing standard infection prevention and control (IPC) measures in order to breaking the chain of infection transmission by COVID-19 virus.

However, with recent increase in COVID-19 cases, the IPC practices in border entrance areas have become a priority to handle. Therefore, a simplified IPC manual for border entrance areas was prepared to highlight the important areas for IPC practices.

The manual has been prepared in line with the original guideline for IPC practices for COVID-19 developed by the Ministry of Health, Timor-Leste and was adjusted according to the recent changes in the global guidelines. It will be a handy supplement for the staffs at the border entrance areas for practicing the IPC within their context.

I believe that the manual will be very useful to practice IPC in border entrance settings for prevention of infection transmission of COVID-19. As a living document, the manual will also be updated in future with the global references. The process of developing this manual was under the auspices of Cabinet of Quality Assurance in Health (CQAH), which is the secretariat of pillar 6, the important IPC unit of COVID-19 management teams of the Ministry of Health, Timor-Leste.

The manual has been designed to explain in a simpler form the practical and achievable ways of IPC implementation. The target audiences of this manual will be the staffs of different levels working at the border areas. I encourage the relevant departments to further support the actual implementation of the manual in the border entrance areas.

Dra Odete da Silva Viegas
General Director of Health Services
Ministry of Health, Timor-Leste

Abbreviations

IPC	Infection prevention and control practices
SOP	Standard Operating procedure
MOH	Ministry of Health
PPE	Personal Protective Equipment
HW	Health worker
POE	Point of entry
WHO	World Health Organization

Contributors

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Contents

Background

Since the pandemic situation, the Ministry of Health team has been providing support in the border control offices and engaged for IPC activities for COVID-19 prevention. GGQS team, as a secretariat of pillar 6 team, visited the border areas and came up with specific recommendations for improving the IPC practices in border areas especially at the outset of the recent COVID-19 surge in Timor-Leste. The visit was done in 1st week of February, 2021 and was structured around discussing and observing major areas of operation in border related to COVID-19 practices. The team observed the available IPC materials there and asked for the IPC practices they usually follow during their work. The team discussed with several focal persons on current IPC practices.

Normally the immigration office has a separate designated area where the passengers come, but during the emergency there is a separate area where the passengers come, undergo screening but do not enter the actual immigration area. However, since the beginning of the emergency activities, the number of the passengers has become very limited and a separate entry area has been designated for receiving the passengers instead of allowing them to enter into the main building. Therefore, now the immigration, customs team do not come in direct contact with the passengers, instead the Ministry of Health team conduct screening for the arrivals first. The passports are asked to be kept on the table without any direct contact with the passenger. They said that they clean only the outer side of the passport using sanitizer in a way that does not damage the passport. Thereafter, after initial screening, their passports are taken by the immigration officers and brought inside the main building. In general, immigration officer at the time of collecting the passport use PPEs (except the boot) for protection. One of the immigration officers is assigned to go and collect the passport and that is done on a rotation basis. The passport is received by hand but they use the gloves. At the time of receiving, the passport the passenger stays far, does not come into close contact with the immigration or customs team. Usually the commander-in-chief, immigration oversees the process of receiving the passports by the immigration officers. There are 4 immigration officers working there in the border immigration office. Usually, before arrival of passenger/passengers, the team is informed and prepared with the relevant precautions. A container-made infrastructure is built for isolating the passengers who are suspected of having COVID-19. There are 2 rooms (with examination bed) 2 adjacent bathrooms for use by the suspected patients. Further details of the report are attached in the annex 1.

I. IPC measures at the entrance of at border entrance

Strategic Principles for reducing transmission of infection at border entrance

Border entrance areas will follow the strategic principles of IPC implementation as below (Adapted from the WHO 5 strategic principles for reducing transmission in health care settings)

I. IPC measures at the entrance
II. Implementation of standard precautions for all patients
III. Implementation of additional precautions to suspected cases of COVID-19, such as droplet precaution and contact precautions
IV. Implementation of administrative control
V. Environmental and engineering control

Based on the findings and the recommendation, it was understood that there is a need of having a concise usable manual there for strengthening the IPC practices there. In this regard, the pocket book is designed in line with the national guidance on IPC practices for COVID-19 to guide the border personnel on strengthening IPC practices. Border entrances have rooms for isolation for the suspected/confirmed cases until they are taken to the actual isolation center. Therefore, it is useful to include IPC principles of isolation within this manual.

In the at border entrance, the entrance area is crucial as there is a huge possibility of having COVID-19 affected patients passing through this area that may pose increased chance of transmission of infection. Therefore, the IPC measures are to be strengthened at that point.

During the entry, expert and trained healthcare staffs should be engaged for quick passage of the patient ensuring the standard and additional precautions at all time. At this time, the healthcare staffs should have a distance of at least 1 meter from patients, ideally with a separation created by a glass/plastic screen. If that is not possible, mask and eye protection should be worn. The passenger should be provided with appropriate PPE and be counseled on the precautionary measures. There should be displayed information on IPC so that the passengers are reminded on the precautionary measures on hand hygiene and respiratory hygiene that are to be followed at all time. There should be dedicated toilets, hand hygiene stations, and trash bins with lid for passenger's usage.

II. Implementation of standard precautions

Standard precautions are a set of practices that must be in place for passengers to prevent transmission of infection in any given settings. These precautions depend on health worker-patient interaction nature and anticipated exposure to a known infectious agent[1]. Particularly important for COVID-19 prevention are the below elements: hand hygiene, respiratory hygiene, use of appropriate personal protective equipment (PPE), environmental cleaning, injection safety practices, safe waste management, linen management, sterilization of patient-

[1] https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-us-settings/overview/index.html

care equipment[2] . Apart from the above, placing the patients with appropriate distancing and correct use of antiseptics, disinfectants, and detergents are important factors for preventing the COVID-19 transmission.

Hand hygiene

Hand hygiene is a critical component of reducing infection transmission especially for management of COVID-19 infections. All staffs, caregivers and patient should practice rigorous hand hygiene continuously around environment where COVID-19 suspected AND/OR confirmed cases are screened or isolated Healthcare staffs require following the concept 'My five moments for hand hygiene'[3]

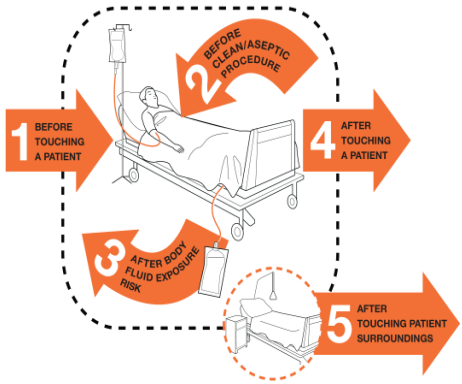

Figure 1: Five moments of hand hygiene

When to practice hand hygiene?

When exposed to a suspected/confirmed COVID-19 patient/passenger:

- Before and after touching a suspected/confirmed case
- Before any clean or aseptic procedure is performed
- After exposure to suspected/confirmed case's body fluid
- After touching a suspected/confirmed case's surroundings
- After touching common surfaces used by the suspected/confirmed cases or his immediate environment

During routine activities in border:

At the time of removal of personal protective equipment (PPE)

- After decontamination of equipment
- During and after the waste management practices
- Before and after preparing food, before eating
- After coughing or sneezing
- After using toilets

How to practice handwashing?

Rigorous hand hygiene requires to be followed in border areas. Running water is important in this regard but should not be a constraint. If the healthcare facility does not have running water, hand hygiene can still be implemented.

Locations of HH stations

- Each entry point for arrivals
- Outside the waiting space
- Toilet entrances
- Service delivery areas

[2] https://www.who.int/publications/i/item/WHO-2019-nCoV-IPC-2020.4
[3] https://www.who.int/gpsc/tools/Five_moments/en/

- Laundry, kitchen

Logistic aspect for Hand Hygiene maintenance

- Arrange sufficient stocks of handwashing materials
- Assign a focal person/ a team to observe Hand Hygiene practice
- Ensure regular checking on functional HW stations, water availability
- Arrange displayed poster on HH at the HH stations.

Serial	Handwashing material	Precautions during practice	Drying Practice
1	Soap and water	At least 40 seconds	Disposable paper towels for drying/ clean cloth towels
2	Alcohol-based hand rub	At least 20 seconds	
3	Liquid soap	Each time 2-3 ml (roughly 2-3 pumps) to be used from the dispenser bottle	Disposable paper towels for drying/ clean cloth towels
4	Bar soap	Bar soaps must be maintained in a dry area	Disposable paper towels for drying/ clean cloth towels

Table 1: Handwashing options at different situations adapted from WHO guidelines on hand hygiene in health care settings[4,5,6]

[4] World Health Organization. (2020). Recommendations to Member States to improve hand hygiene practices to help prevent the transmission of the COVID-19 virus: interim guidance, 1 April 2020 (No. WHO/2019-nCov/Hand_Hygiene_Stations/2020.1). World Health Organization.

[5] Hillier, M. D. (2020). Using effective hand hygiene practice to prevent and control infection. Nurs Stand, 35(5), 45-50.

[6] Fries, K. E., Figueroa, A. M., Pickerign, H., Breda, K., & Eichar, S. (2020). Use of World Health Organization Guidelines to Improve Hand Washing Efficacy. The Journal of Continuing Education in Nursing, 51(10), 453-456.

Respiratory hygiene

All providers, patients and caregivers must be aware and maintain respiratory hygiene which is very crucial in preventing the spread of respiratory infections including COVID-19.

The slogan "catch it, bin it, kill it" slogan[7] has been used for public campaigning by the British Government to provide a simple message for respiratory hygiene maintenance.

1. Catch it: Use tissue to catch a cough or sneeze
2. Bin it: Dispose the tissue immediately in a bin
3. 3. Kill it: Kill viruses by hand hygiene practice

Figure 2: Catch it Bin it kill it' poster

General measures of respiratory hygiene for all

- During sneezing, coughing, or blowing nose all individuals working in the border areas require covering their nose and mouth using tissue or elbow, dispose those in nearest waste-bins and perform hand hygiene (following 'Catch it, bin it, kill it' slogan)
- Face away from others when coughing/sneezing
- Perform hand hygiene each time after coughing, sneezing, or touching any surface with respiratory secretion
- Practice avoiding sneezing, coughing in a public place as much possible

Logistic aspect for respiratory hygiene maintenance

- Arrange sufficient stocks of disposable, single-use tissues (or in case of unavailability, use cut pieces of cloth for single time use)
- Arrange appropriate waste-bin (lined and foot operated) throughout the center
- Assign a focal person/ a team to observe respiratory hygiene practice as a whole

Specific measures of respiratory hygiene for the COVID-19 suspected/confirmed case (passenger)

- Suspected/confirmed cases should use medical masks (or cloth masks) for wearing
- Suspected/confirmed cases should be asked to perform hand hygiene after contact with respiratory secretions or objects that may be potentially contaminated with respiratory secretions
- Symptomatic elderly/immobile suspected/confirmed cases can be given plastic bags or container to confine the respiratory secretion

[7] https://www.infectionpreventioncontrol.co.uk/resources/catch-it-bin-it-kill-it-poster/

Use of appropriate personal protective equipment (PPE)

General rules for wearing PPE

PPEs are special coverings designed to protect healthcare workers from exposure to or contact with infectious agents. Some PPE may be disposable and some may be reused. In general, HW should always use medical masks, gowns, gloves, and eye protection (goggles or face shield) as PPE while contacting the suspected or confirmed COVID-19 patients[8]. Use of a risk assessment tool is helpful at this point.

- Always perform hand hygiene before and after use of PPE
- Before putting PPE on, always inspect it to make sure it is not compromised or out of date.
- Check PPE sizes, it should fit well.
- Always perform a RISK ASSESSMENT before selecting the appropriate PPE for suspected/confirmed case care
- Always put the appropriate PPE on before contacting the patient.
- Immediately after suspected/confirmed case contact, remove PPE and dispose it in a waste bin.
- After putting on PPE, inspect (either in a mirror or via a colleague) to ensure that all PPE is correctly placed and secured.
- Once PPE is on and suspected/confirmed case care activities have commenced, PPE CANNOT BE ADJUSTED OR TOUCHED, especially caution to be maintained on the following aspects:
    - Never touch face while wearing PPE
    - If PPE becomes contaminated or breached, immediately leave the patient care area when safe to do so, and take off the PPE correctly and replace it with new PPE
    - Always remove PPE carefully, slowly, and in the correct order to avoid self-contamination, especially when taking off a medical and/or N-95 mask
    - Disposable, single-use PPE should always to be used when available
    - PPE should not be re-used
    - If PPE shortages are becoming a problem, PPE use may be extended, reprocessed, and/or exchanged for another PPE item

How to use mask?

All providers should wear medical masks when entering a room where suspected/confirmed cases residing.

Key points on mask management

Appropriate use and disposal of mask is essential to avoid possible transmission.

- Masks to be worn in a way to cover the nose and mouth all time and tied securely to minimize any gaps between the face and the mask
- Masks are not to be touched while on wearing
- While damp, the mask requires be immediately replaced by a new, dry one
- Single-use masks should not be reused
- 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 circumstances.
- While on use, the front of masks should not be touched
- While opening, masks need to be untied from behind, followed by hand hygiene

[8] Infection prevention and control of epidemic-and pandemic-prone acute respiratory infections in health care. Geneva: World Health Organization; 2014 (accessed 27 February 2020).

- Masks are to be frequently changed and after each removal hand hygiene are to be performed
- A disposable paper tissue can serve as an alternative to masks when coughing or sneezing

Mask use by symptomatic cases (suspected/confirmed)

- Suspected/confirmed case should wear a medical mask at entrance or any sort of movement
- A disposable paper tissue can serve as an alternative to masks when coughing or sneezing if in case the masks are not available
- Suspected/confirmed case are to wear medical masks when in isolation space/room or in a waiting area
- Suspected/confirmed case do not require wearing medical masks when they reside temporarily in single isolation room for them but covering mouth and nose at times of coughing or sneezing using disposable paper tissues is advisable. Tissues must be disposed of appropriately, and hand hygiene should be performed immediately afterwards.

Key points on using gloves

Disposable gloves are to be used, especially at the time of providing direct care to the suspected/confirmed cases or at the time of being exposed to blood and/or other body fluids. Gloves must be changed immediately following the care episode. If body fluids (e.g, oral or respiratory secretions, stools) are handled, disposable gloves (and a mask) are to be used followed by hand hygiene.

Key points on eye shield/protection

At the time of providing care to the suspected/confirmed case, protective measures require to be taken when there is a chance of direct splashing secretion from patient's respiratory droplets, excretion, blood or body fluids directly to the eye or face of the provider/caregiver. Spectacles are not regarded to be protective in these cases. Surgical mask with integrated visor, full face shield/visor or polycarbonate safety spectacles or equivalent can serve this purpose. These require being disposable and single-used.

PPE use by Health workers

- Health workers are to be provided personal protective equipment (PPE). After contact with confirmed or suspected cases, they should follow appropriate doffing and disposal of all PPE and hand hygiene[9,10].
- For each confirmed or suspected case, a new set of PPE have to be used.
- Health workers should refrain from touching own eyes, nose, or mouth with potentially contaminated gloved or bare hands.
- A designated change room/space will be provided as their changing rooms with separate privacy areas for female staffs.

[9] WHO guidelines on hand hygiene in health care: first global patient safety challenge – clean care is safer care. Geneva: World Health Organization; 2009 (https://apps.who.int/iris/handle/10665/44102, accessed 17 January 2020).

[10]World Health Organization. How to put on and take off personal protective equipment (PPE). World Health Organization; 2008.

Annex 1 summarize the PPE recommendation for point of entries in Timor-Leste

Injection safety practices

Normally, injection is not a common requisite for mild symptomatic patients. However, where required, routine injection safety practices require to be followed. Important IPC measures for safety of injection practices are: Hand hygiene, gloves where appropriate, other single-use personal protective equipment, skin preparation and disinfection[11].

The 7 steps for ensuring safe injection practices are as follows:

Step 1: Clean work space.
Step 2: Hand hygiene.
Step 3: Sterile and new syringe and needle, with re-use prevention and/or injury protection feature whenever possible.
Step 4: Sterile vial of medication and diluent.
Step 5: Skin disinfection.
Step 6: Appropriate collection of sharps.
Step 7: Appropriate waste management.

Safe waste management

The waste produced in the border areas is to be regarded as infectious as there can be suspected or confirmed cases. Therefore, special measures are to be in place for collection and disposal of those wastes which are essentially contaminated with patient's secretion. If wastes are not discarded inappropriately, there is a great chance of transmission of infection.

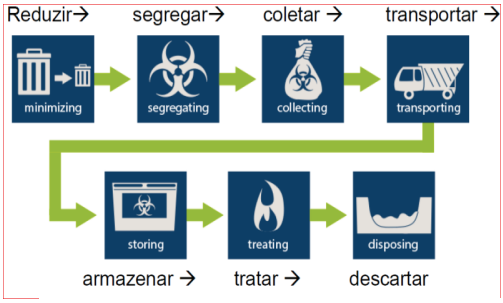

Figure 3: Steps of waste management

Types of wastes[12]:

Infectious waste: waste contaminated with blood and other bodily fluids (e.g., from discarded diagnostic samples), cultures and stocks of infectious agents from laboratory work (e.g. waste from autopsies and infected animals from laboratories), or waste from patients with infections (e.g. swabs, bandages and disposable medical devices);

Pathological waste: human tissues, organs or fluids, body parts and contaminated animal carcasses;

[11] World Health Organization, 2010. *WHO best practices for injections and related procedures toolkit* (No. WHO/EHT/10.02). Geneva: World Health Organization

[12] https://www.who.int/news-room/fact-sheets/detail/health-care-waste

Non-hazardous or general waste: waste that does not pose any particular biological, chemical, radioactive or physical hazard

Preparatory measures for waste management

Arrange three-bin system (with separate containers) to organize general waste, infectious waste, and pathological waste

- Arrange two bins system general waste and infectious waste in cases where three bins system not available
- Waste containers should be clearly labeled and lidded for controlling waste production
- Infectious & general wastes should not be mixed during collection, transport or storage
- Collected waste may be taken to central storage onsite before treatment and disposal provided
- It is stored securely and remains appropriately labeled and segregated
- Use appropriate PPE (boots, long-sleeved gown, heavy-duty gloves, mask, and goggles or a face shield) while managing infectious waste and perform hand hygiene after taking off the PPE;
- Sharps should have a separate container and should not be mixed with the infectious waste
- Waste bags should not be carried up against the body or over the shoulder
- All waste from border entrance areas is considered as infectious and should be disposed of following routine methods for infectious waste
- Border area staffs should be trained in waste management

Linen management

Linens used by the confirmed or suspected cases are to be regarded as infectious. Careful handling of the linen at the time of processing is important so as to not being exposed especially in case of soiled clothes

Steps of linen management

- Contaminated linen is to be put into a clearly labeled, leak-proof bags or containers, and require to be handled inside the patient room before processing
- At the time linen handling, appropriate PPE (heavy duty gloves, a mask, eye protection including goggles or a face shield, a long-sleeved gown, an apron if the gown is not fluid resistant, and boots or closed shoes) should be worn
- Hand hygiene to be practiced before and after handling the laundry
- The regular linen is to be washed using regular soap and warm water and laundry detergent. In case of machine washing a 60–90 °C (140–194 °F) is recommended.
- Where washing machine is no available, a large drum can be used for soaking clothes with use of a stick to stir the clothes within the drum. The linens are then soaked in 0.05% chlorine for additional 30 minutes followed by rinsing with water.
- All linens require to be dried thoroughly in sunlight.
- Health worker uniforms: Ideally, the HW should wear regular clothes before his shift. He should use scrubs to perform his clinical activities and at the end of the shift, the scrubs are to put to launder before next using.

Precautionary measures:

- Arrange a designated place for keeping the linen bags before washing
- Used linen is not to be placed on a surface or floor from where the infection can spread.
- Soiled laundry of the confirmed patients not to be shaken

Environmental cleaning, disinfection and sterilization

Consistent and correct process of cleaning and disinfection procedures is to be followed in border areas. Special attention is required for high-touch surfaces, and visibly soiled areas.

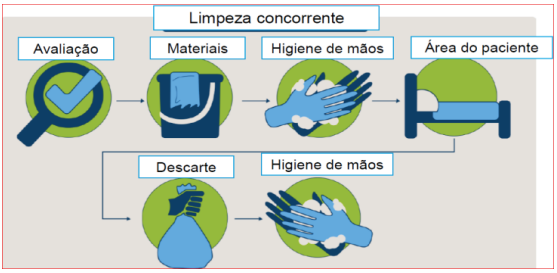

Figure 4 Cleaning process

Cleaning materials

Bleach (Sodium hypochlorite) and alcohol has proven efficacy on cleaning environmental surfaces and patient care equipment and therefore can be used for border entrance areas. A diluted bleach solution is 1 part bleach to 99 parts water. For surfaces that cannot be cleaned with bleach, 70% ethanol or an appropriate local product can be used.

General principles for cleaning

Figure 5 Terminal cleaning process

- Clean from top to bottom, outer to inner, and passenger's waiting areas should be cleaned last
- When cleaning in any facility, always to move from cleanest to dirtiest
- Damp dusting and mopping is recommended (Put a damp/moist towel on the end of the broom or mop)
- Isolation spaces where COVID-19 suspected or confirmed cases are temporarily kept need to have dedicated cleaning/disinfection supplies.
- Increase the frequency of cleaning throughout the healthcare facility (see the cleaning protocol at annex 2)
- Develop a cleaning schedule. More cleaners may need to be hired to meet the cleaning demand
- All organic material should be removed from the room upon patient discharge
- All equipment and medical equipment must be cleaned hospital level disinfectants

- Room furniture or surfaces, toilets that are regularly touched by the patient (doorknobs, bedrails, tabletops, light switches, patient handsets) requires being cleaned and disinfected. Initially, regular household soap or detergent should be used and then, after rinsing, regular household disinfectant containing 0.1% sodium hypochlorite (i.e. equivalent to 1000 ppm) should be applied.

Precautionary measures:
- Cleaners/housekeeping should ensure they are wearing the appropriate PPE when cleaning an isolation room or area
- Do not spray disinfectants, this may cause some virus to be re-aerosolized
- If re-using medical equipment between patients, ensure that they are disinfected between patients
- Utility gloves needs cleaning with soap and water and subsequently decontaminated with 0.1% sodium hypochlorite solution. A one-time glove (e.g. nitrile or latex) needs to be discarded after each use.

Each time, the gloves are out on or discarded, hand hygiene to be performed.

III. Implementing empiric additional precautions

The additional precautions are implemented in case of confirmed or suspected COVID-19 cases. All individuals, including family members, visitors and healthcare providers will practice for contact and droplet precautions while exposed to a COVID-19 suspected or confirmed cases.

COVID-19 infection can spread between individuals through the respiratory droplets and contact routes[13,14]. Transmission of the COVID-19 virus may occur by direct contact with infected people and indirect contact with surfaces in the immediate environment or with objects used on the infected person (e.g. stethoscope or thermometer). Droplet transmission occurs when a person is in close contact (within 1 m) of someone with respiratory symptoms.

Contact and droplet precautionary measures for COVID-19 infection

- Confirmed or suspected cases should be temporarily placed in in adequately ventilated single rooms (where possible).
- Only designated and limited health workers are to be appointed for managing the confirmed patient to reduce the chance of infection transmission.
- The staffs that provides care to the confirmed patient should possess clinical and the IPC related skills.
    - Patient's equipment should be either single-use or disposable or dedicated equipment (e.g. stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be

[13] Liu J, Liao X, Qian S et al. Community transmission of severe acute respiratory syndrome coronavirus 2, Shenzhen, China, 2020. Emerg Infect Dis 2020 doi.org/10.3201/eid2606.200239
[14] Chan J, Yuan S, Kok K et al. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet 2020 doi: 10.1016/S0140-6736(20)30154-9

shared among patients, clean and disinfect it between use for each individual patient (e.g. by using ethyl alcohol 70%).

- The border entrance area is a critical point where careful practice of using masks, constant performing of respiratory and hand hygiene, distancing of the patients for at least 1 meter is a prerequisite.

IV. Implementation of administrative control

Administrative control is related to the followings:

Human resource need: It is important to address human resource needs in the border entrance areas for managing the IPC implementation and ensure the adequate ratio of staff-patient

Orientation of staffs: Orient staffs on required preparation in line with the COVID-19 IPC plan for the border entrance areas. The Front line worker should be provided with clinical skill and IPC relevant skills for dealing with the confirmed cases

Appoint IPC focal person/team: An IPC focal/team requires to be appointed for the border entrance areas for dedicated work on technical and logistic aspects of IPC practices

Organize roster for working: The border entrance areas requires having roster in place with appropriate distribution of staffs in relevant areas. Skilled staffs are to be allocated to handle the critical areas. A back up plan should be in place for sudden shortage of the staffs in the border entrance areas

Available resource and logistics: It is crucial to ensure a continuous supply of resource and logistics for ensuring the ongoing IPC activities. Existing stock is to be identified as a baseline and a plan to adjust in case of acute shortage is to be in place.

Monitor IPC implementation: A team or focal should monitor the compliance of health workers or the patients following the precautions and practices.

V. Use of environment and engineering control

The COVID-19 virus spreads in close encounter between infected cases and especially when the physical environmental aspect is not controlled well. Therefore, the border entrance areas requires to be adjusted for few modifications as much possible to adjust existing space or to create new spaces for allowing social distance of at least 1 m. The designated area where the patient stays requires to be well ventilated and must have water and sanitation facilities.

- Assure the responsible staff adhere the procedures, also the cleaning and disinfectant including good management of eating utensils cleaning, for dirty clothes and good waste management.
- Ensure the built infrastructure is sound and in place
- Practice consistent, correct process of cleaning and disinfection process of the rooms, surfaces, to prevent environmental contamination
- Conduct safe practice and management of laundry, food service utensils, used medical equipment for patients

- Ensure functional hand hygiene facilities for health care staffs at all points of care and in areas where PPE is put on or taken off. In addition, functional hand hygiene facilities should be available for all patients, family members, and visitors, and should be available within 5 m of toilets, as well as in waiting and dining rooms and other public areas.
- Follow important recommendation on WASH management activities in healthcare settings:
  This includes safe managing of excreta (feces and urine) disposal, consistent hand hygiene practice, cleaning and disinfection practices at regular interval, safe management of health care waste.

Annexes

Annex 1: Situation analysis report

Situation Analysis Report
Immigration & Border control, Suai

Pillar 6, Ministry of Health
Timor-Leste

Background:
Date: Feb 03-Feb 05, 2021
Team members for the conducting the situation assessment:
Dr Helder M Carvalho, Dr Shayema Khorshed

The Pillar 6 team visited the Suai border to accomplish 2 major objectives: conduct analysis for overseeing the border situation in line with the Infection Prevention and Control (IPC) activities and organize a workshop on IPC for the border staffs. A team was assigned for conducting the situation of IPC implementation in the border. The team focused to observe IPC interventions and discussed with several focal persons on current IPC practices.

Below are the details of the IPC assessment findings and scope of improvement in specific area for improving the IPC practices.

I. IPC practices at the arrival point:

The visit was structured around discussing and observing major areas of operation in border related to COVID-19 practices. The first day was dedicated on discussing with the immigration staffs on their IPC practices. The pillar 6 team observed the available IPC materials there and asked for the IPC practices they usually follow during their work. Since the pandemic situation, the Ministry of Health team has been providing support in the border control offices and engaged for IPC activities for COVID-19 prevention.

Normally the immigration office has a separate designated area where the passengers come, but during the emergency there is a separate area where the passengers come, undergo screening but do not enter the actual immigration area. However, since the beginning of the emergency activities, the number of the passengers has become very limited and a separate entry area has been designated for receiving the passengers instead of allowing them to enter into the main building. Therefore, now the immigration, customs team do not come in direct contact with the passengers, instead the Ministry of Health team conduct screening for the arrivals first. The passports are asked to be kept on the table without any direct contact with the passenger. They said that they clean only the outer side of the passport using sanitizer in a way that does not damage the passport. Thereafter, after initial screening, their passports are taken by the immigration officers and brought inside the main building. In general, immigration officer at the time of collecting the passport use PPEs (except the boot) for protection. One of the immigration officers is assigned to go and collect the passport and that is done on a rotation basis. The passport is received by hand but they use the gloves. At the time of receiving, the passport the passenger stays far, does not come into close contact with the immigration or customs team. Usually the commander-in-chief, immigration oversees the process of receiving the passports by the immigration officers. There are 4 immigration officers working there in the border immigration office. Usually, before arrival of passenger/passengers, the team is informed and prepared with the relevant precautions.

In summary, the sequence of receiving the patient is as follows:

1. The patient comes, asked by the Ministry of health team (nurse and cleaners) to wash hands at the Handwashing stations
2. Disinfection process followed for the passengers which is aided by the nurses or the cleaners
3. The health team checks all the documents of them and fills up some forms on their behalf.
4. The immigration team and the customs team performs their part of activities after the passport has been given to them, however they wear complete PPEs (without the boot which they donot have). At the time of customs checking, the passengers open their respective bags.
5. Then the passengers are sent to the quarantine centers by ambulance.
6. Ambulance driver uses the PPEs while transporting passengers to the quarantine places. Normally, one ambulance has one driver, currently there is not rotation shift for the ambulance drivers.

Scope of improvement for IPC at arrival point:

- When the passengers arrive at the separate entry area, they must wash hands correctly. There requires being a focal person assigned for showing them the correct practice of

handwashing. And when the passengers wash hands they should be observing from a distance if done correctly.
- A quick orientation on handwashing can be done at the place before the passengers initiate the handwashing.
- Designated person/s from the health team can act as focal/s for the above activities
- Additional chairs are to be arranged for the waiting passengers and the chairs that are used by the passengers require to be disinfected regularly
- Cleaner's working frequency and schedule is to be prepared and followed

II. IPC Orientation

Regular IPC orientation (internal orientation for border staffs to refresh the IPC awareness and practices) do not happen always, few orientations are done by the external teams. Usually the staffs are careful about the IPC and safety. There is no operational manual in place for outlining the IPC prevention and control practices. Normally they just remind each other. The staffs received an instruction from MOH on using masks. Usually staffs depend on MOH team for anything related to the IPC practices based on situational need.

Scope of improvement for IPC Orientation

- An operational manual need to be in place for IPC implementation for border areas
- Regular IPC orientation can be organized internally and be focused on more practical ways of using the PPEs and use of the logistics. This can be linked with the orientation given by the pillar 7
- Internal IPC orientation schedule require to be prepared and the local health team can provide necessary support in those orientations

III. Infrastructure for the arrivals

A container-made infrastructure is built for isolating the passengers who are suspected of having COVID-19. There are 2 rooms (with examination bed) 2 adjacent bathrooms for use by the suspected patients. But at present they are not used for the above. Rather, the rooms are used by the health team for keeping the logistics in cupboards. The masks and other PPEs are kept in an almirah, which they usually give to the border force whenever they ask. But there was no proper inventory on these logistics. Just a sheet is maintained. A row of well-built, new bathrooms are in place there for the general passengers, but they do not use it.

Scope of improvement for Infrastructure for the arrivals

- Separate place to keep the IPC logistics and supplies is requires to be identified.
- Inventory system requires to be established for keeping track of the IPC logistics and the supplies
- The container-based infrastructure and bathrooms need to be used for the passengers as prepared.

IV. IPC logistics and supplies

The logistics and supplies come from several channels. Sometimes they are directly been distributed to the immigration staffs. In other instances, the health teams arrange the supplies and logistics for the border teams that they receive from national and municipal channel. There is no particular space to keep those supplies and logistics anywhere in the compound. In some cases, the PPEs and other logistics were found scattered on the tables or kept here and there.

There were 4 face shields found provided from the PNTL which were unused and kept on the table. Immigration staffs said that they use those and clean after using. The immigration staffs in their stocks have quite a few boxes of masks and gloves (supplied from national level). But they do not maintain any inventory on these. Usually when they find shortage, they ask the health team to provide them the PPEs or logistics.

The handwashing facilities at the point of entry of the passengers have running water supply and adequate handwashing materials. Before moving for the health assessment they conduct the handwashing there. However, the availability of enough disinfectants was not confirmed.

Scope of improvement of IPC logistics and supplies

- Ensure adequate stocks of PPE, disinfectants and logistics for relevant officials/departments
- Inventory system to be developed at each point where PPE, logistics are distributed.

V. Community engagement for IPC

At present, the community works in close coordination and collaboration with the police, immigration and also MOH staffs. The Chefe Sucos usually take initiative to raise awareness amongst the community. The major profession of the community is agriculture. The general people in community are aware on the COVID-19 situation. When they come to know about an illegal entry, they contact the Chefe Alda, Chefe Suco and other relevant authorities including police, immigration, MOH. Usually, 80 percent of the community follows the practice of wearing the mask and practice handwashing. Usually, the elderly people are not comfortable using masks.

Normally when the border police meet an illegal person, they are not in the complete uniform. Some of them are afraid as well at that time. The border police force carries the sanitizers and masks with them. They recommended raising the issues such as controlling the illegal persons in the high-level meeting. They also said that they need more PPEs, logistics. Couple of orientations has been held already. They suggested that organizing regular workshop at the border to aware the community may prove to be very effective. They also suggest engaging a health focal point with the border police team. The immigration team realized that it is important to prevent the illegal entry and also to ensure that the COVID-19 transmission is prevented during that illegal entry timing. They suggested engaging Chefe Sucos in these efforts. They feel that the Chefe Sucos are may contribute a lot more effectively when managing the communities for building the awareness.

Scope of improvement in community engagement

- Organize awareness orientations for the border community
- Ensure required logistics and supplies for IPC in the community
- Better coordination with the Chefe Sucos for improving the IPC practices in the community

VI. Monitoring IPC intervention

There is no as such monitoring plan to oversee the IPC practices in the border. At present a lot of areas require improvement including maintaining inventory, correct practices of handwashing, orientation and post-orientation follow up, skill observation of the cleaners, develop proper cleaning schedule etc. There was suggestion to appoint IPC focal person/s, preferably from the health team to monitoring the IPC status of the border areas. Also , at present there is no reporting template available for monitoring IPC.

Scope of improvement for monitoring IPC intervention

- Reporting template is to be developed for monitoring
- Focal/s to be assigned for monitoring IPC activities in border areas

Annex 2: Monitoring checklist for border entrances

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COVID-19: Monitoring Checklist for Infection Prevention & Control Practices in Isolation centers

Checklist details

The objective of the checklist is to follow up and support the IPC practices in point of entry (POE) or border entrances. Pillar 6 teams will monitor the IPC practices in the border entrances on a routine basis and will provide necessary supports for IPC implementation.

How to fill up the checklist: Please use a variety of methods: discussing with relevant authority, health workers; check documentations (meeting minutes, reports, monitoring schedule, tools etc.), observe practice, physical checking of situation. For every yes, there will be 1 point given and each yes answer is to be ticked in the box for further categorization of the status. Remark's column requires to be filled to provide the justification of the scoring.

The final score that will result from filling up the checklist will provide an indication on the performance of each category of places. The monitoring team will share the findings with the respective authorities. This will guide them to prepare their action plan to fix identified areas. In case where the information is not available, code 99 may be used and 88 can be used where the situation is not applicable.

After completion of filling up the checklist and summarization of scoring, the team will share the findings to the isolation authority. Necessary supports will be ensured from relevant departments for the border IPC management.

	Administration				
1	Does the POE have a dedicated team/focal person to monitor IPC implementation?				
2	Do the IPC team/focal person review IPC activities regularly?				
3	Does the POE have a system to keep records (inventory) including register, records of stocks etc related to IPC logistics, supplies?				
4	Is there a crisis management plan to meet up shortage of PPE, IPC supplies?				
5	Does the POE maintain a rotational shift and back up planning for staffs involved in IPC?				
	Guideline and orientation				
6	Does the POE have any protocol/guideline for IPC practices? (Please check all available guidelines and write in the remarks section)				
7	Are the staffs oriented on IPC protocol/guideline? (Please write the details in the remarks section, i.e, training by whom and duration)				
8	Are the staffs oriented on how to use PPEs? (Please write the details in the remarks section, i.e, training by whom and duration)				
9	Are critical staffs (i.e, cleaners) oriented on IPC on a regular basis? (Please ask the details on any schedule for orientation or relevant documents)				
10	Are the relevant staffs oriented on calculating and managing IPC supplies including PPEs?				
	Logistic availability				
11	Does the POE have adequate personal protective equipment (PPE)? (Please check stocks, talk to manager if they had stock-out any time, write details in remarks)				
12	Are the PPEs available to all staffs? (Ask the process to obtain PPE by staffs)				
13	Does the POE have adequate stock of disinfectants? (Check stocks, talk to manager, cleaners)				
14	Does the POE have adequate hand-washing materials (i.e, soap, alcohol-based hand sanitizer)?				

15	Does the POE have colour-coded waste bins?				
	Information, dissemination and communication				
16	Does the POE have dedicated staff/s for counseling on IPC practices?				
17	Does the POE have a system to make aware the suspected/isolated (temporary isolation until they are sent to the isolation center) individuals on the precautionary measures?				
18	Does the POE have displayed information on IPC (leaflets, posters) at strategic places (entrance, staff rooms etc)?				
19	Are there displayed posters on hand washing techniques near the HH stations?				
20	Do the staffs have access to information related to IPC practices? (Ask them if they can ask for information from someone)				
	Infrastructure including hand washing facilities and practices				
21	Does the POE have running water?				
22	Does the POE have adequate hand hygiene facilities				
23	Are the HH facilities well equipped?				
24	Do all staffs have access to the hand washing facilities?				
25	Is there a designated area for donning & doffing PPE?				
26	Is there a hand washing station (soap withdispenser / hand sanitizer) located at donning & doffing areas?				
27	Does the POE have dedicated area(s) for the disinfection and sterilization of biomedicalequipment and material devices?				
28	Does the POE have well-ventilated singlerooms/space having beds at 1–2 meter distance for temporary lodging of the suspected/confirmed cases?				
	Monitoring on IPC				
29	Does the POE have a system to observe handwashing practices?				

30	Does the POE have a system to observe staff's PPE wearing practices?				
31	Does the POE have a system to observe IPC practice of the temporary isolated individuals (PPE wearing, HH, Respiratory hygiene?)				
32	Does the POE have a system to monitor waste management and disposal (following guideline)?				
33	Are linens used by the cases/suspected cases being cleaned (using regular laundry soap and water or machine wash at 60-90 °C) regularly and dried thoroughly?				
34	Is there any protocol /a regular schedule for cleaning and disinfection of working surfaces?				
35	Is there any protocol /a regular schedule for cleaning and disinfection of rooms/spaces used by isolated cases?				
36	Is a PPE breach log in place and being maintained?				
	Environmental cleaning				
37	Does the center allocate designated personnel for supervising the environmental cleaning?				
38	Are the frequently touched surfaces being cleaned and disinfected on a daily basis with regular disinfectant (containing a diluted bleach solution (that is, 1-part bleach to 99 parts water)?				
39	Are the bathrooms, toilet surfaces beingcleaned and disinfected on a daily basis with regular disinfectant?				
40	Do the cleaning personnel use gloves during cleaning activities?				
	Total score				
	Percentage obtained (Score obtained/max score*100)				

Annex 3: PPE recommendation: Timor-Leste (point of entry)

Setting[1]	Scenario	Medical Mask	Fabric Masks	Respirator or N95 mask	Gown	Medical gloves	eye protection (goggles or face shield)	Boots/ or closed toed shoes	Apron	Heavy duty glowes
Points of Entry	**Screening Staff** • Who do NOT come into contact with and maintain1 meter distance with those crossing borders	■								
	Screening Staff • In cases when staff comesin physical contact with a suspect or confirmed COVID 19	■			■	■	■			
	Cleaners & waste management workers • When cleaning/entering the room of confirmed or suspicious COVID 19 patients	■			■		■	■		■
	Health worker • Direct care/physical exam(suspicious or confirmed)	■			■	■	■			
	Health worker • No direct care / physicalexam (suspicious or confirmed)	■								

[1] Wearing PPE is not a replacement for diligent hand washing on a frequent basis, respiratory etiquette, and maintaining 1-meter distance when possible. PPE must be worn in addition to preforming these 3 critical activities.

Annex 4: Cleaning protocols during Isolation – for households and facilities

Cleaning and disinfection procedures must be followed consistently and correctly. Cleaning staff and caregivers need to be educated about and protected from COVID-19 and ensure that surfaces are regularly and thoroughly cleaned throughout isolation.

- Clean and disinfect frequently touched surfaces daily with a regular household disinfectant containing a diluted bleach solution. This includes: door handles, bedside tables, bed frames, taps, window frames and other frequently touched surfaces
- Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing a diluted bleach solution.
- Clean clothes, bed linens, and bath and hand towels using regular laundry soap and water or machine wash at 60-90 °C (140–194 °F) with common laundry detergent, and dry thoroughly. Do not shake soiled laundry and avoid contaminated materials coming into contact with skin and clothes.
- If machine washing is not possible, these items can be soaked in hot water and soap in a large drum using a stick to stir and being careful to avoid splashing. The drum should then be emptied, and the items soaked in 0.05% chlorine for approximately 30 minutes. Finally, the items should be rinsed with clean water and allowed to dry fully in the sunlight. Liquid from these different steps should be emptied away from people and from water that is used for drinking, cleaning or swimming. 0.05% chlorine can be made from household bleach using 5ml (1teaspoon) of bleach mixed with 500ml (2 cups) of water.
- Disposable gloves and protective clothing (e.g. plastic aprons) should be used when cleaning surfaces, handling used plates, cutlery or other personal items, or handling clothing or linen soiled with body fluids. Hand hygiene should be performed before putting on and after removing gloves.
- Where appropriate, utility gloves may be used. They should be cleaned immediately after use with soap and water and decontaminated with household disinfectant.
- Gloves, masks, and other waste generated while a person is in isolation should be placed into a waste bin with a lid in the patient's room before disposing of it as infectious waste and not in an unmonitored open area.

Note: A diluted bleach solution is 1 part bleach to 99 parts waters. For surfaces that cannot be cleaned with bleach, 70% ethanol or an appropriate local product can be used.

Annex 5: IPC in isolation rooms or areas[15]

3.1 PREPARATION OF THE ISOLATION ROOM OR AREA

- Ensure that appropriate handwashing facilities and hand-hygiene supplies are available.
- Stock the sink area with suitable supplies for handwashing, and with alcohol-based hand rub, near the point of care and the room door.
- Ensure adequate room ventilation.
- Post signs on the door indicating that the space is an isolation area.
- Ensure that visitors consult the health-care worker in charge (who is also responsible for keeping a visitor record) before being allowed into the isolation areas. Keep a roster of all staff working in the isolation areas, for possible outbreak investigation and contact tracing.
- Remove all non-essential furniture and ensure that the remaining furniture is easy to clean, and does not conceal or retain dirt or moisture within or around it.
- Stock the PPE supply and linen outside the isolation room or area (e.g. in the change room). Set up a trolley outside the door to hold PPE. A checklist may be useful to ensure that all equipment is available
- Place appropriate waste bags in a bin. If possible, use a touch-free bin. Ensure that used (i.e. dirty) bins remain inside the isolation rooms.
- Place a puncture-proof container for sharps disposal inside the isolation room or area.
- Keep the patient's personal belongings to a minimum. Keep water pitchers and cups, tissue wipes, and all items necessary for attending to personal hygiene, within the patient's reach.
- Dedicate non-critical patient-care equipment (e.g. stethoscope, thermometer, blood pressure cuff and sphygmomanometer) to the patient, if possible. Thoroughly clean and disinfect patient-care equipment that is required for use by other patients before use.
- Place an appropriate container with a lid outside the door for equipment that requires disinfection or sterilization.
- Keep adequate equipment required for cleaning or disinfection inside the isolation room or area, and ensure scrupulous daily cleaning of the isolation room or area.
- Set up a telephone or other method of communication in the isolation room or area to enable patients, family members or visitors to communicate with health-care workers. This may reduce the number of times the workers need to don PPE to enter the room or area.

3.2 WEARING AND REMOVING PERSONAL PROTECTIVE EQUIPMENT

- Before entering the isolation room or area, collect all equipment needed; perform hand hygiene with an alcohol-based hand rub (preferably when hands are not visibly soiled) or soap and water
- put on PPE in the order that ensures adequate placement of PPE items and prevents self-contamination and self-inoculation while using and taking off PPE; an example of the order in which to don PPE when all PPE items are needed is hand hygiene, gown, mask or respirator, eye protection and gloves, as illustrated in Fig. below.

3.3 LEAVING THE ISOLATION ROOM OR AREA

- Either remove PPE in the anteroom or, if there is no anteroom, make sure that the PPE will not contaminate either the environment outside the isolation room or area, or other people.
- Remove PPE in a manner that prevents self-contamination or self-inoculation with contaminated PPE or hands. General principles are:

[15] Infection prevention and control of epidemic-and pandemic-prone acute respiratory infections in health care. Geneva: World Health Organization; 2014 (accessed 27 February 2020). https://apps.who.int/iris/bitstream/handle/10665/112656/9789241507134_eng.pdf?sequence=1

- Remove the most contaminated PPE items first;
- Perform hand hygiene immediately after removing gloves;
- Remove the mask or particulate respirator last (by grasping the ties and discarding in a rubbish bin);
- Discard disposable items in a closed rubbish bin,
- Put reusable items in a dry (e.g. without any disinfectant solution) closed container; an example of the order in which to take off PPE when all PPE items are needed is gloves (if the gown is disposable, gloves can be peeled off together with gown upon removal), hand hygiene, gown, eye protection, mask or respirator, and hand hygiene (Fig. 3 below).

Perform hand hygiene with an alcohol-based hand rub (preferably) or soap and water whenever ungloved hands touch contaminated PPE items

3.4 CHECKLIST FOR ISOLATION ROOM OR AREA TROLLEY OR TABLE

The following items should be kept on the trolley at all times so that PPE is always available for health-care workers.

Equipment	**Stock present**
Eye protection (visor or goggles)	
Face shield (provides eye, nose and mouth protection)	
Gloves • reusable vinyl or rubber gloves for environmental cleaning • latex single-use gloves for clinical care	
Hair covers (optional)	
Particulate respirators (N95, FFP2, or equivalent)	
Medical (surgical or procedure) masks	
Gowns and aprons • single-use long-sleeved fluid-resistant or reusable non-fluid-resistant gowns • plastic aprons (for use over non-fluid-resistant gowns if splashing is anticipated and if fluid-resistant gowns are not available)	
Alcohol-based hand rub	
Plain soap (liquid if possible, for washing hands in clean water)	
Clean single-use towels (e.g. paper towels)	
Sharps containers	
Appropriate detergent for environmental cleaning and disinfectant for disinfection of surfaces, instruments or equipment	
Large plastic bags	
Appropriate clinical waste bags	
Linen bags	
Collection container for used equipment	

Annex 6: Steps to put on personal protective equipment (PPE) including gown[16]

[16]https://apps.who.int/iris/bitstream/handle/10665/150115/WHO_HIS_SDS_2015.1_eng.pdf?sequence=1

Annex 7: Steps to put on personal protective equipment (PPE) including coverall[17]

[17]https://apps.who.int/iris/bitstream/handle/10665/150116/WHO_HIS_SDS_2015.2_eng.pdf?sequence=1

Annex 8: Steps to take off personal protective equipment (PPE) including gown[18]

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]

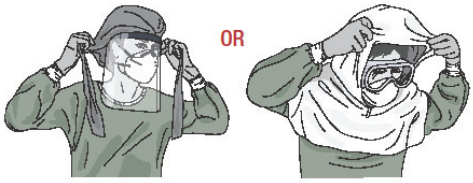
3 Remove apron leaning forward and taking care to avoid contaminating your hands. When removing disposable apron, tear it off at the neck and roll it down without touching the front area. Then untie the back and roll the apron forward.

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.

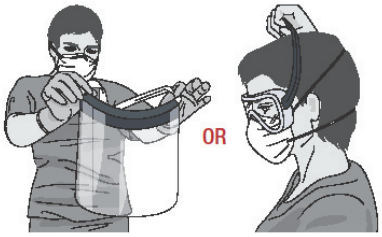


8 Perform hand hygiene on gloved hands.

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.

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.

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.

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

18 Perform hand hygiene.

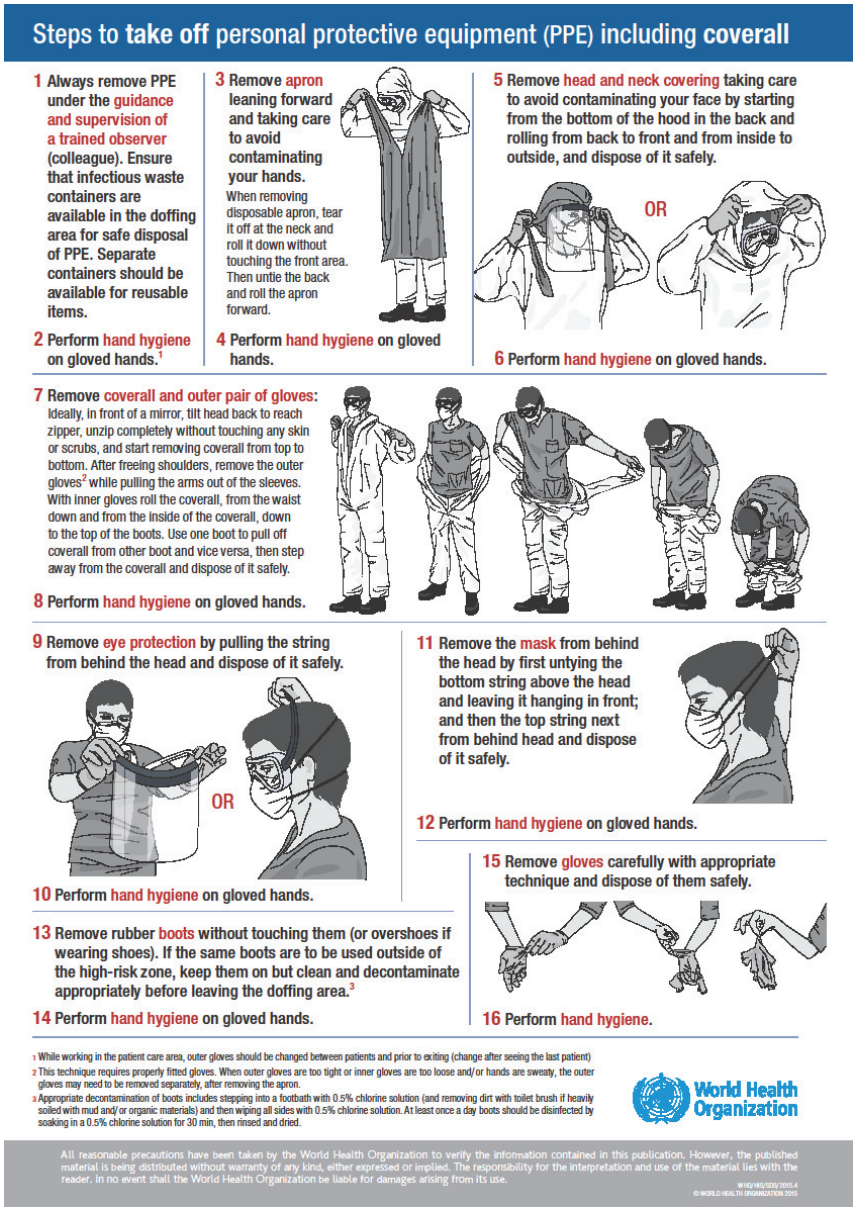
1 While working in the patient care area, outer gloves should be changed between patients and prior to exiting (change after seeing the last patient)

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.

World Health Organization

[18]https://apps.who.int/iris/bitstream/handle/10665/150117/WHO_HIS_SDS_2015.3_eng.pdf?sequence=1

Annex 9: Steps to take off personal protective equipment (PPE) including coverall[19]



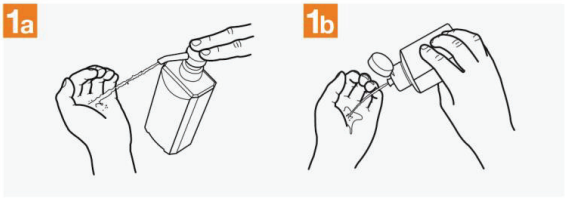
[19]https://apps.who.int/iris/bitstream/handle/10665/150118/WHO_HIS_SDS_2015.4_eng.pdf?sequence=1

Annex 10: How to handrub?[20]

How to handrub?

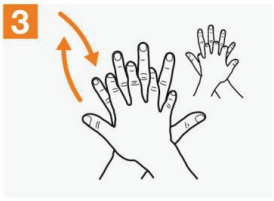
RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds



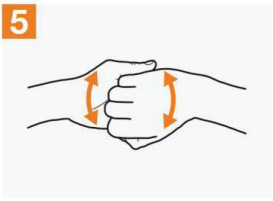
Apply a palmful of the product in a cupped hand, covering all surfaces;

Rub hands palm to palm;



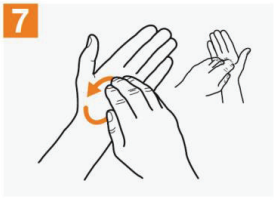
Right palm over left dorsum with interlaced fingers and vice versa;

Palm to palm with fingers interlaced;

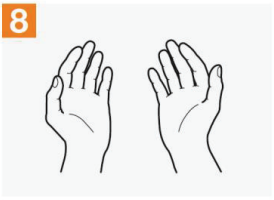


Backs of fingers to opposing palms with fingers interlocked;

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.

[20] World Health Organization & WHO Patient Safety. (2009). WHO guidelines on hand hygiene in health care. World Health Organization. https://apps.who.int/iris/handle/10665/44102

Annex 11: How to handwash?[21]

How to handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: 40-60 seconds

[21] World Health Organization & WHO Patient Safety. (2009). WHO guidelines on hand hygiene in health care. World Health Organization. https://apps.who.int/iris/handle/10665/44102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