

Standard Operating Procedure: COVID-19 Antenatal, Intrapartum, Postpartum and Obstetric Emergency Care; Forcibly Displaced Myanmar National / Rohingya Refugee Response

1. Antenatal, intrapartum, postnatal care, and management of obstetric emergencies in the context of COVID-19

The impact of COVID-19 on care services in settings with under-resources health systems is likely to be substantial. Maternity services should continue to be prioritized as an essential core health service to the extent possible throughout the various transmission phases / scenarios of the COVID-19 outbreak within the Cox's Bazaar district¹.

While pregnant women are not considered to be in the high-risk category for COVID-19, they are however, at increased risk of morbidity and mortality due to fear, stigma and declining access to skilled care due to diversion of resources. It is therefore essential that all health facilities continue to care for women seeking reproductive health services². This document gives guidance for medical providers to understand the care of both healthy and COVID suspect or confirmed patients who present for antenatal (ANC), intrapartum (IP), postnatal (PNC), or emergency obstetric and neonatal care (EmONC) in the context of caring for the forcibly displaced Myanmar national (FDMN) / Rohingya refugee population.

While it will not be addressed in this guidance note, it is imperative to also maintain services that align with the Minimum Initial Service Package (MISP) to prevent unwanted pregnancies through the provision of family planning services, prevention of sexual violence and care for survivors including clinical management of rape (CMR), and prevention and reduction of morbidity and mortality due to STI / HIV³. This document does not attempt to replace any established guidelines on reproductive health services during COVID-19, but does address the specific flow of patients who present to health facilities within the camp setting.

2. Infrastructure

Every health facility (i.e. health posts (HP), primary care centres (PHC), maternity stand-alone facilities and field hospitals) is required to have a dedicated area for screening at the point of entry to their facility, to be able to immediately screen <u>ALL</u> patients, visitors, and staff for potential signs and symptoms of COVID-19. The screening process is used to be able to early identify, isolate and transfer any potential suspect patient with COVID-19 to either a dedicated Isolation Unit (ISOU) or a Severe Acute Respiratory Infection Isolation and Treatment Centre (SARI ITC). (See screening tool in Annex)

Once a person is determined to meet the case definition for COVID-19⁴ they must be masked, brought to an identified isolation holding area. Wearing appropriate PPE, the health care worker (HCW) will then undertake further assessment and initiate treatment if required, whilst the patient awaits transfer to an ISOU or SARI ITC for testing and treatment. In the case that the PHC has a designated and approved ISOU (i.e. a dedicated internal or external space, which is separate away from the general triage population), then the patient can be brought immediately for admission for testing and treatment. (Note: testing is likely only available during the early phase of the response)

Maternal patients, in particular those that are experiencing an emergent need for care and who are screened and triaged as being a suspect patient by case definition will require immediate attention by HCWs.

A dedicated maternity room within the PHC facility should be available for use by staff in addition to the isolation holding area, which should be considered as a red zone for use in such a scenario. This room must be pre-equipped with the necessary equipment and consumables to be able to rapidly address the emergency whilst also adhering to IPC measures for COVID-19⁵ (PPE, WASH, donning and doffing area, solid waste management for infectious diseases etc.). The need for IPC and case management training is essential at the PHC level in the management of maternal cases during the COVID-19 response is essential or the risks to PHC staff will exceed the benefit of such an arrangement.

This dedicated maternity room can also serve for general SRH needs for those women who present to the facility with respiratory symptoms, but who do not meet case definition by screening. Robust cleaning and decontamination procedures (as per IPC standards), must be adhered to in-between patient use of this dedicated maternity red zone, if used in this scenario (see IPC Measures - section 3). During the low transmission phase PHC staff should be aware that it is not possible to attend to suspect patients in the same area as those that present with respiratory symptoms and do not meet the case definition of COVID-19 upon screening. Referral to an alternate facility will need to be considered after the immediate management of the emergent need for care has been undertaken.

3. IPC Measures

Midwives providing care during any clinical setting in the COVID-19 scenario, should adhere to strict IPC measures. The facility should have sufficient supplies of all PPE supplies (masks, gloves, goggles, gowns, hand sanitizer, soap and water, cleaning supplies) in the labour room. At the onset of the shift, it should be determined which midwives will be fixed to the red and green zone areas, and the staffing assignment should not change to minimize cross contamination. A solid understanding and implementation of rational use of PPE is necessary. (see Annex: IPC guidelines). All staff entering the green zones must use at minimum standard precautions, and all staff must implement general IPC measures including thorough hand washing with soap and water between every patient. Staff are also responsible to ensure that all persons understand respiratory hygiene (patients and staff) should cough into a tissue or their elbow and wash hands after coughing or sneezing. Midwives should avoid touching the eyes, nose and mouth. Midwives need to maintain social distancing of 2 arms lengths for as much as possible during any clinical encounter. Physical examination and patient contact can be continued as usual for women without suspected/confirmed COVID-19 if handwashing is performed before and after. Patients should remain at a minimum 1-meter distance from one another in the facility.

Remind women to wash their hands in the hand-washing stations established in patient care area after every contact with health worker or contact with other surfaces.

4. Management

All care outlined in the below scenarios must include respectful maternity care concepts, and consideration to evidence based care and national / international standards. The management of pregnant women during the COVID-19 pandemic will fluctuate as we move through the various stages of low \rightarrow high transmission phases. The ability of the PHC to provide safe and effective case management for maternal cases during this will be hinged on whether a patient is identified as meeting the standard case definition or not at the point of screening.

It is important to acknowledge that as the number of cases increase, and more pressure is placed on isolation and treatment bed capacity, resources are going to be stretched. In such a scenario, mild and moderate cases will have to self-treat at home, while the likelihood that symptomatic women will be infected by COVID-19 will increase.

1. Maternal Health Care Provision – Low Transmission Phase

- a. Non-COVID symptoms
- **b.** COVID / respiratory symptoms, but does not meet the case definition
- c. COVID symptoms and meeting case definition

2. Maternal Health Care Provision—High Transmission Phase

- a. Non-COVID symptoms
- **b.** Any respiratory symptoms consistent with COVID-19 infection
- c. Confirmed and self-isolating

1. N	1. MATERNAL CARE PROVISION LOW TRANSMISSION PHASE		
1 a.	NO COVID-19 Symptoms	ANC	Asymptomatic women should be provided with an ANC visit in line with global ANC standards. They should be in a separate area, and protected from exposure to people with COVID-19 symptoms. Consider encouraging cloth face cover for women ⁶ . While the WHO recommendation is for 8 total ANC visits ⁷ , during the pandemic all asymptomatic pregnant women should be encouraged to attend at least 4 ANC face-to-face visits if low risk and more if at high risk ⁸ . Midwives will ensure visits reflect risk in their care planning. In addition to routine pregnancy related education and health promotion, all women should receive teaching on protecting herself and her family from COVID-19, as well as the importance of facility delivery during the pandemic. Adhere to all IPC recommendations.
		PNC	Early discharge from the facility is recommended after uncomplicated delivery with healthy mother and baby (6 hours), and for cesarean (2 days). Alternate follow up may be considered in place of facility-based PNC visits when no tests or procedures are expected. Consider early (first 24 hours and within first week) assessments and have community health workers follow up in the home, if possible. If maternal or neonatal complications are identified they should be attended to appropriately or referred as is appropriate ⁹ . Adhere to all IPC recommendations.
separate area and Midwives providi precautions, and		IP	Asymptomatic women should be provided with appropriate intrapartum care in line with global standards . They should be in a separate area and protected from exposure to people with COVID-19 symptoms. Midwives providing this care should be fixed to the green zone area, and should adhere to rational use of PPE, use standard precautions, and general IPC measures including hand washing between every patient. If maternal or neonatal complications are identified they should be attended to appropriately or referred as is appropriate. Adhere to all IPC recommendations.
		EmONC	Patients with obstetric emergencies (including post abortion care) should be stabilized in the green zone using appropriate evidence-based care. Staff should use standard precaution PPE. Once stabilized, the midwife re-assesses to see if the patient needs CEmONC services, or needs emergent clinical management and if so, refers according to the non-COVID-19 referral pathway. Adhere to all IPC recommendations.
1 b.	Respiratory symptoms or fever but not meeting standard case definition	ANC	Same as 1 a., but the patient will wear a medical mask, be given very explicit health education including COVID-19 warning signs, and will be asked to come back to the facility only if symptoms have resolved for 3 days of more without the use of any medications, and at least 7 days have passed since the onset of symptoms <i>or for any medical emergencies</i> and visits can be completed in the green zone. Adhere to all IPC recommendations.
		PNC	The patient will wear a medical mask during the assessment. For mild respiratory symptoms, ensure an PNC check-up within 24 hours of delivery and discharge home if there are no other issues, with very explicit health education including COVID-19 warning signs.

			Ask the patient to come back to the facility only if symptoms have resolved for 3 days of more without the use of any medications, or for any medical emergencies. Consider holding the mother baby dyad (can stay in the green zone) if the mother is presenting with moderate symptoms for further monitoring. Mother must wear a medical mask always and be separated from other patients by a minimum distance of 1 meter. Adhere to all IPC recommendations.
		IP	A woman in labour, with mild or moderate respiratory symptoms can deliver in the maternity red zone if there are no other cases present. However, if other confirmed or suspect cases are present in the maternity red zone, then delivery should take place in the green zone, with a medical mask, and ensuring that she is at least one meter away from other patients. Adhere to all IPC recommendations.
		EmONC	Patients with obstetric emergencies (including post abortion care) can be stabilized in the maternity red zone, unless it is otherwise occupied with suspect or confirmed cases. In that case, stabilization can take place in the green zone using appropriate evidence-based care, using PPE that adheres to standard precautions. Once stabilized, the midwife re-assesses to see if the patient needs CEmONC services or is in need of emergent clinical management and if so, refers according to the non-COVID-19 referral pathway. Appropriate handover should be ensured so that the receiving facility understands the current non-COVID-19 symptoms, for close monitoring and to ensure the patient wears a medical mask. Adhere to all IPC recommendations.
1 c.	Meeting case definition (suspect) or confirmed positive	ANC	All women who are determined to meet case definition, or who are known to be confirmed positive must go to an isolation unit, or a SARI ITC. Face-to-face ANC visits can be re-established after discharge, and per international guidance ⁸ . Adhere to all IPC recommendations.
		PNC	All women who are determined to meet case definition, or are confirmed positive, must go to an isolation unit, or a SARI ITC. The risks of separating the baby from the mother outweigh the benefits of maintaining skin-to-skin and initiating early breastfeeding and bonding ^{1,10} . If the mother is severely ill and unable to breastfeed, consider separating the mother and baby but have expressed milk available for the neonate. Needed treatment in the maternity red zone until transfer. Mother must wear a medical mask when holding the baby and should be encouraged to hand wash frequently, including before and after breastfeeding. Midwives are using PPE that adheres to COVID-19 standards. CEmONC facility to stabilize SARI symptoms through recovery. Adhere to all IPC recommendations.
		IP	All women who are determined to meet case definition, must go to an isolation unit, or a SARI ITC for delivery. An assessment must be made prior to transport, and if there a chance that delivery will occur prior to arrival (second stage), she can deliver in the maternity red zone at the PHC. Transfer to isolation after delivery and assurance that both mother and baby are stable. Mother is wearing medical mask. Midwives are using PPE that adheres to COVID-19 standards. Adhere to all IPC recommendations.
		EmONC	Patients with obstetric emergencies (including post abortion care) can be stabilized in the maternity red zone, taking priority over other cases, using appropriate evidence-based care and using PPE that adheres to COVID-19 standards. Once stabilized, the midwife re-assesses to see if the patient needs CEmONC services, or needs emergent clinical management and if so, refers according to the COVID-19 referral pathway. Appropriate handover should be ensured so that the receiving facility understands that COVID-19 symptoms meet case definition, or patient is confirmed positive, for close monitoring, to ensure the patient wears a medical mask

			during procedures, and that midwives are using PPE that adheres to COVID-19 standards. CEmONC facility to stabilize SARI symptoms through recovery. Adhere to all IPC recommendations.		
2. N	2. MATERNAL CARE PROVISION HIGH TRANSMISSION PHASE				
2 a.	No COVID-19 symptoms	ANC	Midwives complete a routine risk assessment to identify high risk OB conditions to determine the need for, and frequency of face-to-face visits, or determine if the visit schedule can be modified. Women should be encouraged to attend at least 4 ANC face-to-face visits, per guidelines ² . Consider advising women with low risk pregnancies to postpone ANC visits during early pregnancy ¹ and prioritize visits for high risk and complications. Standard precautions for PPE. Consider encouraging cloth face cover for women. Adhere to all IPC recommendations.		
		PNC	Early discharge from the facility is recommended after uncomplicated delivery with healthy mother and baby (6 hours), and for cesarean (2 days). Standard precautions for PPE. Alternate follow up may be considered in place of facility-based PNC visits when no tests or procedures are expected. Consider early (first 24 hours and within first week) assessments and have community health workers follow up in the home, if possible. Consider encouraging cloth face cover for women. Adhere to all IPC recommendations.		
		IP	Asymptomatic women should be provided with appropriate intrapartum care in line with global standards. They should be in a separate area and protected from exposure to people with COVID-19 symptoms.		
			Midwives providing this care should be fixed to the green zone area, and should adhere to rational use of PPE, use standard precautions, and general IPC measures including hand washing between every patient. If maternal or neonatal complications are identified they should be attended to appropriately or referred as is appropriate. Consider encouraging cloth face cover for women. Adhere to all IPC recommendations.		
		EmONC	Patients with obstetric emergencies (including post abortion care) should be stabilized in the green zone using appropriate evidence-based care, using PPE that adheres to standard precautions. Once stabilized, the midwife re-assesses to see if the patient needs CEmONC services, or needs emergent clinical management and if so, refers according to the non-COVID-19 referral pathway. Consider encouraging cloth face cover for women. Adhere to all IPC recommendations.		
2 b.	Any respiratory symptoms consistent with COVID-19 infection	ANC	The midwife should have high clinical suspicion of COVID-19 infection; the patient will wear a medical mask including at home, be given very explicit health education including COVID-19 warning signs, maintaining at least 1-meter distance from others, and will be asked to come back to the facility for face-to-face care only if symptoms have resolved for 3 days or more without the use of any medications, and at least 7 days have passed since the onset of symptoms or for any medical emergencies which will take place in the maternity red zone. Adhere to all IPC recommendations.		
		PNC	The midwife should have high clinical suspicion of COVID-19 infection; patient will wear a medical mask during the assessment. The risks of separating the baby from the mother outweigh the benefits of maintaining skin-to-skin and initiating early breastfeeding and bonding ^{1,10} . If the mother is severely ill and unable to breastfeed, consider separating the mother and baby but have expressed milk available for the neonate. For mild respiratory symptoms, ensure an PNC check-up within 24 hours of delivery and discharge home if there are no other issues, with very explicit health education including COVID-19 warning signs, maintaining at least 1-meter distance from others. Ask the patient to come back to the facility only if symptoms have resolved for		

			3 days of more without the use of any medications, or for any medical emergencies. Consider holding the mother baby dyad (stay in the maternity red zone) if the mother is presenting with moderate symptoms for further monitoring, or transfer to the SARI ITC if beds are available. Patient must wear a medical mask always and be separated from other patients by a minimum distance of 1 meter. Adhere to all IPC recommendations.		
deliver in the matthe patient become		IP	A woman in labour with mild or moderate respiratory symptoms must wear a medical mask for the duration of her stay, and deliver in the maternity red zone given the potential for infection. Attention should be made to monitor respiratory status and if the patient becomes unstable, or presents with any moderate symptoms of COVID-19, they must be referred to a SARI ITC. Midwives are using PPE that adhere to COVID-19 standards. Adhere to all IPC recommendations.		
		EmONC	Patients with obstetric emergencies (including post abortion care) must be stabilized in the maternity red zone, taking priority over other cases, using appropriate evidence-based care. Once stabilized, the midwife re-assesses to see if the patient needs CEmONC services, or needs emergent clinical management and if so, refers according to the COVID-19 referral pathway. Appropriate handover should be ensured so that the receiving facility understands that symptoms are consistent with COVID-19. CEmONC facility to stabilize SARI symptoms through recovery. Patient wears a medical mask. Midwives are using PPE that adheres to COVID-19 standards. Adhere to all IPC recommendations.		
2 c.	Confirmed and self-isolating* (*This will only occur during the transition phase	ANC	The patient will wear a medical mask at home, she and her family will be asked to remain in isolation for the duration of the illness, and family remains in home isolation with patient. Patient to be given very explicit health education including COVID-19 warning signs, maintaining a minimum 1-meter distance from others. Patient will be asked to come to the facility only if symptoms have resolved for 3 days of more without the use of any medications, and at least 7 days have passed since the onset of symptoms or for any medical emergencies which will be addressed preferably in a SARI ITC, or if beds are unavailable, in the maternity red zone. The patient will be eligible for home care visits with a CHW, and health care worker if needed. See home care guidance note for more information. Adhere to all IPC recommendations.		
	high transmission if the patient is in isolation and stable, and she is discharged home to free the bed for a severe or	PNC	For mild respiratory symptoms, ensure an PNC check-up within 24 hours of delivery and discharge home if there are no other issues for home care and isolation, with very explicit health education including COVID-19 warning signs, maintaining a minimum 1-meter distance from others, family remains in home isolation with patient. The risks of separating the baby from the mother outweigh the benefits of maintaining skin-to-skin and initiating early breastfeeding and bonding ^{1,10} . If the mother is severely ill and unable to breastfeed, consider separating the mother and baby but have expressed milk available for the neonate. Ask the patient to come back to the facility only if symptoms have resolved for 3 days of more without the use of any medications, or for any medical emergencies. Consider referral to SARI ITC if beds are available, or if no beds, holding the mother baby dyad (stay in the maternity red zone) for further monitoring if the mother is presenting with moderate symptoms. Mother must wear a medical mask always and be separated from other patients by a minimum distance of 1 meter. See home care guidance note for more information. Adhere to all IPC recommendations.		
	critical case)	IP	During high community transmission, mild and moderate confirmed infections will not be universally admitted to an isolation unit or SARI ITC due to bed and staffing capacity. However, women who have been confirmed and are self-monitoring at home, who are in labour should be referred to a SARI ITC, or isolation facility that is equipped for delivery. Women with precipitous labour can		

		deliver at the PHC in the maternity red zone. Midwives are using PPE that adheres to COVID-19 standards. Presentations of moderate COVID-19 infection should be emergently referred to a SARI ITC for further management. Patient wears a medical mask. Adhere to all IPC recommendations.	
		EmONC	Patients with confirmed COVID-19 with obstetric emergencies (including post abortion care) can be stabilized in the maternity red zone, taking priority over other cases, using appropriate evidence-based care. Once stabilized, the midwife re-assesses to see if the patient needs CEmONC services, or needs emergent clinical management and if so, refers according to the COVID-19 referral pathway. Appropriate handover should be ensured so that the receiving facility understands that the patient has laboratory confirmed COVID-19. Close monitoring of obstetric and respiratory status is needed. Ensure the patient wears a medical mask during procedures, and that midwives are using PPE that adheres to COVID-19 standards. An obstetric patient in the maternity red zone of a PHC can be monitored and when stable, can be sent for isolation at home; family members must also be encouraged to remain indoors until symptoms resolve. The patient will be eligible for home care visits with a CHW, and health care worker if needed. See home care guidance note for more information. Adhere to all IPC recommendations.

Educational topics to be discussed with women

- Caring for yourself and others at home
- Handwashing
- Using Face covering safely
- Breastfeeding and COVID
- Pregnancy and COVID
- Importance of Family Planning during COVID
- COVID and risk of GBV

References

¹ https://iawg.net/resources/programmatic-guidance-for-sexual-and-reproductive-health-in-humanitarian-and-fragile-settings-during-covid-19-pandemic

² https://www.unfpa.org/resources/covid-19-technical-brief-maternity-services

³ https://cdn.iawg.rygn.io/documents/MISP-Reference-English.pdf?mtime=20200322131753&focal=none#asset:26025

⁴https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/surveillance-and-case-definitions

⁵ https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125

⁶ https://www.who.int/influenza/publications/public health measures/publication/en/

⁷https://asiapacific.unfpa.org/en/publications/covid-19-technical-brief-antenatal-care-services

8 https://asiapacific.unfpa.org/en/publications/covid-19-technical-brief-postnatal-care-services

9http://www.mohfw.gov.bd/index.php?option=com_docman&task=doc_download&gid=22424&lang=en_

Additional references:

Regional guidance on SRMNCAH in COVID-19: https://asiapacific.unfpa.org/en/publications/continuing-essential-sexual-reproductive-maternal-neonatal-child-and-adolescent-healt-0

Government of Bangladesh – MoHFW Rational Use of PPE:

http://www.mohfw.gov.bd/index.php?option=com_content&view=article&id=660%3Arational-use-of-personal-protective-equipment-for-covid-19&catid=36%3Alatest-news&lang=en

Annex:

Standard precautions

- Hand hygiene (soap-water for 20+seconds or hand sanitizer/70% ethanol- rubbing till dry)
 - 5 critical moments
 - Immediately before touching a patient
 - Before cleaning/aseptic procedure
 - After contact with body fluids
 - After touching patient
 - After touching patient's surrounding environment or surfaces
 - Additional moments for hand hygiene
 - Immediately upon arrival at work
 - Before putting on gloves
 - After removing gloves
 - Before medication preparation
 - Before preparing, handling, serving, or eating food
 - Before feeding a patient
 - Immediately upon arrival at home

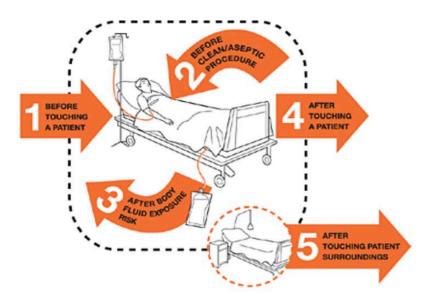


Figure: WHO recommended five-moments for hand hygiene

- Respiratory hygiene and cough etiquette
 - o Cover cough/sneeze into arm or elbow or us cloth or tissue
 - o Throw tissue into covered waste bin immediately; wash cloth frequently with soap and water
 - Wash hands immediately after
 - Avoid touching eyes, nose or mouth
- Standard cleaning and waste management

https://www.cdc.gov/hai/prevent/resource-limited/index.html

• Decontamination of environmental surfaces-

 $\frac{\text{https://apps.who.int/iris/bitstream/handle/10665/331846/WHO-2019-nCoV-IPC\ WASH-2020.3-eng.pdf}$

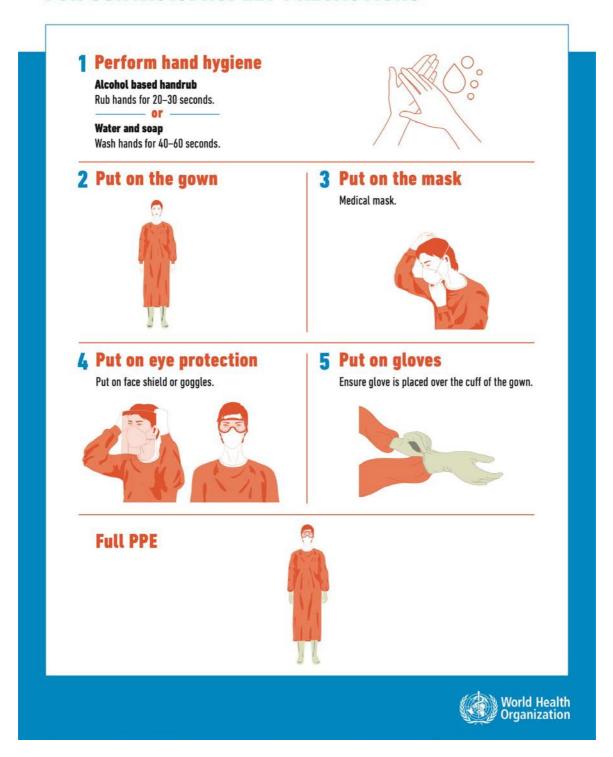
Recommended PPE during the outbreak of COVID-19 outbreak, according to the setting, personnel, and type of activity

Setting	Target personnel or patients	Activity	Type of PPE or procedure			
Health care facilities						
Inpatient facilities						
Screeningi Clinical triage for prioritization of care according to severity (e.g. Manchester classification) should	Health care workers	Preliminary screening not involving direct contacto-	Maintain physical distance of at least 1 metre. Ideally, build glass/plastic screens to create a barrier between health care workers and patients No PPE required. When physical distance is not feasible and yet no patient contact, use mask and eye protection.			
be performed in separate area for individuals with symptoms and signs	Patients with symptoms suggestive of COVID-19	Any	Maintain physical distance of at least 1 metre. Provide medical mask if tolerated by patient. 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 1 metre from other patients. Perform hand hygiene and have the patient perform hand hygiene			
	Patients without symptoms suggestive of COVID-19	Any	No PPE required Perform hand hygiene and have the patient perform hand hygiene			
Patient room/ward	Health care workers	Providing direct care to COVID-19 patients, in the absence of generating procedures	Medical mask Gown Gloves Eye protection (goggles or face shield) Perform hand hygiene			
	Health care workers	Providing direct care to COVID-19 patients in settings where aerosol-generating procedures are frequently in placeii	Respirator N95 or FFP2 or FFP3 standard, or equivalent. Gown Gloves Eye protection Apron Perform hand hygiene			
	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 is anticipated) Closed work shoes Perform hand hygiene			
	Visitors ^b	Entering the room of a COVID-19 patient	Maintain physical distance of at least 1 metre Medical mask Gown Gloves Perform hand hygiene			

 $\frac{https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages$

Donning PPE: Greatest risk of cross contaminating patients if now used correctly.

HOW TO GUIDE - PUTTING ON PPE FOR CONTACT/DROPLET PRECAUTIONS



<u>Doffing PPE:</u> Biggest risk to HCW is when they remove their PPEs, especially if temporarily (i.e. moving mask down to talk). Gloves and mask are the most heavily contaminated.

HOW TO GUIDE - TAKING OFF PPE FOR CONTACT/DROPLET PRECAUTIONS

