Kingdom of Cambodia

Nation Religion King

Ministry of Health

Cambodia COVID-19 Emergency Response Project (P173815), the First Additional Financing(P174605) and the Second Additional Financing (P176212)

UPDATED ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

May 21, 2021

Abbreviations and Acronyms

CCE	Communication and Community Engagement
CCERP	Cambodia COVID-19 Emergency Response Project
COVID-19	Coronavirus Disease 2019
CERC	Contingent Emergency Response Component
EHSG	Environment, Health and Safety Guidelines
EOC	Emergency Operation Center
ESCP	Environment and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standard
GRM	Grievance Redress Mechanism
H-EQIP	Health Equity and Quality Improvement Project
IDA	International Development Association
IBRD	International Bank for Reconstruction and Development
IHR	International Health Regulations
IPF	Investment Project Financing
IMF	International Monetary Fund
JEE	Joint External Evaluation
LMP	Labor Management Procedures
M&E	Monitoring and Evaluation
MPA	Multiphase Programmatic Approach
MOH	Ministry of Health
NDVP	National Deployment and Vaccination Plan
NIP	National Immunization Program
NIPH	National Institute of Public Health
OHS	Occupational Health and Safety
PDO	Project Development Objective
PMD	Preventive Medicine Department
RGC	Royal Government of Cambodia
SEP	Stakeholder Engagement Plan
SOP	Standard Operational Procedures
SRA	Stringent Regulatory Authorities
VHSG	Village Health Support Group
WBG	World Bank Group
WHO	World Health Organization

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EXECUTIVE SUMMARY

1. This updated Environmental and Social Management Framework (ESMF) is to support the environment and social due diligence provisions for three packages of activities: 1) activities financed by the World Bank Group for the Cambodia's COVID-19 Emergency Response Project (P173815) referred to as the "parent project"; 2) activities financed by the Pandemic Emergency Financing Facility (PEF) as the first additional financing (P174605), referred to as AF1; and 3) the activities financed by the Health Emergency Preparedness and Response Trust Fund (HEPRTF), as the second additional financing (AF2) of the Project to support the national deploymentand vaccination plan for COVID-19 vaccines (P176212). These three packages together are called the Project. The objective of the updated ESMF is to assess and mitigate potential negative environmental and social (E&S) risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank Environmental and Social Framework (ESF).

Project Description

2. The parent project supports RGC in addressing critical country-level needs for preparedness and response to COVID-19. The activities under each component of the parent project were designed to support selected containment as well as mitigation related activities which the RGC identified in the COVID-19 Master Plan. The parent project has four components: Component 1 - Case Detection and Management[1]; Component 2 - Medical Supplies and Equipment; Component 3 - Preparedness, Capacity Building and Training; and Component 4 - Project Implementation and Monitoring. A detailed description of the project can be found on the WB's external website[2].

3. The first additional financing (AF1) from Pandemic Emergency Financing Facility (PEF) Insurance in the amount of US$1.146 million was allocated to increase the allocation to Component 1.1 of the parent project for laboratory equipment and consumables, allowing for building diagnostic capacity of the four regional laboratories and 9 provincial laboratories along the borders with Vietnam, Thailand and Lao PDR.

4. The additional financing from Health Emergency Pandemic Response Multi Donor Trust Fund (AF2) in the amount of US$3.5 million will entail the addition of a sub-component 1.2: "Deployment of COVID-19 Vaccination". This new sub-component aims to strengthen the cold chain capacity and logistics to deploy vaccines that meet the World Bank's Vaccine Approval Criteria[3] but the support will strengthen systems for the delivery of all vaccines.

[1] The AF2 proposed changes to Component 1 of the parent project, "Case Detection and Management", to be renamed as "Emergency COVID-19 Prevention and Response" to align it with the MPA. The activities in the parent project under Component 1 will remain unchanged but become sub-component 1.1 titled "Case Detection and Management".

[2] *World Bank. 2020. Cambodia – Cambodia COVID-19 Emergency Response Project. Washington, D.C.: World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/737031585950801934/cambodia-covid-19-emergency-response-project.*

[3] On April 16, 2021, the Board approved a revised VAC for COVID-19 vaccines with threshold for eligibility of COVID-19 vaccine acquisition and/or deployment under all Bank-financed projects: i) the vaccine has received regular or emergency licensure or authorization from at least one of the Stringent Regulatory Authorities (SRAs) identified by WHO for vaccines procured and/or supplied under the COVAX Facility, as may be amended from time to time by WHO; or (ii) the vaccine has received WHO Prequalification (PQ) or WHO Emergency Use Listing (EUL).

Applicable World Bank Environmental and Social Standards

5. The Environmental and Social risk associated with the Project, together with the activities under the first and second additional financings, is classified as 'Substantial'. Six of the ten Environmental and Social Standards (ESSs) of the WB's Environmental and Social Framework (ESF) have been screened as relevant: ESS1 Assessment and Management of Environmental and Social Risks and Impacts, ESS2 Labor and Working Conditions, ESS3 Resource Efficiency and Pollution Prevention and Management; ESS4 Community Health and Safety, ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities, and ESS10 Stakeholder Engagement and Information Disclosure. The ESMF also takes into account national legal requirements as well as the application of international protocols for infectious disease control and medical waste management.

6. WBG Environment, Health and Safety (EHS) Guidelines will apply to the extent relevant as well as appropriate current WHO Guidance on COVID-19 (see resources appendix) including on "healthcare facilities", "waste management", "hazardous materials management", and "construction and decommissioning".

7. In addition to World Bank ESSs, the project will comply with Cambodia's Environmental and Social Regulatory Framework. Applicable laws and regulations include, but are not limited to, the Law on Environmental Protection and Natural Resource Management, Labor Law and relevant Sub-Decrees such as the Sub-decree on Solid Waste Management, the National policy on HCWM, Prakas on HCWM, and National guidelines for IPC for healthcare facilities

Environmental and Social Risks and Impacts

8. The parent project will be national in coverage and scope. No major civil works are expected in this project, except for some minor renovation or rehabilitation of laboratories within existing health facilities. The parent project will support the rehabilitation of existing buildings within state land only, and no land acquisition or involuntary resettlement impacts are expected. As a result, there is no impact or risks to critical natural habitats, protected areas, or cultural sites. However, the COVID-19 Preparedness and Response operations of laboratories (equipment, reagents /chemicals) as well as quarantine and isolation centers may have considerable environmental and social impacts, such as those related to medical and general waste disposal, and the potential for transmission of the COVID-19 virus if prevention protocols are not followed.

9. Moreover, the rehabilitation/upgrade/renovation of health care facilities of the parent project may generate limited adverse impacts such as dust, noise, vibration, building waste, wastewater, traffic obstruction, safety issues, construction worker hygiene and sanitation for the environment and surrounding residents. These impacts are assessed to be site-specific, temporary and can be mitigated with good design and construction practices using environmental and social management plans, or checklists / codes of practice.

10. The second AF could cause environmental and community health and safety related risks from inadequate and improper cold chain storage of vaccines, insufficient personal protective equipment (PPE) for healthcare workers, handling and transportation practices leading to vaccine quality deterioration, vaccination waste such as sharps and vials, and GHG emissions from cold chain logistics and storage of vaccines.

11. Medical wastes and chemical wastes (including water, reagents, infected materials, etc.) from the labs, quarantine, and screening posts to be supported (with drugs, supplies and medical equipment) and wastes generated by vaccination (needles, syringes, vials, face masks, gloves, etc.) can have a significant impact on the environment and human health, in particular the potential for transmission of COVID-19.

12. In addition, the operation of quarantine and isolation centers needs to be implemented in a way that staff, patients, and the wider public will follow and must be treated in line with international best practice as outlined in WHO guidance for COVID-19 response and National Guidelines for Infection Prevention and Control for healthcare facilities. The Stakeholder Engagement Plan (SEP) will also ensure widespread engagement with communities to disseminate information related to community health and safety, particularly around social distancing, high risk demographics, self-quarantine, and mandatory quarantine.

13. Other risks from the parent project and both the first and second AF include: (i) Sexual Exploitation and Abuse (SEA), Gender-Based Violence (GBV) and Violence Against Children (VAC), which are addressed in the ESMF mitigation measures, the LMP and Codes of Conduct (CoC). Gender considerations are also part of all project components (parent project, AF1 and AF2), particularly as many health workers in the country are women.

14. Most activities supported by the parent project and AF1 will be conducted by health- laboratory workers, i.e.civil servants employed by the Government of Cambodia, including non-medical hospital staff (such as cleaners and drivers), and professional consultants and contractors. The key risk for these workers is contamination with COVID-19 (or other contagious illnesses). The risk exposure groups of the activities associated with vaccine deployment financed by the AF2 mainly include: (1) Staff at the Central Medical Store (CMS);(2) healthcare workers including vaccinators and other auxiliary workers; (3) vaccine receivers as identified in the National Deployment and Vaccination Plan for COVID- 19 Vaccines; (4) Village Health Support Groups (VHSG)[4] who will engage the community to receive vaccines; and other officials from sub-national administrations who will engage in vaccine campaigns and awareness raising activities.

15. For vaccination, there would be some risks involving: (i) safety of injection, (ii) fear, trust, and safety of the vaccines, (iii) case management of populations for vaccination, (iv) community health and safety, (v) social inequity and risk of exclusion, (vi) stigma, discrimination, vaccine acceptance and misinformation, (vii) data privacy; and (viii) mandatory vaccination.

16. Labor Management Procedures (LMP) in the ESMF cover risks for entry into health care facilities; procedures for protection of workers in relation to infection control precautions; provision of immediate and ongoing training on the procedures to all categories of workers; training on the use of Personal Protection Equipment (PPE); and ensuring adequate Occupational Health and Safety (OHS) protections are in place. Also, the project will regularly integrate the latest guidance from WHO as it develops over time in addressing COVID-19. For COVID-19 vaccination, the vaccinator will follow the existing safety

[4] Village health support group (VHSG) has been established to represent the needs and concerns of village people at committee meetings for the planning, use, and management of local health facilities. VHSG helps to bridge the gap between villagers and health center by connecting them to important health services. VHSG members were selected among voluntary, trusted, and respected villagers in village. VHSG members are from grassroot communities including indigenous communities. Most of them are female, disabled, and poor people. They are vulnerable themselves and they have first-hand experience as vulnerable groups. Thus, they are good representation for local people specifically for vulnerable groups.

injection guideline developed by the MOH in 2014. In addition, a more specific training module on injection safety for COVID-19 vaccination to all vaccinators has been developed. Annex 6 provides details of the training module.

Environmental and Social Screening

17. The screening form for potential environmental and social issues is in Annex 1 of the ESMF. The purpose of screening is to: (i) determine whether activities are likely to have potential negative environmental and social risks and impacts; and (ii) identify appropriate mitigation measures. For activities with adverse risks or impacts, the mitigation measures are then incorporated into the activity implementation, e.g. through appropriate environmental and social management plans the implementation of which is monitored and reported.

Monitoring, Supervision and Reporting

18. The Project Management will prepare and submit to the World Bank regular biannual monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project, including but not limited to, medical waste management, stakeholder engagement activities, and an accidents and grievances log. The health facility management committee will be responsible for day to day supervision of the implementation of mitigation measures. The civil works supervision team will incorporate the status of the implementation of Environment and Social Management Plans (ESMP) and/or Environmental Codes of Conduct and Practice (ECOP), as relevant, into the monthly progress reports. The Preventive Medicine Department will be responsible for monitoring implementation of ESMF/ESMP, ECOP and SEP and report implementation progress in the project's semi-annual progress reports. These reporting requirements will be included as part of the project Operation Manual.

Implementation Arrangements and Responsibilities

19. Cambodia's National Pandemic Preparedness Plan was updated in 2019. The Ministry of Health (MOH), as the lead technical agency, is responsible for planning and oversight of the health sector response. The activities under the proposed second AF will be implemented by the Ministry of Health (MOH) and no change in implementation arrangement except with an additional technical department, Central Medical Store (CMS). CMS will be involved in project implementation, due to its core responsibility for the storage and distribution of vaccines and consumables. In addition to the above existing arrangements, the Inter-Ministerial Committee for Combating Covid-19 was established on 10 March 2020. Chaired by the Minister of Health, the Inter-Ministerial Committee consists of 15 members from relevant ministries/authorities. The Inter-Ministerial Committee is tasked to: (1) develop a response plan for the COVID-19 pandemic and any evolution of the virus; (2) implement the plan approved by the Royal Government of Cambodia; (3) conduct monitoring and evaluation of the implementation of activities to combat COVID-19; (4) conduct any operational re-planning based on changes in the situation of the COVID-19 pandemic; (5) report routinely to the Royal Government of Cambodia on the evolution of COVID-19; and (6) attend meetings at the invitation of the chairperson. The Department of Preventive Medicines (PMD) of the Ministry of Health has been appointed to manage environmental and social risks and impacts associated with the project.

Capacity Building

20. The project will provide funding, training and capacity building to manage risks associated with COVID-19 including diagnostic testing, quarantine and isolation centers for COVID-19 treatment and vaccination. Specific measures for public communication and handling social concerns around COVID-19 and vaccines are included. These critical initiatives will build upon international best practices in line with WHO guidelines.

Consultation and Stakeholder Engagement

21. The project has prepared and consulted on a Stakeholder Engagement Plan (SEP), which defines a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. It also outlines a communication strategy with project stakeholders, and offers mechanisms for them to raise concerns, provide feedback, or make complaintsabout the project. The SEP is a living document with objectives to:

- Identify all project stakeholders including their priorities and concerns, and ensure the projecthas ways to incorporate them;
- Identify strategies for information sharing and communication to stakeholders in ways that are meaningful and accessible;
- Specify procedures and methodologies for stakeholder consultations, documentation of the process and strategies for feedback;
- Establish an accessible, culturally appropriate and responsive grievance mechanism; and
- Develop a strategy for stakeholder participation in the monitoring of project impacts.

22. ***Consultations during Project Preparation.*** MOH's PMD conducted initial public consultations via group Telegram with relevant staff/health professionals on 25-31 March 2020 to inform them of the Project as well as to seek their feedback, views and suggestions regarding the project environmental and social risks and suggested mitigation measures. Some interesting aspects coming out of consultations with stakeholders in the health sector included the fact that some people in Cambodia, in particular in rural areas, continue to practice traditionaland religious beliefs as a way of 'chasing COVID-19 away' (such as by putting a scarecrow outside their house so the virus 'cannot enter'). These practices indicate that further actions are needed to enhance people's awareness regarding COVID-19 prevention.

23. Since there were no material changes to the ESMF with the scale-up activities under AF1, no additional public consultations have taken place for the first update of the ESMF. However, for COVID-19 vaccination (AF2), public consultations were conducted on 18-19 February 2021 with communities and vaccinators in order to understand their concerns and suggestions on COVID-19 vaccines. Feedback/risks received from this public consultation include: (i) inequity in arrangements for preferred groups to receive better quality vaccines and others to receive lower quality vaccines; (ii) shortage of vaccines and vaccination services when vaccines are trusted by the public; and (iii) people may feel that it is not necessary for them to get vaccinated because they perceive that all positive cases are successfully treated with zero deaths and vaccine receivers after being vaccinated can still be exposed to new variants of the

COVID-19 virus. The consultation also generated some suggestions including (i) strengthening management capacity of vaccination including increasing vaccination capacity, supplies, storage and transportation of vaccines, and applying penalized measures on stealing vaccines; (ii) enhancing communication and education campaigns and dissemination of information with active participation from involved institutions, local authorities, VHSGs, and civil societies, with messages that are clear, correct, and consistent to avoid confusion among people; and (iii) active cooperation with local authorities, VHSGs, and civil societies in collecting information about marginalized and disadvantaged groups. The results of consultations will be used to develop appropriate guidelines, trainings, and public awareness messages. The SEP will also be implemented alongside the government's Communication and Community Engagement (CCE) Strategy and Plan for COVID-19 vaccine deployment and vaccination, which provides timely and accurate information about the vaccines in order to ensure acceptance and support for the vaccines.

Grievance Redress Mechanism

24. A grievance redress mechanism (GRM) is part of the project ESMF, and SEP and has been established for the parent project COVID-19 ERP as well the second additional financing to resolve complaints and grievances in a timely, effective and efficient manner. Project related grievances can be submitted for detrimental impacts on the community, the environment, or on people's quality of life. Stakeholders may also submit comments and suggestions. The GRM provides complaint and resolution measures for any dispute, appropriate redress actions and avoids the need to resort to judicial proceedings. Grievances will be handled at each health facility, operational district, municipal/provincial referral hospital, provincial health department and at the national level by a Grievance Redress Committee which has a dedicated phone number. The Health Center Management Committee or local community can either lodge their complaints or feedback to HCs or hospitals by themselves or through VHSGs or the local authority. VHSG or the local authority will bring those complaints to the respective HCs or hospitals.

Budget

25. ESMF implementation costs are allocated to include training, development of E&S due diligence measures and tools, information and communication, and supervision, monitoring, and reporting. Funds are needed to hire consultant(s) to prepare ESS site specific EMPs and all associated E&S due diligence reports. Costs for undertaking travel to conduct monitoring and trainings are also identified. The anticipated cost for all these initiatives is estimated at US$65,000.

26. It is worth noting that there is a significant overlap in project activities that will be undertaken to achieve project objectives, and the risk management measures prescribed by the ESMF (infection control is an illustrative example). A good part of the Project budget will be used for very similar activities as those outlined in the ESMF, e.g. for training, laboratory safety, and information dissemination.

1. INTRODUCTION

27. This Environmental and Social Management Framework (ESMF) is updated to support the environment and social due diligence provision for three packages of activities: 1) activities financed by the World Bank Group for the Cambodia COVID-19 Emergency Response Project (P173815) referred to as

the ("parent project",2) activities financed by the Pandemic Emergency Financing Facility (PEF) as the first Additional Financing (P174605), referred to as AF1; and 3) the activities financed by the Health Emergency Preparedness and Response Trust Fund (HEPRTF), as the second additional financing (AF2) of the Project to support the national deployment and vaccination plan for COVID-19 vaccines (P176212). These three package together referred to "the project". The AF2 does not support procurement of vaccines. As declared by the Government, COVID-19 vaccination will be provided free of charge and on a voluntary basis to all Cambodians and foreigners who live and work in Cambodia, except for those civil servants and armed forces members who were mandated to be vaccinated against COVID-19. The vaccination of these groups has already been completed.

28. The objective of this ESMF is to assess and mitigate potential negative environmental and social (E&S) risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank Environmental and Social Framework (ESF). Specific objectives of the ESMF are to: (a) assess the potential E&S risks and impacts of the proposed Project and propose their mitigation measures; (b) establish procedures for the E&S screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring E&S issues and concerns related to the activities; (d) identify the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF. The ESMF also provides principles and specific processes to ensure that disadvantaged and vulnerable individuals or groups, including indigenous peoples, have access to the project's benefits

2. PROJECT DESCRIPTION

29. The Project Development Objective (PDO) of the parent project is to assist Cambodia in its efforts to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. The parent project supports the RGC to address critical country-level needs for preparedness and response to COVID-19. The parent project activities under each component were designed to support selected containment as well as mitigation related activities which the RGC identified in the COVID-19 Master Plan. The AF2 will not finance any civil works or any renovation activities. The parent project and AF2 include four components: Component 1 - Case Detection and Management; Component 2 - Medical Supplies and Equipment; Component 3 - Preparedness, Capacity Building and Training; and Component 4 - Project Implementation and Monitoring. A detailed description of the project can be found on the WB's external website[5].

30. The content of the components is adjusted to reflect the expanded scope and new activities proposed under the AF2. The current Component 1 of the parent project, "Case Detection and Management", will be renamed as "Emergency COVID-19 Prevention and Response" to align it with the MPA. The activities in the parent project under Component 1 will remain unchanged but become sub-component 1.1 titled "Case Detection and Management". A sub-component 1.2, "Deployment of COVID-

5 World Bank. 2020. Cambodia – Cambodia COVID-19 Emergency Response Project. Washington, D.C.: World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/737031585950801934/cambodia-covid-19-emergency-response-project.

19 Vaccination", described below, will be added. With the inclusion of this AF2, the cost for Component 1 will be revised, as will the disbursement estimates.

31. The AF2 will support investments to bring immunization systems and service delivery capacity to the level required to successfully deliver COVID-19 vaccines at scale, through Component 1 of the parent project. To this end, the AF is geared to assist the RGC, working with WB, WHO and other development partners, to overcome bottlenecks as identified in the COVID-19 vaccine readiness assessment in the country. The indicative list of activities to be supported relate to the gaps described above and cover: (a) service delivery; (b) training and supervision; (c) cold chain and logistics; (d) registration; and (f) demand generation and communication. TA will be provided to ensure that prioritized activities will be financed. These activities are further described below.

32. Sub-component 1.2 will finance activities associated with the cold chain, logistics and medical consumables for vaccine deployment. This support will include the procurement of cold chain equipment for storage of vaccines at national and sub-national levels, procurement of refrigerated trucks for timely and safe transportation and distribution of vaccines from the national level to regional and provincial levels, along with procurement of vaccination commodities such as syringes, needles, cotton and safety boxes. In addition, the support will include (a) the establishment (design and implementation) of a mechanism to provide identification of the defined at-risk groups and to register them; (b) design and implementation of campaigns to familiarize the population with issues related to vaccination and the roll out plan for the vaccines; (c) capacity building and training of health workers and VHSGs for appropriate and effective provision of the vaccines; (d) delivery of vaccines to reach difficult to access priority groups; and (e) building on support from WHO, management of vaccination waste, including ensuring proper waste collection, transportation and disinfection and disposal of vaccination waste. With the inclusion of AF2, the Cambodia COVID-19 ERP project components will be updated as follows:

Project Cost and Financing[6]

Project Components	Parent Project Cost (includes AF1 already processed) US$ million	Parent + AF Cost (US$ million)	IDA Financing	PEF Grant (AF1)	HEPRTF (AF2)
Component 1: Emergency COVID-19 Prevention and Response	**9.65**	**13.15**	**8.50**	**1.15**	**3.50**
Subcomponent 1.1: Case Detection and Management	9.65	9.65	8.50	1.15	-
Subcomponent 1.2: Deployment of COVID-19 Vaccination	-	3.5	-	-	3.50
Component 2: Medical Supplies and Equipment	**6.5**	**6.5**	**6.5**	**-**	**-**
Component 3: Preparedness, Capacity Building and Training	**3.5**	**3.5**	**3.5**	**-**	**-**
Component 4: Project Implementation and Monitoring	**1.5**	**1.5**	**1.5**	**-**	**-**

[6] The table is presented with the proposed renaming of Component 1, demoting original Component 1 to sub-component 1.1, and inclusion of proposed sub-component 1.2.

Total Costs	**21.15**	**24.65**	**20.00**	**1.15**	**3.50**

33. It is important to note that given the project focus on immediate priority activities, the project should avoid activities or subprojects with complex environmental and social aspects. To ensure that adverse impacts will not occur given the nature of the emergency, the items and activities identified in Table1 below are ineligible.

Table 1: Activities ineligible to be financed by the Project

- Any new construction
- Activities that have potential to cause any significant loss or degradation of critical natural habitats whether directly orindirectly.
- Activities that could adversely affect forest and forest health.
- Activities that could affect sites with archaeological, paleontological, historical, religious, or unique natural values.
- Activities that will result in the involuntary taking of land, relocation of households, loss of assets or access to assetsthat leads to loss of income sources or other means of livelihoods, and interference with households' use of land and livelihoods.
- Use of goods and equipment on lands abandoned due to social tension / conflict, or the ownership of the land is disputed or cannot be ascertained.
- Use of goods and equipment to demolish or remove assets, unless the ownership of the assets can be ascertained, and the owners are consulted.
- Uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor.
- Uses of goods and equipment for activities that would affect indigenous peoples unless due consultation and broad support has been documented and confirmed prior to the commencement of the activities.
- Uses of goods and equipment for military or paramilitary purposes;
- Activities that are connected with the use of security personnel;
- Activities that are linked with operation associated with mandatory or forced vaccination

Project Area and Beneficiaries

34. The project will be implemented countrywide. The expected project beneficiaries will be all Cambodians and foreigners who live and work in Cambodia, particularly people with COVID-19, at- risk populations, and health working at the national hospitals, referral hospitals, laboratories, isolation and treatment centers in 25 PRHs, laboratories attached to the National Institute of Public Health (NIPH), emergency operation centers (EOCs) across Cambodia. The Project will make specific efforts to reach the most vulnerable communities, including poor households, remote communities, ethnic minorities, female-headed households, people with a disability, and other populations that are at high risk of epidemic diseases.

35. The prioritization of the target population described in the NDVP follows a series of consultations with different departments and senior officials of MOH and development partners, and is based on the epidemiology/burden of disease, groups with higher risk of mortality, the country context and health system infrastructure, among others.

36. Under the approved NDVP, which was developed with technical support from WHO, 100% of health care workers, frontline armed forces/police and frontline government officials have been vaccinated in the first phase, or approximately 3.3% of the population. The second phase will focus on 100% of community focal persons and volunteers working on the vaccine roll-out, 50% of elderly and other adults, 50% of garment factory workers and 100% of transportation drivers and garbage collection workers, among others, including foreigners in these target groups, accounting for over 30% of the population. The remaining targeted adult population (30%) will be vaccinated in the third phase, for a

total of 62% of the population. While in the first phase of vaccination the NDVP priority groups do not specifically prioritize poor populations these vulnerable groups (including people living in densely populated areas such as slums or indigenous peoples, people with pre-existing conditions and special needs as well as with medical co-morbidities), will be fully covered in the following two phases of vaccination). As the implementation of the target groups in the phase 1 of NDVP has already been completed, this proposed AF2, once approved, will provide direct benefit to those vulnerable groups in phases 2 and 3.

Table 2: Priority Groups for Vaccination in Cambodia Distributed by Phases. The AF2 will support the deployment in Phase 2 and Phase 3

Phase	Population group	Number of people	% of population
First (Completed)	51. All health care workers (100%) 52. Frontline armed forces/police, (100%) 53. Frontline government officials, (100%)	499,721	3.1%
Second	1 Community focal person and volunteers (100%) 2 Elderly population (65 years above) (50%) 3 All adults from ≥ 16-64 years old including vulnerable groups (medical co-morbidities, ethnic minority, pre-existing conditions, people with special needs) (50%) 4 Moto taxi drivers, Tuk Tuk drivers, and others (100%) 5 Garbage worker and others (100%) 6 Garment Factory and construction site workers (50%) 7 Foreigners aged ≥ 16 years old per category of target groups mentioned in this table	4,849,177	30.1%
Third	67. Elderly population (65 years above) (50%) 68. All adults from ≥ 16-64 years old including vulnerable groups (medical co-morbidities, ethnic minority, pre-existing conditions, people with special needs) (50%) 69. Garment Factory and construction site workers (50%) 70. Foreigners aged ≥ 16 years old per category of targetgroups mentioned in this table	4,639,102	28.88%
Total		9,988,000	62%

3. POLICY, LEGAL AND REGULATORY FRAMEWORK

37. The Constitution of the Royal Kingdom of Cambodia (1993) is the overarching legal framework for the country and guarantees all Khmer citizens the same rights regardless of race, color, language, and religious belief. The constitution includes protections for social, indigenous, gender rights andequality (articles, 36, 45). It also includes provisions for the protection of workers (article 75) and workers' rights to establish associations (article 42) and representative unions (article 36). It specifically prohibits all forms of discrimination against women (article 45).

38. The ministries are technically and administratively represented and supported at the provincial, municipal, and district/commune levels by line departments and technical offices. The provincial departments are responsible and accountable to extend and implement the mandate of their parent ministries to the sub-national administrations including provinces, districts/municipalities, and communes/Sangkats.

39. For vaccination, the government will provide free COVID-19 vaccines to all adult aged 16 and above including foreigners living and working in Cambodia, on a voluntary basis and rolling out in three phases. A sub-decree issued on April 11, 2021 (No. 66 ANK-BK) makes vaccination mandatory for civil service employees, members of the armed forces, elected officials, and officials in the judicial system (3.1% of the country's population) unless they had a medical condition that would make vaccination a risk. The article 3 of this Sub-decree also stated that "COVID-19 vaccination shall be also mandatory for individuals based on their professions and infection risks associated with them as determined by the Ministry of Health". To date, this has not arisen, but the possibility cannot be excluded. The AF2 grant will only support vaccine deployment for priority groups on voluntary basis.. The screening process included in this ESMF has been revised to make any activities linked with mandatory vaccination ineligible for financing under the AF2.

40. These existing procedures will be used for COVID-19 vaccine registration for any WHO prequalified vaccines. Vaccines imported to Cambodia through other procurement routes will still benefit from expedited procedures, requiring less than a week of time. Central Medical Store (CMS), with the support from the MOH, will conduct the customs clearance from the airport.

41. CMS will conduct stock management and will keep all electronic and paper-based records about vaccines and vaccine distribution to sub-national levels and will share these with DDF for traceability purposes. CMS will also be the responsible agency to transport vaccines and supplies to all the provinces for the vaccination services/campaign by using the existing means of transport.

42. In October 2020, a meeting was convened among NIP, DDF and partners, and regulatory readiness was also assessed by using the Vaccine Introduction Readiness Assessment Tool (VIRAT). NIP has been working with the DDF for post deployment surveillance and reporting of adverse events following immunization (AEFI). DDF will also undertake planning and follow-up activities for the recall of vaccines in case of any serious adverse events (SAEs). MOH has updated the guideline for monitoring AEFI to apply during the COVID-19 vaccinations. Training on this guideline to vaccinators has been integrated into the training for vaccinators and supervisors.

43. To accelerate the rollout of the vaccination deployment in the face of a drastic rise in positive COVID-19 case numbers, the government has called on the military medical professionals to assist in deploying vaccine in selected areas with very high incidence in the capital Phnom Penh and Preah Sihanouk Province. The military medical professionals were trained on medical profession, and code of conduct and ethic is part of their training program. MOH's updated information confirms that that the military operates a health system that is entirely separate to the MOH system and under the control of the Ministry of Defense (MOD). Therefore, the AF2 resources will not be used to deploy vaccines by military personnel. The screening process included in this ESMF also makes any activities linked with the use of security personnel ineligible for financing under the AF2. The risks associated with the use of personnel is irrelevant for the AF2.

Environmental Assessment, Review and Permitting

44. The Ministry of Environment (MOE) is the primary agency tasked to promote environmental protection and conservation of natural resources, contributing to the improvement of environmental quality, public welfare, and the economy. The Environmental Impact Assessment (EIA) Department of the MOE oversees and regulates the EIA process, quality control on EIA reporting and coordinates the implementation of projects in collaboration with project executive agencies and concerned ministries.

45. The MOE has the following responsibilities:

- Review, evaluate, and approve submitted EIA in collaboration with other concerned ministries; and

- Monitor to ensure a project owner (the executing agency of the project) satisfactorily implements the Environment and Social Management Plan (ESMP) throughout pre-construction, construction, and operational phases of a project.

Infection Prevention and Control (IPC) and Health Care Waste Management (HCWM)

46. There is no specific regulation for hazardous waste management and substances in Cambodia. However, this aspect is in the Sub-Decree on Water Pollution Control Annex 1, and Sub- Decree on Solid Waste Management, which give details of classifications of what are defined as hazardous wastes and substances. Any hazardous wastes and substances must be stored correctly andonly disposed in a manner approved by MOE.

47. MOH is responsible for providing the legal framework managing environmental and social risksin the health sector. MOH has issued the following regulations and guidelines:

- National policy HCWM (2009) sets a goal that all healthcare waste will be handled and managed properly to avoid negative impacts on human health and environment. Cambodia is a signatory to the Stockholm Convention. The National Policy on HCWM sets an objective to put in practice HCW treatment technologies in line with the Stockholm Convention.

- Prakas on HCWM provides detailed regulations on definition, segregation, collection, transport, storage, treatment and disposal of healthcare waste. Alternative technologies such as autoclave and microwave are introduced in this Prakas.

- National guidelines for IPC in health facilities (2017) provide detailed measures and procedures for standard precautions, transmission-based precautions, and specific procedures for managing patients in isolation unit/centers. National guidelines are mostly consistent with WHO's guidelines for IPC in health facilities.

- Major health facilities including provincial and district hospitals have an IPC&HWM unit to be responsible for IPC and hospital waste management.

WHO Guideline and International Industrial Good Practice

- Environmental Health and Safety (EHS) Guidelines including those on "healthcare facilities", "waste management", "hazardous materials management", and "construction and decommissioning", and GIIP will be a reference for the project for handling the infection and prevention control given the rapid evolve of the COVOID-19 (see Annex 4).

Labor Legislation

48. Cambodia has national legislation that outlines workers' rights. The Labor Law (1997) remains the key document governing the regulatory framework for labor in Cambodia. The Labor Law defines non-discrimination in employment and in wages. It establishes a minimum wage level, which may vary between regions. Working hours are limited to 8 hours per day, 6 days a week. There are strong regulatory provisions against discrimination in the workplace, enhancing from a legal point of view fair treatment, non-discrimination and equal opportunity, special protection, and assistance to vulnerable workers. A whole chapter in the Law is dedicated to health and safety in the workplace. The Law also covers those who work for subcontractors.

49. Child labor remains a noticeable gap in the legal framework despite many years of participation in related international programs. The Labor Law defines 12 years old as the minimum working age for children, though 12-15-year-old are only meant to engage in certain light jobs, but this is not always closely monitored. The Prakas on the Prohibition of Hazardous Child Labor (2004) allow hazardous work for well-trained children above 16, provided it is not night work. Furthermore, Cambodia has ratified all relevant ILO conventions, such as those on forced labor, freedom of association, right to organize and collective bargaining, equal remuneration, minimum age, discrimination, and child labor. No persons under the age of 18 will be allowed work on any aspect relating to the project.

50. The Labor Law (1997) includes provisions on Occupational Health and Safety (OHS) mostly consistent with ESS2 of the World Bank's ESF. Additional measures must also be taken compliant with WHO guidelines on COVID-19, as outlined in this ESMF.

Applicable World Bank Environmental and Social Standards

51. The Project's environmental and social risk is classified as 'Substantial'. Six of the ten ESSs of the WB's ESF have been screened as relevant. The screening of social risks and impacts is based on discussion with the task team and consultations with MOH. The ESMF has also taken into account the national requirements as well as the application of international protocols for infectious disease control and medical waste management. The Project is not expected to impact natural habitats or cultural sites. In addition, all activities financed through the project are subject to the World Bank Group Environmental, Health and Safety (EHS) Guidelines (see Annex 4 Resources) including those on "healthcare facilities", "waste management", "hazardous materials management", and "construction and decommissioning".

Table 3: Relevant Environmental and Social Standards Measures and Actions

Relevant Environmental & Social Standard	Required Measures and Actions
ESS1 Assessment and Management of Environmental and Social Risks and Impacts	MOH has established and maintained assigned departments/institutes with qualified staff and resources to support the management of ESHS risks and impacts of the Project including environmental and social risk management specialists. The ESMF has been prepared, consulted, and updated to reflect additional risks/impacts andmitigation measures as a result of the second AF. Infection Prevention and Control and Waste Management Plan (IPC&WMP) acceptable to the Association had been prepared and implemented in this Project.

ESS2 Labor and Working Conditions	**OHS measures** in line with the ESMF, LMP, IPC&WMP and WHO guidelines on COVID19 shall be established and complied with in all facilities, including laboratories, quarantine and isolation centers, screening posts, and vaccination deployment and related activities. A **Grievance Hotline** and assignment of focal points to address these grievances will be established within MOH, including grievances related to vaccination. Provisions to prevent **SEA, GBV and/or VAC,** including CoC for both staff and contracted workers in line with relevant national laws and legislation will be included at the project's LMP, adopted and applied under the project.
ESS3 Resource Efficiency and Pollution Prevention and **Management**	**IPC&WMP** acceptable to the Association will be prepared before beginning the relevant Project activities. For COVID-19 vaccination, emission from cold chain logistics and storage from both energy emissions (indirect emissions) and leak of GHG potent hydrofluorocarbon (HFC) refrigerant gases (direct emissions), will be estimated. Climate change may also be a risk to implementation of the project especially for vaccination campaigns since Cambodia is vulnerable to climate change. The more frequent occurrence and shorter return period of extreme climate events including floods and droughts in Cambodia would become a major obstacle if climate change responses and resilience are not mainstreamed/incorporated in project implementation.
ESS4 Community Health and Safety	Precautionary measures in line with the ESMF, IPC&WMP, injection safety for COVID-19 vaccines and WHO guidelines on COVID-19 shall be put in place to prevent or minimize the spread of infectious diseases/COVID-19 from laboratories, quarantine and isolation centers, and vaccination activities to the community. The project will mitigate the risk of Sexual Exploitation and Abuse by applying the WHO Code of Ethics and Professional Conduct -Code of Conduct using WB's terminology- for all workers. The project's LMP includes also provisions to prevent Sexual Exploitation and Abuse (SEA), Gender-Based Violence (GBV) and/or Violence Against Children (VAC) including provision of related trainings. The project has put in place a grievance redress system for project-related activities to allow people to share complaints and concerns about project activities.
ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional LocalCommunities	The project's SEP has been adapted and updated in a manner acceptable for the Bank to make sure that IPs are fully consulted in a culturally appropriate manner and have opportunities to benefit from the project activities. For COVID-19 vaccination, Stakeholder Engagement Plan (SEP) and consultation sessions will be broadened to cover high risk populations, marginalized and remote groups. COVID-19 vaccination strategy shall ensure that vaccines will reach them.
ESS10 Stakeholder Engagementand Information Disclosure	A draft SEP including a **Grievance Mechanism** shall be prepared, consulted, and disclosed. SEP and consultation sessions will be broadened to cover high risk populations, marginalized and remote groups The SEP shall be updated and disclosed within 1 month after the Effective Date. **Grievance Mechanism** shall be made publicly available to receive and facilitate resolution of concerns and grievances in relation to the Project, consistent with ESS10, in a manner acceptable to the Association. For vaccination, the Grievance Redress Mechanism shall cover up to health centers and activities in communities with VHSG as the focal points.

52. An Environmental and Social Commitment Plan (ESCP) has been prepared, consulted on, and has been updated following consultation with relevant stakeholders to include vaccination E&S risk management, which takes into account the need to ensure adequate budget, staffing and operational arrangements for Project E&S risk management. A SEP has also been prepared and consulted on, and updated to include vaccination stakeholder engagement, describing a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project

cycle, recognizing the need for effective and inclusive engagement with all of the relevant stakeholders and the population at large and consistent with the government's Communication and Community Engagement Strategy. Considering the serious challenges associated with COVID-19 and its vaccination, dissemination of clear messages around social distancing, high risk demographics, self- quarantine, and when necessary, mandatory quarantine is critical. In addition, the message should focus on building public confidence in the safety of vaccines and addressing rumors and misinformation, as well as making clear the priority groups for vaccination. The parent project will also strive to address other communication messages that may be needed, such as around mental health, support to parents and Gender-Based Violence, particularly if social isolation restrictions and school closures continue.

53. An SEP for the parent project was prepared and has been updated after consultations to include vaccination stakeholder engagement. The SEP serves the following purposes: (i) stakeholder identification and analysis; (ii) methods for stakeholder engagement, including effective communication tools for consultations and disclosure; (iii) defining roles and responsibilities of different actors in implementing the Plan; and (iv) a grievance redress mechanism (GRM). Provisions have been included to reach and meaningfully engage vulnerable and disadvantaged groups (elderly, children at high risk such as those who are malnourished, poor households, ethnic minorities, residents in rural areas, people living with a disability, female-headed households and those with chronic illnesses). In line with WHO guidelines on prioritization, The NDVP sets out to cover 9,988,000 people or 62 percent of the country's population, including foreigners living and working in Cambodia. It describes the roll out of COVID-19 vaccination in three phases (see Table 2 for more detail). Phase I will cover all health care workers, frontline armed forces/police, and frontline government officials, and phases 2 and 3 will cover 100% of the adult population aged 16 and above including prioritized groups identified as vulnerable.

54. Project preparation has included a mapping of stakeholders. Individuals and groups likely to be affected (direct beneficiaries) have been identified. Mapping of other interested parties such as government agencies/authorities, NGOs and CSOs, and other international agencies has also been completed, including NGOs/CSOs who work with the poor, homeless, indigenous groups, people with disabilities, at-risk women, migrants and others, who could help to spread accurate communication about the vaccine program. The SEP was prepared by the client and publicly disclosed[37]. This SEP has been updated to include vaccination stakeholder engagement and that has also been publicly disclosed. The SEP will beupdated during project implementation.

55. To enhance timely access to vaccines, Cambodia has chosen to join the COVAX Facility. Through COVAX, Cambodia can obtain supply of doses for 20% of its total population to offer vaccination to people who are vulnerable or at most risk. The MOH had issued a letter (No 945) to all manufacturers, local pharmaceutical companies, office representatives in Cambodia that for any vaccine registration or renewal must be WHO pre-qualified vaccine. Therefore, if COVID-19 vaccine has become WHO pre-qualified, it is eligible to be registered. On the other hand, the NDVP shows that MOH can manage vaccine storage, transportation, and delivery in compliance with WHO guideline and standards. WBG EHS Guidelines will apply to the extent relevant as well as appropriate current WHO Guidance (see Resources appendix). Beyond this immediate concern, project implementation also needs to be responsive to the needs of marginalized and vulnerable social groups who may be unable to access facilities and services designed to combat the disease. To mitigate this risk MOH, in the ESCP, is committed to the provision of services and supplies based on the urgency of the need, in line with the latest data on the prevalence of cases.

[7] http://hismohcambodia.org/public/announcements.php?pid=32

4. ENVIRONMENTAL AND SOCIAL BASELINE

56. The proposed Project and additional financings will be implemented throughout Cambodia. The Project will address system weaknesses in pandemic preparedness and response including (i) the reference laboratory at the NIPH and the laboratories attached to the 25 provincial referral hospitals; (ii) Isolation and Treatment Centers in all 25 municipal/provincial referral hospitals; (iii) EOCs at Central and Provincial levels; (iv) Rapid Response Teams at the provincial and district levels where specific locations have not yet been identified; and (v) Covid-19 vaccination and related activities.

57. The Reference Laboratory at NIPH has a biosafety level 2+ (BSL2+) status with capacity to do Influenza Polymerase Chain Reaction analysis. There is a system to transport samples quickly and safely. The NIPH was performing 100 tests per day at the beginning of the project and has a surge capacity of around double this number. Four thousand tests or greater per day may be required during the peak of the pandemic, so the capacity of the National Laboratory needs to be built up most urgently to cover the expected surge. The NIPH laboratory was certified by ISO in 2019 as National Reference Laboratory in Cambodia. The Pasteur Institute (Institut Pasteur du Cambodge) located in Phnom Penh is an international reference lab and is supporting the NIPH lab as well. At the provincial level, there is a unit of disease control in each provincial health department in all 25 municipalities and provinces. The laboratories are attached to the provincial referral hospitals.

58. The public health facilities in Cambodia include 9 national hospitals in Phnom Penh, 25 provincial referral hospitals and 92 municipal/district referral hospitals, 1,221 health centers and 127 health posts. The quality of health services in Cambodia is suboptimal however, with significant gaps and weaknesses. Beneficiaries incur high out-of-pocket payments due to the perceived poor quality of care in certain public facilities, even when they are covered by the Health Equity Fund. In addition to some remaining gaps in infrastructure, Cambodia faces a major challenge with the skills and competencies of its health workforce and needs both pre-service and in-service training improvements and a renewed focus on competency-based training. In addition, the absence of a well-coordinated monitoring and evaluation (M&E) mechanism and limited data quality have hampered the effective monitoring of health sector performance and evidence-based decision-making. The Joint External Evaluation (JEE) of International Health Regulations (IHR) Core Capacities conducted in 2016 found that many technical capacities for detecting, preventing, and rapidly responding to emerging diseases and public health emergencies remain under development. Cambodia's capacities in the majority of technical areas evaluated were categorized as limited under the JEE categorization system. Overarching challenges included significant funding gaps, human resources capacity, intersectoral collaboration and coordination, and the application of M&E mechanisms.

59. Cambodia has already gained solid experience in handling vaccination services and campaigns. It has achieved polio eradication, and carried out several vaccination campaigns for tetanus, measles/rubella, and Japanese encephalitis. Cambodia also has demonstrated good capacity to successfully conduct vaccination campaigns of national scale, such as H1N1 vaccination which achieved greater than 95% coverage. The NIP, along with WHO and UNICEF as core partners for immunization, has been a member of the technical working group on immunization since its establishment over a decade ago. It has an established and well-managed supply chain system for the routine immunization program including experience managing vaccination services/campaigns as well as the introduction of many new vaccines in recent years. Moreover, it has increased its storage capacity and strengthened supply chain management capacity among staff. It has also established national guidelines on injection safety and waste management with well-established system of waste disposal resulting from routine immunization

programs.

60. However, some of the target populations have never been reached through vaccination programs inCambodia and reaching them will be costly and challenging (e.g., identifying elderly and high-risk adults will require registration prior to vaccination). In addition, as the nature of COVID-19 vaccines is new, there is a need to provide training to immunization staff at national and sub-national levels in COVID-19 vaccination, safe injection practices, and managing adverse events following immunization. Project financing will support repair and rehabilitation of existing buildings only, and no land acquisition or involuntaryresettlement impacts are expected. There are no impacts or risks critical to natural habitats, protected areas, or cultural sites. The COVID-19 Preparedness and Response operations of laboratories (equipment, reagents /chemicals) as well as quarantine, isolation centers and vaccination and related activities will be implemented in urban as well as remote areas (including border areas).

61. Even though MOH has sufficient policy, regulations, and guidelines on HCWM IPC, the compliance at hospitals and health centers remains weak. Hazardous waste is segregated from general waste but segregation practices among staff should be improved further. Posters are not always displayed and SOPs on HCW segregation and collection are not regularly followed. Storage, treatment, and disposal of hazardous waste are unsafe. Storage facilities are located inappropriately (far away from treatment location, difficult for transport in and out, and subject to flooding) and engineered improperly (without roof, easy to access by animals and insects, no separate zones for hazardous and non-hazardous waste). Waste bags are not stored in designated locations but put anywhere behind the buildings and on flooded fields. Small scale incinerators including brick incinerators and single chamber incinerators are still commonly used in health facilities while numerous designs, operational and management deficiencies result in poor performance. Wastewater collection and treatment systems are missing in many hospitals.

62. In recent years, the Health Equity and Quality Improvement Project (H-EQIP) has been providing performance-based financing to different levels of the Cambodian primary and secondary health system based on achievement of service delivery results including HCWM and IPC. The latest findings show while IPC improved in CPA3 and CPA2 hospitals, the performance of CPA1 hospitals and at health centers (HCs) remained low and requires further improvement[8](see Figure 4.1).

63. Although Cambodia has experience in infection prevention and control, healthcare waste management, communication and public awareness in emergency situations, its capacity to manage risks associated with COVID-19 need further improvement across the country. Healthcare professionals may not have the detailed know-how on infectious risk management in the labs and treatment/isolation centers. Handling of waste and adequate use of PPE equipment may also be challenging, though this should improve with the project intervention. Key hospital staff, such as cleaners, are likely to have low levels of education in infection prevention and could contract COVID-19 if protection measures are not taken.

64. Regarding COVID-19 vaccination, MOH has established national guidelines on injection safety and waste management with well-established system of waste disposal resulting from routine immunization programs. Based on these guidelines, a more specific training module on injection safety and management of wastes generated from COVID-19 vaccination was developed.

[8] *Source: MOH validated data in Round 14, Q1/2021 Quality Assessment under H-EQIP project*

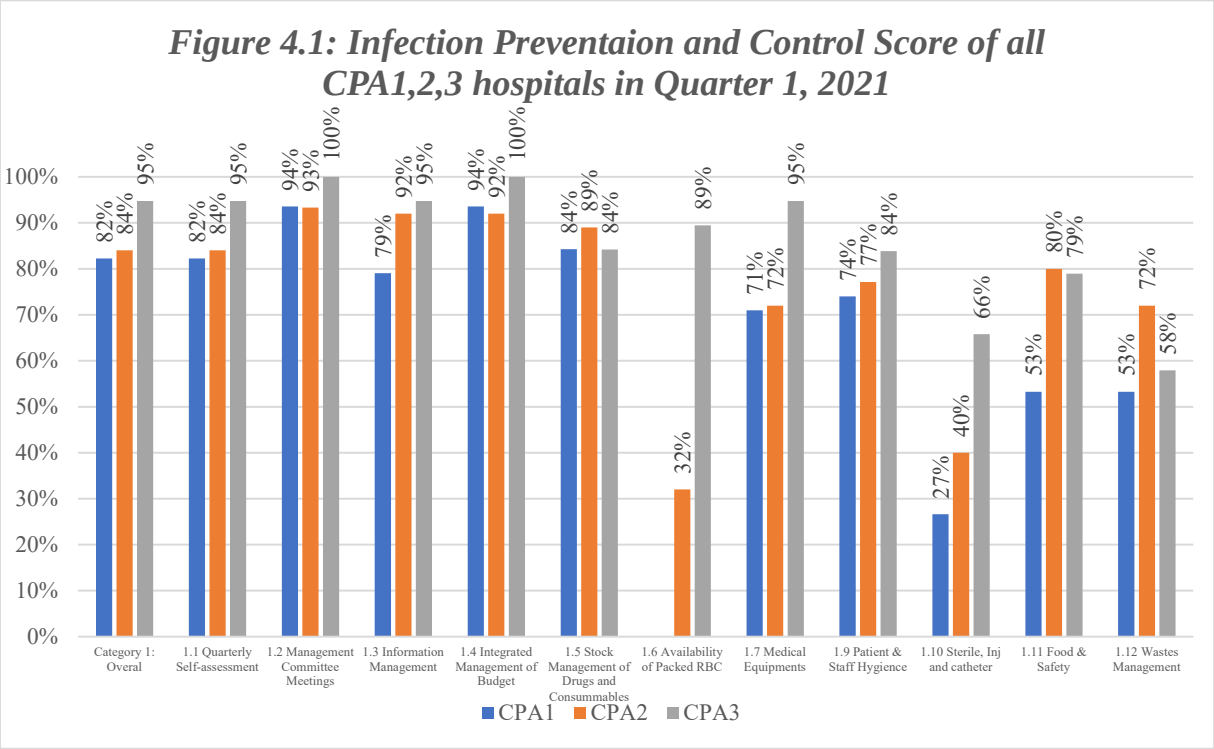


Figure 4.1: Infection Preventaion and Control Score of all CPA1,2,3 hospitals in Quarter 1, 2021
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
82%
84%
95%
82%
84%
95%
94%
93%
100%
79%
92%
95%
94%
92%
100%
84%
89%
84%
32%
89%
71%
72%
95%
74%
77%
84%
27%
40%
66%
53%
80%
79%
53%
72%
58%
Category 1: Overal
1.1 Quarterly Self-assessment
1.2 Management Committee Meetings
1.3 Information Management
1.4 Integrated Management of Budget
1.5 Stock Management of Drugs and Consummables
1.6 Availability of Packed RBC
1.7 Medical Equipments
1.9 Patient & Staff Hygience
1.10 Sterile, Inj and catheter
1.11 Food & Safety
1.12 Wastes Management
CPA1
CPA2
CPA3

Social Conditions

65. There may also be challenges for people accessing health care, in particular for the most vulnerable groups – the poor, elderly, those living with a disability, single female-headed households, and IP groups. This may be due to remoteness (especially for IP groups), poor road infrastructure (especially during the wet season from May to November where significant road segments across the country may getflooded), and an inability to afford medical care or the transport to access such care. An inability to pay for medical care may result in worst-case scenario outcomes for the poorest people, and/or drive families into debt. For instance, based on data from the 2013 Cambodia Socioeconomic Survey (CSS), approximately 6.3 percent of the population endured catastrophic spending and 3.1 percent had to incur debt to pay for health expenditures. The impact is even greater for the elderly and disabled for whom 8.6 percent and 13.4 percent incur catastrophic spending, respectively[9]. By 2014, the national incidence of catastrophic health expenditure was 4.9%, but four times more likely among rural households than their peers in the capital. For rural households with members seeking medical care, catastrophic health expenditure incidence was 12.3%. The impoverishment rate due to health spending among the lowest consumption quintile was 15.3%; the highest rate in this analysis[106]. Moreover, the latest CSS (2017) showed that 40% of people had to dig into their savings in order to pay for medical care, which in turn may leave households worse off as they are left with little or no safety nets after a health emergency.

66. There may also be challenges in compliance with COVID-19 prevention measures, in particular handwashing, since some groups – particularly the most vulnerable – may have limited access to clean water sources or may not have money to purchase soap or hand sanitizers. According to the 2014 Cambodia Demographic Health Survey (CDHS), while about 95% of urban households can access improved water sources (especially for drinking) only about 60% of rural households have access. A study conducted by the World Bank for a water and sanitation project observes that the lack of access towater and sanitation creates a burden on women and girls, as many of them are responsible for performing household chores and hygiene practices. In the context of COVID-19, where public services are constrained, women may encounter additional burdens in their access to water and sanitation. Moreover, a potential lack of access to water, particularly in the dry season, may extend to some public health facilities (i.e. operational districts and health centers) which are located far from urban areas. Without water and soap, health professionals and workers will be put at higher risk in the context of COVID-19 outbreaks.

67. Equally, as is happening with nearly every country around the world, Cambodia has no experience in carrying out social isolation and quarantine measures, and the social impacts that these measures could have (loss of jobs, rise in GBV, etc.). Cambodians may be resistant to abide by social distancing measures, as a significant amount of people live day to day and need daily visits to busy markets to buy food. They may also have traditional beliefs that could give rise to social stigma, misinformation on how to prevent the virus, and lack of compliance with RGC/MOH precautions and protocols. Already there are people practicing traditional and religious beliefs as a way of 'chasing COVID-19 away' by using scarecrows or burning food.

68. With 24,157 cases of COVID-19 and 165 death as of 20th May 2021, the pandemic is already

[9] HEQIP Project Appraisal Document, para 6, page 2

[10] Fernandes et al (2018), Equality in financial access to healthcare in Cambodia from 2004 to 2014. Accessed at: https://www.ncbi.nlm.nih.gov/pubmed/30165473

having devastating effects to people's livelihoods as tourism has markedly dropped, shops, restaurant and hotels are mostly closed or empty, some factories have begun to temporarily or permanently shut down, etc. The poorest – mostly involved in the informal sector – are likely to be the most affected. They may also be working and living in cramped conditions or in situations where there may be poor access to sanitation (such as Tuk Tuk drivers, waste collectors and recycling collectors, or mobile vendors). These groups may also find it more difficult to get accurate information about COVID-19, may already face social stigma in the country (in particular in Phnom Penh), many face constraints in accessing water and soap, and may therefore be more at risk of contracting and transmitting COVID-19.

69. Given the economic and social pressure as a result of the COVID-19 outbreaks, the situation of gender-based violence may be exacerbated. In particular, women and girls may face increased violence at home and not be able to access social and public services as these may be dedicated to combating COVID-19 instead. An effective mechanism is needed to promptly respond to women's grievances regardinggender-based violence, VAC or child labor, including online reporting services. Additional Social Characteristics associated with this project are summarized in Annex 1.

70. There may be a couple of challenges for some groups of people to access vaccination and information. Those people are vulnerable groups including marginalized groups and remote populations, such as indigenous peoples in remote areas and also sexual and gender minorities (especially transgender people). Literacy and language barriers, especially for indigenous and ethnic minority groups, are also challenges as some groups may not be able to understand vaccine messages if they are in written form or presented in Khmer language only. However, to ensure priority access to those most at risk and equitable access to the vaccine, the NIP conducted several consultative meetings and worked with the Communicable Disease Control Department (CDC) to review the epidemiology/burden of disease, groups with higher risk of mortality, country context, health system infrastructure, etc., and worked with the WHO allocation framework and recommendations from the Immunization Strategic Advisory Group of Experts (SAGE). Moreover, this ESMF and the SEP will guide further consultative activities working together with the CCE to ensure the project can meet its objectives of reaching vulnerable groups for vaccination.

71. As previously mentioned, there could also be some challenges in terms of support for the vaccines, due to misinformation, cultural beliefs and rumors about efficacy, side effects, etc.

5. POTENTIAL ENVIRONMENT AND SOCIAL RISKS AND IMPACTS AND THEIR MITIGATION MEASURES

72. Implementation of the parent project activities will be positive and urgently needed. As this Project willfinance procurement of drugs, supplies, medical equipment and vaccination-related supplies and equipment (cold chain), which has limited impacts, the environmental risks result from the operation of the labs, the quarantine and isolation centers, screening posts at land crossings, and vaccination related activities and the medical waste management system which will be properly managed in accordance with mitigation measures laid out in the ESMP of each project intervention.

73. From a social perspective, there are substantial risks related to the direct and indirect social impacts of the activities proposed by the project, which are expected to be mostly temporary, predictable, and avoidable. The major areas of social risks are expected to be: (i) OHS risks for project workers associated with upgrading activities; (ii) OHS risks related to the spread of the virus among health care workers; (iii) risks related to the spread of COVID-19 among the population at large and, especially for the most disadvantaged and vulnerable populations such as the elderly, children at highrisk, those who are malnourished, poor households, etc., due to poor training, communication and public awareness related to the readiness and response to COVID-19; (iv) risk of panic/conflicts resulting from false rumors and social unrest, the social stigma associated with COVID-19 or potential unrest with respect to access to testing and other services related to public health, including inability of accessing services by the most disadvantaged; Civil works envisaged in the project refer to repair and rehabilitation of existing buildings only, no land acquisition or involuntary resettlement impacts are expected.

74. For vaccination, there would be some potential social risks involving: (i) injection safety, (ii) fear, trust, and safety of the vaccines, (iii) case management of population for vaccination, (iv) community health and safety, (v) social inequity and risk of exclusion, and (vi) stigma, discrimination, vaccine acceptance and misinformation, (vii) data privacy and (viii) mandatory vaccination.

- *Safe injection*: Safe injection practices are crucial to prevent the spread of infection during health care delivery, including during the COVID-19 vaccination. It provides infection prevention and control measures during vaccination sessions to protect health workers, relevant staff/officials engaging in vaccine activities/campaigns, vaccine recipients, and the community from risks related to COVID-19 vaccination such as spread of COVID-19 itself, needle stick injuries, cross contamination of infectious diseases from one vaccine recipient to another, and environmental pollution caused by waste generated from vaccines if not properly managed. MOH has established national guidelines on injection safety and waste management, and NIP has developed a more specific training manual on injection safety and management of waste generated from COVID-19 vaccination. Please refer to Annex 6 for the training module.

- *Fear, trust, and safety of the vaccine*: in regard to the safety of existing vaccines, trust has been built among most people. The contraindications to COVID-19 vaccines may pose a risk. Risk associated with unsuitable storage and transportation of vaccines may lead to reduction in vaccine quality and efficacy. To minimize these risks, The National Deployment Plan and Vaccination for COVID-19 Vaccines and Operational Guideline for COVID-19 Vaccination Campaign were developed to ensure: (i) effective COVID-19 vaccine shipment, storage, handling, and stock management; (ii) rigorous temperature control in the cold chain including monitoring and recording temperature twice a day to ensure the temperature stays within 2-

8 degrees Celsius; and (iii) maintenance of adequate logistics management information systems. Security of vaccines is also important as there could be a risk of stealing the vaccines and bribing to get the vaccines. This risk can be managed through strict enforcement of compliance with regulations and applying strong penalties. Government provision of all vaccines free of charge will also minimize the risk of theft as long as supply is adequate. Training provided to staff engaging in vaccine management is central to the second AF's activities.

- *Misinformation on the adverse health effects of vaccines* is a risk which should be addressed through the Communication and Community Engagement (CCE) Strategy and Plan for COVID-19 vaccine deployment and vaccination developed by NIP. The strategy aims to provide timely and accurate information about the vaccines to ensure acceptance and support for the vaccines and the phased approach and to encourage vaccine uptake. The strategy also aims to establish social listening channels to address misinformation and fake news promptly as well as to develop communication guidelines and key messages to prepare for and respond to adverse events following immunization (AEFI) and any vaccine-related crises.

- *Case management of population for vaccination*: There are risks of contraindications and adverse health effects as result of improper or inadequate profiling and screening of individuals prior to vaccination. There is also a risk of not completing the vaccine regimen (two doses in all vaccines planned for use in Cambodia) due to the individual's apprehension and/or schedule mismanagement. The data management of the vaccination program, including the establishment of a good surveillance system and schedule monitoring, are also risks. During the immunization period, close monitoring of adverse events in vaccinated individuals using information technology, i.e. a digital tracking system, should be conducted. As the possibility of adverse effects of the vaccine is a risk, tracking of health effects in vaccinated individuals and follow-up assessments should be conducted.

- *Community health and safety*: The vaccine administration may also lead to crowding and violation of physical distancing measures, increasing the risk of exposure for healthworkers, vaccine receivers, and the community, especially residents within the vicinity of the immunization site. Infectious health care waste generated from the vaccinations and other COVID-19- related responses pose a risk to community health andsafety if not handled, transported, treated, and disposed of according to the guidelines on health care waste management.

- *Social inequity and risk of exclusion*: Although the NDVP has identified priority groups for vaccination, there is a risk tostrictly adhering to the list of identified risk groups to ensure that the most-at-risk are the ones vaccinated. There is an indirect risk of social exclusion, in particular the most vulnerable and marginalized groups such as the indigenous peoples in remote areas, from access to the COVID-19 information and vaccines, and also sexual and gender minorities(especially transgender people). The vaccine distribution and deployment may also exclude populations based on geographical distribution, i.e., those in far- flung areas, and on socioeconomic status, such as less access for the marginalized and itinerant poor. The COVID-19 vaccination strategy shall ensure that vaccines will reach the most marginalized and remote groups. Enhancing communication strategy, education campaign and dissemination information about vaccination by cooperation with local government,

VHSGs and civil societies to make sure these marginalized and disadvantaged groups are reached. Messages shall be clear, correct, and consistent to avoid confusion among people.

- *Stigma, discrimination, vaccine acceptance and misinformation*: The fear and apprehension of individuals and communities about the scientific integrity, efficacy, and safety of the COVID- 19 vaccines may lead to people refusing vaccination. The possibility of having COVID-19 may also cause individuals to hide symptoms, avoid getting tested, and reject hygiene measures, which could lead to further spread of the virus. The health workers involved in the vaccine administration activities may face discrimination and harassment when going back to their communities due to people's fear of contracting the virus, frustrations over medical care, or misinformation. The Communication and Community Engagement (CCE) Strategy and Plan for COVID-19 vaccine deployment and vaccination was developed to provide timely and accurate information about the vaccines in order to ensure acceptance and support for the vaccines to avoid misinformation caused by fake news. There is also a project Stakeholder Engagement Plan (SEP). MOH has provided preventive measures including guidance on physical distancing (1.5m from each other) to prevent the spread of COVID-19.

- *Privacy data*: a *certain* amount of data is collected from people receiving vaccinations. This data includes: full name, sex, address, phone number, identity card number, acknowledgement that key messages about vaccines have been understood, consent to be vaccinated, and an identity photo taken just before vaccination. Apart from the last three items, all these data are already held and stored by government. The main potential risk from data is that consent or refusal could be linked to an individual and used to discriminate against that individual for access to government services or facilities. All the data collected will need to remain confidential and the files anonymized to prevent linkage to specific individuals. Communication and information campaigns will also stress that consent to vaccination is voluntary, in line with government policy for the general population.

- *Mandatory Vaccination:* The RGC's sub-decree 66 mandates individuals for COVID-19 vaccination based on their professions and infection risks associated with them as determined by the Ministry of Health. If this is activated, there is a risk of mandatory vaccination for some people. A routine monitoring system will be put in place to ensure the deployment of vaccine under the AF2 will be on voluntary basis.

75. The main environmental risks associated with the AF2 are (i) vaccination related waste, vaccine wastage, and health risks, (ii) GHG emissions from logistics and cold chain storage, and (iii) the impact of climate change on vaccination deployment and campaigns.

- Vaccination *related waste, vaccine wastage and health risks*: improper management of vaccination (including collection, storage, transportation, disinfection and disposal), related wastes including vaccine vials, syringes, and alcohol pads, would generate health risks for vaccinators, vaccine receivers, and communities. Needle sticks, contacting used alcohol pads, or sharp cuts from broken vials would cause injury and possible transmission of viruses including COVID-19, HIV-AIDS, and Hepatitis.

- *Different* types of vaccines will require varying storage temperatures. Improper storage of vaccines, failing to meet the storage temperature of 2°C to 8°C for Astra-Zeneca, Sinopharm, and Sinovac vaccines, will lead to deteriorated quality of vaccines and generation of vaccine

wastage leading to an increased quantity of waste to be disposed. To manage the risk in storage and transportation, CMS will install temperature monitoring devices, such as fridge tags, at refrigerators during transport and storage. MOH has an established and well-managed supply chain system for the routine immunization program including experience managing vaccination services/ campaigns. In Cambodia, many new vaccines have been introduced in recent years. Accordingly, MOH has increased its storage capacity and strengthened supply chain management capacity. The ESMF also includes measures to mitigate the potential impacts from vaccine introduction (e.g., vaccine storage, handling, transport, deployment, cold chain capacity, etc.). Refrigeration in the cold chain system for vaccine storage and distribution is necessary to maintain efficacy of the vaccines and will reduce the potential to generate vaccine wastage.

- *Greenhouse Gas Emissions*: the operation of logistics and cold chain storage of vaccines will emit both energy consumption emissions as indirect emissions and leaks of GHG potent hydrofluorocarbon (HFC) refrigerant gases as direct emissions and will contribute to increased greenhouse gases in the atmosphere which contribute to ozone depletion, global warming, and climate change.

- *The* refrigeration facilities (cold storage and refrigerated road transport), require a huge amount of energy to operate and use different kinds of cooling agents/refrigerants in their cooling systems which could contribute to greenhouse gas emissions. Therefore, lack of proper maintenance and knowledge often translates into inadequate management of the life cycle of refrigerant gases. The refrigerant leakage results to less efficient equipment and heightened release of global warming potential (GWP) and ozone depleting substances (ODS) found in refrigerants into the atmosphere. Refrigerants are also toxic and could pose a risk to people's health. Some cold storage warehouses use ammonia as a refrigerant which has negligible GWP but is mildly flammable and toxic. It is therefore necessary that safe practices are applied.

- *Impact of climate change on vaccination campaign*: Climate change would be a risk to implementation of the project especially for vaccination campaigns. Climate extreme events including floods, droughts, and storms in Cambodia would become major obstacles if climate change responses, adaptation measures are not mainstreamed and incorporated into project implementation.

76. It should be noted that it may be difficult to draw a clear distinction between managing existing risks and the problem of risks and impacts that could be created by project implementation.

77. The Tables below describe the expected project impacts and potential mitigation measures toaddress them.

Environmental and Social Risks and Mitigation Measures during Designing and Planning Stage

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Design of laboratories, healthcare facilities including isolation and treatment centers	Design of healthcare facilities (e.g. isolation and treatment centers) does not meet layout and engineering requirements for nosocomial infection control, increasing risk of spreading COVID-19 in health facilities. Design of new facilities does not take into account universal access.	Design of facility should meet National guidelines for IPC in healthcare facilities and take into account guidance from WHO and/or US-CDC on COVID-19 management and infection control: ✓ WHO guidance for Severe Acute Respiratory Infections Treatment Center. ✓ WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected; ✓ WHO technical brief on water, sanitation, hygiene and waste management for COVID-19; ✓ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources); ✓ CDC Guidelines for isolation precautions: preventing transmission of infectious agents in healthcare settings; and ✓ CDC guidelines for environmental infection control in healthcare facilities. In addition, where applicable, universal access (i.e. access for people with disabilities) needs to be considered and put in place. For patients with possible or confirmed COVID-19, isolation rooms should be provided and used at medical facilities. Isolation rooms should: ✓ be single rooms with attached bathrooms (or with a dedicated commode).	Ministry of Health (Communicable Disease Control Department [CDC], Hospital Services Department [HSD], National Institute of Public Health [NIPH] and provincial referral hospitals)

		✓ ideally be under negative pressure (neutral pressure may be used, but positive pressure rooms should be avoided). ✓ be sited away from busy areas (areas used by any people) or close to vulnerable or high-risk patients, to minimize chances of infection spread. ✓ have dedicated equipment (for example blood pressure machine, peak flow meter and stethoscope), but should avoid excess equipment or soft furnishings. ✓ have signs on doors to control entry to the room, with the door kept closed. ✓ have an ante room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment. An operation manual should be prepared prior to the opening of isolation rooms to describe the working procedures to be taken by healthcare workers to protect themselves and prevent infection escape while providing treatment. Hand washing facilities should be provided at the entrances to and in health care facilities in line with WHO Recommendations to Member States to Improve Hygiene Practices.	
	Design of laboratory does not meet requirements for biosafety	Design of laboratory should take into account guidance from WHO Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19).	Ministry of Health (CDCD, and HSD), NIPH and provincial referral hospitals
Development of technical specifications for PPEs	Incorrect standard or quality of PPE leads to spread of infection to healthcare	The healthcare workers shall be provided with medical personal protective equipment (PPE) including: Medical mask, Gown, Apron, Eye protection (goggles or face shield), Respirator (N95 or FFP2 standard),	Ministry of Health (CDCDHSD)

	workers and cleaners.	Boots/closed work shoes WHO interim guidance on rational use of PPE for coronavirus disease 2019 provides further details on the types of PPE that are required for different functions.	
Purchase of storage trucks and cold chain refrigerators for vaccine storage and deployment.	Use out of date or low standard/specification cold storage trucks and refrigerators would be potentially contribute to global warming through emission of potential GHG, Hydrofluorocarbon (HFC)/or Chlorofluorocarbon (CFC) and consumption of much energy.	• Procurement for storage trucks and cold chain refrigerator should be seriously required higher standard/specification of equipment that reflect environmentally friendly or least HFC/CFC emissions and ensure that the requirement based on vaccine manufacturers requirements will be added to the temperature technical specification (+2 degree to +8 degree).	MOH

5.2 Environmental and Social Risks and Mitigation Measures during repair/rehabilitation Stage

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
Upgrading isolation and treatment centers	Dust, noise and vibration generated from construction, rehabilitation or minor civil works	- The contractor(s) is responsible for compliance with relevant national legislation with respect to ambient air quality, noise and vibration - The contractor(s) undertaking works shall ensure that the generation of dust is minimized and implement a dust control plan to maintain a safe working environment and minimize disturbances for patients, staff and surrounding community - The contractor(s) undertaking works shall implement dust suppression measures (e.g. water paths, covering of material stockpiles, etc.) as required. Materials used shall be covered and secured properly during transportation to prevent scattering of soil, sand, materials, or generating dust. Exposed soil and material stockpiles shall be protected against wind erosion - The contractor(s) shall ensure onsite latrines are properly operated and maintained to collect and dispose wastewater from those using the site - The contractor(s) should not carry out construction activities generating a high level of noise during healthcare activities, especially when services are being delivered to the clients.	Contractor(s)
	Solid waste generated from construction, rehabilitation or minor civil works	- The contractor(s) shall develop and follow a brief site-specific solid waste control procedure (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any financed rehabilitation works. - The contractor(s) shall use litter bins, containers and waste collection facilities at all places during works. - The contractor(s) may store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a	Contractor(s)

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		licensed waste collector. A transport management plan in line with WBG good practice should be developed. - The contractor(s) shall dispose of waste at a designated place identified and approved by the local authority. Open burning or burial of solid waste at the hospital premises shall not be allowed. It is prohibited for the contractor(s) to dispose of any debris or construction material/paint in environmentally sensitive areas (including watercourses). - Recyclable materials such as wooden plates for trench works, steel, scaffolding material, site holding, packaging material, etc. shall be segregated and collected on-site from other waste sources for reuse or recycle (sale).	
	Asbestos containing materials (ACM) generated from construction, renovation or minor civil works	- The asbestos audit will be undertaken as required prior to/at the beginning of refurbishment. - Safe removal of any asbestos-containing materials or other toxic substances shall be performed and disposed of by specially trained workers in line with the WBG guidelines on asbestos management. - If ACM at a given hospital is to be removed or repaired, the MOH will stipulate required removal and repair procedures in the contractor's contract. - Contractors will remove or repair ACM strictly in accordance with their contract. Removal personnel will have proper training prior to removal or repair of ACM. - All asbestos waste and products containing asbestos is to be buried at an appropriate landfill and not to be tampered or broken down to ensure no fibers are airborne. Disposal of waste containing asbestos should be agreed with MOH.	Contractor(s)

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		- No ACM will be used for renovation works.	
	Safety risks during works	- The contractor(s) shall comply with all requirement national and good industrial practice regulations regarding workers' safety. - The contractor(s) shall prepare and implement a simple action plan to cope with risk and emergency (e.g., fire, earthquake, floods, COVID-19 outbreak) - The contractor(s) shall have or receive minimum required training on occupational safety regulations and use of personal protective equipment - The contractor(s) shall provide safety measures as appropriate during works such as installation of fences, fire extinguishers, first aid kits, restricted access zones, warning signs, overhead protection against falling debris, lighting system to protect hospital staff and patients against construction risks.	Contractor(s)
	Renovated Isolation and treatment centers do not include Life and Fire Safety (L&FS) measures.	L&FS master planning should be included in the renovation of new facilities, hospitals in line with GIIP and national legal requirements. MOH should ensure that all national legal L&FS requirements are met, upon completion of the construction. The isolation centers should be provided with Fire Detection and Alarm; Means of Egress; Fire Control and Suppression; Smoke Control. IFC's Good Practice Note on Life and Fire Safety for hospitals shall be taken into account.	MOH, isolation and treatment centers and Contractor(s)
Working and living conditions for workers	Close working and poor living conditions in labor camps may create conditions for the easy transmission of COVID-19 and the infection of large numbers of people, especially	The contractor(s) shall implement COVID-19 prevention measures as follows: • Consider ways to minimize/control movement in and out of construction areas/site.	Contractor(s)

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
	vulnerable groups. There is also a risk of Gender-Based Violence (GBV) or Sexual Abuse and Exploitation (SEA)	• If workers are accommodated on site require them to minimize contact with people outside the construction area/site or prohibit them from leaving the area/site for the duration of their contract • Implement procedures to confirm workers are fit for work before they start work, paying special to workers with underlying health issues or who may be otherwise at risk • Check and record temperatures of workers and other people entering the construction area/site or require self-reporting prior to or on entering • Provide daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures. • Require workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor if they have symptoms or are feeling unwell • Prevent a worker from an affected area or who has been in contact with an infected person from entering the construction area/site for 14 days (with insurance in place to ensure they can continue to access salary, as per the LMP) • Preventing a sick worker from entering the construction area/site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days (with insurance in place to ensure they can continue to access salary, as per the LMP) The contractor(s) shall develop contingency plans with arrangements for accommodation, care and treatment for:	

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		• Workers self-isolating • Workers displaying symptoms • Getting adequate supplies of water, food and supplies The contractor(s) shall provide workers with PPEs. The contractor(s) ensure that worker accommodation that meets or exceeds IFC/EBRD worker accommodation requirements (e.g. in terms of floor type, proximity/no of workers, no 'hot bedding', drinking water, washing, bathroom facilities etc.) will be in good state for keeping clean and hygienic, and for cleaning to minimize spread of infection. Wash stations should be provided regularly throughout site, with a supply of clean water, liquid soap and paper towels (for hand drying), with a waste bin (for used paper towels) that is regularly emptied. Wash stations should be provided wherever there is a toilet, canteen/food and drinking water, or sleeping accommodation, at waste stations, at stores and at communal facilities. Where wash stations cannot be provided (for example at remote locations), alcohol-based hand rub should be provided. Enhanced cleaning arrangements should be put in place, to include regular and deep cleaning using disinfectant of catering facilities/canteens/food/drink facilities, latrines/toilets/showers, communal areas, including door handles, floors and all surfaces that are touched regularly (ensure cleaning staff have adequate PPE when cleaning consultation rooms and facilities used to treat infected patients). Communication materials on COVID-19 prevention and control should be put in workplaces	

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
		The contractor(s) shall develop and implement LMP. The contractor shall ensure that workers are well briefed on the LMP, including aspects relating to preventing GBV and SEA and no tolerance for these behaviors, and sign the Code of Conduct.	
	Workers do not receive the care needed if infected with COVID-19.	Contractors should ensure that contracted workers who have symptoms meeting criteria for testing COVID-19 will be tested and treated at COVID-19 treatment centers.	Contractor(s)
	Workers are underaged.	Child labor or indentured labor is absolutely prohibited in the project. Labor law prohibits anyone under 18 years to be involved in hazardous work.	Contractor(s)

5.3 Environmental and Social Risks and Mitigation Measures during Operation Stage

Key Activities	Potential Risks and Impacts	Proposed Mitigation Measures	Responsibilities
COVID-19 testing and diagnosis	Improper collection of samples and testing for COVID-19 and appropriate laboratory biosafety could result in spread of disease to medical workers or laboratory workers, or population during the transport of potentially affected samples.	• Collection of samples, transport of samples and testing of the clinical specimens from patients meeting the suspect case definition should be performed in accordance with WHO interim guidance Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected cases. Tests should be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) by staff trained in the relevant technical and safety procedures. • National guidelines on laboratory biosafety should be followed. There is still limited information on the risk posed by COVID-19, but all procedures should be undertaken based on a risk assessment. For more information related to COVID-19 risk assessment, see specific interim guidance document: WHO interim guidance for laboratory biosafety related to 2019-nCoV. • Samples that are potentially infectious materials (PIM) need to be handled and stored as described in WHO document Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses (PIM Guidance). • For general laboratory biosafety guidelines, see the WHO Laboratory Biosafety Manual, 3rd edition.	Laboratories at national and subnational level
Isolation, care and treatment of COVID-	Weak compliance with the precaution measures for	• Health facilities should establish and apply Standard Precautions including: - Hand Hygiene (HH).	COVID-19 treatment centers at national and subnational

19 patients in healthcare facilities; Vaccination deployment plan	infection prevention and control in isolation and treatment of infected cases spreads COVID-19 infections in healthcare facilities.	- Respiratory hygiene/cough etiquette. - Use of personal protective equipment (PPE). - Handling of patient care equipment, and soiled linen. - Environmental cleaning. - Prevention of needle-stick/sharp injuries. - Appropriate Health Care Waste Management. • In addition, health facilities should establish and apply Transmission based precautions (contact, droplet, and airborne precautions) as well as specific procedures for managing patients in isolation room/unit. • Establishment of Standard precautions and Transmission based precautions should be in line with National guidelines for IPC in healthcare facilities and take into account guidance from WHO and/or CDC on COVID-19 infection control: ✓ WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected; ✓ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources); ✓ CDC Guidelines for isolation precautions: preventing transmissions of infectious agents in healthcare settings; and	levels HSD, PMD, PHDs, ODs, and vaccinators

		✓ CDC guidelines for environmental infection control in healthcare facilities. • Special considerations need to be made to vulnerable groups in delivering these services.	
	Medical waste is contaminated with COVID-19 virus and waste from vaccination under second AF. Improper collection, transport, treatment and disposal of infectious waste becomes a vector for the spread of the virus.	• All hospitals and laboratories should prepare waste management procedures in accordance with the national requirements that outline waste segregation procedures, on site handling, collection, transport, treatment and disposal, and training of staff. COVID-19 vaccination services/campaign may generate a vast amount of health care waste. • Waste should be segregated at the point of generation by risk level, including segregation of organic, recyclables, biological infectious and hazardous health care wastes which are temporary stored for pickup of contracted waste management company on site. • Transport routes including elevators should also be defined and marked for infected wastes and other types of wastes. Instructions related how to handle medical waste safely should be made to relevant people handling medical waste including health and waste workers. • The treatment of healthcare waste produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated and then safely disposed of. • Open burning and incineration of medical wastes can result in emission of dioxins, furans and particulate matter, and	Laboratories and healthcare facilities at national and subnational levels, HSD, PMD

		result in unacceptable cancer risks under medium (two hours per week) or higher usage. • If small-scale incinerators are the only option available, the best practices possible should be used to minimize operational impacts on the environment. Single-chamber, drum and brick incinerators do not meet the Best Available Techniques (BAT) requirements under the Stockholm Convention. Small-scale incineration should be viewed as a transitional means of disposal for health-care waste. If existing on-site incinerators are used, mitigation measures will be taken to control emissions to air in line with WBG EHS for healthcare facilities and WHO's guidelines for safe management of waste generated from healthcare activities. The good practices are as follows: • Waste reduction and segregation to minimize quantities of waste to be incinerated. • Siting incinerators away from patient wards, residential areas or where food is grown. • A clearly described method of operation to achieve the desired combustion conditions and emissions; for example, appropriate start-up and cool-down procedures, achievement and maintenance of a minimum temperature before waste is burned, use of appropriate loading/charging rates (both fuel and waste) to maintain appropriate temperatures, proper disposal of ash and equipment to safeguard workers. • Periodic maintenance to replace or repair defective components.	

		• Improved training for operators and improved management including the availability of an operating and maintenance manual, visible management oversight, and regular maintenance schedules. • Alternative treatments should be designed into longer term projects, such as steam treatment methods. Steam treatment should preferably be on site, although once treated, sterile/non-infectious waste may be shredded and disposed of in suitable waste facilities. • The project health facilities should establish and apply procedures for healthcare waste management. HCWM procedures should be in line with National guidelines for Infection Prevention and Control in healthcare facilities and take into account WHO guidelines for Safe management of wastes from health-care activities and WHO technical brief water, sanitation, hygiene and waste management for COVID-19.	
	Poor sanitation and improper management of wastewater related to COVID-19 diagnosis and treatment services transmit diseases to communities and pollute environment.	• Health facilities shall ensure the provision of safe water, sanitation, and hygienic conditions, which is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak. Health facilities shall establish and apply good practices line with WHO guidance on water, sanitation and waste management for COVID-19 and National guidelines for Infection Prevention and Control healthcare facilities	Laboratories and COVID-19 treatment centers at national and subnational levels
	Hazardous materials used and generated during the provision of COVID-19 diagnosis, care and treatment services	• The hospitals and laboratories should develop a hazardous material management procedure that defines: inventory of hazardous materials in the health care facilities, proper labeling of hazardous materials, safe handling, storage and use of hazardous materials, use of protective equipment	Laboratories and COVID-19 treatment centers at national and subnational levels

	Hazardous chemicals in hospitals and health care centers are limited to small volumes of laboratory reagents, chemicals, solvents, medicinal gases etc.	procedure for managing spill, exposures and other incidents, procedure for reporting of incidents. Hazardous materials should be handled in accordance with the accepted practices. Only trained personnel should handle the materials and precautions taken when handling materials by using required protection equipment such as ventilation hoods and personal protective equipment.	
Labor management	Health workers (especially nurses), cleaners, ambulance drivers and caterers may be asked to work overtime to respond to the COVID-19 pandemic. It is important that these personnel are able to access overtime pay as needed. Health care and other staff, including cleaners, or workers in upgrade/rehabilitation may need medical care if they contract COVID-19 Health workers, a big proportion of whom are female (and who may also bear additional responsibilities in terms of child and elder care), may face mental health issues or burnout as result of an outbreak. Health workers, cleaners or	• All workers must be paid for overtime as per the Labor Law • All workers must be provided with security of medical care, in particular ensuring they can access free medical care if they contract COVID-19. • Ensure that the staff with lower qualification or less experienced working in the health sector (e.g., cleaners, caterers, part-time workers, etc.), often female workers, also have access to the required Personnel Protection Equipment (PPE) – including gloves, gowns, masks and eye protection if exposed to patients with COVID-19, their waste, clothes or linen – and training to make sure they work in a safe environment. • Most vulnerable workers should be identified, such as female single heads of household, who may need additional support in order for them to do their job (for instance, female nurses who are single heads of household may need additional support if they have to work overtime). Additional support to consider may include cash grants, access to food support or provision of childcare services. • Health care workers must be actively supported by their employers and commended for their work, as well as offered psychological, emotional or mental support if	MOH

	workers involved in upgrades experiencing respiratory symptoms may fear not getting paid and continue to show up at work.	possible. This may mean bringing in monks to a hospital for a ceremony or ensuring health workers have regular breaks and proper food throughout the day. • All workers involved in upgrading facilities, health workers, cleaners, etc., must be reassured that they will continue to get paid if they need to self-isolate if they are showing with COVID-19/respiratory symptoms. These provisions must be made including for contracted staff and are included in the Labor Management Plan (LMP).	
	Village Health Support Groups (VHSG) help to connect villagers to important health services provided by health centers. VHSG work voluntarily but it is important to ensure that they are motivated to work. VHSGs work closely with villagers from house to house, their working conditions can therefore be at risk of transmission of COVID-19 if they don't follow the precautionary measures of MOH.	• All VHSGs work for the community without any salary. Many are women, poor with the burden of a family as well. Thus, they should be motivated with an incentive package for their living during the pandemic. • VHSGs live and work with local villagers. For their work, they need to communicate and travel a lot to cover all households. It is therefore important to cover their communication and travel expenses. • Health centers should ensure that appropriate PPE and hand cleaning alcohol/gel are provided to VHSGs to use during their work. • HCs need to ensure that VHSGs can access free medical care if they contract COVID-19.	Project Management and; Commune Councils
Access to COVID-19 healthcare services	People are asked to pay at public hospitals in order to access medical care. There is a risk that the poor, those with disabilities and IP groups – who could be	• All provincial/referrals hospitals including in Phnom Penh must treat any patient accessing services for COVID-19 in a manner appropriate to ensure their wellbeing. • Communication materials including RCCE materials, must make clear that all treatment for COVID-19 at	

	disproportionately affected by COVID-19 – may face discrimination when accessing health services, particularly if they do not have money to pay.	provincial/referral and PP public hospitals is free. People must also be told about the GRM process to report any instance where they are asked to pay to access needed medical services (unless it is a private hospital).	
	Focus on COVID-19 may redirect staff and resources at health facilities and health care services, such as maternal health check-ups, vaccinations for children and treatment of chronic diseases. This may particularly impact women, young children and the elderly. People, in particular women with young children, pregnant women, the elderly, those with disabilities, chronic illness and other vulnerable populations, may be fearful of going to the hospital/health center for fear of contracting the virus. This may cause children to miss out on needed vaccinations, women not seeking support during pregnancy, etc.	• Public health facilities must ensure they still have adequate staff to work with routine medical needs. While non-urgent cases may be deferred, it is important that childhood vaccinations continue, that women have antenatal and post-natal visits, that sexual and reproductive health services are available and that those with chronic conditions and/or disabilities continue to receive necessary treatments (with adequate measures to separate them from patients with COVID-19, as detailed in other sections in this Table). • Communication materials must stress that these routine services are still being provided, and explain measures taken in health centers to avoid COVID-19 risks (for instance, that COVID-19 patients are treated in a different area from where mothers deliver babies) as there may be apprehension from community members about going to health facilities. This may include radio messages, Facebook, loudspeaker announcements, signage in hospitals, etc.	Ministry of Health (subcommittee on IEC for risk communication, information and vaccination)
Access to other	It may also be that people are asked to pay increased fees for non-COVID-19 related illnesses, in order to cover	• All public hospitals must treat every patient accessing services in a manner appropriate to ensure their wellbeing.	Ministry of Health (CDCD, and PMD) and all public health

healthcare services	other hospital costs. For instance, fees for maternal services, surgeries, etc. may increase as a result of pressures on hospitals dealing with COVID-19, which may also disproportionally impact the poor and vulnerable, in particular if they face livelihood losses as a result of the COVID-19 pandemic.	• People must also be told about the GRM process to report any instance where they are asked to pay beyond the publicly displayed user fees to access needed medical services.	facilities at national and subnational levels
	Inappropriate information and communication increase social stigma against those exposed to or infected by the virus. Risk of fear and/or stigma towards the virus, which may make people hide symptoms, avoid getting tested and even reject hygiene measures or wearing PPE equipment (or masks if recommended) Health workers may suffer stigma, in particular when coming back to their communities, as they may be seen as potential "carriers" Some groups may be particularly vulnerable to stigma, such as Cham	• When developing communication messages about COVID-19, it is important to have social stigma issues in mind and to choose language that does not exacerbate stigma. • It is best to not refer to people with the disease as "COVID-19 cases", "victims" "COVID-19 families" or "the diseased". It is better to refer as "people who have COVID-19", "people who are being treated for COVID-19", or "people who are recovering from COVID-19". It is important to separate a person from having an identity defined by COVID-19, in order to reduce stigma. This language should be used in all communication materials. • Ensure accurate information about the virus is widely disseminated, and that there is also a focus on people who have recovered. • When developing communication materials, refer to WHO information on social stigma: https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf	Public health facilities at national and subnational levels

	minorities who are already experiencing prejudice due to the high number of cases in their communities	• Engage social influencers, such as religious leaders, who can help communicate accurate messages and help to reduce social stigma as well as support those who may be stigmatized. • Correct misconceptions and provide accurate information. One way to do this could be through District health officials and/or commune leaders/officials. They could be trained on the basics of COVID-19 prevention (good hygiene, frequent hand washing, avoid touching the face, social isolation measures) and be provided with simple materials in Khmer. These officials can use this information to inform others in their communities, including correcting false rumors. Focus should be on prevention as well as on identifying symptoms and how to seek treatment. • The SEP should include reaching out to NGOs and other stakeholders to ensure it captures their views and suggestions on the best methods to develop RCCE materials. • Communication materials must reinforce the positive contribution of health care workers and other essential workers and their need to be supported by community members. • Communication materials should make clear the steps health workers and others are taking to protect themselves against the virus and their use of PPE.	
Information, communication,	Communication materials may not reach the most vulnerable, including the elderly, IPs and workers from the informal	• When developing communication materials, it is important to ensure that they are clear and concise, and that they are in a format/language that is understandable to all people, in particular the most vulnerable. Messages should be clear	Ministry of Health (subcommittee on IEC for risk communication, information and vaccination) and all public

capacity building and stakeholder engagement	sector, a lot of whom are women, who tend to have lower levels of education, lower incomes and may lack access to reliable information materials.	and concise, focusing on hygiene measures (hand washing, coughing), what to do if people suspect they have COVID-19, as well as restrictions if applicable (for instance specific guidelines on social-distancing). • When developing communication materials, refer to WHO information on social stigma: https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf • This may mean that different media needs to be used (social media, radio, tv) plus engaging existing formal and informal public health and community-based networks (schools, healthcare service providers at local level, etc.). Ensure that information is accessible in sign language, illustrations/pictorial and relevant languages of IP groups, in particular in northeast Cambodia where there are more non-Khmer speaking IPs. • Ensure messages relating to COVID-19 reach all groups of people, in particular the most vulnerable (the poor, elderly, women single heads of household, those with a disability, IP groups, any marginalized group). This may include having a multi-faceted approach to consultations and disclosure of information and information sharing, such as by loudspeaker (by commune authorities or district health authorities), Facebook, SMS, You Tube videos, social influencers/religious leaders, etc. • A focus of information materials should be on women, as they tend to be the best means of communication for children and the elderly in households.	health facilities
	If stakeholders are not properly consulted,	• The Stakeholder Engagement Plan (SEP) must use different communication methods and ensure consultations with	MOH/PMD

	information is not disclosed and people are not informed about their rights, options for grievance redress or project timelines, there could be misunderstandings, conflict, stigma, gender-based violence, false rumors or loss of confidence in the community regarding the project.	NGOs and other stakeholders that can provide recommendations on how to communicate information and develop a Risk Communication and Community Engagement Plan (RCCE). • Ensure consultations on SEP and this ESMF include relevant government agencies, NGOs and other organizations working on health and gender, including GBV, as well as IP groups. Ensure women, and women's groups, are targeted during consultations on the SEP and ESMF, as well as information campaigns and RCCE materials as described above. • Identify trusted community groups (local influencers such as community leaders, religious leaders, health workers, community volunteers, celebrities) and local networks (such as women's groups, youth groups, business groups, and traditional healers) that can help to disseminate messages. Define clear and easy mechanisms to disseminate messages and materials based on community questions and concerns. • Ensure communication materials not only focus on COVID-19 symptoms and hygiene, but also on coping strategies if there is social isolation, avenues (materials, organizations, hotline) available for mental health, GBV, etc. that may be available.	
	Improper safety injection may lead to needle stick injury among vaccinators and may cause cross contamination from one vaccine receiver to another	• MOH shall ensure that vaccination teams adhere to the existing MOH guidelines on injection safety and waste management, and the training module on injection safety for all vaccinators. Occupational Health and Safety (OHS) measures shall be established and complied with at all vaccination sites.	Project Management's IEC for risk communication, information and vaccination and subnational committee for All public health facilities at national and subnational levels

Preparedness and deployment of COVID-19 vaccination campaign		•	
	Storage and cold chain capacity may be insufficient for the number of vaccines to be delivered Unsuitable storage and transportation of vaccines may lead to reduction of vaccine quality.	• MOH should make sure that resource allocation does not impede the vaccination activities to be conducted and ensures supply chain system functionality in the country. The web-based cold chain inventory by provinces will be reviewed and appropriate measures taken in case of non-functionality or shortage of cold storage capacity. • The operational guideline for the COVID-19 vaccination campaign shall be clear on capacity of handling, transporting and cold chain storage for vaccines. MOH's subnational committee on vaccine and cold chain management should ensure national, PHD, OD supervision and monitoring teams for vaccination campaigns to strictly monitor the cold chain system including required storage temperatures, quantity and quality of cold chain appliances including refrigerators, cold boxes, and vaccine carriers used, and to make sure that cold chain equipment is enough in terms of quantity and quality for storage vaccines, especially at OD and health center levels. • MOH's subnational committee on vaccine and cold chain management shall develop an operational guideline for COVID-19 Vaccination campaigns that include Immunization Supply Chain Management. This operational guideline shall ensure: (i) effective COVID-19 vaccine shipment, storage, handling, and stock management; (ii) rigorous temperature control in the cold chain; and (iii) maintenance of adequate logistics management information systems.	Project Management /CMS

	Operation of cold chain logistic and storage would potentially generate negative environmental emissions.	• GHG emissions from cold chain logistics and storage from both energy emissions (indirect emissions) and leak of GHG potent hydrofluorocarbon (HFC) refrigerant gases (direct emissions), will be estimated. • Use of more energy-efficient technology for the refrigeration system by including relevant technical specifications as part of procuring cold storage/chain equipment and ensuring that the refrigeration system including its maintenance and servicing, complies with international standard requirements. • Observe proper handling of refrigerants during servicing and ensure that workers involved in servicing are trained to avoid leakage of refrigerants into the atmosphere and use PPEs to avoid exposure to refrigerants.	Project Management
	Some of the most at risk groups may be excluded from vaccination and may not be able to access information related to COVID-19 vaccination. There is a risk of social exclusion, in particular, the most vulnerable and marginalized groups such as indigenous peoples in remote areas, and also sexual and gender minorities (especially transgender people) from access to COVID-19 information and vaccines.	• Providing guidance and training on how to identify the most at risk populations for COVID-19 vaccination shall be essential. In addition, Village Health Support Group shall be involved to ensure no identified priority groups are excluded, particularly the most vulnerable and marginalized groups. • The communication strategy shall include development and dissemination messages on COVID-19 vaccination that are inclusive taking into consideration vulnerable groups, indigenous people and their literacy levels and languages. The messages contained in the Communication Strategy will address concerns/feedback from public consultation such as equitable access, quality of vaccination services, the importance to get vaccination, etc. To ensure priority access to those most at risk and equitable access to the vaccines, the NDVP was developed in several consultative	Project Management

		meetings, working with the Cambodian Communicable Disease Control Department (CDC) to review the epidemiology/burden of disease, groups with higher risk of mortality, country context, health system infrastructure, etc., and the WHO allocation framework and recommendations from the Immunization Strategic Advisory Group of Experts (SAGE). • The NDVP identified priority groups to receive the vaccines. These priority groups in the NDVP were presented to the Technical Working Group for Health which acts as the National Immunization Technical Advisory Group (NITAG), for review and discussion. The priority groups were then reviewed and finalized by the COVID-19 Vaccine Introduction Preparedness and Implementation Task Force of MOH in December 2020.	
	As COVID-19 vaccines are new and their development and clinical trials are relatively short, communities may not be confident about them and may refuse to accept them.	• Communication strategies and messages should address rumors and fake news and built trust in communities about the safety of vaccines.	Project Management
	An adverse event following immunization generates fear in the community and leads to people refusing vaccination	• The likelihood of this is largely unknown given that the vaccines are new, but trials to date show low incidence of adverse reactions. However, communication strategies shall ensure clarification of the reasons for the adverse event and support an evidence-based communication campaign to reassure people of the true risk level. • Misinformation on the adverse effects of vaccines may lead to people doubting the quality of vaccines. The Communication and Community Engagement (CCE)	Project Management

		Strategy and Plan for COVID-19 vaccine deployment and vaccination shall ensure provision of timely and accurate information about vaccine uptake and cases of adverse events and address misinformation and fake news promptly, as well as develop communication guidelines and key messages to respond adverse events following immunization (AEFI) and vaccine related issues. • Post Deployment Surveillance (PDS) have been developed to monitor the safety and effectiveness of COVID-19 vaccines. A system to detect AEFI cases has also been established with mainly passive surveillance where cases are reported through the system. MOH shall ensure sensitive activation of this monitoring system.	
	People may feel that it is not necessary for them to get vaccinated and they refuse to vaccinate since they see that almost all COVID-19 positive cases have been successfully treated with few deaths and vaccine receivers after vaccinated are still exposed to new variants of the COVID-19 virus.	• Clear communication strategy, education campaign, and dissemination information; with clear, correct, and consistent messages; and active participation from involved institutions, local authorities, and VHSGs.	Project Management

	The degree of trust in the effectiveness of different types of COVID-19 vaccines varies. This would create negative beliefs among the public that preferred groups will receive better quality vaccines and others will receive lower quality vaccines.	• Clear communication strategy, education campaign, and dissemination information; with clear, correct, and consistent messages; and active participation from involved institutions, local authorities, and VHSGs. • Ensuring prioritization of target groups is clear to people through the communication strategy	Project Management
	The risk of a shortage of vaccines and vaccination services leading to people competing with each other to get a vaccination first and possible social conflict as a result.	• Strengthening management capacity of vaccination including increasing vaccination capacity, ensuring volume of supplies, storage and transportation of vaccines, applying penalized measures on the theft of vaccines, and increasing communication, education campaign, and dissemination of information. • Ensuring prioritization of target groups is clear to people through the communication strategy	Project Management
	Security of vaccines is also important as there could be a risk of stealing the vaccines and bribing to get the vaccines.	• This risk can be managed through strict enforcement of compliance with regulations and applying strong penalties. Free provision of all vaccines in line with government policy will reduce the risk of theft as long as supplies are sufficient. Training provided to staff engaging in vaccine management is central to the second AF's activities.	Project Management
	There is a risk of not completing the vaccine regimen (2 doses at least 2 weeks apart) due to the individual's apprehension and/or schedule	• Registration of priority groups before vaccination by using a digital registration system. The digital registration system shall be able to alert priority groups about their vaccination schedule. VHSGs shall be involved in reminding priority groups to get vaccinated as scheduled.	Project Management and PHDs, ODs, heads of vaccination sites, local authorities

	mismanagement	• The, date, place and name of vaccines for second doses will be written on the vaccination card given to vaccine receivers. MOH will arrange and announce the second dose schedule through communications including local authority announcements by loudspeaker and social media such as Facebook, Telegram, Tik Tok.	
	The vaccine administration may lead to crowding and violation of physical distancing measures, increasing the risk of exposure of the health workers, the vaccine receivers, and the community.	• Support the development of micro planning at local level. The micro planning should clearly cover vaccination scheduling to avoid crowding people in a way that may violate physical distancing.	Project Management
	The accessibility of COVID-19 vaccines due to their price is a risk.	• Policy that provides free COVID-19 vaccines to all Cambodian and foreigners who live and work in Cambodia, especially those who are most at risk.	Project Management
	The vaccine distribution and deployment may also exclude populations based on geographical distribution, i.e., those in far-flung areas, and on socioeconomic status, such as less access for the marginalized.	• MOH shall ensure that vaccination is provided to all priority groups, particularly the most vulnerable and marginalized groups, and that all target groups are reached and covered. Village Health Support Groups will play a crucial role to support this activity.	Project Management
	Infectious health care wastes generated from the vaccination pose a risk to community health and safety if not handled, transported, treated, and disposed of	• Specify adherence to the existing MOH guidelines on injection safety and waste management, and training module of NIP on injection safety and management of wastes generated from COVID-19 vaccination for all vaccinators. The module should cover precautionary	Project Management

	according to the proper health care waste management practices.	measures on hand hygiene, physical distancing, wearing face masks, and body temperature control.	
	The health workers and vaccinators involved in the vaccine administration activities may face discrimination by people in the community due to their fear of contracting the virus, frustrations over medical care, or misinformation.	• Communication strategy should produce and disseminate messages on COVID-19 vaccination particularly to prevent misinformation that may lead to discrimination toward vaccinators.	Project Management
	Most personal data provided by people being vaccinated is already held by government, but there is a risk that consent or refusal to be vaccinated, which is recorded, might be used to discriminate against individuals.	• Data held on people vaccinated or offered vaccination but who refused, will be stored in a way that is anonymized so that a linkage between consent/refusal and any specific individual is not feasible. Both those who were vaccinated and those who refused will also have access to the GRM if they have concerns about how their personal data has been used.	Project Management
	The RGC's sub-decree 66 mandates individuals for COVID-19 vaccination based on their professions and infection risks associated with them as determined by the Ministry of Health. This could result in inclusion of the possibility of mandatory vaccination.	• A Routine monitoring system during the implementation will be put in place to ensure the deployment of vaccine under the AF2 will be on voluntary basis.	Project Management

6. PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES

78. This section sets out the procedures for identifying, preparing, and implementing the project components, environmental and social screening, preparation of required E&S plans, consultation on such plans, review and approval and implementation.

Screening:

79. The purpose of screening is to (i) determine whether activities are eligible to be financed, and likely to have potential negative environmental and social risks and impacts; and (ii) identify appropriate mitigation measures for activities with adverse risks or impacts. **The MOH will use the E&S screening form and Indicative Screening Guidance in Annex 1.** Based on the screening, the MOH will (a) ensure that the activities on the "ineligible list" will not be financed by the Project; (b) sign the E&S screening form; and (c) prepare and implement the specific E&S instrument/plan as needed.

Preparation of E&S plan:

80. To facilitate preparation of the E&S plan, beneficiary health facilities fall broadly into 2 groups: Group 1 – health facility without civil works and Group 2 – health facility with civil works. Each health facility without civil works shall prepare an ICWMP using the template in Annex 2. Each health facility with civil works shall prepare an ESMP. The ESMP will include three parts: an ICWMP in line with the template presented in Annex 2; ECOPs to mitigate impacts related to repair/rehabilitation as proposed in sections 5.1 and 5.2; and LMPs as presented in Annex 3. The ESMP/ECOPs will then be incorporated into the bidding and contract documents, and the implementing agency will ensure thatthe contractor is aware and committed to comply with the E&S obligations in the ESMP/ECOPs. MOH will support beneficiary health facilities to prepare the ICWMP and ESMP/ECOPs.

81. **Consultation of prepared E&S plan:** The ICWMP and ESMP will be consulted with health facility staff, particularly nurses and female health professionals, and with local communities.

82. **Review and approval of E&S plan:** The ICWMP and ESMP will be reviewed by E&S specialists in and the Department of Preventive Medicine under MOH and approved by the Project Director. The World Bank will review ICWMs and ESMPs as well.

83. **Implementation and monitoring of E&S plan:** The implementing agency will assign a construction supervision consultant or field engineer to be responsible for day-to-day monitoring of the renovation civil works and maintain close consultation with the local community as necessary. If appropriate provincial health department and other local authorities may also monitor the implementation of the E&S measures during implementation of the physical renovation works, as well as ensuring there is equitable access to services. Monitoring and reporting to the MOH and the World Bank will be required.

Monitoring, Supervision and Reporting

84. The Preventive Medicine Department of MOH will be responsible for monitoring implementation of ESMF/ESMP, ECOP and SEP, and prepare biannual monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project, including but not limited to, stakeholder engagement activities and a grievances log for review and discussion during every project implementation support mission (ISM). The outcomes of the discussions and the report will be reflected and annexed respectively to the aide memoire of every ISM. During upgrading/renovation of health care facilities monitoring and

supervision will proceed as already established in earlier World Bank health projects. The health facility management committee will be responsible for day to day supervision of the implementation of mitigation measures. They will be guided in this task by designated staff/consultants of relevant departments or institutions.

85. The selected contractor(s) shall submit their completed work plans to the Project Director prior to initiating the civil works. The Contractors' Work plans should incorporate all agreed measure described in the ESMP or ECOPs as appropriate. The civil work supervision team should incorporate the status of ESMP /ECOPs implementation into the monthly civil work progress reports. The Project's civil work supervision engineers will monitor compliance with the ESMP/ECOPs by the civil works contractors during their regular site supervision.

86. The Preventive Medicine Department will be responsible for monitoring implementation of ESMF/ESMP provisions and report implementation progress in the project semi-annual progress reports. This reporting requirement will also be included as part of the project's Operation Manual.

Implementation Arrangements and Responsibilities

87. Cambodia's National Pandemic Preparedness Plan was updated in 2019. Clear coordination, command and control structures were put in place for a multisectoral, whole-of-government, whole-of-society response involving government departments, agencies, and civil society organizations. The government strengthened and tested its preparedness efforts and set up the national preparedness and response coordination mechanism through a National Public Health Emergency Operation Center (EOC). To ensure the success of the COVID-19 vaccination campaign, an ad-hoc national committee for COVID-19 vaccination was established on March 17, 2021. This committee has the following roles and duties: (1) lead and manage national COVID-19 vaccination activities; (2) review and develop national COVID-19 vaccination plans; (3) train and task health staff for COVID-19 vaccination; (4) distribute COVID-19 vaccines to vaccination sites across the country; (5) allocate budget, and necessary supplies for COVID- 19 vaccination activities; (6) review, monitor and assess progress of the national vaccination program; (7) facilitate vaccination and related activities; (8) liaise with national and international development partners, UN agencies, international organizations, NGOs and foreign embassies in Cambodia relating to COVID-19 vaccination; (9) prepare a reporting system and reports to the head of Government; and (10) undertake other tasks related to vaccination.

88. The project management has been assigned by the Minister of Health. The Project Director and Project Manager act through MOH's technical departments and national programs, as well as the Provincial Health Departments (PHDs), Operational Districts (ODs), referral hospitals (RHs), and health centers (HCs). Within MOH, the project will be implemented through the Department of Communicable Disease Control (DCDC), Department of Hospital Services (DHS), National Institute of Public Health (NIPH), Central Medical Store (CMS), and the Department of Budget and Finance (DBF) using mainstream MOH processes and will not involve a parallel project implementation unit or secretariat. Other MOH departments participating in project implementation will include (a) the Internal Audit Department (IAD); (b) the Preventive Medicine Department; and (c) the Department of Drugs and Food. CMS will be involved in project implementation, due to its core role in the storage and distribution of vaccines and consumables. CMS is experienced in managing vaccine storage and distribution for the routine vaccination program and national scale vaccination campaigns for eliminating vaccine-preventable diseases such as measles and neonatal tetanus. It has the human resource capacity to manage appropriate storage and distribution of vaccines and supplies for the national COVID-19 vaccination campaign. The oversight and

verification arrangements for the implementation of COVID-19 vaccine deployment have been established in line with the NDVP, and the monitoring team consists of government officers from MOH, local government, and development partners.

89. The MOH, through the Department of Preventive Medicine (PMD) is responsible for World Bank Safeguards implementation for H-EQIP. The PMD is also responsible for safeguards implementation of CERC and COVID-19 ERP activity. The PMD is already implementing environmental and social due diligence required for the environmental and social management of current projects and will also adapt the E&S Standards to these initiatives when necessary.

90. Those responsible for carrying out stakeholder engagement activities are appointed at the Department of Preventive Medicine (PMD) under MOH. The project has already initiated efforts to strengthen this department's capacity and skills through additional consultants or advisors. The additional consultants or advisors will be used to strengthen MOH's capacities for stakeholder engagement in the project activities.

Capacity Building

91. The health sector has experience in infection prevention and control, healthcare waste management, communication and public awareness for emergency situations. As found across most countries, the capacity to manage risks associated with COVID-19 is a monumental challenge as the healthcare professionals may not have the detailed know-how on the infectious risk management in the labs to be used for COVID-19 diagnostic testing, quarantine and isolation centers for COVID-19 treatment, in particular waste management, and COVID-19 vaccination. Additionally, the communication process with the public in handling social concerns around COVID-19 as well as related measures, including quarantine is a catch-up process globally. The project will provide considerable funding, training and capacity building to support these critical initiatives and build upon international expertise to achieve international best practices on these matters in line with WHO guidelines and advice. This will also include further identification of capacity gaps and detailed measures in line with the project proposal.

7. CONSULTATION AND STAKEHOLDER ENGAGEMENT

92. The main objective of the stand-alone Stakeholder Engagement Plan (SEP) is to define a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. It also outlines a communication strategy with the project stakeholders, and offers mechanisms for them to raise concerns, provide feedback, or make complaints about the project. While Component 3 of the project specifically deals with capacity building and communication materials, the SEP will deal with all project components as it seeks to ensure stakeholders are consulted and well-informed about the project and have avenues to provide their feedback.

93. In terms of the COVID-19 vaccines, NIP, supported by UNICEF, WHO and CHAI, has developed the Communication and Community Engagement (CCE) Strategy and Plan for COVID-19 vaccine deployment and vaccination. The strategy aims to provide timely and accurate information about the vaccines in order to ensure acceptance and support for the vaccines, the phased approach and to encourage vaccine uptake. The strategy also aims to establish social listening channels to address misinformation and fake news promptly as well as to develop communication guidelines and key messages to prepare for and respond to adverse events following immunization (AEFI) and any vaccine-related crises. Local authorities and health staff are a key audience for the strategy not only as the first COVID-19 vaccine receivers but

also as key influencers in their communities. Hence, the strategy underlines community engagement interventions and aims to provide health staff with the appropriatecommunication tools and training (combined training with other areas) for them to conduct vaccination safely and encourage vaccine uptake. Orientation meetings with Village Health Support Group (VHSG) and key community leaders at all HCs will take place ahead of the vaccination campaign to prepare theVHSG and community leaders on disseminating COVID-19 vaccination messages to target groups.

94. The SEP shall focus on stakeholders and communication strategy and will be aligned with NIP's CCE as relevant. The communications strategy should produce and disseminate messages on COVID-19 vaccination particularly to prevent misinformation that may lead to discrimination toward vaccinators and on building public confidence in the safety of the vaccines and process transparency. Addressing rumors, fake news, and misinformation immediately is vital to the success of the COVID-19 vaccination services/vaccination campaign. Communication materials to be developed should clearly present messages in a way that is understandable and culturally acceptable to local people in terms of appearances of the language used, written versus verbal communications, and dissemination means including social media, traditional media, local authorities, and VHSG. For indigenous and ethnic minority communities, the message should be presented in local languages and in verbal form. Mobile loudspeakers are an effective information dissemination means for community campaigns.

95. The SEP is a living document. The objectives of the SEP are:

- To identify all project stakeholders including their priorities and concerns, and ensure theproject has ways to incorporate them.
- Identify strategies for information sharing and communication to stakeholders in ways thatare meaningful and accessible.
- To specify procedures and methodologies for stakeholder consultations, documentation ofthe proceedings and strategies for feedback.
- To establish an accessible, culturally appropriate, and responsive grievance mechanism, and
- To develop a strategy for stakeholder participation in the monitoring of project impacts.

96. In general, there are two kinds of stakeholders: affected and interested stakeholders.

- ***Affected stakeholders.*** Those who will likely be impacted by the project positively or negatively. They include individuals or groups whose interests may be affected by the Project and who have the potential to influence the Project outcomes in any way. A guiding principle is that engagement with these stakeholders will be commensurate with the level of impact they suffer. In line with the SEP, the affected parties include:
    - People with COVID-19, including their immediate family members.
    - Communities (i.e. religious, ethnic, gender) which have people with COVID-19.
    - People under quarantine as a result of the pandemic, and their immediate family members.

- Communities close to laboratories, quarantine centers, hospitals, and screening posts.
- Workers at construction sites of laboratories, quarantine centers and screening posts.
- Health workers and other relevant staff dealing with patients with COVID-19, their waste, fluids, blood, clothes or linen, in any of the 25 hospitals the project is supporting.
- COVID-19 vaccinators, VHSGs, COVID-19 vaccine receivers (priority groups), relevant sub-national staff, communities, and drivers and workers in vaccine storage and transportation.
- People at risk of contracting COVID-19 (vulnerable groups – in particular the poor, including informal sector workers, those living with disabilities, the elderly and female- headed households), travelers from overseas, inhabitants of areas where cases have been identified, etc.).
- Municipal waste collection and disposal workers.
- MOH and NIPH staff.
- Other public authorities who may be directly working in the project, such as law enforcement officials working on screening or local authorities working on communications and delivery of vaccines to reach difficult to access priority groups.

- ***Interested Stakeholders.*** Those who are not impacted by the project but who may be interested in the Project outcomes and who may have an influence in the project. Interestedstakeholders are identified are as follows:
  - Traditional media.
  - Participants of social media.
  - Politicians.
  - National and international health organizations.
  - Non-governmental organizations (NGOs).
  - Businesses with international links.
  - The public at large.

97. ***Consultations during Project Preparation.*** Initial public consultations were conducted by MOH's PMD with relevant staff/health professionals on 25-31 March 2020 to inform them of the Project as well as to seek their feedback, views and suggestions regarding the project environmental and social risks and suggested mitigation measures. Given ongoing restrictions, consultations were conducted remotely, by setting up a Telegram group where project information was shared and discussed by stakeholders. Some interesting aspects coming out of consultations with stakeholders in the health sector included the fact that some people in Cambodia, in particular in rural areas, still practice traditionaland religious

beliefs as a way of 'chasing COVID-19 away' (e.g. by putting a scarecrow outside their house so the virus cannot enter). These practices indicate that further actions are needed to enhance people's awareness regarding COVID-19 prevention. The minutes of the consultation can be found in theannex of the SEP, which has been publicly disclosed on the MOH and World Bank websites.

98. Since there are no material changes to the ESMF with the scale-up of activities, no additional public consultations took place for the first update of the ESMF. However, for COVID-19 vaccination (AF2) public consultations were conducted on 18-19 February 2021, with communities and vaccinators to understand their concerns and suggestions on COVID-19 vaccines. Feedback/risks received from this public consultation include: (i)inequity in arrangements for preferred groups to receive better quality vaccines and other to receive lower quality vaccines; (ii) shortage of vaccines and vaccination services when vaccines are believed and trustedby the public; and (iii) people may feel that it is not necessary for them to get vaccinated and they refuse to vaccinate because they see that all positive cases are successfully treated with zero deaths and vaccine receivers after vaccinated are still exposed to new variants of the COVID-19 virus. The consultation also generated some suggestions including (i) strengthening management capacity of vaccination including increasing vaccination capacity, supplies, storage and transportation of vaccines, applying penalties for stealing vaccines; (ii) enhancing communication and educationcampaigns and dissemination of information with active participation from involved institutions, local authorities, VHSGs, and civil societies, and messages have to be clear, correct, and consistent to avoid confusion among people; and (iii) active cooperation with local authorities, VHSGs, and civil societies in collecting information about marginalized and disadvantaged groups. The feedback received from the consultants was central not only to informing the project risk, but also to allowing the project to adapt or reinforce, where relevant and appropriate, the risk mitigation measures as outlined in Table 5.1 and 5.2 above.

99. ***Consultations During Project Implementation.*** It is expected that consultations and information disclosure will be an ongoing process under Component 3 of the Project. These consultations will be made, as outlined in the SEP, with project affected/interested stakeholders including the IPs, relevant ministries working or having an interest in the health sector, relevant CSOs/NGOs, as needed, using various means of communication as appropriate and consistent with ongoing restrictions, including using Telegram/Facebook, face-to-face consultations, phone calls.

Table 4: Consultation Stages and Considerations

Project stage	Topic of consultation / message	Method used	Target stakeholders	Responsibilities
Preparation prior effectiveness	The project, its activities and locations, potential impacts and mitigation measures Introduce the project's ESF instruments Present the SEP and the Grievance Mechanism	National Consultations conducted virtually via Telegram given restrictions on public gatherings, March 25-31. Additional consultations updating on ESMF in April 2020. Project website	Affected people and other interested parties as appropriate. Relevant Ministries working in, or with an interest in the health sector and COVID-19. NGOs and CSOs may also be included.	PMD with support from consultants

Project Implementation	Updated project's ESF instruments Feedback of project consultations Information about project's activities in line with WHO COVID19 guidance on risk communication and community engagement	Consultations (face to face and/or virtual consultations) Project website Correspondence by phone/email Letters to local, provincial,and national authorities Consultations with IPs groups, or their representatives, (when applicable) in a culturally appropriate and accessible manner Delivery of vaccines to reach difficult to access priority groups	Affected people and other interested parties as appropriate. Relevant Ministries working in, or with an interest in health sector and COVID-19. NGOs and CSOs may also be included	PMD with support from consultants Mass media
Preparation for COVID-19 vaccine deployment	Environmental and Social concerns including risk and impact from COVID-19 vaccination related waste generation, vaccination campaign, and exclusion of vulnerable groups.	National Consultations Distance consultation by using social media communication (Telegram) with healthcare staff at PHDs, RHs, ODs, and HCs Direct individual discussion through provincial safeguard focal points with VHSG	For vaccination: Healthcare staff of PHDs, PRHs, ODs, and HCs will be engaged to ensure injection safety and good waste handling VHSG will engage community to ensure most at-risk groups are not excluded Vulnerable groups marginalized groups, poor and remote populations	PMD with support from consultants

Reporting Back to Stakeholders

100. ***Consultations*** with stakeholders will be the main mechanism to inform them of the project and to get their feedback. MOH will ensure there are notes of project meetings and incorporation ofcomments into project documents when applicable. Stakeholders who provide specific suggestions will be followed up with consultations and feedback on how their comments were considered. For instance, an email, message and/or official letter will be sent after workshops (in person or virtual) on how comments/suggestions were considered.

Grievance Redress Mechanism

101. A grievance redress mechanism (GRM) for the parent project had been established to resolve complaints and grievances in a timely, effective and efficient manner that satisfies all parties involved. Grievances can be submitted if someone believes the Project is having a detrimental impact on the community, the environment, or on their quality of life. Stakeholders may also submit comments and suggestions. This GRM instrument was developed and disclosed on MOH's website on January 2021. Specifically, the GRM:

- Provides affected people with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of the project;
- Ensures that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
- Avoids the need to resort to judicial proceedings.

102. Grievances will be handled at community level (with VHSG as focal points), at each respective health facilities/treatment center, municipal/provincial referral hospitals and PHDs and at the national level by a Grievance Redress Committee established by MOH, including via a dedicated hotline to be established. The GRM includes the following steps:

- Step 1: Complainant discusses project-related grievance with the respective health facilities/treatment centers being supported by the project including vaccination. The Health Center Management Committee or local community can either provide their complaints or feedback to HCs or hospitals by themselves or through VHSGs or the local authority.

- Step 2: If the Complainant is not satisfied with how the grievance is handled, the grievance canbe raised with the Provincial Grievance Redress Focal Person (PGRF)/PHD.

- Step 3. If the Complainant is still not satisfied with how the grievance is handled by the PGRF/PHD,the grievance can be raised directly with the MOH's Grievance Redress Committee and/or hotline.

103. The above steps are at no cost to the complainant. Once all possible redress has been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse. This GRM has been set up to have one grievance redress focal person (GRFP) at provincial level for each capital/province of the total 25. These GRFPs are to manage grievances and record the complaints and resolutions made in their respective province. For collecting complaints nationally, PMD can collect through the existing GRFP. This GRM has been in place for implementation but only a few minor cases have occurred and have all been resolved at the health facility level. PMD will further enhance the GRM through regular virtual meeting with GRFP.

8. BUDGET

104. ESMF implementation costs are allocated according to the budget line items in Table 5. Such costs include training, development of E&S due diligence measures and other to be determined tools. Funds are needed to hire consultant(s) to prepare ESS site specific ESMPs and all associated E&S due diligence reports. The anticipated cost for all these initiatives should be included in the annual operational plans of Cambodia COVID-19 ERP to be approved by the World Bank. It is worth noting that there is a significant overlap between project activities to achieve its objectives, and risk management measures prescribed by the ESMF (infection control is an illustrative example). A good part of the Project budget will be used for

very similar activities as those outlined in the ESMF, e.g. for training, laboratory safety, and information dissemination; significantly more money will thus be spent on ES risk management, than reflected in Table 5. It is also noted that the World Bank activated COVID-19 CERC is undertaking parallel actions and activities set out in the annual operational plans that need to be reconciled with on-going MOH actions to ensure costs savings.

105. Training will cover the following topics:

- COVID-19 ESMF approach
- MOH actions and environmental and social considerations
- Good international industry practices (e.g., WHO, CDC, OSHA etc.) concerning OccupationalHealth and Safety
- Managing COVID related waste, general Medical Health Care Waste, and COVID-19 vaccinerelated waste
- Labor management procedures
- Grievance redress mechanisms including COVID-19 vaccination GRM
- Consultations, communications and feedback including COVID-19 vaccination
- Ensuring all people are given equal access and rights (including vulnerable groups, ethnic groups)
- Understanding concerns with gender-based violence, violence against children, social stigmawith COVID 19
- Monitoring and reporting at all levels.

Table 5: ESMF implementation costs.	**US$**
Training and workshops	
1. MOH to provide training on E&S good practice rolling out first 12 months at national and provincial level **2.** Consultation with ethnic/vulnerable groups for the preparation of the ESMF **3.** 3. Public consultation, especially with communities and vaccinators to understand their concerns and suggestions on COVID-19 vaccines.	0 (this has been done online)
Development of ES Due Diligence Measures and other Tools	
1. Recruitment of consultants for preparation of ESS Standards due diligence site specific upgrades/renovation/checklists, EMPs, etc. **2.** Production of Documents for ES due diligence	25,000 5,000
Information and Communication	

Production and dissemination of communication materials targeting the vulnerable groups	25,000
Supervision, monitoring, and reporting	
1. Travel to provinces for training and conducting monitoring and reporting 2. Monitoring including preparation of annual ES Standards monitoring report for World Bank 3. PMD to conduct supervision and preparation of 6-month ESS Standards monitoring reports	10,000
TOTAL	**$65,000**

APPENDICES

Annex 1: Screening Form for Potential Environment and Social Issues

1. This Annex provides guidance on the E&S screening. The process is considering activities not eligible to be financed by the Project (Ineligible – see main text) and identification of potential environmental and social issues arising from the activities that will be financed. The screening form will be used to screen subprojects for E&S risks anticipated, and the mitigation measures required based on the guidelines in the ESMF.

2. Based on the screening, MOH will (a) ensure that the activities in the "ineligible list" will not be financed by the Project; (b) sign the E&S screening form; and (c) prepare and implement the specific E&S instrument/plan as needed. Guidance for the preparation of the follow-up E&S instrument such as an Environmental and Social Management Plan (ESMP) Template, Infection Control and Waste Management Plan (ICWMP) Template. Consultation with WB specialists on screening is strongly encouraged.

3. E&S Screening form. The form below will be filled during the identification of the Project activities/subproject. The completed forms will be signed and kept in the Project ESF file and included in the ESF implementation progress report to be submitted to World Bank (WB) per theschedule as agreed with WB.

4. Indicative screening guidance table categorizing Project's planned goods, services and works into Tiers that typically do not require screening form and often also no E&S measures (Tier 1) and activities that do require screening form and additional E&S measures (Tier 2) is included after the screening form, together with supporting checklists referenced in the table. In case of any doubt, screening form should be filled out for Tier 1 activities as well and appropriate mitigation measure identified.

Subproject Name	
Subproject Location	
Subproject Proponent	
Estimated Investment	
Start/Completion Date	

Questions	**Answer**		**ESS relevance**	**Due diligence / Actions**
	yes	no		
Does the project finance any activities linked with mandatory/forced vaccination[11]?				If yes, the activity will be ineligible for project financing

[11] Forced vaccination refers to a government mandate requiring vaccination of everyone or everyone in a defined group, without any exceptions or due process for refusing to be vaccinated. Refusal to be vaccinated may result in punitive measures such as criminal sanctions.

Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of healthcare facilities and/or associated waste management facilities?			ESS1	ESMP, ICWMP, SEP
Does the subproject involve acquisition of assets to hold patients (including yet-to-confirm cases for medical observation or isolation purpose)?			ESS5	If yes, this is ineligible activity for project financing
Does the subproject involve in activities that will result in the involuntary taking of land, relocation of households, loss of assets or access to assets that leads to loss of income sources or other means of livelihoods, and interference with households' use of land and livelihoods? marginalized groups and remote population, such as indigenous peoples in remote areas and also the sexual and gender minorities (especially transgender people)			ESS5	The activity will be ineligible for project financing
Does the subproject involve use of goods and equipment on lands abandoned due to social tension / conflict, or the ownership of the land is disputed or cannot be ascertained?			ESS5	The activity will be ineligible for project financing
Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?			ESS2	The activity will be ineligible for project financing
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant for healthcare waste disposal?			ESS3	ESMP, ICWMP, SEP
Is there sound regulatory framework, institutional capacity in place for healthcare facility infection control and healthcare waste management?			ESS1	ESMP, ICWMP, SEP
Does the subproject involve recruitment of workforce including direct, contracted, primary supply, and/or community workers?			ESS2	LMP, SEP
Does the subproject involve transboundary transportation of specimen, samples, infectious and hazardous materials?			ESS3	ESMP, ICWMP, SEP

Does the subproject involve use of security personnel during construction and/or operation of healthcare facilities?			ESS4	The activity will be ineligible for project financing
Does the subproject use goods and equipment for military or paramilitary purposes?			ESS4	If yes, the activity will beineligible for project financing
Does the subproject finance any activities linked with the use of security personnel?			ESS4	If yes, the activity will beineligible for project financing
Is the subproject located within or in the vicinity ofany ecologically sensitive areas?			ESS6	ESMP (only if existing health facility), for any new facility, this would be ineligible activity for project financing, SEP
Does the subproject involve activities that have potential to cause any significant loss or degradation of critical natural habitats whether directly or indirectly, or activities that could adversely affect forest and forest health?			ESS6	The activity will be ineligible for project financing
Is the subproject located within or in the vicinity ofany known cultural heritage sites?			ESS8	The activity will be ineligible for project financing
Are there any vulnerable groups present in the subproject area and are likely to be affected by theproposed subproject negatively or positively?			ESS7	Measures addressing issue onvulnerable groups, including IPs, will be part of ESMP/ ECOP and SEP
Is there any indigenous people presence near the site and benefits from the subproject?			ESS7	Conduct consultation with affect IPs and identify measures addressing issue on IPs as a part of ESMP and SEP
Is there any uses of goods and equipment for activities that would affect indigenous peoples unless due consultation and broad support has been documented and confirmed prior to the commencement of the activities?			ESS7	Conduct consultation with affect IPs in a culturally appropriate manner, and document it well
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1	LMP, SEP
Is there any territorial dispute between two or more countries in the subproject and its ancillary aspects and related activities?			*OP7.60 Projects in Disputed Areas*	Governments concerned agree

Will the subproject and related activities involve the use or potential pollution of, or be located in international waterways[12]?			*OP7.50 Projects on International Waterways*	Notification (or exceptions)

Conclusions:

1. **Proposed E&S Risk Ratings (High, Substantial, Moderate or Low). Provide Justifications.**
   - ……

2. **Proposed E&S Instruments:** ……

Remarks.……
……

Sign by Subproject/activities owner: ……

Position: ……**Date** ……

Sign by: ……

Position: ……**Date:** ……

[12] International waterways include any river, canal, lake or similar body of water that forms a boundary between, or any river or surface water that flows through two or more states.

Indicative Screening Guidance for Goods, Services and Works supported by the Project

Goods & Supplies – Tier 1	Risks and Impacts and Mitigation Measures
ods, bottled water and containers • **Gasoline and diesel** (for air, land, and sea transport) and engine lubricants • **Spare Parts, Equipment and Supplies** for engines, transport, construction vehicles • **Lease of vehicles** (Vans, trucks, and SUVs) • **Search and Rescue** equipment, tools, materials and supplies for (including light motorboats and engines for transport and rescue) • **Tools and Construction Supplies** (roofing, cement, iron, stone, blocks, etc.) • **Communications and Broadcasting** equipment and supplies for (radios, antennas, batteries) • Cargos, equipment to allow **Mobilization to Affected Sites** • **Living** Arrangement **Equipment and Supplies** - gas stoves, utensils, tents, beds, sleeping bags, mattresses, blankets, hammocks, mosquito nets, kit of personal and family hygiene, etc. • **Furniture Acquisition** • **Network Installation** ========== • **Medical Supplies** - rehydration fluids, antibiotics, drugs, medicines, vaccines, antivirals, • **Medical Equipment** - ventilators, respiratory care equipment, IV pumps, referral equipment, isolation area equipment • **Cleaning Supplies** including hand hygiene and disinfectants • **Personal Protective Equipment (PPE)** stockpiles, including masks, gowns, and gloves • **Diagnostic and Test Kits** • **Morgue Packs**	*No material risks requiring mitigation* ***==========*** ***Low risk requiring the following measures:*** • Follow appropriate recommended good international industry practice for collection and disposal found in Table 5.3 • Apply ESCOP Checklist 1 Exposure at Health Care Facility – see below • Apply ESCOP Checklist 2 Waste Management Procedures – see below • ICWMP • LMP • SEP
Services – Tier 1	
• **Consulting Services** Related to Emergency Response - studies and surveys necessary to determine the impact of the disaster and to serve as a baseline for the recovery and reconstruction process, and support to the implementation of emergency response activities • **Feasibility Study and Technical Design** related to COVID-19 emergency responses**.** • **Technical Assistance** in developing TORs, preparing	*No material risks requiring mitigation*

Technical Specifications and drafting tendering documents (Bidding Documents, ITQ, RFP) related to COVID-19 emergency responses. • **Non-Consultant Services** aerial photographs, satellite images, mapping, information and awareness campaigns.	
Training – Tier 1	
• Conduct necessary training related to emergency response including, but not limited to activities in the positive list in the table 1 and the Implementation of the Emergency Action Plan (EAP) • Training on rapid needs assessment and other related assessments	*Low to No Risk* • Trainings and Capacity Building will include overview of all COVID-9 activities and screening process and appropriate mitigation measures and application of tables, checklists and other plans
Emergency Operating Costs – Tier 1	
• Incremental expenses by the Government for a defined period related to preparing for prevention or to early recovery efforts arising as a result of the impact of an eligible emergency. This includes but is not limited to operational costs and rental of equipment.	***L****ow to No Risk* • Apply the appropriate mitigation measures as defined in above • If this leads to Tier 2 activities, appropriate mitigation measures below apply
Upgrading Medical Facilities – Tier 2	
• Laboratory Upgrades • Expanding, Upgrading Quarantine and Isolation Centers • Expand Treatment Centers • Upgrade National Institute of Public Health Lab • Improve Diagnostic Capacity of 25 Municipal/Provincial Referral Hospitals • Screening Posts at Border Crossings	*Moderate to Low Risk* • Follow appropriate recommended good international industry practice for collection and disposal found in Annex 2 • Apply ESCOP Checklist 1 Exposure at Health Care Facility – see below • Apply ESCOP Checklist 2 Waste Management Procedures – see below • Apply ESCOP Checklist 3 Community and Social Inclusion – see below • Apply ESCOP Checklist 4 Small Scale Construction Upgrades, Rehab and Expansion – see below • ICWMP • LMP • SEP

CHECKLIST 1: Environmental and Social Codes of Practice – COVID 19 Exposure at Health Care Facility

Target: Health Care Workers/Health Care Facility Visitors/Construction Workers

General Infection Prevention and Control

- ✓ Procedures for entry into health care facilities, such as minimizing visitors and visitor hours, taking temperature checks and having separate area (including entry area) for patients presenting with COVID-19 symptoms/respiratory illness, who should be taken to a different area and given a face mask. All persons visiting hospitals should wash hands before entering and before leaving.
- ✓ Simple poster/signage (can be A4 paper) in Khmer language explaining entry procedures.
- ✓ Signage available in hospitals to remind visitors to wear masks if necessary and wash hands before entering/leaving.
- ✓ Minimize contact between patients and other persons in the facility: health care professionals should be the only persons having contact with patients suspected of having COVID-19 and this should be restricted to essential personnel only (except in cases of young children or other persons requiring assistance, then a family member may be present but they must also be wearing PPE – at least gloves and mask – and adhering to protocols).
- ✓ Adequate facilities for hand washing available – this may mean setting up additional facilities throughout health centers.
- ✓ Provide alcohol-based hand sanitizer (60-95% alcohol), tissues and facemasks in waiting rooms and patient rooms.

Isolation and Treatment

- ✓ Isolate patients as much as possible, separate from people presenting with COVID-19. People with COVID-19 should be separate from each other by curtains or in different rooms if possible. Only place together in the same room patients who are have all contracted COVID-19. People with COVID-19 must always be separated from other hospital patients and health and other staff. This means there must be dedicated toilet facilities (or bedpans), hand washing facilities, and medical equipment (stethoscope, blood pressure machine, etc.) for patients with COVID-19 only.
- ✓ Use of Personnel Protection Equipment (PPE) at all times for medical staff and cleaners as needed (particularly facemask, gowns, gloves, eye protection and potentially face shield) when in contact with someone who may have COVID-19/ who is presenting with a respiratory illness, including for those caring directly for patients, cleaners entering patient's room, or where patient has been treated, and lab technicians handling blood samples. Train staff on how to use the PPE. Put reminders in hospitals (paper/signage) in Khmer language.

Staff Occupational Health and Safety

- ✓ Immediate and ongoing training on the procedures to all categories of workers (lab technicians, doctors, nurses, cleaning staff, etc.) on use of PPE, personal hygiene and thorough disinfecting of surfaces on a regular basis (multiple times per day using a high-alcohol based cleaner to wipe down all surfaces and when COVID-19 patients are discharged; wash instruments with soap and water and then wipe down with high-alcohol based cleaner; dispose of rubbish by burning etc.) Put signage in hospital as a reminder.
- ✓ Make particular efforts to ensure that all staff (such as cleaners and those doing the washing) are able to understand these procedures and have access to the necessary PPE.
- ✓ Laboratories undertaking testing for COVID-19 virus should adhere strictly to appropriate biosafety practices and WHO guidelines on Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases.
- ✓ Labor personnel needs to be trained and acquainted with key provisions in Labor Management Plan (LMP), in particular Occupational Health and Safety (OHS) aspects.
- ✓ All staff to be trained and reminded of hand washing procedures, and signage included in bathrooms and other key health center areas. Hand washing should involve use of soap / detergent, rubbing to cause friction, and placing hands under running water. Washings of hands should be undertaken before and after direct patient contacts and contact with patient blood, body fluids, secretions, excretions, or contact with equipment or articles contaminated by patients (including wastes, clothes and linen). Washing of hands should also be undertaken before and after work shifts; eating; smoking; use of personal protective equipment (PPE); and use of bathrooms. If hand washing is not possible, appropriate antiseptic hand cleanser and clean cloths / antiseptic towelettes should be provided. Hands should then be washed with soap and running water as soon as practical. Reminders should be placed throughout the health care facility, including pictorial on how to properly hand wash

Sanitation and Waste Management

- ✓ Ensure that the designs for medical facilities consider the collection, segregation and treatment of medical waste
- ✓ The treatment of healthcare wastes produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated, and then safely dispose
- ✓ General cleaning strategies: (i) proceed from cleaner to dirtier areas to avoid spreading dirt and microorganisms; (ii) proceed from top areas to bottom areas to prevent dirt and microorganisms from dripping or falling down and contaminating already cleaned areas (for example clean mattress first, then clean bed legs); (iii) proceed in a methodical, systematic manner to avoid missing areas (for example, proceed from left to right or clockwise). Provide training to cleaning staff on these procedures, as well as on the use of PPE equipment, and put signage of reminders throughout health centers.
- ✓ Hospitals/health centers will also need to develop procedures and facilities for handling dirty linen and contaminated clothing and preparing and handling food. For instance, social distancing measures (people 2m apart) should be implemented for those preparing and serving food in hospitals, ensuring thorough handwashing as per above guidelines, with reminders in kitchen and eating areas, and cooks/servers should wear masks.

REFERENCES

- ➢ WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected;
- ➢ WHO technical brief water, sanitation, hygiene and waste management for COVID-19;
- ➢ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources);
- ➢ WHO interim practical manual for improving infection prevention and control at the health facility;
- ➢ CDC Guidelines for isolation precautions: preventing transmissions of infectious agents in healthcare settings;
- ➢ CDC guidelines for environmental infection control in healthcare facilities

CHECKLIST 2: Environmental and Social Codes of Practice – COVID 19 WASTE MANAGEMENT PROCEDURES

Target: Health Care Workers/Health Care Facilities/Laboratories

General Instructions

- ✓ All health care waste produced during the care of COVID-19 patients must be considered as infectious waste and should be collected safely in designated containers and bags, treated, and then safely disposed (WHO).
- ✓ Train the staffs who are assigned in handling and disposal of waste management
- ✓ Train staffs on how to put and remove PPE.
- ✓ Ensure necessary PPE (Gown, gloves, face mask, goggles or face shield, gumboots) is provided to all staffs.
- ✓ Ensure staff wear PPE when handling and disposing waste according to HCW guideline.

General Waste - Food waste, paper, disposable cups, plates, spoons etc.

- ✓ Collect in black bag
- ✓ Close and tie when 2/3rd full
- ✓ Transfer the waste to a temporary storage point for general waste along a specified route at a fixed time point and store the waste separately at a fixed location
- ✓ Transport to landfill away from facility

Infectious Waste - Gown, gloves, apron, shoe cover, disposable items, mask etc.

- ✓ Collect in small biohazard red bags
- ✓ Close, seal the bag with cable ties and tie close when 2/3 full
- ✓ Transfer the waste to a temporary storage point for medical waste along a specified route at a fixed time point and store the waste separately at a fixed location
- ✓ Securely transfer out for incinerating
- ✓ Transport outcome as general waste

Sharpe Waste

- ✓ Put in puncture proof plastic container
- ✓ Close the lid and seal the container when 2/3 full
- ✓ Put in the red bag and tie lose
- ✓ Transfer the waste to a temporary storage point for medical waste along a specified route at a fixed time point and store the waste separately at a fixed location
- ✓ Securely transfer out for incinerating or appropriate disposal

REFERENCES

- ➢ WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected;
- ➢ WHO technical brief water, sanitation, hygiene and waste management for COVID-19;
- ➢ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources);
- ➢ WHO interim practical manual for improving infection prevention and control at the health facility;
- ➢ CDC Guidelines for isolation precautions: preventing transmissions of infectious agents in healthcare settings;
- ➢ CDC guidelines for environmental infection control in healthcare facilities

CHECKLIST 3: Environmental and Social Codes of Practice – COVID 19 COMMUNITY AND SOCIAL INCLUSION

Target: General Population/Vulnerable Groups/

General Communication

- ✓ When developing communication materials, it is important to ensure that they are clear and concise, and that they are in a format/language that is understandable to all people, in particular the most vulnerable. Messages should be clear and concise, focusing on hygiene measures (hand washing, coughing), what to do if suspect have COVID-19, as well as restrictions if applicable (for instance specific guidelines on social-distancing). Furthermore, communication materials should include messages on fear of vaccines and adverse event following immunization.
- ✓ Utilize appropriate media needs to be used (social media, radio, tv) plus engaging existing formal and informal public health and community-based networks (schools, healthcare service providers at local level, etc.). Ensure thatinformation is accessible in sign language and relevant languages of IP groups (in particular in Northeast Cambodiawhere there are more non-Khmer speaking IPs.
- ✓ Communication materials must also be clear about (i) how to avoid contracting COVID-19 (good hygiene measures); (ii) symptoms of COVID-19; (iii) what to do if suspect have COVID-19.
- ✓ Communication materials and reach out to people, including RCCE materials, must make clear that all treatment for COVID-19 at provincial/referral hospitals, including in Phnom Penh, and public hospitals is free and accessible for all population. People must also be told about the GRM process to denounce any instance where they are asked to pay to access needed medical services (unless it is a private hospital).
- ✓ Identify trusted community groups (local influencers such as community leaders, religious leaders, health workers, community volunteers, celebrities) and local networks (such as women's groups, youth groups, business groups, and traditional healers) that can help to disseminate messages. Define clear and easy mechanisms to disseminate messages and materials based on community questions and concerns.
- ✓ A focus of information materials should be on women, as they tend to be the best venue of communication for children and the elderly in the household.
- ✓ RGC/MOH should consider having a dedicated hotline for people to call for questions and recommendations on what to do if they suspect they may have COVID-19.

Infection Prevention

- ✓ Information on how to protect oneself from COVID-19, the symptoms of COVID-19, where and how to get tested should be made available to everyone and ensure they are accessible to IPs, marginalized groups, those with disabilities, other vulnerable groups and the elderly by using different languages (including sign language), and in a manner that is culturally appropriate to the respective groups and specific needs.
- ✓ Promote large scale social and behavior change. Introduce preventive community and individual health and hygiene practices with a focus on handwashing. Could include gifting of soap bars, distributed by commune authorities or District health officials.
- ✓ Workplaces should be encouraged to post and provide communication materials, in particular workplaces which may face a higher risk of COVID-19 spread, such as construction sites and factories. This may include social isolation measures in workplaces, separating people from each other (2m), opening spaces to allow for natural ventilation, providing hand sanitation facilities (soap/water or hand sanitizer), etc.

Economic and Livelihood Impacts

- ✓ Planning of containment measures and social restrictions need to take into account the livelihood impact it will have for the population, in particular the most vulnerable (the poor, elderly, women single heads of household, IPs, those with disabilities). MOH and RGC may need to develop specific mitigation measures for this, outside the scope of this ESMF. This may include social safety nets with cash transfers to specific population groups, ensuring that it does not exclude informal workers, the poor, home-based workers, etc. May also include food grants, essential basket of goods, childcare support for women, etc.

Stakeholder Engagement

- ✓ Stakeholder Engagement Plan (SEP) must use different communication methods.
- ✓ Stakeholder Engagement Plan (SEP) should ensure consultations with NGOs and other stakeholders that can provide recommendations on how to communicate information and develop Risk Communication and Community Engagement Plan (RCCE).

REFERENCES

- WHO interim guidance on Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected;
- WHO Risk Communication and Community Engagement (RCCE) Guidance, https://www.who.int/publications-detail/risk-communication-and-community-engagement-(rcce)-action-plan-guidance
- IFRC, UNICEF, WHO Social Stigma associated with COVID-19: A guide to preventing and addressing social stigma, https://www.unicef.org/documents/social-stigma-associated-coronavirus-disease-covid-19
- Human Rights Watch COVID-19 A Human Rights Checklist: https://www.hrw.org/sites/default/files/supporting_resources/202004_northamerica_us_covid19_checklist2.pdf

CHECKLIST 4: Environmental and Social Codes of Practice – COVID 19 SMALL SCALE CONSTRUCTION, UPGRADES, REHAB, EXPANSION

Target: Construction Workers OHS/Project Supervisor/Facility Manager

Worker Safety

- ✓ The local construction and environment inspectorates and communities have been notified of upcoming activities
- ✓ The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)
- ✓ All legally required permits have been acquired for construction and/or rehabilitation
- ✓ The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.
- ✓ Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses, and safety boots)
- ✓ Appropriate signposting of the sites will inform workers of key rules and regulations to follow.

General Rehabilitation and/or Construction

- ✓ During interior demolition debris-chutes shall be used above the first floor
- ✓ Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust
- ✓ During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site
- ✓ The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust
- ✓ There will be no open burning of construction / waste material at the site
- ✓ There will be no excessive idling of construction vehicles at sites
- ✓ Construction noise will be limited to restricted times agreed to in the permit
- ✓ During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible
- ✓ The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.

Waste Management

- ✓ Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities.
- ✓ Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.
- ✓ Construction waste will be collected and disposed properly by licensed collectors
- ✓ The records of waste disposal will be maintained as proof for proper management as designed.
- ✓ Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)

Wastewater Treatment

- ✓ The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities
- ✓ Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment
- ✓ Monitoring of new wastewater systems (before/after) will be carried out
- ✓ Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.

REFERENCES

- ➢ WHO technical brief water, sanitation, hygiene and waste management for COVID-19;
- ➢ WHO guidance on infection prevention and control at health care facilities (with a focus on settings with limited resources);

Annex 2: Infection Control and Waste Management Plan (ICWMP) Template

1. Introduction

1.1 Describe the project context and components

- Project name and project owner
- Project activities

1.2 Describe the targeted healthcare facility (HCF):

- Type, level
- Location and associated facilities, including access, water supply, power supply
- Capacity: beds, staff

1.3 Overview of infection control and waste management in the HCF

- Describe the healthcare waste management system in the HCF, including material delivery, waste generation, handling, collection, storage, transport, and disposal and treatment works
- Describe the infection prevention and control system in the HCF: hand hygiene facilities, disinfection, and sterilization, etc.
- Organizational structure
- Staffing and responsibility assignment

2. Infection prevention and control procedures

2.1 Standard precaution measures

- Hand hygiene procedures
- Respiratory hygiene/cough etiquette
- Use of personal protective equipment (PPE) when handling body fluid
- Appropriate handling of patient care equipment, and soiled linen
- Environmental cleaning management
- Prevention of needle-stick/sharp injuries

2.2 Transmission based precaution measures

- Contact transmission precaution measures
- Droplet transmission precaution measures
- Air-borne transmission precaution measures

2.3 Specific measures for managing patients in isolation center

2.4 Specific measures for delivery and storage of specimen and samples

3. Waste management procedures

- Waste minimization, reuse, and recycling: HCF should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety considerations.
- Waste segregation, packaging, color coding and labeling: HCF should strictly conduct waste segregation at the point of generation. Internationally adopted method for packaging, color coding and labeling the wastes should be followed.

- Onsite collection and transport: HCF should adopt practices and procedures to timely remove properly packaged and labelled wastes using designated trolleys/carts and routes. Disinfection of pertaining tools and spaces should be routinely conducted. Hygiene and safety of involved supporting medical workers such as cleaners should be ensured.
- Waste storage: A HCF should have multiple waste storage areas designed for different types of wastes. Their functions and sizes are determined at design stage. Proper maintenance and disinfection of the storage areas should be carried out. Existing reports suggest that during the COVID-19 outbreak, infectious wastes should be removed from HCF's storage area for disposal within 24 hours.
- Onsite waste treatment and disposal (e.g. an incinerator): Many HCFs have their own waste incineration facilities installed onsite. Due diligence of an existing incinerator should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended. For new HCF financed by the project, waste disposal facilities should be integrated into the overall design and ESIA developed. Good design, operational practices and internationally adopted emission standards for healthcare waste incinerators can be found in pertaining EHS Guidelines and GIIP.
- Transportation and disposal at offsite waste management facilities: Not all HCF has adequate or well-performed incinerator onsite. Not all healthcare wastes are suitable for incineration. An onsite incinerator produces residuals after incineration. Hence offsite waste disposal facilities provided by local government or the private sector are probably needed. These offsite waste management facilities may include incinerators, hazardous wastes landfill. In the same vein, due diligence of such external waste management facilities should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended and agreed with the government or the private sector operators.
- Wastewater treatment: HCF wastewater is related to hazardous waste management practices. Proper waste segregation and handling as discussed above should be conducted to minimize entry of solid waste into the wastewater stream. In case wastewater is discharged into municipal sewer sewerage system, the HCF should ensure that wastewater effluent comply with all applicable permits and standards, and the municipal wastewater treatment plant (WWTP) is capable of handling the type of effluent discharged. In cases where municipal sewage system is not in place, HCF should build and properly operate onsite primary and secondary wastewater treatment works, including disinfection. Residuals of the onsite wastewater treatment works, such as sludge, should be properly disposed of as well. There're also cases where HCF wastewater is transported by trucks to a municipal wastewater treatment plant for treatment. Requirements on safe transportation, due diligence of WWTP in terms of its capacity and performance should be conducted.

Annex 2.1: Infection prevention and control procedures

2.1.1 Hand hygiene procedure

HCFs staff and care givers should perform hand hygiene, when arriving at work/HCFs and before leaving work/HCFs, as well as before eating and after using the toilet/ latrine. Additionally, for anyone who is providing care to patients, the "Five moments for hand hygiene" must be respected.

Recommendation

Routine Hand Hygiene

Hand hygiene must be performed before and after every episode of patient contact.

- Before touching a patient
- Before a procedure
- After a procedure or body substance exposure risk
- After touching a patient
- After touching patient's surroundings

Note: Hand hygiene MUST also be performed after taking off PPE.

1a – Hand Washing with Soap and Water

1b - Hand Hygiene with Alcohol-based Hand Rub (AHR)

2.1.2 Respiratory hygiene

Respiratory hygiene and cough etiquette are standard precaution that should be applied by all patients, visitors and HCWs to contain respiratory secretions (e.g. when coughing, sneezing…) to avoid spreading respiratory infections.

Cover nose and mouth when coughing, sneezing with tissue or mask.

If no tissues are available, cough or sneeze into the inner elbow rather than hand.

Do not "spit" in environment (use tissue instead).

Dispose used tissue and/or masks in the nearest bin after use.

Avoid shaking hands when sick. Use «traditional greeting» instead.

Perform hand hygiene after contact with respiratory secretions.

HCF should promote respiratory hygiene and cough etiquette by:

- Educating HCF staff, patients, family members, and visitors on the importance of containing respiratory droplet/ aerosol and secretions to prevent the transmission of infectious disease (e.g. influenza, tuberculosis, bacterial pneumonia …).
- Posting signs informing that patients and family members with acute febrile respiratory illness use respiratory hygiene/cough etiquette (e.g. poster).
- Prepare equipment in triage area for patient and family to apply respiratory hygiene. For instance, in Out-Patient- Department (OPD) and Emergency Room (ER), make mask, tissue, rubbish bin, and AHR ava

1.1.3. Personal protective equipment procedures

HCWs must select the appropriate PPE after having assessed the risk of contact with body fluid.

The following is not a sequence of PPE. It is procedure for each PPE item.

It is when the HCW remove the PPE that he/she may contaminate himself/ herself. Therefore wear PPE in a logical order, to be able to take off from the most contaminated item (higher risk) to the less contaminated item (lower risk).

Any PPE procedure must start by performing hand hygiene first.
When removing PPE, the last step is to thoroughly perform hand hygiene.

1. Gloves

Put On

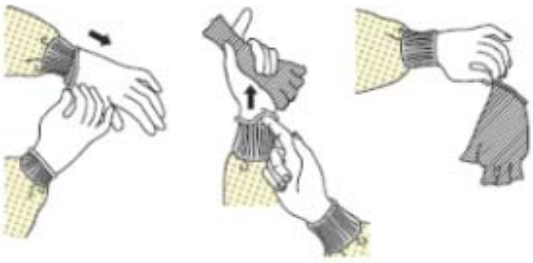
Putting on gloves

Put On

1. Carefully put on disposable gloves (to avoid breaking the gloves)

When wearing long sleeves gown, gloves cover the wrist of the gown

Take Off



Removing gloves

Take Off

! Outside part of gloves is con-taminated!

1. Grasp outside of glove with opposite gloved hand; peel off
2. Hold removed glove in gloved hand or discharge in waste container
3. Slide fingers of un-gloved hand under remaining glove at wrist
4. Peel glove off
5. Discard gloves in waste container

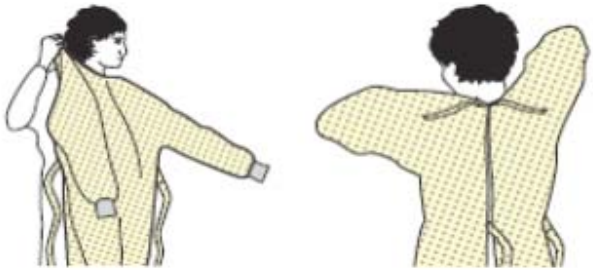
2. Gown

Put On

1. Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back

2. Fasten in back of neck and waist

Put On



Take Off

1. Unfasten ties

2. Gown front and sleeves are contaminated!

3. Pull away from neck and shoulders, touching inside of gown (only if not wearing gloves)

4. Turn gown inside out

5. Fold or roll into a bundle and discard

Note: Reusable gown should be clean/ disinfected before being reuse

Take Off

3. Surgical Mask

Put On

1. Secure ties or elastic bands at middle of head and neck
2. Fit flexible band to nose bridge
3. Fit snug to face and below chin

Put On

Take Off

Take Off

! DO NOT TOUCH with hands the front of mask, it is contaminated!

1. Grasp ties or elastics and take off
2. Discard in waste container

4. Eyes protection (safety glasses, goggles or face shield)

4.1 Procedure for goggle or face shield

Put On

Goggle face shield

Put On

Place goggle or face-shield over eyes and face, and adjust to fit

Take Off

Take Off

! DO NOT TOUCH, with hands front of the eyes protection, it is contaminated!

1. Take off, by handling the head band, elastics

2. Place in designated receptacle for reprocessing or in waste container for single use (e.g. face shield).

4.2 Procedure for safety glasses

Put On

Put On

Place item over face and eyes and adjust to fit

Take Off

! DO NOT TOUCH with hands front of the eyes protection, it is contaminated!

To take off, handle by ear pieces

Place in designated receptacle for reprocessing or in waste container for single use (e.g. face shield).

Take Off

2.1.4 Patient-care equipment cleaning and disinfection procedures

All medical devices are either single-use or reusable ones. Single-use equipment must be discarded, while all reusable equipment must be properly processed between use and between patients, to prevent infections. For proper reprocessing of equipment, all items need to be cleaned with detergent (liquid soap) and water before disinfection and sterilization, to get rid of the organic matter e.g. blood and mucus that may neutralize chemical disinfectant and affecting the efficiency of the disinfectant.

Instruments and other items may be classified based on the risk of transmitting infection into critical, semi-critical or non-critical, depending on the sites.

Category	Application	Type of processing	Example of items
Critical	Sterile tissues or the blood system	Sterilization (by heat or chemicals)	Dressing and suture instruments, surgical instruments, delivery sets, diagnostic cath-eters, dental instru-ments, bronchoscopes, cystoscopes, etc.
Semi-critical	Mucous membranes or non-intact skin	High-level disinfection (HLD) & intermediate level disinfection	Laryngoscope blades, vaginal specula, instruments for MVA, respiratory therapy and anaesthe-sia equipment. dental impressions, endo-scopes, gastroscopes, etc.
Non-critical	Intact skin	Cleaning, low level Disinfection (depending on contact with the type of patient)	bedpans, toilets, uri-nals, blood pressure cuffs, ECG leads, thermometers, stethoscopes, beds, bedside tables

Patient-care equipment cleaning procedure

- Prepare all cleaning and disinfecting equipment and solution

- Cleaner wear PPE: rubber gloves and boots, impermeable apron. when there is a risk of splash in the face, staff must wear eyes protection and surgical mask.

- Take off any gross soiling on the instrument by rinsing in clean water

- Take instrument apart – fully and immerse all parts in detergent solution, and clean all channels and bores of the instrument

- Ensure all visible soil is take off from the instrument – follow manufacturers' instructions,

• Rinse thoroughly with clean water

• Dry the instrument (let it dry to– on a clean rack or hang if tubing or items with lumens, away from other dirty items)

• Inspect to ensure the instrument is cleaned

Patient-care equipment disinfecting procedure

• Prepare disinfectant solution according to the volume of medical instruments, following notice of disinfectant, cleaner wearing PPE. The following table shows the most common sources of chlorine in Cambodia, and the amount of water to add to obtain a 0.5% or 0.05% solution.

Product	Available Chlorine	How to dilute 0.5%	How to dilute 0.05%
Sodium hypochlorite 5% (liquid bleach) If % is different to this, adjust recipe accordingly	5%	1 part bleach to 9 parts water	1 part bleach to 99 parts water
Sodium hypochlorite 6% (liquid bleach)	6%	1 part bleach to 11 parts water	1 part bleach to 119 parts water
Chloramine tablets (1 g liberates 250 mg chlorine) If amount of chlorine liberated is different to this, adjust % and hence recipe accordingly)	25%	20 grams to 1 liter water (20 tablets)	2 grams to 1 liter water (2 tablets)
Tablets that release 100 mg of chlorine	100 mg	50 tablets per 1 liter of water	5 tablets per 1 liter of water
Tablets that release 250 mg of chlorine	250 mg	20 tablets per 1 liter of water	2 tablets per 1 liter of water

• Immerse the cleaned equipment completely in the disinfectant solution. Soak in the solution, duration will depend on the disinfectant recommendations and dilutions. For example: Sodium hypochlorite 0.05%: soak for 30 minutes

• Rinse thoroughly with clear or sterile water (depending on the required level of disinfection and the use of the equipment)

• Sterile water for semi-critical instrument (HLD)

• Clean water for non-critical instrument (low level of disinfectant)

• Let it dry (on a rack)

• Pack the disinfected equipment and store in a clean area

2.1.5 Soiled linen management procedures

Soiled linen, from patients and HCWs should be cleaned, and disinfected/ sterilized when necessary in HCF laundry. To ensure a safe and sanitary environment for laundry staff, PPE should be available, as well as the supply of clean water, and hygienic laundry place.

The basic principles of linen management are as follows:

• In laundry room, the staff should be protected and wear at least: gloves, surgical mask, and impermeable apron, and close shoes or rubber boots. Where there is no laundry machine, and staff is washing by hands, the staff need to wear eyes protection (e.g. safety glasses)

• Place used linen in bag for linen at the point of generation. Do not rinse in patient care area.

• Any linens soiled with blood/bodily fluid are considered infectious.

• Separate infected linen from non-infected linen and put it in a bag for infectious linen (e.g. yellow impermeable bag). Keep it separated during transport.

• Handle all linen with minimum agitation to avoid aerosolization of pathogenic microorganisms.

• Mattresses and pillows should be covered with plastic and be wiped over with a neutral detergent (refer to environment cleaning). If there is no plastic cover, wash them by hands.

Principles for reprocessing soiled linen:

	Non-infectious linen	**Infectious linen**	**Infectious drapes from operating room**
Overview	Linen from non-infectious patient and without blood/ body fluid	All linens from infectious patients and/ or with blood/ body fluid	All drapes from operating room are infectious.
PPE required when handling linen	Disposable gloves	Disposable gloves (Other PPE may be required depending on route of trans-mission.	Rubber gloves (Other PPE may be required depending on route of trans-mission)
Sorting used linen	Place in bag for linens. Separate linens soiled with bodily fluid and put in infectious linens bag.	Place all used linen in bag for infectious linen (e.g. yellow impermeable bag) at the point of generation	Place all drapes in bag for infectious linen (e.g. yellow impermeable bag) at the point of generation.
PPE required in laundry room, when using laundry machine	Gloves Surgical mask; Impermeable apron; Close shoes or rubber boots	Rubber gloves; Surgical mask Eye protection; Impermeable gown or non-impermeable gown with impermeable apron; Rubber boots	Rubber gloves; Surgical mask; Eye protection; Impermeable gown or non-impermeable gown with impermeable apron; Rubber boots
PPE required in laundry room, for	Rubber gloves, eyes protection, surgical mask,	**MUST NOT** be hand washed. If not laundry ma-chine	**MUST NOT** be hand washed. If not laundry

hand washing	impermeable apron rubber boots,	available, wash by hands with caution Always wear eyes protection as using disinfectant	machine available, wash by hands with caution Always wear eyes protection as using disinfectant
Washing process with hot water (at least 70^{o}C)	Detergent (Laundry liquid or powder) Rinse Dry (dryer or sun & iron)	Detergent (Laundry liquid or powder) Rinse Dry (dryer or sun & iron)	Detergent (Laundry liquid or powder) Rinse Dry (dryer or sun & iron) Bring clean and dried drapes to the central of sterilization
Washing process with warm or cold water (less than 70^{o}C)	Wash with deter-gent (Laundry liquid or powder), Rinse Dry (dryer or sun & iron)	Detergent (Laundry liquid or powder) Rinse Soak in clean water with sodium hypochlorite 0.5% for 30 minutes[10] Wash again with detergent and water, and dry (dryer or sun & iron)	Detergent (Laundry liquid or powder) Rinse Soak in clean water with sodium hypochlorite 0.5% for 30minutes Wash again with detergent and water, and dry (dryer or sun & iron) Bring dried drapes for packaging and sterilization.
Note		If there is no other option (no laundry machine), for infectious linen/ surgical drape, before being wash by hand, they need to be decontaminated at first (soak in disinfectant solution e.g. bleach 0.05% or autoclaved), then they MUST be cleaned rinsed and disinfecting, and sterilization for sterile drapes, to avoid contamination of patient	

2.1.6 Environmental cleaning procedure

Most areas of HCFs, are low risk zone (non-infectious zone), these area should be cleaned daily, with detergent solution (soapy water) to remove dirt and organic material and dissolve or suspend grease, oil, and other matter so it can easily be removed by scrubbing. In high-risk areas where heavy contamination is expected and risk of cross-contamination by the staff and other patients, surfaces need to be cleaned with soapy water, rinsed, and let it dry, before being disinfected (e.g. sodium hypochlorite (chlorine) solution 0.05%). High risk are areas are for instance, operating rooms, pre- and postoperative recovery areas, intensive care units (ICUs), isolation room, laboratory, toilets and latrines; or area with blood/ body fluid spills. When cleaning, cleaners are at risk and need to be properly trained. They also must wear appropriate PPE, at least rubber gloves, rubber boots, uniform or apron. When there is risk of splash in the face, wear surgical mask and eyes protection.

Principles of Environmental Cleaning

• Apply hand washing / hygiene and wear appropriate PPE (at least rubber gloves, rubber boots, uniform or apron. When risk of splash in the face, wear surgical mask and eyes protection).

• Prepare fresh cleaning and household solution once a day; and change solution whenever they appear to be dirty.

• Perform cleaning and disinfecting patient environment at least once a day.

• Clean first with detergent (soapy water), rinse with water, let it dry in non-patient area (e.g. including corridor, laundry room etc.)

• In high risk area (patient care area), following cleaning procedure, disinfect surface by using household disinfectant (e.g. bleach 0.05% solution, alcohol 70% for small object, or follow manufacture recommendations).

• Every day clean all patients' rooms, units, cleaner's rooms

• Cleaning with a moistened cloth helps to avoid contaminating the air and other surfaces

• Clean from the less contaminated to the most contaminated area (e.g. start from corridor, then patient' room, and last finish to clean bathroom and toilet)

• After patient discharge, clean and disinfect patient room very well, including all equipment that has been in contact with patient (e.g. bed, table, …) as soon as possible

• After use, all cleaning equipment (e.g. mop, brush, bucket, cloth…) must be cleaned, disinfected and dried before storage, and be reused.

• In general, do not spray (i.e. fog) occupied or unoccupied clinical areas with disinfectant. This is a potentially dangerous practice that has no proven disease control benefit.

Cleaning up Spills

• Clean up spills of potentially infectious fluids immediately, to preventing the spread of the infection and also prevents accidents.

• Small spills of blood of other body fluids should be wiped with paper towel (staff using disposable gloves), then clean with soapy water, rinse and disinfect.

Appropriate handling of bedding

• Mattresses and pillows with plastic covers should be cleaned with deter-gent, after departure of each patient.

• In isolation unit and intensive care unit, as well as infectious wards (e.g. TB.) disinfecting should follow cleaning procedure.

2.1.7 Prevention of needle-stick/sharp injuries

In healthcare settings, injuries from needles or other sharp instruments are the number-one cause of occupational exposure to blood-borne infections. All staff that come in contact with sharps - from doctors and nurses to those who dispose of the trash - are at risk of infections.

Improper disposal of sharps also poses a great threat to members of the community.

The term *sharps* refer to any sharp instrument or object used in the delivery of healthcare services - including hypodermic needles, suture needles, scalpel blades, sharp instruments, intravenous (IV) catheters, and razor blades. Needle stick/sharp injury means the skin is accidentally punctured by a used needle/ sharp (e.g. scalpel). The injury is a port of entry for blood-borne diseases, such as hepatitis B (HBV) and hepatitis C (HCV), HIV etc. Exposure to patient's body fluid also put HCWs at risk of infection. Therefore, they are encouraged to strictly comply with IPC precautions related to body fluid.

The main causes of needle stick/sharp injury include:

• Recapping of needles (identified as the most common cause)

• Unsafe handling of sharp waste (identified as the second most common cause)

• Reuse of safety box

• Manipulation of used sharps (bending, breaking, or cutting needles).

• Unnecessary injections

• Lack of supplies: disposable syringes, sharps-disposal container/safety box

• Failure to place needles in sharps containers immediately after injection

• Passing sharps from hand to hand (e.g. during surgery)

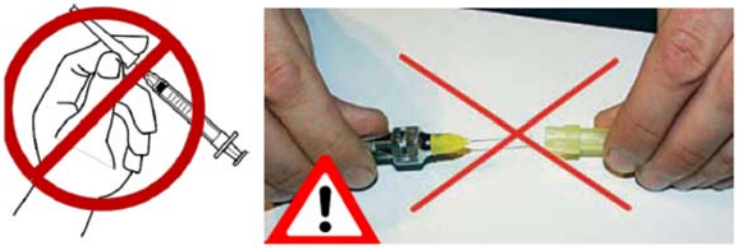
• Lack of management of sharp wastes

• Lack of awareness of the problem

• Lack of training for staff

Principle of the disposal of used needles/sharps

• Never recap needle/sharp



• Dispose of needles and syringes immediately after use in the safety box.

• Close the safety box, whenever the containers become ¾ full.

• Safely dispose the safety box (e.g. via incinerator with temperature at least of 800o Celsius)

• When it is not immediately disposed, keep safety boxes in appropriate storage, for infectious waste.

Refer to “Healthcare Waste Management Guidelines 2011” and “National Injection Safety Guidelines 2014”, for more information.

Safety Box or Sharp disposal container

Safety boxes MUST be puncture and leak resistant. They should be conveniently located in any area where sharp objects are frequently used (such as injection rooms, treatment rooms, operating theatres, labor and delivery rooms, and laboratories).

| Figure 52
Disposal of needles: incorrect (left) and correct (right) disposal of needles

2.1.8 Contact precautions

Requirements	Contact Precautions
Single Room	Yes, or Cohort with patient with same pathogen in consultation with infection prevention and control focal point.
Negative Pressure	No
Hand Hygiene	Yes Hand cleaning with soap and water or AHR
PPE for staff/ visitor	
Gloves	Yes, If there is direct contact with the patient or their environment Rubber gloves, when cleaning, disinfecting
Gown/Apron	Yes, If there is direct contact with the patient or their environment.
Mask	Standard Precautions Use to protect face if splash or aerosol likely
Protective eyewear	Standard Precautions Use to protect eyes if splash likely to be generated
Rubber boots	Standard precautions When risk of infected liquid on the foot, walking where contaminated floor
Patient Equipment	Designated equipment (1 equipment/ 1 patient) Or if not possible clean and disinfect before to use to the next patient. To avoid infection of other patients (nosocomial infection) via contaminated equipment.
Transport of Patients (inside and outside of hospital)	• limit transport, only when necessary • Notify the area receiving patient. • choice un-crowed way to transport patient inside of hospital • transport staff need to wear PPE for contact precautions • PPE for patient: ◦ Put a drape on top of the patient (to avoid risk of contamination of the environment during the transport)

	◦ If patient has also respiratory symptoms, patient should wear surgical mask during the transport • Clean and disinfect transport material or vehicle
After leaving the isolation room	• when transferring patient from outside to isolation unit, use the dedicated entrance for infectious patient, if available • Take off PPE in the ante-room (if ante-room is not available, in the dedicated area – e.g. corridor) and perform hand hygiene
Room Cleaning	• Refer to **Annex 15** and Hospital Cleaning Procedure • Cleaner staff wear PPE for contact precaution plus rubber gloves, rubber boots and impermeable apron • May require additional cleaning with a disinfectant solution depending on the pathogen.
Remarks	• Everyone entering in the isolation room or unit, need to record their name and contact in the logbook. • Patient Medical Records/document, pen, mobile phone… must not be taken into the room. • Put a sign contact precaution room.

CONTACT PRECAUTIONS

Staff, Visitors, Family, must report to nursing desk before entering

Staff, Visitors, Family, must

- Perform hand washing before entering and when leaving
- Wear disposable gloves and gown/ apron before enter
- Leave patient care equipment, food in the room and inform unit staff
- When leaving the isolation room, take off PPE (in anteroom or designated area) and
- Perform hand hygiene

2.1.9 Droplet precautions

Requirements	Droplet Precautions
Single Room	Yes or Cohort with patient with same pathogen (in consultation with infection control professional, or infectious diseases physician). It is recommended that single patient rooms be fitted with ensuite facilities. In the advent of no ensuite facilities, a toilet and bathroom should be dedicated for individual or cohort patient use.
Negative Pressure*	No
Hand Hygiene	Yes Hand cleaning with soap and water or water-free alcohol based skin cleanser.
PPE for staff/ visitor	
Gloves	Standard Precautions Use to protect for anticipated contact with blood and body substances.
Gown/Apron	Standard Precautions Use to protect where soiling or splashing are likely.
Mask	Yes Surgical Mask Take off mask after leaving patients room.
Protective Eyewear	Yes
Handling of Equipment	Standard Precautions Avoid contaminating environmental surfaces and equipment with used gloves.
Transport of Patients	• Respiratory hygiene for coughing and sneezing patients suspected of having an infectious respiratory illness. • Surgical mask for patient when they leave the room.

	• Patients on oxygen therapy must be changed to nasal prongs and have a surgical mask over the top of the nasal prongs for transport (if medical condition allows). • Advise transport staff of level of precautions to be maintained (droplet precautions). • Notify area receiving the patient. • Clean and disinfect transport material or vehicle.
Alert	• When cohorting patients, they require minimum of one metre of patient separation. • Visitors to patient room must wear a surgical mask and protective eyewear (if unable to maintain 1 meter distance) and perform hand hygiene. • Patient Medical Records must not be taken into the room. • Signage of room.
Room Cleaning	• Refer to **Annex 15** and Hospital Cleaning Procedure • May require additional cleaning with a disinfectant agent depending on organism. • Consult with infection control professional.

DROPLET PRECAUTIONS

Staff, Visitors, Family must report to nursing desk before entering

Staff, Visitors, Family must

- Perform hand washing before entering and before leaving the room
- Wear at least surgical mask and eyes protection when entering room
- Leave patient care equipment in the room and inform unit staff
- When leaving the isolation room, take off PPE (in anteroom or designated area)
- Perform hand washing

2.1.10 Air-borne precautions

Requirements	Airborne Precautions
Single Room	**Yes** Door closed It is recommended that single patient rooms be fitted with ensuite facilities. If no en-suite facilities, a toilet and bathroom should be dedicated for individual patient use.
Negative Pressure*	**Yes**, if available otherwise single room with door closed and window open
Hand Hygiene	**Yes** Hand cleaning with soap and water or water-free alcohol based skin cleanser
PPE for staff/ visitor	
Gloves	Standard Precautions Use to protect for anticipated contact with blood and body substances
Gown/Apron	Standard Precautions Use to protect where soiling or splashing are likely
Mask	**Yes**, N95 or P2 Mask (perform fit check each time a mask is worn to ensure it fits the face firmly with no gaps between the mask and the wearers face according to manufacturer instructions prior to entering room) Take off mask after leaving patient room
Protective eyewear	Standard Precautions Use to protect eyes if splash likely or where aerosol may be generated
Handling of Equipment	Standard Precautions Avoid contaminating environmental surfaces and equipment with used gloves
Transport of Patients	• Surgical mask for patient when they leave the room • Patients on oxygen therapy must be changed to nasal prongs and have a surgical mask over the top of the nasal prongs for transport (if medical condition allows). • Advise transport staff of level of precautions to be maintained (airborne).

	• Respiratory hygiene for coughing and sneezing patients suspected of having an infectious respiratory illness. • Notify area receiving patient. • Clean and disinfect transport material or vehicle.
Alert	• Respiratory hygiene for coughing patients • Visitors to patient room must also wear P2 or N95 mask and perform hand hygiene • Signage of room indicating precautions to be applied • Patient Medical Records must not be taken into the room.
Room Cleaning	• Refer to Annex 15 and Hospital Cleaning Procedure. • May require additional cleaning with a disinfectant agent depending on the organism. • Consult with infection control professional.

AIRBORNE PRECAUTIONS

Staff, Visitors, Family, must report to nursing desk before entering

Staff, Visitors, Family must

- Perform hand washing before entering
- Wear particulate respirator (N95) before enter
- Leave patient care equipment in the room and inform unit staff
- When leaving the isolation room, take off PPE (in anteroom or designated area) and
- Perform hand washing

2.1.11 Specific procedures for managing patients in isolation unit

Preparation of isolation Room / unit

- Isolate infectious patient in a single room
- If there is no single room, isolate in the cohort room. In cohort room, always keep suspected cases separate from confirmed cases
- If single and cohort room, keep the single room for suspected cases and the cohort room for confirmed cases
- Avoid movement of infectious suspected and confirmed patients (only if crucial)
- Limit number of visitor (ideally only one)
- Staff help the visitor select PPE base on route of transmission, visitor must be trained for wearing PPE
- Put a clear sign of restrictive area and fence around isolation room/unit
- Set up isolation room/ unit as per standard
- Prepare the isolation room and ensure refurbishment of PPE/ material.

The following items should be kept on the trolley at all times so that PPE is always available for healthcare 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	

HCWs/staff in the isolation room /unit

Apply IPC standard and adequate additional precaution(s) based on route of transmission. For emerging infectious disease (EID), with unknown route of transmission, apply standard precautions and all additional precautions (contact+ droplet+ airborne), until the route of transmission has been identified (staff will wear FULL PPE, maximum protective personal equipment)

Exclusively assigned trained staff (medical and non-medical)

- If HCW is not trained, he/she must not wear PPE and enter in the isolation room

Prior entering to the room:

- HCW must record their name and contact details
- Perform hand hygiene and wear PPE for identify route of transmission (following PPE procedure)

After contact with isolated patient:

- HCW must safely take off PPE, and thoroughly wash hands precautions (following PPE procedure)

PPE Procedure in Isolation room/ unit

The PPE to wear will depends on the type of isolation precautions. Therefore, several PPE procedures are possible. Keep in mind the steps of removing the PPE (from more contaminated to less), this will guide the step of putting on the PPE.

Example of PPE procedure when all PPE items are needed (based on assessment of the risk and route(s) of transmission.

A. Putting on PPE (when all PPE items are needed)

1

- Identify hazards and manage risk.
- Gather the necessary PPE.
- Plan where to put on and take off PPE.
- Do you have a buddy? Mirror?
- Do you know how you will deal with waste?

2 Put on a gown.

3 Put on particulate respirator or medical mask; perform user seal check if using a respirator.

4 Put on eye protection, e.g. face shield/goggles (consider anti-fog drops or fog-resistant goggles). Caps are optional: if worn, put on after eye protection.

5 Put on gloves (over cuff).

B. Taking off PPE

1

- Avoid contamination of self, others and the environmen
- Remove the most heavily contaminated items first.

Remove gloves and gown:
- peel off gown and gloves and roll inside, out;
- dispose of gloves and gown safely.

2 Perform hand hygiene.

3

- Remove cap (if worn).
- Remove goggles from behind.
- Put goggles in a separate container for reprocessing.

4 Remove respirator from behind.

5 Perform hand hygiene.

Environment Cleaning / Disinfecting

Trained staff is wearing PPE depending on route of transmission, adding rubber gloves, impermeable apron, rubber boots.

- In isolation room, all surfaces (floor, table, …) need to be cleaned, then disinfected once per day.

- When heavy contamination (blood, vomit, feces) on surface and floor, take off spill, c lean with detergent, disinfect with chlorine solution 0.5%.

Refer to the list of disinfectant to select those that will inactivate the pathogen. The most common hospital disinfectants include:

- Sodium hypochlorite (household bleach)
- Ethyl alcohol 70%
- Phenolic compounds
- Quaternary ammonium compounds
- Peroxygen compounds

Refer to dilution table, to prepare the detergent disinfectant solution (Refer to Appendix 1C. "Preparation of Sodium Hypochlorite Solution Procedure")

Some disinfectant solutions provide the two actions (detergent and disinfectant) in one product, follow instruction for that specific product.

Reprocessing reusable equipment

Clean with detergent, then soak into chlorine solution 0.05% for at least 30 minutes, rinse and let it dry in a clean area.

If using google or safety glasses, clean with detergent, then soak in chlorine solution 0.05% for 10 minutes (30 minutes can damage the goggle, glasses), thoroughly rinse (avoid irritation of eyes) and let it dry in a clean area, before reusing.

Refer to Annex 7 for Preparation of Sodium Hypochlorite Solution Procedure.

Contaminated equipment should be placed in clearly labelled, leak-proof bags or closed container.

Transport of equipment bag/container from the anteroom to the cleaning/ utility room

- The trained staff wears disposable gloves and mask to transport the bag to the cleaning room

- Place the leak-proof bag into a new bag (double bag)

or

- Disinfect the outside part of the container with e.g. chlorine solution 0.05%
- Use a wheeled bin with a lid or trolley (covered trolley is preferred) to transport the bag. The staff must not carry the bag/container
- Clean and disinfect all surfaces of the trollies or bins, after each use

Cleaning staff, like other staff need to check and record their temperature twice a day, and notify to chief of unit or IPC team, if any symptoms.

Soiled linen:

Soiled linen must be proceeding by trained staff wearing PPE (depending on the pathogen route of transmission). At least wear rubber gloves, impermeable apron, and rubber boots (refer to Appendix 1D appropriate handling of soiled linen)

Wash with detergent and disinfect linen daily.

If there is any solid excrement such as feces or vomit,

- Remove carefully, and flush it down the toilet (if proper sewage) or in the sluice before linen is placed in its bag or container.

- If not proper sewage, remove carefully, discharge in waste bag,
- or decontaminate with disinfectant solution (concentration depending on the pathogen)

Soiled linen should be placed in clearly labelled, leak-proof bags or closed container.
Transport of linen bag/container from the anteroom the laundry room

- Place the leak proof bag into a new bag (double bag) or
- Disinfect the outside part of the container with e.g. chlorine solution 0.05%
- The trained staff wears disposable gloves and mask to transport the linen bag to the laundry
- Use of a wheeled bin with a lid or trolley (covered trolley is preferred). The staff must not carry the bag/container.
- Clean and disinfect all surfaces of the trollies or bins, after each use

In the laundry room, trained staff wear PPE wearing PPE depending on the pathogen route of transmission, with rubber gloves, waterproof apron and rubber boots), wash infected linen with laundry machine:

- In hot water of 70^{o}C: wash with detergent or disinfectant (30 minutes).
- In cold water (< 70^{o}Celsius): wash with detergent, then disinfectant that are active in cold water. When using bleach, rinse in clean water, and dry before reuse.

Laundry staff, like other staff need to check and record their temperature twice a day, and notify to chief of unit or IPC team, if any symptoms

Management of Infectious Waste

Only trained staff, wearing PPE depending on the pathogen route of trans-mission, with rubber gloves, impermeable apron and rubber boots, must handling infectious waste in the isolation room/ IU (see Appendix 2 Transmission based Precautions)
Dispose needle/sharps in a sharp-proof container (as per standard precautions), and never re-cap needles and/or separate needle from syringe before disposing in the container.
Dispose infectious waste in a “biohazard” labelled waste bag, or leak-proof waste bag (refer Appendix 1G HCWM)
Management of solid infectious waste
Transport of infectious waste bag from isolation room/ unit to incinerator or designated pit:

- Put the waste bag in another clean bag (double bagging) before exiting the isolation area or decontaminate container/bag with the infectious waste, with chlorine solution 0.05%.
- Outside the isolation area, staff who is helping for double bagging, trans-port the decontaminated bags/containers, should wear at least gloves and disposable mask if outside the isolation zone.

When storing bag/container with infected waste, before being properly manage

- Do not stored them more than 24 hours
- The store place must be protected by a fence to prevent entry by animals, children, or untrained personnel

Management of waste bags with infected solid waste

- Incinerate bags with infectious wastes (high temperature > 800oC.)
- Disinfect infectious waste by autoclave
- Bury in a designated pit of appropriate depth (e.g. 2 meters)

Management of infected liquid waste (blood, feces, urine and vomit, grey water, etc.)
With adequate PPE, depending on the pathogen route of transmission, adding eyes protection and surgical mask (if not worn)

- Flush liquid waste (e.g. urine, liquid fecal waste) into the sewage system, if there is an adequate

system in place.

- Avoid splashing when disposing of liquid infectious waste to avoid possible generation of aerosols

When hospital does not have an adequate system

- Select adequate disinfectant solution for the pathogen
- In general, disinfect liquid waste with chlorine 0.05% or 0.5% depending on the pathogen before disposing (e.g. disinfect cholera with chlorine solution 0.5%)

Avoid splashing when pouring disinfectant solution

Handling of dead bodies

Discourage any local practices (touching/ being in contact with the corpse) by HCW, family, friends...

Dead body remains should not be sprayed, washed or embalmed.

PPE to safely handle dead body. Refer to route of transmission, with at least:

- Disposable gown with long sleeves
- Waterproof apron
- Disposable, non-sterile gloves (over the cuffs of the gown)
- Surgical mask (wear particulate mask if autopsy)
- Eyes protection (preferable face-shield, or goggle)
- Rubber gloves
- Rubber boots

Put corpse in waterproof/ impermeable body bag immediately, and transfer to the mortuary as soon as possible after death.

Bury or incinerate corpse without delay

Surveillance of staff who handle dead body (need to check and record their temperature twice a day, and notify to chief of unit, IPC team if any symptoms)

Occupational health

Any staff and visitor who is entering in the isolation room/ isolation unit (IU), or has any contact with contaminated equipment, linen, waste, dead body MUST:

- Register their name and contact details in the logbook of isolation room/ unit, for contact tracing purpose.
- Follow up health status, fever and other symptoms (refer to suspect case definition/ triage form)
- Take and record temperature twice daily, for the entire incubation period after the last contact
- Notify to chief of unit, IPC team, focal point if any symptoms

Have a good hygiene, drink plenty of safe drinking water, and rest to avoid mistake due to overwhelmed, severe fatigue.

Provide supervision and support from chief of IU, IPC focal point and director of hospital

Promote preventive medicine:

- No pregnant women should be working in isolation room/ unit
- Provide psychological support to the staff/team who work in isolation room/ unit
- Prevent heat illness/ dehydration (serious risk of heat illness while wearing PPE in tropical conditions)

For HCWs who are developing symptoms

Stop work immediately or do not report to work

Limit interactions with others

Exclude themselves from area,

Notify the chief of unit or focal point if any fever > 38°C. and/ or other symptoms (refer to case definition)

Exposed persons must receive follow-up care (e.g. antiviral therapy when available), counselling and psychological support

Inform supervisor, for contact tracing and follow-up of family, friends, co-workers and other patients, who may have been exposed to the disease through close contact with the infected HCW/staff.

Managing Blood/ Body fluid Exposure

Persons including HCWs with percutaneous or muco-cutaneous exposure to blood, body fluids, secretions, or excretions from a patient with suspected or confirmed infectious disease, should immediately and safely stop any current tasks, and leave the patient care area.

Safely take off PPE according to the steps in the procedure, in the anteroom

Treat affected exposed area:

- wash the affected skin surfaces or the percutaneous injury site with soap and water
- Irrigate mucous membranes (e.g. conjunctiva) with copious amounts of water or an eyewash solution, and not with chlorine solutions or other disinfectants.

Immediately report the incident to the chief of unit, IPC focal point (following hospital exposure procedure) as soon as the HCF staff exist the isolation room/ unit.

Exposed persons should be medically evaluated for:

- infectious disease (ID) (of isolated patient)
- other potential exposures (e.g., HIV, HCV) if sharp/needle-stick injury

Exposed persons must receive follow-up care, including:

- fever monitoring, twice daily
- period of recording symptoms will depend on the ID
- Counselling and psychological support

Immediate consultation with an expert in infectious diseases for any exposed person who develops fever, symptoms after exposure.

If fever appears and other symptoms, isolate HCF staff, and follow procedure for ID suspected until a negative diagnosis is confirmed

Or

People suspected of having infected should be cared for/isolated, and the same recommendations outlined in this document must be applied until a negative diagnosis is confirmed.

Conduct contact tracing and follow-up of family, friends, co-workers and other patients, who may have been exposed to Ebola virus through close contact with the infected HCW/ staff.

Annex 2.2: Healthcare waste management procedures

While approximately 80% of the wastes generated in a HCF are general waste, the remaining 20% comprise wastes that contain harmful microorganisms which can infect hospital patients, HCFs staff and the general public, as well as sharp objects and hazardous substances that can result in injuries, poisoning and pollution.

Categorization of healthcare wastes

Healthcare waste is broadly categorized into two main groups, namely medical wastes and general wastes.

1. General wastes or household waste

• Any waste that are solid or semi-solids generated from HCFs that are non-toxic and non-hazardous and are not contaminated with medical wastes. These are the food wastes, paper, plastics, textiles, non-toxic metals, glass, and garden wastes.

• In the event that general wastes are contaminated or mixed with any medical wastes, the general wastes shall be classified as medical wastes and managed accordingly.

2. Medical wastes

• Any waste which consists completely or partly of human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharps instruments, … all wastes that are hazardous or can cause infection to any person coming into contact with it.

• Any other wastes generated from healthcare activities which may be hazardous or toxic.

• The categories of medical wastes are:

1) Infectious wastes

2) Pathological wastes

3) Sharps wastes

4) Pharmaceutical wastes

5) Genotoxic wastes

6) Chemical wastes

7) Wastes with high content of heavy metals

8) Pressurized containers

9) Radioactive wastes

Proper healthcare waste management includes (1) waste segregation, (2) collection and handling, (3) stock in a safe temporary storage, (4) safe treatment and disposal.

1. **Organize waste segregation:**

All HCFs shall organize waste segregation at sources. Each type of waste should be contained in designated, color coded and labelled bags and containers. These are:

- green bin: general waste or household waste
- yellow bin: infectious waste, main part of the medical waste
- brown bin: chemical and pharmaceutical wastes, wastes with high content of heavy metals
- red bin: genotoxic waste, radioactive waste
- black bin: pressurized containers

Waste Category	Colour of Container & Markings	Proposed Symbol
Infectious waste	Yellow, marked black	
Pathological wastes	Yellow, marked red	
Sharps "safety-box"	Yellow, marked "SHARPS"	
Chemical & pharmaceutical waste	Brown, marked "HAZARDOUS"	
Wastes with high content of heavy metals	Brown, marked with the specific heavy metal content and "HAZARDOUS"	
Genotoxic waste	Red, marked "CYTOTOXIC"	
Radioactive waste	Red	
Pressurized containers	Black	
General waste	Green	

2. Handling

Staff should handle medical waste as little as possible before storage and disposal. The more waste is handled, the greater the chance for accidents.

Special care must be taken when handling used needles and other sharps, which pose the greatest risk of accidental injury and infection.

Emptying waste containers

Waste containers that are too full also present greater opportunities for accidents. Waste should be removed from operating theatres, procedure rooms, and sluice rooms before the containers become completely full. At the very least, these containers should be emptied once a day. Dispose of sharps containers when they are 3/4 full. (When sharps-disposal containers become too full, people may push

sharps into the container, causing injury.)

Staff should wear utility gloves, heavy duty apron and boots when collecting waste.

Do not collect medical waste from patient-care areas by emptying it into open carts or wheelbarrows, as this may lead to spills and contamination of the surroundings, may encourage scavenging of waste, and may increase the risk of injury to staff, patients, and visitors.

Handle medical waste as little as possible.

Never put your hands into a container that holds medical waste.

3. Stock in a safe temporary storage

Following segregation, medical wastes should be placed in a designated, safe (locked) and temporary storage at HCFs. Different health care waste should be streamed separately in standard storage equipment. Storage time of infectious waste should not exceed 48 hours. Anatomical waste should be buried or disposed daily.

The central storage area must be:

- Located separately from the general waste storage areas.
- Should be clearly identifiable.
- Away from food preparation, public access, and egress route.
- Arranged to store waste for landfill and waste for incineration waste separately.
- Well ventilated and well lit.
- Located on well drained, impervious hard standing.
- Provided facilities for washing down and disinfection.

4. Treatment and disposal of medical waste

General wastes can be removed to the regular community waste-disposal (land field). Infectious waste can be treated by the following methods:

Incineration. Two-chambered incinerators with proper temperature, required chimney heights should be used. The temperature must be at least of 800'C to ensure minimal emission of toxic gases at the primary chamber. Appropriate location and high chimney (higher than nearby roofs) are required. Pressured gas containers, halogenated plastics like PVC, mercury, cadmium and ampoules of heavy metals should never be incinerated. Several provinces in Cambodia have installed two-chambered incinerators for medical waste treatment in the centralized model. Health centers and district hospitals are recommended to transport sharp waste to these incinerators for treatment.

Single-chamber, drum and brick incinerators cannot meet the best available technology requirements of the Stockholm Convention on Persistent Organic Pollutants, of which Cambodia is signatory. Emissions of toxic and persistent organic pollutants (dioxin, furans, etc.) from these small-scale incinerators may result in human exposure at levels associated with adverse health risks. The project will not finance new small-scale onsite incinerator. If existing on-site incinerators are used, mitigation measures will be taken to control emissions to air in line with WBG EHS for healthcare facilities and WHO's guidelines for safe management of waste generated from healthcare activities. The good practices as follow:

- Waste reduction and segregation to minimize quantities of waste to be incinerated.
- Siting incinerators away from patient wards, residential areas or where food is grown.

• A clearly described method of operation to achieve the desired combustion conditions and emissions; for example, appropriate start-up and cool-down procedures, achievement and maintenance of a minimum temperature before waste is burned, use of appropriate loading/charging rates (both fuel and waste) to maintain appropriate temperatures, proper disposal of ash and equipment to safeguard workers.

• Periodic maintenance to replace or repair defective components.

• Improved training for operators and improved management including the availability of an operating and maintenance manual, visible management oversight, and regular maintenance schedules.

Autoclave. Autoclave used to decontaminate infectious waste is required for laboratory (Level BS2+ and BSL3). They are available in some laboratories in Cambodia. All laboratory equipment, materials and fluids must be decontaminated in the autoclave, before being discharged out of the laboratory.

Sharp pit and Placenta pit: Placenta and small anatomical waste should be disposed to placenta pit and sharp waste should be disposed to sharp pit where there is no effective incineration.

Secured landfill. This is the minimal approach to sharp waste disposal, which should be used only in remote and underdeveloped areas. Even in difficult circumstance, the health facility should establish the following basic principles:

- Locates the burial site away from the groundwater supply sources
- Restrict access to the disposal site by unauthorized persons
- Line the burial site with a material of low permeability, such as clay, dung, and river silt, if available, to prevent pollution of shallow groundwater and nearby wells.
- Bury sharp waste and infectious waste only
- Each layer of waste should be covered by a layer of soil to prevent odors, rodents, and insects.

5. Wastewater collection and treatment

a. <u>Overall requirements</u>

Health and environmental workers should always wear heavy utility gloves and shoes when handling or transporting liquid medical waste of any kind. When carrying or disposing of liquid medical waste, they should be careful to avoid splashing the waste on yourself, others, or on the floor and other surfaces.

Carefully pour liquid waste down a sink, drain, flushable toilet, or latrine. If this is not possible, bury it in a pit along with solid medical waste. Moderate quantities of mild liquid or semi-liquid pharmaceuticals such as solutions containing vitamins, cough syrups, intravenous solutions, eye drops (but not antibiotics or cytotoxic drugs), may be diluted in a large flow of water and discharged into municipal sewers. Pharmaceutical wastes shall not be disposed of into slow-moving or stagnant water. Pharmaceutical wastes shall not be disposed of into slow-moving or stagnant water.

All facilities should have appropriate drainage. If the facility does not link to a treated municipal water drainage system, then all drainage should be treated locally. This includes appropriate septic and

filtration systems. Highly infectious waste should be disinfected by proper disinfectants or autoclaved before they are disposed of either by incineration or non-incineration processes. Unless there is an adequate waste-water treatment plant, blood should be disinfected before discharged to a sewer.

b. <u>Management of fecal waste and wastewater in COVID-19 outbreak</u>

There is no evidence that the COVID-19 virus has been transmitted via sewerage systems with or without wastewater treatment. Further, there is no evidence that sewage or wastewater treatment workers contracted the severe acute respiratory syndrome (SARS), which is caused by another type of coronavirus that caused a large outbreak of acute respiratory illness in 2003. As part of an integrated public health policy, wastewater carried in sewerage systems should be treated in well-designed and well-managed centralized wastewater treatment works. Each stage of treatment (as well as retention time and dilution) results in a further reduction of the potential risk. A waste stabilization pond (an oxidation pond or lagoon) is generally considered a practical and simple wastewater treatment technology particularly well suited to destroying pathogens, as relatively long retention times (20 days or longer) combined with sunlight, elevated pH levels, biological activity, and other factors serve to accelerate pathogen destruction. A final disinfection step may be considered if existing wastewater treatment plants are not optimized to remove viruses. Best practices for protecting the health of workers at sanitation treatment facilities should be followed. Workers should wear appropriate personal protective equipment (PPE), which includes protective outerwear, gloves, boots, goggles or a face shield, and a mask; they should perform hand hygiene frequently; and they should avoid touching eyes, nose, and mouth with unwashed hands.

- *Sanitation and plumbing*

People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine that has a door that closes to separate it from the patient's room. Flush toilets should operate properly and have functioning drain traps. When possible, the toilet should be flushed with the lid down to prevent droplet splatter and aerosol clouds. If it is not possible to provide separate toilets, the toilet should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (gown, gloves, boots, mask, and a face shield or goggles). Further, and consistent with existing guidance, staff and health care workers should have toilet facilities that are separate from those used by all patients.

WHO recommends the use of standard, well-maintained plumbing, such as sealed bathroom drains, and backflow valves on sprayers and faucets to prevent aerosolized fecal matter from entering the plumbing or ventilation system, together with standard wastewater treatment.21 Faulty plumbing and a poorly designed air ventilation system were implicated as contributing factors to the spread of the aerosolized SARS coronavirus in a high-rise apartment building in Hong Kong in 2003.22 Similar concerns have been raised about the spread of the COVID-19 virus from faulty toilets in high-rise apartment buildings.23 If health care facilities are connected to sewers, a risk assessment should be conducted to confirm that wastewater is contained within the system (that is, the system does not leak) before its arrival at a functioning treatment or disposal site, or both. Risks pertaining to the adequacy of the collection system or to treatment and disposal methods should be assessed following a safety planning approach,24 with critical control points prioritized for mitigation.

- *Toilets and the handling of feces*

It is critical to conduct hand hygiene when there is suspected or direct contact with feces (if hands are dirty, then soap and water are preferred to the use of an alcohol-based hand rub). If the patient is

unable to use a latrine, excreta should be collected in either a diaper or a clean bedpan and immediately and carefully disposed of into a separate toilet or latrine used only by suspected or confirmed cases of COVID-19. In all health care settings, including those with suspected or confirmed COVID-19 cases, feces must be treated as a biohazard and handled as little as possible. Anyone handling feces should follow WHO contact and droplet precautions and use PPE to prevent exposure, including long-sleeved gowns, gloves, boots, masks, and goggles or a face shield. If diapers are used, they should be disposed of as infectious waste as they would be in all situations. Workers should be properly trained in how to put on, use, and remove PPE so that these protective barriers are not breached.25 If PPE is not available or the supply is limited, hand hygiene should be regularly practiced, and workers should keep at least 1 m distance from any suspected or confirmed cases.

If a bedpan is used, after disposing of excreta from it, the bedpan should be cleaned with a neutral detergent and water, disinfected with a 0.5% chlorine solution, and then rinsed with clean water; the rinse water should be disposed of in a drain or a toilet or latrine. Other effective disinfectants include commercially available quaternary ammonium compounds, such as cetylpyridinium chloride, used according to manufacturer's instructions, and peracetic or peroxyacetic acid at concentrations of 500−2000 mg/L.

Chlorine is ineffective for disinfecting media containing large amounts of solid and dissolved organic matter. Therefore, there is limited benefit to adding chlorine solution to fresh excreta and it is possible that this may introduce risks associated with splashing.

- *Safely disposing of greywater or water from washing PPE, surfaces, and floors.*

Current WHO recommendations are to clean utility gloves or heavy duty, reusable plastic aprons with soap and water and then decontaminate them with 0.5% sodium hypochlorite solution after each use. Single-use gloves (nitrile or latex) and gowns should be discarded after each use and not reused; hand hygiene should be performed after PPE is removed. If greywater includes disinfectant used in prior cleaning, it does not need to be chlorinated or treated again. However, it is important that such water is disposed of in drains connected to a septic system or sewer or in a soak-away pit. If greywater is disposed of in a soak-away pit, the pit should be fenced off within the health facility grounds to prevent tampering and to avoid possible exposure in the case of overflow.

Annex 3: Labor Management Plan

The Labor Management Plan (LMP) is a living document to be reviewed and updated throughout development and implementation of the Cambodia COVID-19 project. The LMP applies to all project workers, irrespective of contracts being full-time, part-time, temporary or casual.

USE OF LABOR IN THE PROJECT

The World Bank ESS2 defines four categories of project workers:

- **Direct workers** - people employed or engaged directly by the Borrower (including the project proponent and the project implementing agencies) to work specifically in relation to the project.
- **Contracted workers** - people employed or engaged through third parties to perform work related to core functions of the project, regardless of location. These could be either international or national workers.
- **Primary supply workers** - people employed or engaged by the Borrower's primary suppliers (primary supply workers).
- **Community workers** - people employed or engaged in providing community labor, generally voluntarily. Village Health Support Group will involve in engagement community people in vaccination campaign.
- **Civil Servant**- those employed directly by the Government.

For vaccination, labors involve vaccine administrators including vaccinators, recorders, and VHSGs, etc. that need to be planned for their OHS related to risks of infection and contacting wastes generated from vaccination. There are considered Direct and Contracted workers and Supply workers. Also, VHSG are considered community workers.

The Cambodia COVID-19 Project is expected to engage a variety of staff and workers listed below.

Project Component	Estimated Number of Project Workers	Characteristics of Project Workers	Timing of Labor Requirements	Contracted Workers
1. Case detection and management: establishing and upgrading laboratory, isolation and treatment centers and equipping them	Unknown at this stage	Contractor may be national or international hired to upgrade/establish labs or isolation/treatment centers	Construction	Direct worker -- Company in charge of minor civil work for the establishing and upgrading of labs/centers.

1. Case detection and management	Unknown at this stage	Likely national workers who may come from Phnom Penh or different provinces. It is recommended that workers are hired locally to work on the upgrading of municipal/provincial center to (i) avoid labor influx from other provinces, (ii) reduce the need to set up labor camps	Construction	Contracted worker – Laborers working for the construction company (above) to work on upgrading of labs/centers
2. Medical supplies and equipment: procurement of medical supplies and equipment needed for activities outlined in the COVID-19 Master Plan	Unknown at this stage	National workers who drive trucks and deliver medical supplies and equipment. May be hired directly or contracted by company/person selling the medical equipment.	Construction, potentially Operations	Direct and/or Contracted worker – those supplying or transporting medical supplies and equipment
2. Medical supplies and equipment	Unknown at this stage	National workers for goods procured in-country, or workers in-country who procure goods internationally.	Construction	Supply workers – working on factories providing medical supplies and equipment purchased
3. Cold chain supplies and equipment	Unknown at this stage	Workers for goods procured in-country, or workers in-country who procure goods internationally.	Before vaccination campaign started	Supply workers – working on factories providing medical supplies and equipment purchased
4. COVID-19 vaccines deployment (storage and transportation)	Unknown at this stage	Workers (drivers and carriers) of the CMS or contracted transport companies in storage, transport, and distribution of vaccines to provincial hospitals, ODs, and HCs. Village Health Support Groups (VHSGs)/ community workers who will support vaccination at a village level	Before vaccination campaign started	Direct and Contracted Workers – those supplying or transporting medical supplies and equipment Community workers/VHSG
5. Preparedness, Capacity Building	Unknown at this stage	Workers at MOH in Phnom Penh, the Department of	Throughout the whole	Civil servants at MOH, NIH, health workers

and Training: includes coordination, human resources, support for screening, hotline, supporting, communication materials and outreach, community surveillance		Health in the 25 provinces, District health officials in the 25 provinces, health workers (doctors, nurses, pharmacists, lab technicians, cleaners, etc.) working in one of the 25 provincial/referral hospitals across the country. National Institute of Public Health (NIH) staff. Workers at MOH responsible for grievance redress, communication materials and managing hotline numbers and/or websites. Law enforcement officials or other authorities responsible for conducing checks, screening for entry into the country, monitoring compliance with movement restrictions and helping to disseminate project information. National and international skilled consultants to provide training	project cycle	and District/Provincial level, law enforcement officials, other authorities, if working specifically on COVID-19 response Consultancy contracts are likely to be tendered to individual consultants.
6. Preparedness, Capacity Building and Training:	Unknown at this stage	Civil society, NGO or consultant staff may be hired directly by MOH (or one is hired, and rest is sub-contracted) to deliver training activities or communications and outreach materials on COVID-19, GBV, mental health, VAC, or conduct additional assessments	Operations	Direct and/or Contracted worker -- NGO, CSO or consultant
6. Preparedness, Capacity Building and Training: COVID-19 vaccination	Unknown at this stage	Staff of PHDs, RHs, ODs, HCs will be directly involved in operating vaccination. VHSGs will also be important labour to priority	Operations	Government civil servants under MOH and VHSGs (Community workers)

		target population for vaccination.		
7. Project Implementation and Monitoring: including procurement, safeguards, monitoring, costs for consultants, etc.	Unknown at this stage	Civil servants at MOH implementing project. Consultants hired to support environmental and social standards implementation, monitoring.	Throughout the whole project cycle	Direct worker Consultancy contracts are likely to be tendered to individual consultants.

The project will ensure that no workers of any type is under 18 years.

ASSESSMENT OF KEY POTENTIAL LABOR RISKS

People engaged to work in the Cambodia COVID-19 project may come into contact with hazardous wastes and people diagnosed with COVID-19. It is therefore extremely important that all project workers that are in direct contact with patients and/or medical or any other hazardous waste, follow strict protocols as recommended by the World Health Organization (WHO) and Occupational Health and Safety (OHS) measures highlighted in the ESMF. There are also some general construction-related risks linked to the upgrading or establishing of isolation/treatment centers and upgrading of laboratories.

Project Activity	Key Labor Risks
General project administration and implementation (hiring of consultants, monitoring and reporting, financial management, audits, E&S management, project coordination, conducting behavior and communication campaigns, conducting trainings, M&E)	• Road travel to provinces (OHS) • Sedentary work (OHS)Exposure to people who could have COVID-19 without the proper PPE and/or training
COVID-19 vaccine deployment and Vaccination campaign	• Risks from exposure to vaccination generated wastes • Risks from exposure with vaccine receivers without the proper PPE. • Risks with discrimination from people in community • Risk from exposure with community people without the proper PPE (VHSGs)
Minor civil works and/or construction works to upgrade hospitals and other medical facilities, including NIH and labs, including supplying with medical	• Terms and conditions of employment are not consistent with WB ESF 2 (see more info in section below) • Non-discrimination and equal opportunity are not consistent with WB ESF 2 (see more info in section below) • Child labor

equipment.	• Risks of workplace accidents, particularly when operating construction equipment, when working at height on building construction, and when handling heavy equipment and materials • Risks from exposure to hazardous substances (dust, cement, chemicals used in construction etc.) • Accidents or emergencies (OHS) • Potential employment of migrants or seasonal workers • Sexual Exploitation and Abuse (SEA), GBV and VAC to workers and community
Transportation of medical supplies, equipment	• Traffic hazards (OHS) • Road travel to provinces (OHS) • Risks of accidents when handling heavy equipment • Transportation of equipment and supplies is not expected to be a vector of COVID-19
Transportation of medical waste	• Traffic hazards (OHS) • Road travel to/from provinces (OHS) • Risks from exposure to hazardous substances (medical waste, contaminated waste)
Running laboratories, treatment facilities, isolation centers, etc. that deal directly with COVID-19 patients and/or their waste	• Terms and conditions of employment • Non-discrimination and equal opportunity • Risks from exposure to hazardous substances (medical waste, contaminated waste) • Risks from exposure with patients without the proper PPE and/or training, or their bodily fluids/waste, that have contracted COVID-19 • SEA, GBV and VAC to workers and community
Screening people entering the country	• Risks from exposure with people that may be positive for COVID-19 • Abuse of power, discrimination, stigma towards community members
Conducting checks and screening on people in the community	• Risks from exposure with people that may be positive for COVID-19 • Abuse of power, discrimination, stigma, SEA, GBV and VAC risks for community members
Delivering trainings for community or for rural health workers	• SEA, GBV and VAC to workers and community • Spread of sexually transmitted diseases • Risk of contact with people with COVID-19 without the proper PPE and/or training

BRIEF OVERVIEW OF THE LABOR LEGISLATION

Cambodia has national legislation that outlines worker's rights. The Labor Law (1997) remains the key document governing the regulatory framework for labor in Cambodia.

The **1997 Labor Law** defines non-discrimination in employment and in wages. It establishes a minimum wage level, which may vary among regions. Working hours are limited to 8 hours per day, 6 days a week.

There are strong regulatory provisions against discrimination in the workplace, enhancing from a legal point of view fair treatment, non-discrimination, equal opportunity, special protection, and assistance to vulnerable workers. A whole chapter in the Law is dedicated to health and safety in the workplace. The Law also covers those who work for subcontractors. Furthermore, Cambodia has ratified all relevant ILO conventions, such as those on forced labor, freedom of association, right to organize and collective bargaining, equal remuneration, minimum age, discrimination, and child labor.

Child labor remains a noticeable gap in the legal framework despite many years of participation in related international programs. The Labor Law defines 12 years old as the minimum working age for children, though 12-15 years are meant to only engage in certain light jobs, but this is not always closely monitored. The Prakas on the Prohibition of Hazardous Child Labor (2004) allow hazardous work for well-trained children above 16, provided it is not night work. The ESMF details the relevant legislation and a gap analysis with the World Bank ESF. No persons under the age of 18 will be allowed work on any aspect relating to the project.

The Labor Law (1997) includes provisions on Occupational Health and Safety (OHS) mostly consistent with ESS2 of the World Bank's Environmental and Social Framework (ESF). Additional measures must also be taken compliant with WHO guidelines on COVID-19, as outlined in this ESMF.

RESPONSIBLE STAFF

This section identifies the function and/or individuals/agencies within the project responsible for oversight mechanisms.

Engagement and Management of Direct Workers. The Ministry of Health (MOH) is responsible for engagement of direct workers/contractors and compliance with contract conditions (payment of invoices). The MOH will address all LMP aspects as part of procurement for works (such as transport of medical supplies, minor civil works to refurbish labs or medical facilities, consultancy/technical assistance, etc.). A Project Management Unit () established in MOH will be responsible for overseeing all aspects of implementation of the project, including compliance of direct workers and contractors, and monitoring and evaluation.

Engagement and Management of Sub-Contracted Workers. The Contractor is responsible for management of their workers or subcontracted workers in accordance with this LMP, which will be supervised by MOH. This includes ensuring compliance with key aspects, in particular those relating to COVID-19 prevention and general OHS.

Labor and Working Conditions. Contractors will keep records in accordance with specifications set out in this LMP. MOH may at any time require records to ensure that labor conditions are met and that prevention mechanisms and other safety issues, general to OHS and specific to COVID-19, are being followed. MOH will review records against actuals at a minimum on a monthly basis and can require immediate remedial actions if warranted. A summary of issues and remedial actions will be included in quarterly reports to the World Bank.

Training of Workers. Contractors are required to have a designated safety officer. The contractor must train staff on OHS measures, hygiene practices, precautions against COVID-19, and other aspects of this LMP as appropriate. Contractors must make staff available for any mandatory trainings required by MOH, as specified by the contract. Meanwhile MOH must ensure adequate training and materials are provided to direct workers, such as those working on communication materials, screening, etc.

Addressing Worker Grievances. MOH and Contractors will be required to implement a Grievance Redress Mechanism (GRM) for workers which responds to the minimum requirements in this LMP. The MOH will review records on a monthly basis. MOH will keep abreast of GRM complaints, resolutions and reflect in quarterly reports to the World Bank.

Occupational, Health and Safety. Contractors on civil works must designate a minimum of one safety representative to ensure day-to-day compliance with specified safety measures and OHS, including on precautions against COVID-19, and record any incidents to MOH on a monthly basis; serious incidents should be reported immediately. Cases of COVID-19, and actions taken, should also be reported immediately. Minor incidents should be reflected in the quarterly reports to the World Bank, and major issues should be flagged to the World Bank immediately. Further to enforcing the compliance of environmental and social management, contractors will be responsible and liable for the safety of site equipment, laborers and daily workers attending to the construction site and safety of citizens for each subproject site, as mandatory measures.

POLICIES AND PROCEDURES

Most environmental and social impacts of the project resulting from activities directly under the control of contractors will be mitigated directly by the same contractors. As such, the approach is to ensure that contractors effectively mitigate project related impacts. MOH will incorporate standardized environmental and social clauses in the tender documentation and contract documents in order for potential bidders to be aware of environmental and social performance requirements that shall expected from them, are able to reflect that in their bids, and required to implement the clauses for the duration of the contract. In particular, this will be the relevant aspects of the Environment and Social Risks and Mitigation Measures outlined in the ESMF in Tables 5.1, 5.2 and 5.3, which covers all potential risks and mitigation measures relevant to contractors. MOH will enforce compliance by contractors with these clauses.

As a core contractual requirement, the contractor is required to ensure all documentation related to environmental and social management, including the LMP, is available for inspection at any time by MOH. The contractual arrangements with each project worker must be clearly defined. All environmental and social requirements will be included in the bidding documents and contracts.

In addition, MOH will be responsible to ensure that safe messaging around COVID-19 prevention and OHS measures are distributed and available to all project staff directly hired/working for MOH, as per provisions in this LMP.

All project workers must be aware and sign the Manager's Code of Conduct and/or the Individual Code of Conduct (see further below in this Annex for both codes), as applicable.

Occupational Health and Safety (OHS)

All project workers should receive training on OHS as well as COVID-19 prevention, social distancing measures, hand hygiene, cough etiquette and relations with local community. Training programs should also focus, as needed, on COVID-19 laboratory bio-safety, operation of quarantine and isolation centers and screening posts, communication and public-awareness strategies for health workers and the general public on emergency situations, reporting and actions on COVID-19 cases in the workforce, as well as compliance monitoring and reporting requirements, including on waste management based on the existing IPC&WMP prepared as part of the ESMF, OHS and project's labor-management procedures,

stakeholder engagement and grievance mechanism.

The Health and Safety specifications will include the following provisions:

- Ensuring workplace health and safety standards in full compliance with Cambodian law, at a minimum, and including (1) basic safety awareness training to be provided to all persons as well as on COVID-19 prevention and related measures; (2) all vehicle drivers to have appropriate licenses (3) Safe management of the area around operating equipment inside or outside hospitals/laboratories/treatment facilities/isolation centers; (4) workers to be equipped with hard helmets, safety boots and protective gloves and/or PPE equipment as needed (particularly facemask, gowns, gloves, handwashing soap, and sanitizer) to protect from COVID-19; (5) secure scaffolding and fixed ladders to be provided for work above ground level; (6) First aid equipment and facilities to be provided in accordance with the Labor Law; (7) at least one supervisory staff trained in safety procedures to be present at all times when construction work is in progress; and (8) adequate provision of hygiene facilities (toilets, hand-washing basins), resting areas etc. separated by gender as needed and with distancing guidelines in place.
- Comply with Cambodia legislation, WB's ESS2 requirements and other applicable requirements which relate to OHS hazards, including WHO specific COVID-19 guidelines.
- All workplace health and safety incidents to be properly recorded in a register detailing the type of incident, injury, people affected, time/place and actions taken including COVID-19 cases in the workforce, which should be reported to MOH and the World Bank immediately.
- All workers (irrespective of contracts being full-time, part-time, temporary or casual) to be covered by insurance against occupational hazards and COVID-19, including ability to access medical care and take paid leave if they need to self-isolate as a result of contracting COVID-19.
- Procedures confirming workers are fit to work, which may include temperature testing and refusing entry to sick workers (with insurance in place to cover payment, as described above).
- All work sites to identify potential hazards and actions to be taken in case of emergency.
- Any on-site accommodation to be safe and hygienic, and with distancing guidelines in place, including provision of an adequate supply of potable water, washing facilities, sanitation, accommodation and cooking facilities.
- Workers residing at site accommodation to receive training in preventing prevention of infection through contaminated food and / or water, COVID-19 prevention and avoidance of sexually transmitted diseases.
- Provide laminated signs of relevant safe working procedures in a visible area on work sites, in English and local language as required, including on hand hygiene and cough etiquette, as well as on symptoms of COVID-19 and steps to take if suspect have contracted the virus.
- Fair and non-discriminatory employment practices.
- Provide PPE as suitable to the task and hazards of each worker, without cost to the worker.
- Under no circumstances will contractors, suppliers or sub-contractors engage forced labor.
- Construction materials manufactured in Cambodia be procured only from suppliers able to certify that no forced labor (including debt bondage labor) or child labor (except as permitted by the Labor Law) has been used in production of the materials.
- All employees to be aware of their rights under the Labor Law, including the right to organize.
- All employees to be informed of their rights to submit a grievance through the Project Worker Grievance Mechanism.
- All employees to be provided training on appropriate behaviour with communities, gender-based violence and violence against children (also see Codes of Conduct).

Age of Employment

For this project, the minimum age will be 18 years. This rule will apply for both national and international workers. Workers will be required to provide proof of their identify and age before commencing any works on site.

Terms and Conditions and Equal Opportunities

All terms and conditions as outlined in the World Bank Environmental and Social Framework (ESF) ESS2, paragraphs 10 to 15 apply to contracted workers. In addition,

- In line with national law, the maximum working hours are limited to 8 hours per day, 6 days a week unless there is payment of overtime, however this may be amended during a COVID-19 outbreak as prescribed by national directives or legislation.
- Employment opportunities will be available to all. This includes equal pay for equal work, regardless whether the person performing the work is male or female.
- The wages paid by the employers to the workers shall not be lower than the local Cambodian minimum wage.
- All workers to be covered by insurance against occupational hazards and COVID-19, including ability to access medical care and take paid leave if they need to self-isolate as a result of contracting COVID-19.

Grievance Mechanism

There will be a specific Grievance Redress Mechanism (GRM) for project workers as per the process outlined below. This considers culturally appropriate ways of handling the concerns of direct and contracted workers. Processes for documenting complaints and concerns have been specified, including time commitments to resolve issues.

To date, the parent Project has involved in procured goods/equipment. No civil works have taken place that requires use of workers. Therefore, the GRM for workers have not yet been established, nor be there any work related complaints. The specific workers' GRM will be prepared and adjusted from the Project GRM as part of ESMP/ECOP or IPC&WMP for subprojects used workers.

This GRM should be communicated to all relevant category of workers as part of project engagement. Special communications will be held with the vulnerable groups identified at each location.

All project workers will be informed of the Grievance Mechanism process as part of their contract and induction package.

The process for the Worker GRM is as follows:

- The first step is that the Aggrieved Person/Party may report their grievance in person, by phone, text message, mail or email (including anonymously if required) to the Contractor as the initial focal point for information and raising grievances. For complaints that were satisfactorily resolved by the Aggrieved Person/Party or Contractor, the incident and resultant resolution will be logged and reported to the MOH's Focal Point. The structure of the Health Center Management Committee, local community can either provide their complaints or feedback to HCs or hospital by themselves or through VHSGs or local authority. VHSG or local authority will bring those

complaints to respective HCs or hospitals. In case where VHSG want to complain, s/he will need to submit complaint to HC for resolution.

- As a second step, where the Aggrieved Person/Party is not satisfied, the Contractor will refer the aggrieved party to the MOH Focal Point. Grievances may also be referred or reported to the MOH Management if deemed suitable. The MOH Focal Point endeavors to address and resolve the complaint and inform the Aggrieved Person/Party as promptly as possible, in particular if the complaint is related to something urgent that may cause harm or exposure to the person. For complaints that were satisfactorily resolved by the MOH Focal Point, the incident and resultant resolution will be logged by the MOH Focal Point. Where the complaint has not been resolved, the MOH Focal Point will refer to the Manager of the MOH for further action or resolution.
- As a third step, if the matter remains unresolved, or the Aggrieved Person/Party is not satisfied with the outcome, the Manager of the MOH should refer the matter to the Project Steering Committee for a resolution, which shall aim to resolve the grievance in three weeks or less. The MOH Focal Point will log details of issue and resultant resolution status.

Up until the third stage there will be no fees for the lodgment of grievances. However, if the complaint remains unresolved or the complainant is dissatisfied with the outcome proposed by the Project Steering Committee, the Aggrieved Person may refer the matter to the appropriate legal or judicial authority, or labor inspectorate, at the complainant's own expense. A decision of the Court will be final.

Feedback must be provided to the lodger of each step no less than weekly.

Each grievance record should be allocated a unique number reflecting year and sequence of received complaint (for example 2020-01, 2020-02 etc.). Complaint records (letter, email, record of conversation) should be stored together, electronically or in hard copy. The MOH Focal Point will be responsible for undertaking a regular (at least monthly) review of all grievances to analyze and respond to any common issues arising. The MOH Focal Point is also responsible for oversight of the GRM.

CONTRACTOR MANAGEMENT

The tendering process for contractors will require that contractors can demonstrate their labor management and OHS standards, which will be a factor in the assessment processes.

Contractual provisions will require that contractors:

- Monitor, keep records and report on terms and conditions related to labor management, including specific aspects relating to COVID-19.
- Provide workers with evidence of all payments made, including benefits and any valid deductions.
- Ensuring there is a health and safety focal point, responsible for monitoring OHS issues and COVID-19 prevention and any cases of the virus.
- Keep records regarding labor conditions and workers engaged under the Project, including contracts, registry of induction of workers including Code of Conduct, hours worked, remuneration and deductions (including overtime).
- Record safety incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, etc.).
- Report evidence that no child labor is involved.
- Training/induction dates, number of trainees, and topics.
- Insurance for workers against occupational hazards and COVID-19, including ability to access medical care and take paid leave if they need to self-isolate as a result of contracting COVID-19.
- Details of any worker grievances including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken. Grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
- Sign the Manager's Code of Conduct and/or the Individual Code of Conduct, as applicable.

Monitoring and performance management of contractors will be the responsibility of MOH. MOH will be responsible for oversight of labor management provisions as well as contract supervision. The MOH Focal Point will have overall responsibility for data collection, monitoring, and analysis of the LMP as part of the Project's M&E efforts. The MOH Focal Point will monitor the implementation of, and compliance with, this LMP, including management of worker-related grievances. Monitoring reports should be reviewed and submitted regularly to Manager of the who will submit with other monitoring reports to the World Bank.

PRIMARY SUPPLY CHAIN WORKERS

The Contractor will be responsible for conducting due diligence on the primary supply workers (those providing medical equipment and supplies) if there is a significant risk of child or indentured labor in the supply chain.

In conducting due diligence, the contractor (or contractor's staff) should:

- Inform the provider, that the Contractor will not engage a provider who has forced or child laborers.
- When possible, and where a high risk exists, visit the company/factory, and conduct interviews with key personnel about their working conditions, as well as informal random interviews with workers.

- Conduct secondary due diligence, by asking information from others who may be familiar with the provider, to make sure there are no reported instances of forced or child labor.
- If necessary, and possible, engage the Ministry of Labor to conduct checks on supplier to ensure no child labor or forced labor.
- Keep records of the information and include in reporting to MOH.

Manager's Code of Conduct

Instructions: This Code of Conduct should be included in bidding documents for the civil works contractor(s) and in their contracts once hired.

Manager's Code of Conduct

The contractor is committed to ensuring that the project is implemented in such a way which minimizes any negative impacts on the local environment, communities, and its workers. This will be done by respecting the environmental, social, health and safety (ESHS) standards, and ensuring appropriate occupational health and safety (OHS) standards are met. The contractor is also committed to creating and maintaining an environment where children under the age of 18 will be protected, and where sexual abuse and sexual harassment have no place. Improper actions towards children, Violence Against Children (VAC), sexual abuse/harassment, and/or acts of Gender Based Violence (GBV) will not be tolerated by any employee, sub-contractors, supplier, associate, or representative of the company.

Staff at all levels have a responsibility to uphold the contractor's commitment. Contractors need to support and promote the implementation of the Code of Conduct. To that end, staff must adhere to this Code of Conduct and to sign the Individual Code of Conduct.

Implementation

a. To ensure maximum effectiveness of the Code of Conduct:
   (i) Prominently displaying the Code of Conduct in clear view at workers' camps, offices, and in public areas of the workspace. Examples of areas include waiting, rest and lobby areas of sites, canteen areas and health clinics.
   (ii) Ensuring all posted and distributed copies of the Code of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
b. Verbally and in writing explain the Code of Conduct to all staff, including in an initial training session.
c. Ensure that:
   (i) All staff sign the 'Individual Code of Conduct', including acknowledgment that they have read and agree with the Code of Conduct.
   (ii) Staff lists and signed copies of the Individual Code of Conduct are provided to the OHS Manager and the MOH Focal Point.
   (iii) Participate in training and ensure that staff also participate as outlined below.
   (iv) Put in place a mechanism for staff to:
      - report concerns on ESHS or OHS compliance; and,

- confidentially report GBV incidents through the Grievance Redress Mechanism (GRM)

(v) Staff are encouraged to report suspected or actual ESHS, OHS, GBV, VAC issues, emphasizing the staff's responsibility in compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees nor ordinarily resident in the country where the works are taking place.

d. Ensure that when engaging in partnership, sub-contractor, supplier or similar agreements, these agreements:

(i) Incorporate the ESHS, OHS, GBV, VAC Codes of Conduct as an attachment.

(ii) Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Individual Codes of Conduct.

(iii) Expressly state that the failure of those entities or individuals, as appropriate, to ensure compliance with the ESHS and OHS standards, take preventive measures against GBV and VAC, to investigate allegations thereof, or to take corrective actions when GBV or VAC has occurred, shall not only constitute grounds for sanctions and penalties in accordance with the Individual Codes of Conduct but also termination of agreements to work on or supply the project.

e. Provide support and resources to create and disseminate staff training and awareness-raising strategy on GBV, VAC and other issues highlighted in the ESMF.

f. Ensure that any GBV or VAC complaint warranting Police action is reported to the Police, MOH and the World Bank immediately.

g. Report and act in accordance with the agreed response protocol any suspected or actual acts of GBV or VAC.

h. Ensure that any major ESHS or OHS incidents are reported to MOH and the supervision engineer immediately, non-major issues in accordance with the agreed reporting protocol.

i. Ensure that children under the age of 18 are not present at the construction site, engaged in any hazardous activities or otherwise employed.

Training

j. The managers are responsible to:

(i) Ensure that staff have a suitable understanding of the ESMF, in particular OHS aspects and COVID-19 prevention, as well as GBV and VAC and are trained as appropriate.

Response

k. Managers will be required to take appropriate actions to address any ESHS or OHS incidents.

l. Regarding GBV:

(i) Maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).

(ii) If a manager develops concerns or suspicions regarding any form of GBV by one of his/her direct reports, or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM.

(iii) Once a sanction has been determined by the GRM, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of 14 days from the date on which the decision to sanction was made by the GRM.

(iv) If a Manager has a conflict of interest due to personal or familial relationships with the survivor and/or perpetrator, he/she must notify the Company and the GRM. The Company will be required to appoint another manager without a conflict of interest to respond to complaints.

(v) Ensure that any GBV issue warranting Police action is reported to the Police, MOH and the World Bank immediately.

m. Managers failing address ESHS or OHS incidents or failing to report or comply with the GBV provisions may be subject to disciplinary measures, to be determined and enacted by the Company. Those measures may include:

(i) Informal warning.

(ii) Formal warning.

(iii) Additional training.

(iv) Loss of up to one week's salary.

(v) Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.

(vi) Termination of employment.

n. Ultimately, failure to effectively respond to ESHS, OHS, VAC and GBV cases on the work site by the company's managers may provide grounds for legal actions by authorities.

I do hereby acknowledge that I have read the Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, VAC and GBV requirements. I understand that any action inconsistent with this Code of Conduct or failure to act mandated by this Code of Conduct may result in disciplinary action.

Signature: _____

Printed Name: _____
Title: _____
Date: _____

Individual Code of Conduct

Instructions: This Code of Conduct should be included in bidding documents for the civil works contractor(s) and in their contracts once hired. It should also be signed by other workers in the project.

I, _____, acknowledge that adhering to environmental, social, health and safety (ESHS) standards, following the project's occupational health and safety (OHS) requirements, and preventing Violence Against Children (VAC) and Gender Based Violence (GBV) is important.

The Contractor/my employer considers that failure to follow ESHS and OHS standards, or to partake in activities constituting VAC or GBV—be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities—constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who

commit GBV or VAC may be pursued if appropriate.
I agree that while working on the project I will:

a. Consent to a background check in any place I have worked for more than six months.

b. Attend and actively partake in training courses related to ESHS, OHS, COVID-19 prevention, VAC and GBV as requested by my employer.

c. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in project related activities, in particular if related to exposure to COVID-19.

d. Will follow all prevention measures relating to COVID-19, including (i) washing hands with water and soap before and after eating, when entering my work area, after sneezing/coughing, etc.; (ii) sneeze or cough on elbow and/or wash hands after sneezing/coughing; (iii) if feeling unwell or have symptoms of a cold, flu or any respiratory illness, inform manager immediately, stay at home and do not come to work.

e. Implement OHS measures.

f. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.

g. Treat women, children (persons under the age of 18), and men with respect regardless of ethnicity, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.

h. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.

i. Not sexually exploit or abuse project beneficiaries and members of the surrounding communities.

j. Not engage in sexual harassment of work personnel and staff —for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature is prohibited: i.e. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; in some instances, giving personal gifts.

k. Not engage in sexual favors —for instance, making promises of favorable treatment (i.e. promotion), threats of unfavorable treatment (i.e. loss of job) or payments in kind or in cash, dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.

l. Not use prostitution in any form at any time.

m. Not participate in sexual contact or activity with children under the age of 18—including grooming or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.

n. Unless there is the full consent[13] by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members

[13] **Consent** is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

in exchange for sex (including prostitution). Such sexual activity is considered “non-consensual” within the scope of this Code.

o. Consider reporting through the GRM or to my manager any suspected or actual GBV by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

With respect to children under the age of 18:

p. Bring to the attention of my manager the presence of any children on the construction site or engaged in hazardous activities.

q. Wherever possible, ensure that another adult is present when working in the proximity of children.

r. Not invite unaccompanied children unrelated to my family into my home unless they are at immediate risk of injury or in physical danger.

s. Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography

t. Refrain from physical punishment or discipline of children.

u. No hiring of children for any project activity (no persons under the age of 18).

Sanctions

I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

v. Informal or formal warning.

w. Additional training.

x. Loss of up to one week’s salary.

y. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.

z. Termination of employment.

aa. Report to the Police if warranted.

I understand that it is my responsibility to ensure that the environmental, social, health and safety standards are met. That I will adhere to the occupational health and safety management plan. That I will avoid actions or behaviors that could be construed as VAC or GBV. Any such actions will be a breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, VAC and GBV issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to act mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Annex 4: Additional Resources

Given the COVID-19 situation is rapidly evolving, a version of this resource list will be regularly updated and made available on the World Bank COVID-19 operations intranet page (http://covidoperations/).

WHO Guidance

Advice for the Public

- WHO advice for the public, including on social distancing, respiratory hygiene, self-quarantine, and seeking medical advice, can be consulted on this WHO website: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

Technical guidance

- Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected, issued on March 19, 2020
- Recommendations to Member States to Improve Hygiene Practices, issued on April 1, 2020
- Severe Acute Respiratory Infections Treatment Center, issued on March 28, 2020
- Infection prevention and control at health care facilities (with a focus on settings with limited resources), issued in 2018
- Laboratory biosafety guidance related to coronavirus disease 2019 (COVID-19), issued on March 18, 2020
- Laboratory Biosafety Manual, 3rd edition, issued in 2014
- Laboratory testing for COVID-19, including specimen collection and shipment, issued on March 19, 2020
- Prioritized Laboratory Testing Strategy According to 4Cs Transmission Scenarios, issued on March 21, 2020
- Infection Prevention and Control for the safe management of a dead body in the context of COVID-19, issued on March 24, 2020
- Key considerations for repatriation and quarantine of travelers in relation to the outbreak COVID-19, issued on February 11, 2020
- Preparedness, prevention and control of COVID-19 for refugees and migrants in non-camp settings, issued on April 17, 2020
- Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, issued on March 18, 2020
- Oxygen sources and distribution for COVID-19 treatment centers, issued on April 4, 2020
- Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response, issued on March 16, 2020
- Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19), issued on March 19, 2020
- Operational considerations for case management of COVID-19 in health facility and community, issued on March 19, 2020
- Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19), issued on February 27, 2020
- Getting your workplace ready for COVID-19, issued on March 19, 2020
- Water, sanitation, hygiene and waste management for COVID-19, issued on March 19, 2020
- Safe management of wastes from health-care activities, issued in 2014
- Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (COVID-19) outbreak, issued on March 19, 2020
- Disability Considerations during the COVID-19 outbreak, issued on March 26, 2020

WORLD BANK GROUP GUIDANCE

- Technical Note: Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings, issued on March 20, 2020
- Technical Note: Use of Military Forces to Assist in COVID-19 Operations, issued on March 25, 2020
- ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects, issued on April 7, 2020
- Technical Note on SEA/H for HNP COVID Response Operations, issued in March 2020
- Interim Advice for IFC Clients on Preventing and Managing Health Risks of COVID-19 in the Workplace, issued on April 6, 2020
- Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19, issued on April 6, 2020
- IFC Tip Sheet for Company Leadership on Crisis Response: Facing the COVID-19 Pandemic, issued on April 6, 2020
- WBG EHS Guidelines for Healthcare Facilities, issued on April 30, 2007

ILO GUIDANCE

- ILO Standards and COVID-19 FAQ, issued on March 23, 2020 (provides a compilation of answers to most frequently asked questions related to international labor standards and COVID-19)

MFI GUIDANCE

- ADB Managing Infectious Medical Waste during the COVID-19 Pandemic
- IDB Invest Guidance for Infrastructure Projects on COVID-19: A Rapid Risk Profile and Decision Framework
- KfW DEG COVID-19 Guidance for employers, issued on March 31, 2020
- CDC Group COVID-19 Guidance for Employers, issued on March 23, 2020

Annex 5: Report on Stakeholder Consultations on ESMF

April 29-May 4, 2020

Consultative Process

Following MOH's preparation of the Stakeholder Engagement Plan (SEP), the first round of consultations with relevant stakeholders was conducted. The consultations aimed to provide relevant stakeholders with generic information about the Cambodia COVID-19 Emergency Response Project, and to seek their feedback and suggestions regarding project risks, impacts and mitigation measures. As a summary, their feedback received include both positive and negative impacts of the project. On a positive side, the stakeholders see the project as part of a measure to improve community and people's health and economic well-being during Covid-19 outbreak. On a negative side, they drew the project attention to the need to carefully address environmental and social risks emanated from project activities: safety of health workers, community, public officials, social discrimination, accessibility to project activities by populations and disadvantaged people. Thus, they suggested that there should be appropriate waste handling measures, including use of equality personal protective equipment, alongside actions to raise awareness of Covid-19 preventive measures among communities.

This second round of consultations aims to follow-up to the previous consultations. The consultations seek to disclose, in a participatory fashion, MOH's Environmental and Social Management Framework (ESMF)[14], which has been prepared to assess and mitigate potential environmental and social risks/impacts of the project. The consultations also seek to ensure that relevant stakeholders are aware of the ESMF and that their feedback on the potential risks and mitigation measures identified is taken into consideration for ESMF finalization.

Given the success of the first round of consultations, the consultations on the ESMF adopts the same methodology. The consultations were led by MOH' Preventive Medicine Department (PMD)) and caution was exercised in view of the Covid-19 infection/spread prevention. A number of instruments were followed: the national guidelines regarding Covid-19 preventions and the WHO's technical guidance in dealing with COVID-19.

The consultations were divided into two parts. First a meeting among core groups (within MOH' Preventive Medicine Department (PMD)) with the facilitation and technical support of the World Bank's staff[15]. The meeting led to improved understanding of ESMF's risks and mitigation measures among PMD team, which has enabled them to further explain the ESMF to other participants[16] during the consultations. The results from consultation with the core groups suggested that they have better understanding on the presented ESMF and had no question nor additional input to the draft ESMF. Second, the Executive Summary of the ESMF was translated into Khmer, and a set of questions (in Khmer and English) were provided to consultation participants beforehand as guidance.

14 The ESMF has been disclosed and can be accessed through this link: http://hismohcambodia.org/public/announcements.php?pid=32

15 Some Bank's project task team participated in the meeting include environmental and social specialists and project analyst.

16 Detailed list/name of participants who took part in the consultations is provided at the end of the report.

PMD made significant endeavors to engage with participants in the process. Individual phone calls were made to key participants to remind them of the deadline for them to provide inputs, and to explain to them the potential risks and mitigation measures. While this is the case, no additional feedback hasbeen provided by participants. But many of them have indicated that they have already providedcomments in the previous round, and their comments have been addressed in the final draft ESMF. PMD is committed to conduct additional consultations during the project implementation, should there be additional environmental and social risks emerged as a result of feedback by relevant stakeholders identified in the SEP.

List of Telegram Group: Safeguard COVID19-Emergency Response

	Name	**Sex**	**Position**	**Organization**
1	Dr Chap Seak Chhay	M	Deputy Director General	General Dept of Budget &Finance
2	Dr. Hero Kol	M	Director	Preventive Medicine Dept/MOH (PMD)
3	Dr Lak Muy Sreang	F	Deputy Director	PMD
4	Dr Ean Sokoeu	M	Chief of Disaster Management and Environmental Health Bureau	PMD
5	Dr Thol Dawin	F	Vice chief of Disaster Management and Environmental Health Bureau	PMD
6	Mr Un San	M	Deputy Director	PMD
7	Tong Ratha	M	Technical Staff	PMD
8	Nov Molyka	M	Technical Staff	PMD
9	Dr Mok Theavy	M	Deputy Director	Khmer-Soviet Friendship hospital
10	Dr Teng Srey	F	Deputy Director	CDC Dept/MOH
11	Dr Yi Seng Doeun	M	Deputy Director	CDC Dept/MOH
12	Heng Chantha			
13	Che Picheth			
14	Chhan Chansophoan	F	Deputy Director	Banteay Meanchey
15	Dr Mak Kimly	M	Deputy Director	Koh Kong
16	Dr. Muon Nara	M	Deputy Director	Oddar Meanchey
17	Dr. Keo Vannak	M	Director	Tboung Khmum
18	Keo Vibol	M	Deputy Director	Phnom Penh
19	Kong Veng	M	Deputy Director	Ratanakiri
20	Kuch Sitha	M	Deputy Director	Svay Rieng
21	Kuch Vanna	M	Deputy Director	Mondulkiri
22	Lim Chan	M	Deputy Director	Kampot
23	Lim Leang Ngoun	M	Deputy Director	Kampong Chhnang
24	Ngy Bunlen	M	Deputy Director	Kratie
25	Dr Nora D.Nhek	M	Deputy Director	Prey Veng
26	Nuon Seng	M	Deputy Director	Kep
27	Oeung Bunsang	M	Vice Chief of Technical Bureau	Kep

28	Pheav Sov	M	Technical staff	PMD
29	Phol Punloeu	M	Deputy Director	Tboung Khmum
30	Dr Chhay Sao Mony	M	Deputy Director	Preah Vihear Provincial Health Department
31	Say Proloeng	M	Deputy Director	Stung Treng
32	Say Savy	M	Deputy Director	Kampong Speu
33	Seang Horn	M	Deputy Director	PMD
34	Sechou Sethychot			Preah Sihanouk
35	Sing Rithireth	M	Deputy Director	Siem Reap
36	Than Sithan	M	Deputy Director	Takeo
37	Nuon Sokunthea			
38	Yok Sovann	M	Deputy Director	Pailin
39	Tek Sopheap	M	Deputy Director	Pursat
40	Tith Vuthy			
41	Ty Thiravuth	M	Deputy Director	Kampong Thom
42	Var Vanna			
43	Chor Vichet	M	Deputy Director	Kandal
44	Koy Virya		Deputy Director	Department of Hospital Services
45	Ouk Vithiea	M	Deputy Director	Battambang
46	Prof. Chau Darapheak	M	NIPH	NIPH
47	Mr Sao Sovanratnak	M	Health Analyst	World Bank
48	Nuth Monyrath	M	Social Development Specialist	World Bank

For vaccination, to ensure priority access to those most at risk and equitable access to the vaccine, the NIP conducted several consultative meetings, worked with Cambodian Communicable Disease ControlDepartment (CDC) to review the epidemiology/burden of disease, groups with higher risk of mortality,country context, health system infrastructure, etc.

During the update on this ESMF to integrate second additional financing (AF2) in late January 2021, the E&S consultants also consulted further with NIP and UNICEF to clarify on activities of COVID-19 deployment and vaccination campaign.

Guiding questions for feedback on the ESMF

Questions and instruction for the consultative meeting were developed in Khmer as shown below:

1) What are environmental impacts both positive and negative as a result of the project? if there is negative impact, what can we do to help mitigate negative environmental impacts?

๑) តើគម្រោងអាចមានផលប៉ះពាល់ជាវិជ្ជមាន និង អវិជ្ជមានអ្វីខ្លះដល់បរិស្ថាន? ចំពោះផលប៉ះពាល់អវិជ្ជមានបើសិនជាមាន តើយើងអាចធ្វើអ្វីខ្លះដើម្បីកាត់បន្ថយផលប៉ះពាល់អវិជ្ជមានទាំងនោះ?

2) What are social impacts both positive and negative as a result of the project? if there is negative impact, what can we do to help mitigate negative social impacts?

๒) តើគម្រោងអាចមានផលប៉ះពាល់ជាវិជ្ជមាន និង អវិជ្ជមានអ្វីខ្លះដល់សង្គម? ចំពោះផលប៉ះពាល់អវិជ្ជមានបើសិនជាមាន តើយើងអាចធ្វើអ្វីខ្លះដើម្បីកាត់បន្ថយផលប៉ះពាល់អវិជ្ជមានទាំងនោះ?

3) Who are the most vulnerable groups of people in Cambodia? Why?

៣) តើអ្នកណាជាក្រុមប្រជាជនងាយរងគ្រោះ (vulnerable groups) ជាងគេនៅក្នុងប្រទេសកម្ពុជា? តើហេតុអ្វី?

4) Can these vulnerable groups benefit from the project? Why and why not?

៤) តើក្រុមប្រជាជនងាយរងគ្រោះទាំងនោះអាចទទួលផលប្រយោជន៍ពីគម្រោងដែរឬទេ? តើដោយហេតុអ្វីដែលពួកគាត់អាចទទួលផលប្រយោជន៍ពីគម្រោង?ឬតើដោយហេតុអ្វីដែលពួកគាត់មិនអាចទទួលផលប្រយោជន៍ពីគម្រោង?

5) What can we do to ensure that they can benefit from the project?

៥) តើយើងអាចធ្វើអ្វីបានដើម្បីឲ្យពួកគាត់អាចទទួលផលប្រយោជន៍ពីគម្រោង?

6) What is your view about this document (ESMF)? What is your feedback?

៦) តើលោក លោកស្រីយល់ដូចម្តេចដែរចំពោះឯកសារក្របខ័ណ្ឌនៃការគ្រប់គ្រងបរិស្ថាននិងសង្គម (Environmental and Social Management Framework/ESMF)? សូមផ្តល់ព័ត៌មានត្រឡប់របស់លោក លោកស្រីអំពីឯកសារនេះ។

Annex 6: Training Module on Safety Injection and Infection Prevention

By the end of this module, you should be able to: outline infection prevention and control measures during vaccination sessions to protect health workers, vaccine recipients, and the community; describe how you prepare for vaccination sessions according to infection prevention and control protocols; and outline the process of safe COVID-19 vaccine administration and waste disposal.

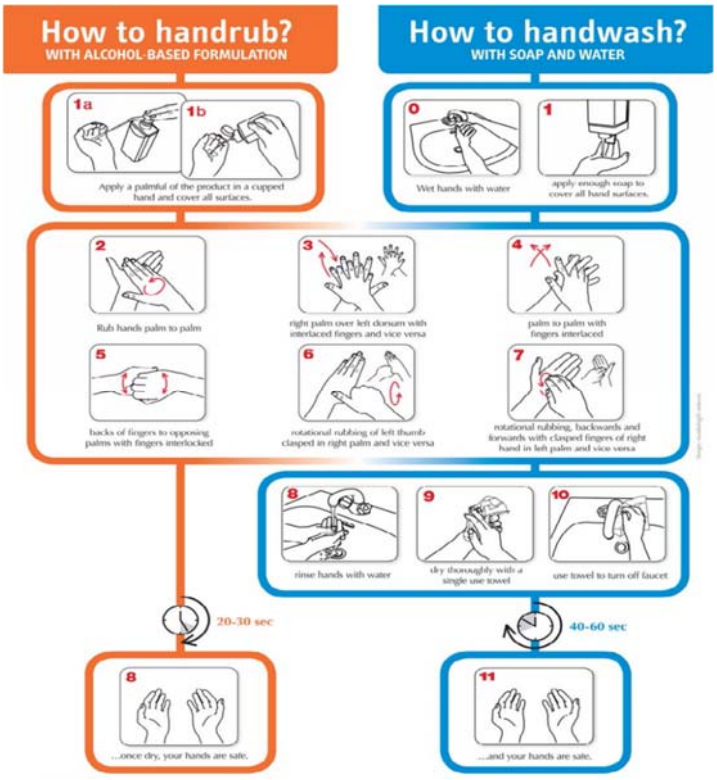
Standard infection prevention and control strategies for vaccination sessions

- Hand hygiene: use alcohol-based hand rub or running water and soap before and after contact with each vaccine recipient.
- PPE: wear a medical mask.
- Environmental cleaning: maintain a clean environment, especially high-touch surfaces (e.g. chairs, tables, door handles).
- Apply safe injection practices and safe disposal of waste.

Hand hygiene techniques:

- Use appropriate product and technique.
- An alcohol-based hand rub product is preferable, if hands are not visibly soiled.
- Rub hands for 20–30 seconds.
- Use soap, running water and single use towel, when visibly dirty or contaminated.
- Wash hands for 40–60 seconds.

Figure: Hand hygiene techniques



Preparing for the session

- Inform the community and target groups in advance of the location and time of vaccination.
- Set up safe vaccination sites and ensure adequate quantities of:
  - vaccines and supplies
  - adequate cold-chain equipment
  - appropriate injection equipment
  - appropriate PPE
  - safety boxes
  - reporting tools.

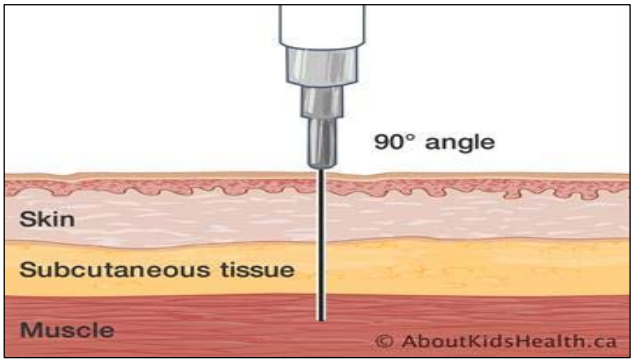
Setting up vaccination sites: Ventilation

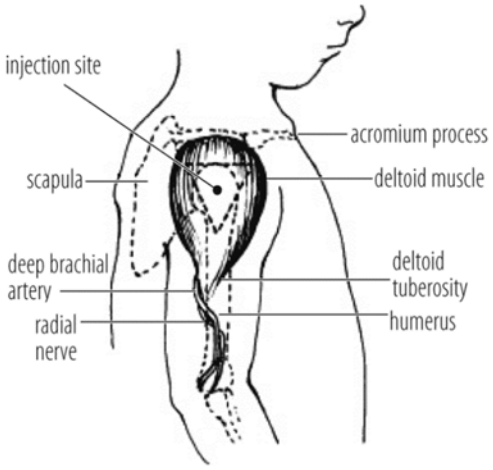
Figure x: Setting up vaccination sites: Physical distancing 1.5 meter from each other

Ensure good ventilation: open windows in indoor space.

Administration of intramuscular (IM) injection

- Hold the syringe barrel with fingers and thumb on the sides of the barrel and with the bevel of the needle facing upwards.



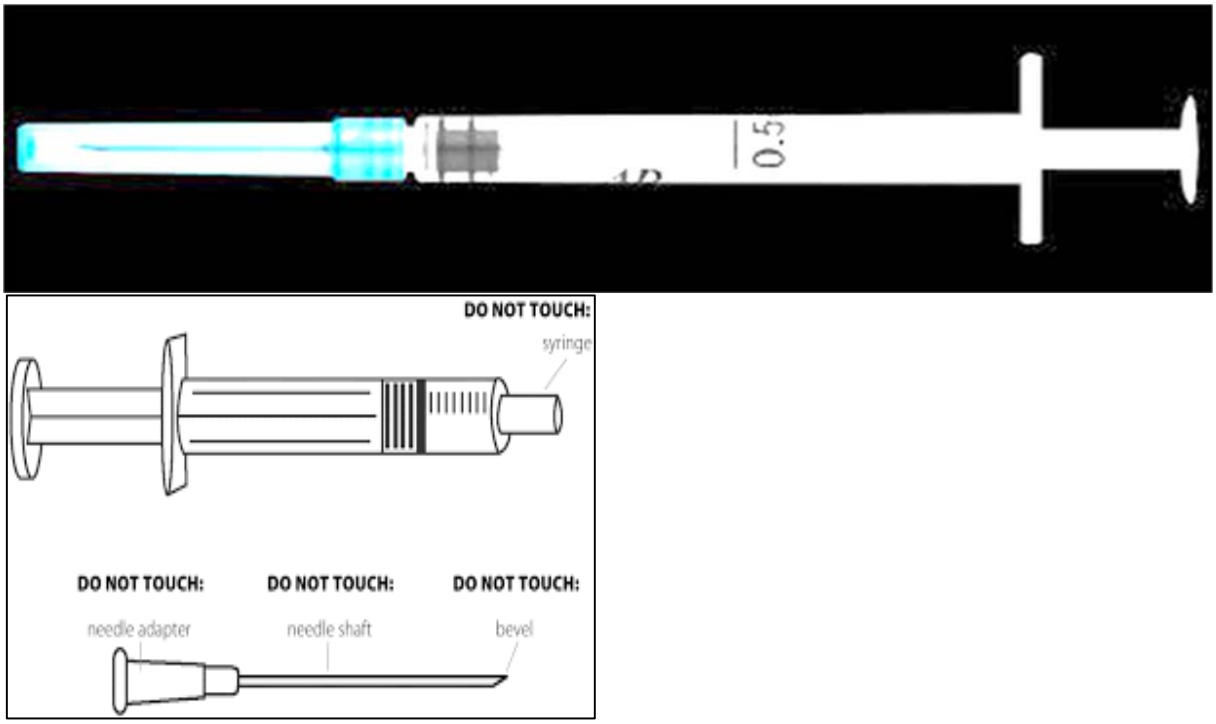


- Gently stretch and support the skin with the other hand and quickly push the needle at a 90° angle down through the skin into the muscle.
- Depress the plunger smoothly, do not move the needle under the skin.
- Pull the needle out quickly and smoothly at the same angle as it went in.
- Discard the needle and syringe straight into the safety box.

Auto-disable (AD) syringe

Auto-Disable Syringes, which are otherwise referred to as “AD Syringes”, contain internal safety mechanisms, that ensure that after a single use the syringe will not be able to be used a second time.
The NIP has been using AD syringe in Cambodia since 2000 and health care staff at all levels are well known and experienced to use it. For COVID-19 vaccination services/campaign 0.5 ml AD Syringe will be used.
Wastage rate for AD syringe is 10%. During calculation of requirement in micro-plan, health care workers should use wastage rate.

Figure x: Auto-disable (AD) syringe



Safety box

The Safety box is made of strong cardboard and is used to dispose of used AD syringes for immunization program. The safety box is light and easily portable, and the needles and sharps cannot puncture through it. It is recommended that the safety box has to be used all the times when conducting immunization activities.

The NIP has been using safety box in Cambodia since 2000 and health care staff at all levels are well known and experienced to use it. For COVID-19 vaccination services/campaign safety box

will be used.

Vaccination teams must have sufficient safety boxes for the number of AD syringes (1 safety box for every 100 AD syringes). Wastage rate for safety box is 5%. During calculation of requirement in micro-plan, health care workers should use wastage rate.

Figure x: Safety box

At the end of session, safety box needs to be stored in designated place in HC/hospital. Designated place should be secure and waterproof area. Once vaccination services/campaign completed, all safety boxes in store have to be taken to incinerator or burn and buried site for proper disposal.

Key points of injection and safety:

- Ensure availability of adequate AD syringes and safety boxes along with vaccine.
- Don't touch the rubber cap of the vial with anything but the needle of freshly opened and unused AD syringe (if touched somehow with any other object – discard the vial).
- Only draw vaccine in AD syringe when a recipient is there – do not pre-fill.
- Used AD syringes and needle caps should be placed in safety boxes immediately after the vaccine has been given– never try to recap.
- When a safety box is approximately ¾ full, it should be closed off and a new one used.
- Ensure vaccine administration using correct route and site.
- Infection prevention and control (IPC), Personal protective equipment

Health-care waste management at the facility level

Disposal of used syringes

- Drop the used AD syringe needle end down into the safety box immediately after use.
- Never recap the needle.
- Fill up to (¾ of a safety box), or up to the "fill line".
- When the safety box is full, close it and keep in a secure place until final disposal.
- Dispose of empty vaccine vials and other waste in a separate container or a waste bag.

Disposal of vials

- Put used vaccine vials and unopened vaccine vials which have expired or suffered heat exposure into a red or yellow bag for infectious waste, or into a biohazard container.
- Open vials posing a risk of cuts may be classified as sharps waste.

- Ensure that bags/containers are properly labeled with the infectious substances symbol.
- Seal the containers before transporting them to the treatment site.

Disposal of PPE

Contaminated PPE is infectious waste and should be disposed of in a separate container or a waste bag as all other hazardous waste.

- PPE includes single-use gloves, aprons and gowns, surgical masks, face protectors in the form of glasses, goggles or face shields.
- Use a room/place away from the vaccination area to remove all used PPE.
- Consult the national guidelines to follow special procedures for removing PPE.
- After safely removing used PPE, put them into a special waste container or bag for infectious waste (yellow or red).
- Ensure that bag/container is properly labeled with the infectious substances symbol.
- Seal the containers before transporting them to the treatment site.

Closing the vaccination site

- Discard in a separate waste bag or container any used reconstituted COVID-19 vaccine vials.
- Count the unopened COVID-19 vaccine vials and diluents and write down the number on the tally sheet.
- Calculate on the tally sheet the number of COVID-19 vaccines administered, number of vials received, opened, discarded, and returned and submit the tally sheet to the 1st level supervisor.

Annex 7: Report on Stakeholder Consultation

Environmental and Social Impacts of the COVID-19 Vaccination Project under the Additional Funding 2 of the Cambodia COVID-19 Emergency Response Project (P173815)

18-19 February 2021

The World Bank, through the COVID-19 ERP project, is preparing an additional financing of US$3.5 million to support the Ministry of Health (MOH) in the national deployment and vaccination plan for COVID-19 vaccines (P176212). This additional financing provides support to strengthening cold chain system and operational cost for vaccination. It does not support procurement of vaccines. As declared by the Government of Cambodia, COVID-19 vaccination will be provided free of charge and on avoluntary basis to all Cambodians and foreigners who live and work in Cambodia.

Regarding this additional financing, the Department of Preventive Medicine (PMD) has updated the existing COVID-19 ERP's ESMF, SEP and ESCP to reflect the additional E&S related risks/concerns and mitigation measures that may arise from the COVID-19 vaccination activities. As part of the updating process of this ESMF, PMD conducted another round of stakeholder consultation, specifically with groups of vaccine providers and vaccine receivers, to collect and incorporate their concerns and suggestions related toCOVID-19 vaccination/activities in these updated documents.

Consultative Process and Methodology

In order to generate inputs from key stakeholders in a timely manner to urgently complete the updating ESMF document for COVID-19 vaccination, the public consultation was conducted through a couple of open-ended guiding questions that can be easily answered by the intended respondents, namely vaccine providers and vaccine receivers. For the vaccine providers, as they are higher educated, the approach was that they provided answers to the guiding questions through various means (i.e. telegram etc.). However, for vaccine receivers the method of receiving feedback was different. Since there were several groups of vaccine receivers, the Village Health Support Groups[12] (VHSGs) were selected as their representatives because they worked closely with local people at the village level. In addition, they werealso a major stakeholder identified in the National Deployment and Vaccination Plan for COVID-19 vaccine. They knew very well about their people living in their villages, including the marginalized and disadvantage groups. As most VHSGs have low level of education, additional face-to-face explanation and facilitation by Provincial Safeguard Focal Persons were provided.

[12] Village health support group (VHSG) has been established to represent the needs and concerns of village people at committee meetings for the planning, use, and management of local health facilities. VHSG helps to bridge the gap between villagers and health center by connecting them to important health services. VHSG members were selected among voluntary, trusted, and respected villagers in village. VHSG members are from grassroot communities including indigenous communities. Most of them are female, disabled, and poor people. They are vulnerable themselves and they have first-hand experience as vulnerable groups. Thus, they are good representation for local people specifically for vulnerable group

The guiding questions for the consultation was designed to gather their concerns on the environmental and social risks and impacts and their mitigation measures that may be missing in the draft updated ESMF. Four main guiding questions were prepared for both groups and were translated into Khmer.

1. What are the environmental risks, including vaccination wastes, resulted from COVID-

19 vaccination beside the environmental risks identified in the ESMF's executive summary? what can we do to help mitigate the environmental risks from COVID-19 vaccination activities?

2. What are the social risks resulted from COVID-19 vaccination beside the social risks outlined in the ESMF's executive summary? what can we do to help mitigate social risks from COVID-19 vaccination activities?
3. Do you have any concerns about the COVID-19 vaccination project? Please explain. Based on your knowledge, what are the reasons that may prevent people not to vaccinate against COVID- 19 vaccine? In your view, what is the best way to reach people to encourage them to vaccinate?
4. Who do you think are the marginalized and disadvantaged groups of people in Cambodia for COVID-19 vaccination? Can these groups be excluded from the COVID-19 vaccination? How can we ensure that these marginalized and disadvantage groups are not excluded from COVID-19 vaccination activities?

Consultation sessions were conducted by regions represented by one province per region. These regions and their representative provinces were: (i) northeast region represented by Mondulkiri province; (ii) southeast region by Svay Rieng province; (iii) northwest region by Battambang province; (iv) central region by Kandal province; and (v) costal region by Koh Kong province. 10 respondents in each representative province were identified by PMD covering both groups of vaccine providers and vaccine receivers (see annex 2).

In each representative province, 5 respondents from group of vaccine providers included one from Provincial Health Department (PHD), one from Operational District (OD), and three from health centers (HCs). The guiding questions together with the ESMF's executive summary in Khmer were sent to them through telegram to get the answers.

For vaccine receivers who were represented by VHSGs, 5 VHSGs were identified in each representative province. Their responses were facilitated by Provincial Safeguard Focal Persons (appointed for the Project) using the guiding questions together with the ESMF's executive summary in Khmer.

The Preventive Medicine Department (PMD) made significant effort to engage the participants in the consultation process including the distribution of guiding questions and collection of responses. The consultation sessions were conducted from 18 to 19 February 2021. Each respondent was given the guiding questions in Khmer to answer and the updated ESMF's executive summary in Khmer to understand the background of the vaccination project. Dr. Thol Dawin of PMD provided clear instruction and explanation about how the respondents should answer to the questions.

Results and findings

Besides the positive feedback of the vaccination project, stakeholders were concerned that the COVID-19 vaccination would create some risks regarding waste generation from vaccination, fear and refusal of vaccination, concerns that marginalized and disadvantaged groups might be excluded from the project.

Table below presents the results of this stakeholder consultation:

Questions	Answers (PHD, OD, Health Center, and VHSGs)
1. What are the environmental risks, including vaccination wastes, resulted from COVID-19 vaccination beside the environmental risks identified in the ESMF's executive summary? what can we do to help mitigate the environmental risks from COVID-19 vaccination activities?	✓ The vaccination project will generate vaccination related wastes include vaccine vials, needles, syringes, and alcohol cottons. The vaccine providers should strictly follow the technical guideline on medical waste management of MOH. ✓ Vaccination generated wastes should be collected and burned at safer place including incinerators. ✓ Vaccinators and vaccine receivers should use preventive measures of MOH: wearing face mask, washing hand, check temperature, and keep physical distancing of at least 1.5m. ✓ Vaccine and vaccination waste transporters should wear face mask and protected suit to protect them from medical waste.
2. What are the social risks resulted from COVID-19 vaccination beside the social risks outlined in the ESMF's executive summary? what can we do to help mitigate social risks from COVID-19 vaccination activities?	✓ There would be risks of inequity in prioritizing groups of people to receive different type of vaccines. The degree of trust and the effectiveness of these vaccines are perceived to be different. Thiswould create negative beliefs from the public that there will be an arrangement for preferred groups to receive better quality vaccines and other to receive less quality vaccines. ✓ There would be a risk also when COVID-19 vaccines are believed and trusted by the public. In this case, there will be shortage of vaccines and vaccination service. This would create risks that people can be jealous of each other and people of priority groups would compete each other to get vaccination first. ✓ However, this can be managed through strengthening management capacity of vaccination including increasing vaccination capacity, increasing and ensure capacity of supplies, storage, and transportation of vaccines, applying penalized measures on stealing vaccines, and increasing communication, education campaign, and dissemination of information. ✓ People are fear of adverse event after immunization and the long- term negative effect of vaccine on their health. ✓ There would be a big issue if people misunderstand about COVID-19 vaccination from fake and misleading information. Communicationand education campaign should be conducted up to the community level with active participation from involved institutions, local authorities, and VHSGs. Education campaign, information dissemination, and communication about vaccination should be clearly, correctly, and consistently messages to avoid confusion from people.

3. Do you have any concerns about the COVID-19 vaccination project? Pleaseexplain. Based on yourknowledge, what are the reasons that may prevent people not to vaccinate against COVID-19 vaccine? In your view, what is the best way to reach people to encourage them to vaccinate?	✓ People would be hesitating to get vaccinated and they would have fear of adverse event after immunization and the long-term negative effect of vaccine on their health. They may hesitate to get COVID-19 vaccine since they believe from the misleading information and rumors. They do not understand well about the benefit of COVID-19 vaccination. ✓ Misleading information and rumors about negative of COVID-19 vaccination would lead people to vaccine refusal. ✓ People may mistrust the vaccines and their effectiveness, and they may be concerned about their short-term and long-term adverse effects. This should be addressed by using only those vaccines that areofficially recognized by WHO. ✓ Some people may tell lie about their health condition, illness or not illness due to their intend or not intend to vaccinate. ✓ People may feel that it is not necessary for them to get vaccinated and they refuse to vaccinate since they experienced that: (i) the COVID- 19 cases in Cambodia are mainly imported from other countries, (ii) preventive measures are strictly followed occasionally, especially when cases are found, (iii) all cases have been successfully treated with zero death, (iv) not a single case has been found to be transmitted from big events like wedding ceremony and other big social and religion events; (v) the vaccine can't protect against a new transformed COVID-19 virus, vaccine receivers is still exposable tonew transformed COVID-19 virus. Moreover, this attitude is reinforced by the believe that the vaccines available in the country arenot well trusted. ✓ Suggestion to increase dissemination of information and education campaign about the safety and benefit of vaccine. Education campaign should be conducted through video clips. ✓ Suggestion to conduct communication campaign and awareness raising with clear messages and positive benefit and qualification of the vaccines. ✓ The communication and education campaign should be widely conducted to build people knowledge, understanding and trust about the COVID-19 vaccines. ✓ Health staff shall be vaccinated first to generate trust among people.

4. Who do you think are the marginalized and disadvantaged groups of people in Cambodia for COVID-19 vaccination? Can these groups be excluded from the COVID-19 vaccination? How can we ensure that these marginalized and disadvantage groups are not excluded from COVID-19 vaccination activities?	✓ Those marginalized and disadvantaged groups are indigenous peoples, people in slum area, homeless people, women working in entertainment service, beggars, scavengers, children of less than 5 years of age, disabled people, old people, people with pre-existing conditions, and people living in remote areas. ✓ Mitigation measure to avoid exclusion of these groups: there should be cooperation in collection of information about these groups with local authorities, VHSGs, social workers and social affair institutions, and civil societies. ✓ Suggestion to conduct widely communication campaign to reach and provide correct messages to these groups. ✓ These group should be prioritized for vaccination on COVID-19 vaccines. ✓ In order to ensure that these groups are not missed from vaccination, ensure delivery of vaccine to reach difficult to access priority groups, especially for remote communities and communities with difficult access roads.

Conclusion:

Most of the concerns and mitigation measures found from the public consultations are already addressed in the draft updated ESMF. However, there are some additional findings on risks that are missing from the ESMF. They are:

- The degree of trust and the effectiveness of vaccines are perceived to be different. Thus, there would be a risk of inequity in arrangement for preferred groups to receive better quality vaccines and other to receive less quality vaccines.
- There would be a risk when COVID-19 vaccines are believed and trusted by the public. In this case, there will be shortage of vaccines and vaccination service. This would create risks that people can be jealous of each other and people of priority groups would compete each other and bribe to get vaccination first.
- People may feel that it is not necessary for them to vaccinate and they refuse to vaccinate since they saw that:
    a. Most COVID-19 positive cases are mainly imported from other countries.
    b. Preventive measures are strictly followed occasionally, especially when cases are found.
    c. All COVID-19 cases have been successfully treated with zero death.
    d. Not a single case has been found to be transmitted from big events like weddingceremony and other large social and religion events.
    e. The vaccines can't protect against a new transformed COVID-19 virus, vaccine receiversare still exposable to a new transformed COVID-19 virus. And
    f. Moreover, this attitude is reinforced by the believe that the vaccines available in thecountry are not well trusted.

- However, these can be managed through strengthening communication and education campaign, and dissemination of information with active participation from involved institutions, local authorities, and VHSGs. Education campaign, information dissemination, and communication about vaccination and messages must be clear, correct, and consistent to avoid confusion among people.

- Strengthening management capacity of vaccination including increasing vaccination capacity, increasing and ensure capacity of supplies, storage, and transportation of vaccines, applying penalized measures on stealing vaccines, and
- Measure to avoid exclusion of marginalized and disadvantage groups: (i) ensure delivery of vaccine to reach difficult to access priority group especially at remote communities and communities with difficult access roads, and (ii) cooperation in collection of information about these groups with local authorities, VHSGs, social workers and social affair institutions, and civil societies.

Annex 7.1: Guiding question for public consultation on COVID-19 vaccination

សំនួរពិភាក្សាដើម្បីប្រមូលយោបល់ត្រឡប់លើក្របខណ្ឌគ្រប់គ្រងបរិស្ថាន និងសង្គមនៃហិរញ្ញប្បទានបន្ថែមលើកទី ២ស្តីពីប្រព័ន្ធចាក់វ៉ាក់សាំងកូវីដ១៩នៃគម្រោងឆ្លើយតបបន្ទាន់កូវីដ១៩៖ Guiding questions for feedback on the ESMF of COVID-19 ERP AF2 vaccination

សំនួរខាងក្រោម គឺសម្រាប់ក្រុមទាំងពីរនៃកម្មវិធីចាក់វ៉ាក់សាំងកូវីដ១៩ ក្រុមអ្នកផ្តល់វ៉ាក់សាំង និងក្រុមទទួលវ៉ាក់សាំង។ សូមបញ្ជាក់ថា ហិរញ្ញប្បទានបន្ថែមលើកទី២នេះ គឺមិនគ្របដណ្តប់លើការទិញវ៉ាក់សាំងកូវីដ១៩ទេ។ តាមការប្រកាសរបស់រាជរដ្ឋាភិបាល ការចាក់វ៉ាក់សាំងនេះគឺមិនគិតថ្លៃ និងតាមកោលការណ៍ស្ម័គ្រចិត្ត សម្រាប់ប្រជាពលរដ្ឋកម្ពុជាទាំងអស់។ These questions can be applied for both groups, vaccine providers and vaccine receivers. For the consultative meeting, these questions will be offered in Khmer. Please be notice that this additional financing will not cover procurement of vaccines. As declared by the government, COVID-19 vaccination will be provided free of charge and on a voluntary basis to all Cambodian.

សំនួរពិភាក្សា

១) តើអ្វីខ្លះ ជាហានិភ័យបរិស្ថាន រួមទាំងសំណល់វេជ្ជសាស្ត្រ ដែលអាចកើតចេញពីគម្រោងចាក់វ៉ាក់សាំងកូវីដ១៩ ក្រៅពីហានិភ័យដែលបានអធិប្បាយក្នុងសេចក្តីសង្ខេបនោះ? តើយើងអាចធ្វើអ្វី ដើម្បីជួយកាត់បន្ថយហានិភ័យបរិស្ថានទាំងនេះ ពីសកម្មភាពចាក់វ៉ាក់សាំងកូវីដ១៩? What are environmental risks including medical wastes as result of the COVID-19 vaccination aside environmental risks identified in the Executive Summary? what can we do to help mitigate environmental risks from COVID-19 vaccination activities?

២) តើអ្វីខ្លះ ជាហានិភ័យសង្គម ដែលអាចកើតចេញពីគម្រោងចាក់វ៉ាក់សាំងកូវីដ១៩ ក្រៅពីហានិភ័យដែលបានអធិប្បាយក្នុងសេចក្តីសង្ខេបនោះ? តើយើងអាចធ្វើអ្វី ដើម្បីជួយកាត់បន្ថយហានិភ័យសង្គមទាំងនេះ ពីសកម្មភាពចាក់វ៉ាក់សាំងកូវីដ១៩? What are social risks as a result of the COVID-19 vaccination aside social risks outlined in the Executive Summary? what can we do to help mitigate social risks from COVID-19 vaccination activities?

៣) តើអ្នកមានការព្រួយបារម្ភណ៍អំពីកម្មវិធីចាក់វ៉ាក់សាំងកូវីដ១៩ដែរឬទេ? សូមអធិប្បាយដោយផ្អែកលើការយល់ដឹងរបស់អ្នក តើមានហេតុផលអ្វីខ្លះដែលប្រជាពលរដ្ឋអាចនឹងរារែកមិនព្រមចាក់កូវីដ១៩នេះ? តាមទស្សនៈរបស់អ្នក តើអ្វីជាមធ្យោបាយប្រសើរក្នុងការលើកទឹកចិត្តពួកគាត់ ដើម្បីចាក់វ៉ាក់សាំងកូវីដ១៩នេះ? Do you have any concerns about the Covid-19 vaccination program? Please explain. Based on your knowledge, for what reasons may people not vaccinate against Covid-19? In your view, what is the best way to reach people to encourage them to vaccinate?

៤) តើក្រុមណាខ្លះនៅក្នុងប្រទេសកម្ពុជា ដែលជាក្រុមជនទន់ខ្សោយ ក្រុមជនងាយរងគ្រោះ ក្រុមជនជួបការលំបាក សម្រាប់កម្មវិធីចាក់វ៉ាក់សាំងកូវីដ១៩នេះ? តើក្រុមទាំងនេះ អាចនឹងត្រូវបានផាត់ចោល/បំភ្លេច សម្រាប់ការ

ចាក់វ៉ាក់សាំងការពារកូវីដ១៩នេះដែរឬទេ ? តើធ្វើដូចម្តេច ទើបយើងអាចជានាថា ក្រុមទាំងនេះ គឺមិនត្រូវបានដាក់ចេញ/បំភ្លេចពីសកម្មភាពចាក់វ៉ាក់សាំងកូវីដ១៩នេះ ?

Who do you think are the marginalized and disadvantage groups of people in Cambodia for the COVID-19 vaccination? Can these groups be excluded from the COVID-19 vaccination? How can we ensure that these marginalized and disadvantage groups are not excluded from COVID-19 vaccination activities?

Annex 7.2: *List of Stakeholders for Public Consultation*

1- Vaccine Providers

Region	Province	PHD level	OD level	HC level	Quantity
North-east region	Mondulkiri	1	1	3	5
North-west region	Battambang	1	1	3	5
South-east region	Svay Rieng	1	1	3	5
South-west region	Koh Kong	1	1	3	5
Central region	Kandal	1	1	3	5
Total					**25**

2- Vaccine Receivers (represented by VHSG)

Region	Province	Who	Quantity
North-east region	Mondulkiri	VHSG	5
North-west region	Battambang	VHSG	5
South-east region	Svay Rieng	VHSG	5
South-west region	Koh Kong	VHSG	5
Central region	Kandal	VHSG	5
Total			**25**

Annex 8: Ineligible/Negative List

The Project will not involve activities with high potential environmental and social risks. Such activitieswhich are not eligible for financing include but are not limited to the following:

- Activities that have potential to cause any significant loss or degradation of critical natural habitats whether directly or indirectly.
- Activities that could adversely affect forest and forest health.
- Activities that could affect sites with archaeological, paleontological, historical, religious, orunique natural values.
- Activities that will result in the involuntary taking of land, relocation of households, loss ofassets or access to assets that leads to loss of income sources or other means of livelihoods, and interference with households' use of land and livelihoods.
- Use of goods and equipment on lands abandoned due to social tension/conflict, or the ownership of the land is disputed or cannot be ascertained.
- Use of goods and equipment to demolish or remove assets, unless the ownership of the assets can be ascertained, and the owners were consulted and had concurred
- Use of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor.
- Use of goods and equipment for activities that would adversely affect indigenous peoples.
- Use of goods and equipment for military or paramilitary purposes.
- Activities that are connected with the use of security personnel;
- Activities that are linked with operation associated with mandatory or forced vaccination